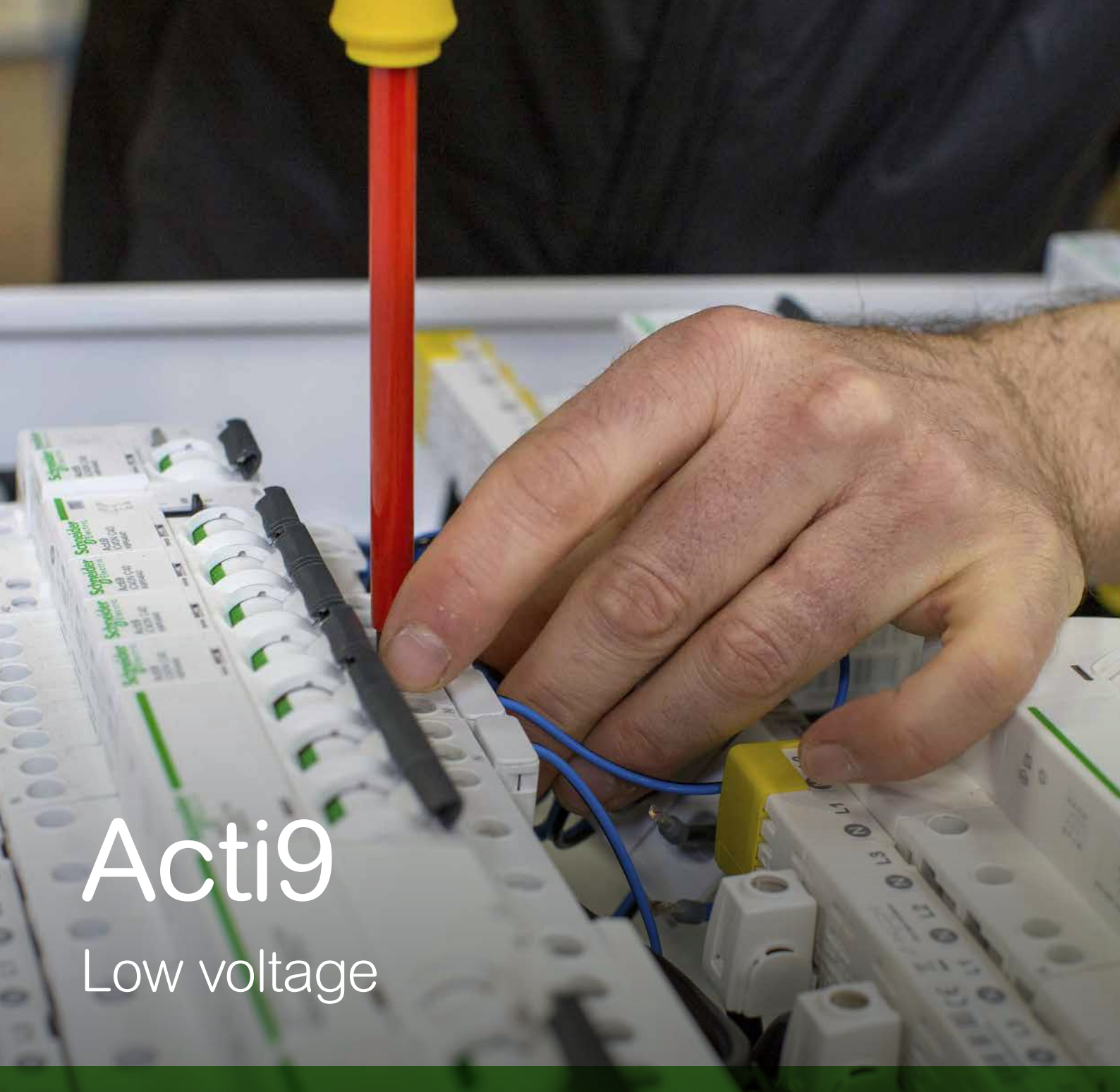


Acti9

Low voltage

Catalogue 07/2019

The efficiency you deserve

CÔNG TY CỔ PHẦN THIẾT BỊ ĐIỆN HOÀNG PHƯƠNG

ĐC: Số 10, ngõ 44, phố Võ Thị Sáu, P.Thanh Nhàn, Q.Hai Bà Trưng, TP. Hà Nội

MST: 0106798886

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Email: **Codienhoangphuong@gmail.com**

se.com

Life Is On | Schneider Electric

Acti9 iC40N circuit breakers
6000 A / 10 kA

Country approval pictogram

IEC/EN 60947-2
IEC/EN 60898-1

As per the above standards:
Circuit breakers which combine the following functions:
- circuit protection against short-circuit currents,
- circuit protection against overload currents,
- suitable for isolation.

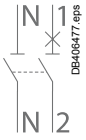
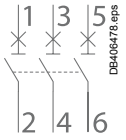
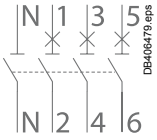




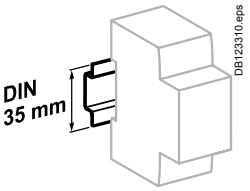


Catalog numbers

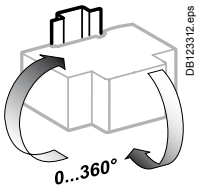
Acti9 iC40N circuit breakers

Type	1P+N			3P		3P+N		
								
Auxiliaries	**Catalog module CA907002**							
Vigi	**Catalog module CA902053**							
Rating (In)	**B curve**	**C curve**	**D curve**	**C curve**	**D curve**	**B curve**	**C curve**	**D curve**
2 A	-	**A9P54602**	**A9P64602**	-	-	-	-	-
4 A	-	**A9P54604**	-	-	-	-	-	-
6 A	**A9P44606**	**A9P54606**	**A9P64606**	**A9P54306**	**A9P64306**	**A9P44706**	**A9P54706**	**A9P64706**
10 A	**A9P44610**	**A9P54610**	**A9P64610**	**A9P54310**	**A9P64310**	**A9P44710**	**A9P54710**	**A9P64710**
13 A	**A9P44613**	**A9P54613**	**A9P64613**	**A9P54313**	**A9P64313**	**A9P44713**	**A9P54713**	**A9P64713**
16 A	**A9P44616**	**A9P54616**	**A9P64616**	**A9P54316**	**A9P64316**	**A9P44716**	**A9P54716**	**A9P64716**
20 A	**A9P44620**	**A9P54620**	**A9P64620**	**A9P54320**	**A9P64320**	**A9P44720**	**A9P54720**	**A9P64720**
25 A	**A9P44625**	**A9P54625**	**A9P64625**	**A9P54325**	**A9P64325**	**A9P44725**	**A9P54725**	**A9P64725**
32 A	**A9P44632**	**A9P54632**	**A9P64632**	**A9P54332**	**A9P64332**	**A9P44732**	**A9P54732**	**A9P64732**
40 A	**A9P44640**	**A9P54640**	**A9P64640**	**A9P54340**	**A9P64340**	**A9P44740**	**A9P54740**	**A9P64740**
Width in 9-mm modules	2			6		6		
Accessories	**Catalog modules CA907001 and CA907015**							
Comb busbars	**Catalog module CA907026**							
PowerTag energy sensors	**Catalog modules CA907029 and CA908058**							

Acti9 iC40N circuit breakers
6000 A / 10 kA

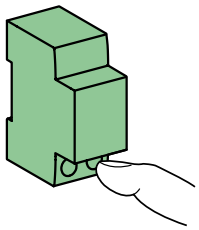


Clip on DIN rail 35 mm.

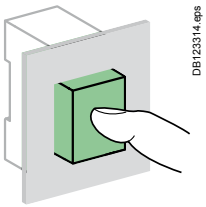


Indifferent position of installation.

IP20



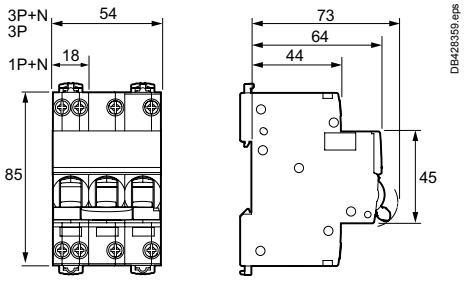
IP40



Technical data

Main characteristics			Acti9 iC40N
Insulation voltage (Ui)	Phase-to-neutral		400 V
	Phase-to-phase		440 V
Voltage rating (Ue)	Phase-to-neutral		230 V
	Phase-to-phase		400 V
Operating frequency			50/60 Hz
According to IEC/EN 60898-1			
Limitation class			3
Rated breaking capacity (Icn)			6000 A
Service breaking capacity (Ics)			100 % Icn
Rated breaking and making capacity on a single pole (Icn1)			Icn1 = Icn
Magnetic tripping	B curve		3 to 5 In
	C curve		5 to 10 In
	D curve		10 to 14 In
Operating temperature			30°C
According to IEC/EN 60947-2			
Rated impulse withstand voltage (Uimp)			4 kV
Breaking capacity (Icu)			10 kA
Service breaking capacity (Ics)	3P		75 % Icu
	1P+N, 3P+N	≤ 25 A	75 % Icu
		≥ 32 A	50 % Icu
Magnetic tripping	B curve		4 In ±20 %
	C curve		8 In ±20 %
	D curve		12 In ±20 %
Operating temperature			50°C
Pollution degree			3
Additional characteristics			
Degree of protection (IEC 60529)	Device only		IP20
	Device in modular enclosure		IP40 Insulation class II
Endurance (O-C)	Electrical	≤ 20 A	20000 cycles
		≥ 25 A	10000 cycles
	Mechanical		20000 cycles
Operating temperature			-25°C to +70°C
Storage temperature			-40°C to +85°C

Dimensions (mm)



Weight (g)

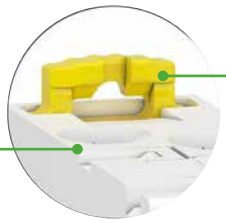
Circuit breakers	
Type	**Acti9 iC40N**
1P+N	120
3P	340
3P+N	345

Acti9 iC40 circuit breakers

■ Automatic cable guiding in the correct position: terminals with guard

■ Reinforced cable pull-out strength: serrated terminals

■ Where there is a comb tooth, the connection of cables of cross section 16 mm² remains possible



■ Assembly and disassembly with comb busbar in place by operating toggle latches at the top and bottom of the products

VISI-TRIP window

■ Fault tripping is indicated by a red mechanical indicator on the front face





■ Insulated terminals IP20



VISI-SAFE window

Positive contact indication

■ A green strip on the toggle indicates full opening of all the poles

■ Downstream maintenance operations can be carried out in better safety conditions

■ Padlocking possible



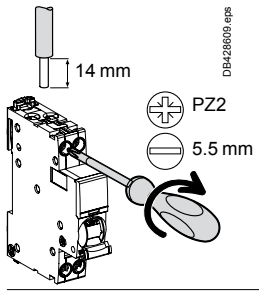
Markings

■ Area for marking by 12 mm high label on the front panel

Markings

■ Area for 4 marking clips alongside the downstream terminal

Connection



Type	Connection	Tightening torque	Comb busbar	Copper cables	
				Rigid	Flexible or with ferrule
				 DB122945.eps	 DB122946.eps
Acti9 iC40	Top	2 N.m	■	1 to 16 mm²	1 to 10 mm²
	Bottom		■		

■ Connection by comb busbar or cables (as per EN 50027).
■ Where there is a comb tooth, the connection of cables of cross section 16 mm² remains possible.
■ See Choice of Comb busbars (CA908048).



iC60N double terminals circuit breakers (curve B, C, D)

DB106619 DB123865 DB123854

Country approval pictograms



IEC/EN 60947-2
IEC/EN 60898-1

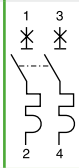
- iC60N double tunnel terminals circuit breakers are multi-standard circuit breakers which combine the following functions:
  - circuit protection against short-circuit currents,
  - circuit protection against overload currents,
  - suitable for industrial isolation according to IEC/EN 60947-2, standard.
  - fault tripping indication by a red mechanical indicator in circuit breaker front face.

Alternating current (AC) 50/60 Hz						
Breaking capacity (Icu) according to IEC/EN 60947-2						**Service breaking capacity (Ics)**
		Voltage (Ue)				
Ph/Ph (2P, 3P, 3P+N, 4P)		**12 to 133 V**	**220 to 240 V**	**380 to 415 V**	**440 V**	
Ph/N (1P, 1P+N)		**12 to 60 V**	**100 to 133 V**	**220 to 240 V**	**-**	
Rating (In)	0.5 to 4 A	50 kA	50 kA	50 kA	25 kA	100 % of Icu
	6 to 63 A	36 kA	20 kA	10 kA	6 kA	75 % of Icu
Breaking capacity (Icn) according to IEC/EN 60898-1						
		Voltage (Ue)				
Ph/Ph		**400 V**				
Ph/N		**230 V**				
Rating (In)	0.5 to 63 A	6000 A				

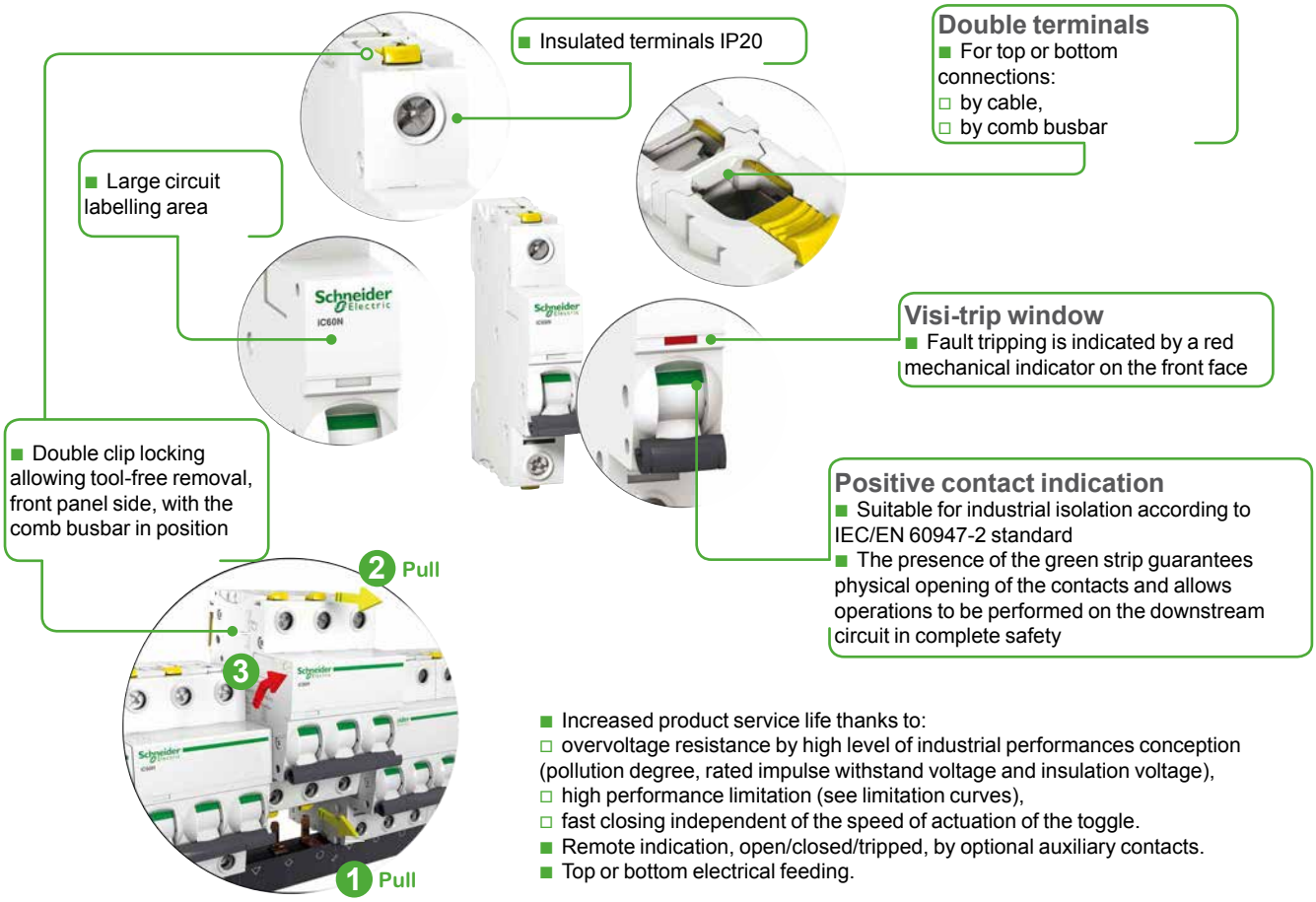
Direct current (DC)							
Breaking capacity (Icu) according to IEC/EN 60947-2							**Service breaking capacity (Ics)**
		Voltage (Ue)					
Between +/-		**12 to 60 V**	**≤ 72 V**	**≤ 125 V**	**≤ 180 V**	**≤ 250 V**	
Number of poles		**1P**		**2P**	**3P**	**4P**	
Rating (In)	1 to 63 A	15 kA	10 kA	10 kA	10 kA	10 kA	100 % of Icu

Catalogue numbers

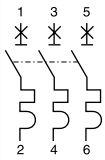
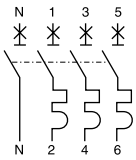
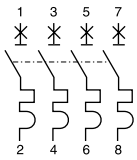
iC60N double terminals circuit breaker

Type	**1P**			**1P+N**		**2P**		
								
Auxiliaries	**Remote tripping and indication, module CA907000 and CA907002**			**Remote tripping and indication, module CA907000 and CA907002**		**Remote tripping and indication, module CA907000 and CA907002**		
Vigi iC60	**Vigi iC60 add-on residual current device, module CA902005**			**Vigi iC60 add-on residual current device, module CA902005**		**Vigi iC60 add-on residual current device, module CA902005**		
Rating (In)	**Curve**			**Curve**		**Curve**		
	B	**C**	**D**	**B**	**C**	**B**	**C**	**D**
0.5 A	-	**A9F04170**	**A9F05170**	-	**A9F04670**	-	**A9F04270**	**A9F05270**
1 A	**A9F03101**	**A9F04101**	**A9F05101**	-	**A9F04601**	-	**A9F04201**	**A9F05201**
2 A	**A9F03102**	**A9F04102**	**A9F05102**	-	**A9F04602**	**A9F03202**	**A9F04202**	**A9F05202**
3 A	-	**A9F04103**	**A9F05103**	-	**A9F04603**	-	**A9F04203**	**A9F05203**
4 A	**A9F03104**	**A9F04104**	**A9F05104**	-	**A9F04604**	**A9F03204**	**A9F04204**	**A9F05204**
6 A	**A9F03106**	**A9F04106**	**A9F05106**	**A9F03606**	**A9F04606**	**A9F03206**	**A9F04206**	**A9F05206**
10 A	**A9F03110**	**A9F04110**	**A9F05110**	**A9F03610**	**A9F04610**	**A9F03210**	**A9F04210**	**A9F05210**
13 A	**A9F03113**	**A9F04113**	**A9F05113**	**A9F03613**	**A9F04613**	**A9F03213**	**A9F04213**	**A9F05213**
16 A	**A9F03116**	**A9F04116**	**A9F05116**	**A9F03616**	**A9F04616**	**A9F03216**	**A9F04216**	**A9F05216**
20 A	**A9F03120**	**A9F04120**	**A9F05120**	**A9F03620**	**A9F04620**	**A9F03220**	**A9F04220**	**A9F05220**
25 A	**A9F03125**	**A9F04125**	**A9F05125**	**A9F03625**	**A9F04625**	**A9F03225**	**A9F04225**	**A9F05225**
32 A	**A9F03132**	**A9F04132**	**A9F05132**	**A9F03632**	**A9F04632**	**A9F03232**	**A9F04232**	**A9F05232**
40 A	**A9F03140**	**A9F04140**	**A9F05140**	**A9F03640**	**A9F04640**	**A9F03240**	**A9F04240**	**A9F05240**
50 A	**A9F03150**	**A9F04150**	**A9F05150**	**A9F03650**	**A9F04650**	**A9F03250**	**A9F04250**	**A9F05250**
63 A	**A9F03163**	**A9F04163**	**A9F05163**	**A9F03663**	**A9F04663**	**A9F03263**	**A9F04263**	**A9F05263**
Width in 9-mm modules	2			4		4		
Accessories	**Modules CA907000 and CA907001**			**Modules CA907000 and CA907001**		**Modules CA907000 and CA907001**		

iC60N double terminals circuit breakers (curve B, C, D) (cont.)



■ Increased product service life thanks to:
□ overvoltage resistance by high level of industrial performances conception (pollution degree, rated impulse withstand voltage and insulation voltage),
□ high performance limitation (see limitation curves),
□ fast closing independent of the speed of actuation of the toggle.
■ Remote indication, open/closed/tripped, by optional auxiliary contacts.
■ Top or bottom electrical feeding.

	3P			3P+N		4P		
								
	Remote tripping and indication, module CA907000 and CA907002			Remote tripping and indication, module CA907000 and CA907002		Remote tripping and indication, module CA907000 and CA907002		
	Vigi iC60 add-on residual current device, module CA902005			Vigi iC60 add-on residual current device, module CA902005		Vigi iC60 add-on residual current device, module CA902005		
	Curve			Curve		Curve		
	B	C	D	B	C	B	C	D
	-	A9F04370	A9F05370	-	A9F04770	-	A9F04470	A9F05470
	-	A9F04301	A9F05301	-	A9F04701	-	A9F04401	A9F05401
	A9F03302	A9F04302	A9F05302	-	A9F04702	-	A9F04402	A9F05402
	-	A9F04303	A9F05303	-	A9F04703	-	A9F04403	A9F05403
	-	A9F04304	A9F05304	-	A9F04704	-	A9F04404	A9F05404
	A9F03306	A9F04306	A9F05306	A9F03706	A9F04706	A9F03406	A9F04406	A9F05406
	A9F03310	A9F04310	A9F05310	A9F03710	A9F04710	A9F03410	A9F04410	A9F05410
	A9F03313	A9F04313	A9F05313	A9F03713	A9F04713	A9F03413	A9F04413	A9F05413
	A9F03316	A9F04316	A9F05316	A9F03716	A9F04716	A9F03416	A9F04416	A9F05416
	A9F03320	A9F04320	A9F05320	A9F03720	A9F04720	A9F03420	A9F04420	A9F05420
	A9F03325	A9F04325	A9F05325	A9F03725	A9F04725	A9F03425	A9F04425	A9F05425
	A9F03332	A9F04332	A9F05332	A9F03732	A9F04732	A9F03432	A9F04432	A9F05432
	A9F03340	A9F04340	A9F05340	A9F03740	A9F04740	A9F03440	A9F04440	A9F05440
	A9F03350	A9F04350	A9F05350	A9F03750	A9F04750	A9F03450	A9F04450	A9F05450
	A9F03363	A9F04363	A9F05363	A9F03763	A9F04763	A9F03463	A9F04463	A9F05463
	6			8		8		
	Modules CA907000 and CA907001			Modules CA907000 and CA907001		Modules CA907000 and CA907001		

iC60N double terminals circuit breakers (curve B, C, D) (cont.)

Connection between double terminal circuit breakers

DB404815



With comb busbar at the back/cables at the front
Without comb busbar at the back/cables at the front

Rating	Tightening torque	Back		Front	
		Comb busbar	Copper cables		
		Thickness of the teeth	Rigid	Flexible or with ferrule	
		DB122945	DB122946		
0.5 to 25 A	2 N.m	1.5 mm	1 to 25 mm²	1 to 16 mm²	
32 to 63 A	3.5 N.m	1.5 mm	1 to 25 mm²	1 to 25 mm²	

Between double terminal circuit breakers and single-terminal circuit breakers

DB404817



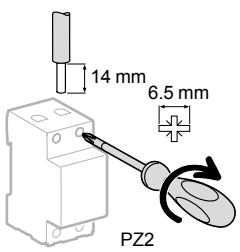
Cables at the back/comb busbar at the front

Rating	Tightening torque	Back		Front
		Copper cables		Comb busbar
		Rigid	Flexible or with ferrule	Thickness of the teeth
	DB122945	DB122946		
0.5 to 25 A	2 N.m	1 to 16 mm²	1 to 10 mm²	1.5 mm
32 to 63 A	3.5 N.m	1 to 16 mm²	1 to 10 mm²	1.5 mm

■ Connection by comb busbar or by cable (according to EN 50027).

Connection

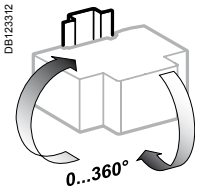
DB123947



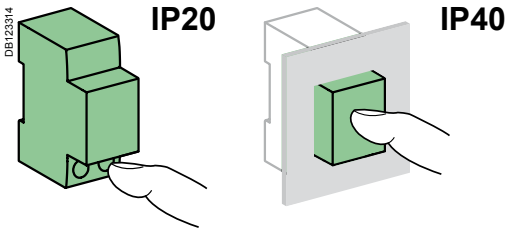
With accessories

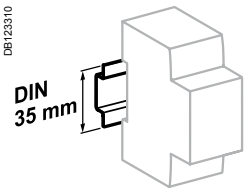
Rating	50 mm² Al terminal	Screw-on connection for ring terminal	Multi-cables terminal	
			Rigid cables	Flexible cables
	DB122935 Al	DB118789 Ø	DB118787	
0.5 to 25 A	-	Ø 5 mm	-	-
32 to 63 A	50 mm²		3 x 16 mm²	3 x 10 mm²

iC60N double terminals circuit breakers (curve B, C, D) (cont.)



Indifferent position of installation.





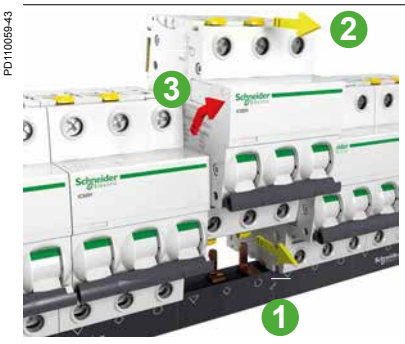
Clip on DIN rail 35 mm.

Technical data

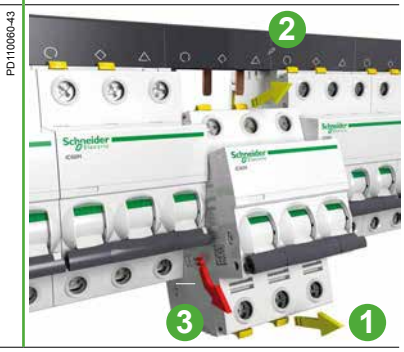
Main characteristics		
According to IEC/EN 60947-2		
Insulation voltage (Ui)		500 V AC
Pollution degree		3
Rated impulse withstand voltage (Uimp)		6 kV
Thermal tripping	Reference temperature	50°C
	Temperature derating	See module CA908007
Magnetic tripping	B curve	4 In ± 20 %
	C curve	8 In ± 20 %
	D curve	12 In ± 20 %
Utilization category		A
According to IEC/EN 60898-1		
Limitation class		3
Rated making and breaking capacity of an individual pole (Icn1)		Icn1 = Icn
Additional characteristics		
Degree of protection (IEC 60529)	Device only	IP20
	Device in modular enclosure	IP40 Insulation class II
Endurance (O-C)	Electrical	10,000 cycles
	Mechanical	20,000 cycles
Overvoltage category (IEC 60364)		IV
Operating temperature		-35°C to +70°C
Storage temperature		-40°C to +85°C
Tropicalization (IEC 60068-1)		Treatment 2 (relative humidity 95 % to 55°C)

Disassembly double terminals iC60 circuit breaker with the comb busbar in position

Comb busbar downstream

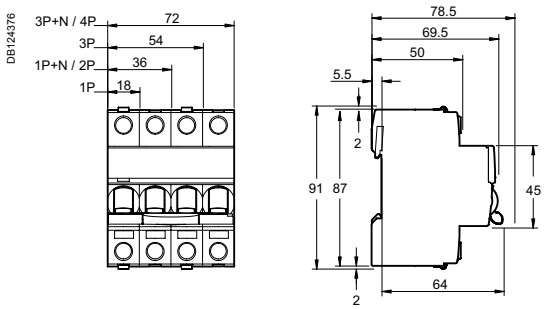


Comb busbar upstream



1- Pull lower "clip locking"
2- Pull upper "clip locking"
3- Remove the circuit breaker

Dimensions (mm)



Weight (g)

Circuit-breaker	
Type	**iC60N**
1P	125
2P (1P+N)	250
3P	375
4P (3P+N)	500

iC60H double terminals circuit breakers (curve B, C, D)

DB106619 DB123865 DB123854

Country approval pictograms

IEC/EN 60947-2
IEC/EN 60898-1

- iC60H double tunnel terminals circuit breakers are multi-standard circuit breakers which combine the following functions:
  - circuit protection against short-circuit currents,
  - circuit protection against overload currents,
  - suitable for industrial isolation according to IEC/EN 60947-2, standard.
  - fault tripping indication by a red mechanical indicator in circuit breaker front face.

PB107402-40



PB107406-40



PB107408-40



PB107410-40



Alternating current (AC) 50/60 Hz

Breaking capacity (Icu) according to IEC/EN 60947-2		Voltage (Ue)				Service breaking capacity (Ics)
Ph/Ph (2P, 3P, 4P)		12 to 133 V	220 to 240 V	380 to 415 V	440 V	
Ph/N (1P, 1P+N)		12 to 60 V	100 to 133 V	220 to 240 V	-	
Rating (In)	0.5 to 4 A	70 kA	70 kA	70 kA	50 kA	100 % of Icu
	6 to 40 A	42 kA	30 kA	15 kA	10 kA	50 % of Icu
	50/63 A	42 kA	30 kA	15 kA	10 kA	50 % of Icu

Breaking capacity (Icn) according to IEC/EN 60898-1		Voltage (Ue)
Ph/Ph		400 V
Ph/N		230 V
Rating (In)	0.5 to 63 A	10000 A

Direct current (DC)

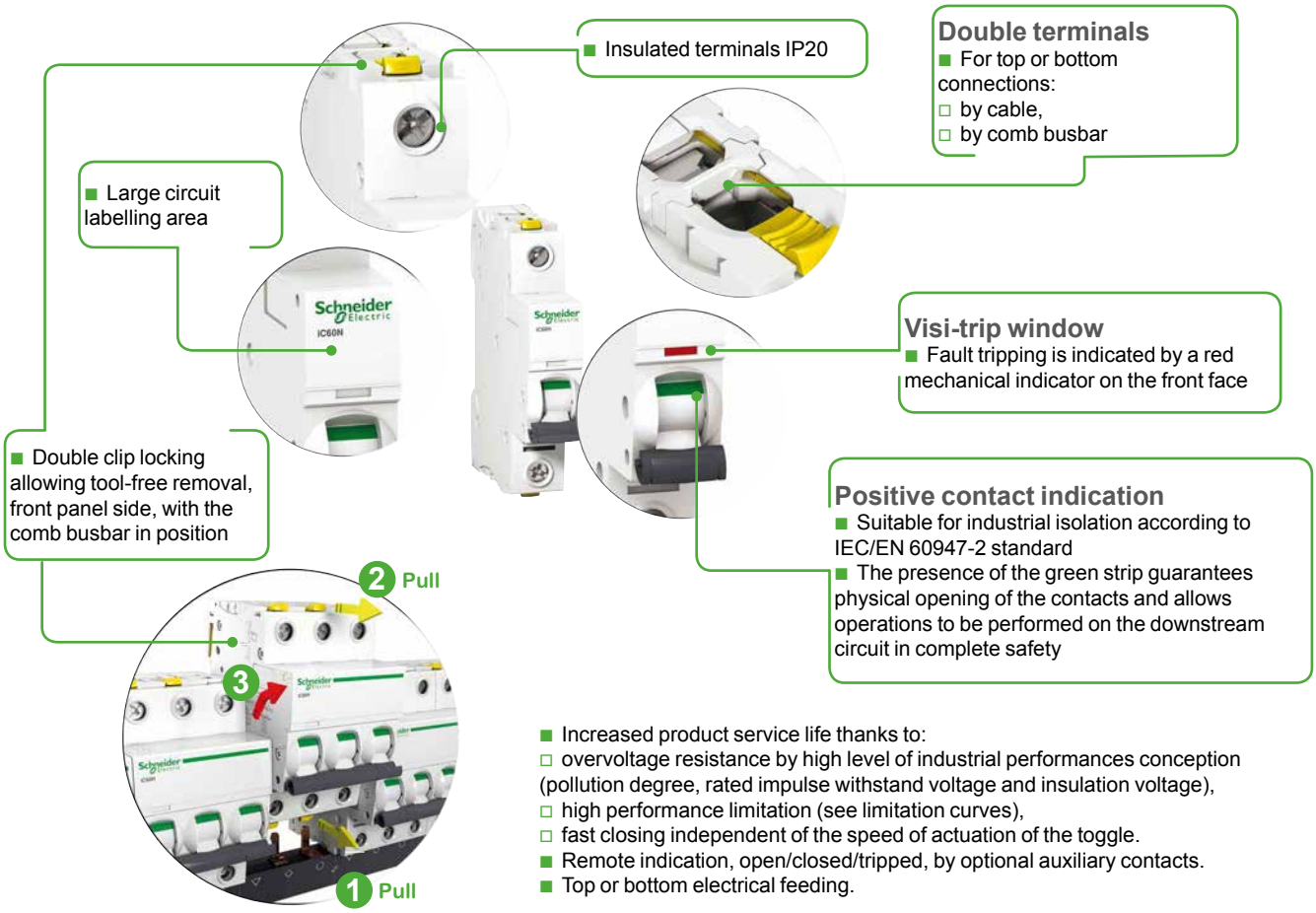
Breaking capacity (Icu) according to IEC/EN 60947-2		Voltage (Ue)					Service breaking capacity (Ics)
Between +/-		12 to 60 V	⩽ 72 V	⩽ 125 V	⩽ 180 V	⩽ 250 V	
Number of poles		1P		2P	3P	4P	
Rating (In)	1 to 63 A	20 kA	15 kA	15 kA	15 kA	15 kA	100 % of Icu

Catalogue numbers

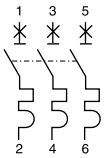
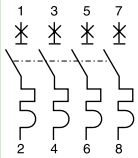
iC60H double terminals circuit breaker

Type	1P			1P+N			2P		
									
Auxiliaries	Remote tripping and indication, module CA907000 and CA907002			Remote tripping and indication, module CA907000 and CA907002			Remote tripping and indication, module CA907000 and CA907002		
Vigi iC60	Vigi iC60 add-on residual current device, module CA902005			Vigi iC60 add-on residual current device, module CA902005			Vigi iC60 add-on residual current device, module CA902005		
Rating (In)	Curve			Curve			Curve		
	B	C	D	B	C	D	B	C	D
0.5 A	-	A9F07170	A9F08170	-	A9F07670		-	A9F07270	A9F08270
1 A	-	A9F07101	A9F08101	-	A9F07601		-	A9F07201	A9F08201
2 A	-	A9F07102	A9F08102	-	A9F07602		-	A9F07202	A9F08202
3 A	-	A9F07103	A9F08103	-	A9F07603		-	A9F07203	A9F08203
4 A	-	A9F07104	A9F08104	-	A9F07604		-	A9F07204	A9F08204
6 A	A9F06106	A9F07106	A9F08106	A9F06606	A9F07606		A9F06206	A9F07206	A9F08206
10 A	A9F06110	A9F07110	A9F08110	A9F06610	A9F07610		A9F06210	A9F07210	A9F08210
13 A	A9F06113	A9F07113	A9F08113	A9F06613	A9F07613		A9F06213	A9F07213	A9F08213
16 A	A9F06116	A9F07116	A9F08116	A9F06616	A9F07616		A9F06216	A9F07216	A9F08216
20 A	A9F06120	A9F07120	A9F08120	A9F06620	A9F07620		A9F06220	A9F07220	A9F08220
25 A	A9F06125	A9F07125	A9F08125	A9F06625	A9F07625		A9F06225	A9F07225	A9F08225
32 A	A9F06132	A9F07132	A9F08132	A9F06632	A9F07632		A9F06232	A9F07232	A9F08232
40 A	A9F06140	A9F07140	A9F08140	A9F06640	A9F07640		A9F06240	A9F07240	A9F08240
50 A	A9F06150	A9F07150	A9F08150	A9F06650	A9F07650		A9F06250	A9F07250	A9F08250
63 A	A9F06163	A9F07163	A9F08163	A9F06663	A9F07663		A9F06263	A9F07263	A9F08263
Width in 9-mm modules	2			4			4		
Accessories	Modules CA907000 and CA907001			Modules CA907000 and CA907001			Modules CA907000 and CA907001		

iC60H double terminals circuit breakers (curve B, C, D) (cont.)



■ Increased product service life thanks to:
□ overvoltage resistance by high level of industrial performances conception (pollution degree, rated impulse withstand voltage and insulation voltage),
□ high performance limitation (see limitation curves),
□ fast closing independent of the speed of actuation of the toggle.
■ Remote indication, open/closed/tripped, by optional auxiliary contacts.
■ Top or bottom electrical feeding.

	3P			4P		
						
	Remote tripping and indication, module CA907000 and CA907002			**Remote tripping and indication, module CA907000 and CA907002**		
	Vigi iC60 add-on residual current device, module CA902005			**Vigi iC60 add-on residual current device, module CA902005**		
	Curve			**Curve**		
	B	**C**	**D**	**B**	**C**	**D**
	-	A9F07370	A9F08370	-	A9F07470	A9F08470
	-	A9F07301	A9F08301	-	A9F07401	A9F08401
	-	A9F07302	A9F08302	-	A9F07402	A9F08402
	-	A9F07303	A9F08303	-	A9F07403	A9F08403
	-	A9F07304	A9F08304	-	A9F07404	A9F08404
	A9F06306	A9F07306	A9F08306	A9F06406	A9F07406	A9F08406
	A9F06310	A9F07310	A9F08310	A9F06410	A9F07410	A9F08410
	A9F06313	A9F07313	A9F08313	A9F06413	A9F07413	A9F08413
	A9F06316	A9F07316	A9F08316	A9F06416	A9F07416	A9F08416
	A9F06320	A9F07320	A9F08320	A9F06420	A9F07420	A9F08420
	A9F06325	A9F07325	A9F08325	A9F06425	A9F07425	A9F08425
	A9F06332	A9F07332	A9F08332	A9F06432	A9F07432	A9F08432
	A9F06340	A9F07340	A9F08340	A9F06440	A9F07440	A9F08440
	A9F06350	A9F07350	A9F08350	A9F06450	A9F07450	A9F08450
	A9F06363	A9F07363	A9F08363	A9F06463	A9F07463	A9F08463
	6			8		
	Modules CA907000 and CA907001			**Modules CA907000 and CA907001**		

iC60H double terminals circuit breakers (curve B, C, D) (cont.)

Connection between double terminal circuit breakers

With comb busbar at the back/cables at the front — Back — Front

Without comb busbar at the back/cables at the front

DB404815



Rating	Tightening torque	Comb busbar	Copper cables	
		Thickness of the teeth	Rigid	Flexible or with ferrule
			DB122945	DB122946
0.5 to 25 A	2 N.m	1.5 mm	1 to 25 mm²	1 to 16 mm²
32 to 63 A	3.5 N.m	1.5 mm	1 to 25 mm²	1 to 25 mm²

Between double terminal circuit breakers and single-terminal circuit breakers

Cables at the back/comb busbar at the front — Back — Front

DB404817



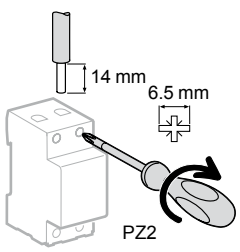
Rating	Tightening torque	Copper cables		Thickness of the teeth
		Rigid	Flexible or with ferrule	
	DB122945	DB122946		
0.5 to 25 A	2 N.m	1 to 16 mm²	1 to 10 mm²	1.5 mm
32 to 63 A	3.5 N.m	1 to 16 mm²	1 to 10 mm²	1.5 mm

■ Connection by comb busbar or by cable (according to EN 50027).

Connection

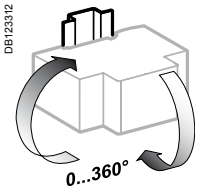
With accessories

DB123947

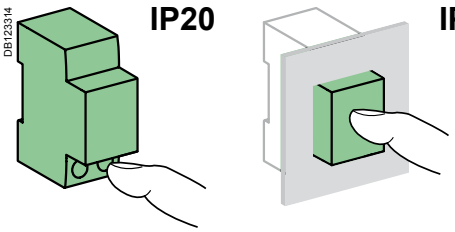


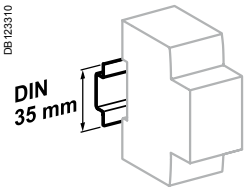
Rating	50 mm² Al terminal	Screw-on connection for ring terminal	Multi-cables terminal	
			Rigid cables	Flexible cables
	DB122935 Al	DB118789 Ø	DB118787	
0.5 to 25 A	-	Ø 5 mm	-	-
32 to 63 A	50 mm²		3 x 16 mm²	3 x 10 mm²

iC60H double terminals circuit breakers (curve B, C, D) (cont.)



Indifferent position of installation.



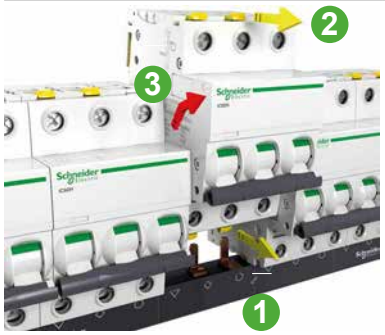
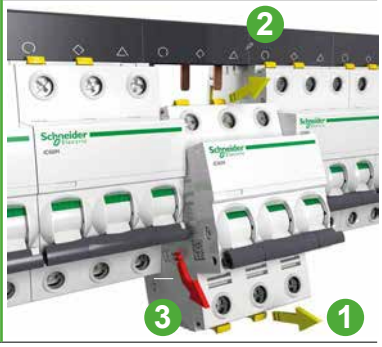


Clip on DIN rail 35 mm.

Technical data

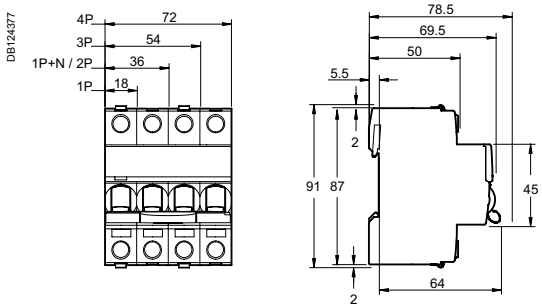
Main characteristics		
According to IEC/EN 60947-2		
Insulation voltage (Ui)		500 V AC
Pollution degree		3
Rated impulse withstand voltage (Uimp)		6 kV
Thermal tripping	Reference temperature	50°C
	Temperature derating	See module CA908007
Magnetic tripping	B curve	4 In ± 20 %
	C curve	8 In ± 20 %
	D curve	12 In ± 20 %
Utilization category		A
According to IEC/EN 60898-1		
Limitation class		3
Rated making and breaking capacity of an individual pole (Icn1)		Icn1 = Icn
Additional characteristics		
Degree of protection (IEC 60529)	Device only	IP20
	Device in modular enclosure	IP40 Insulation class II
Endurance (O-C)	Electrical	10,000 cycles
	Mechanical	20,000 cycles
Overvoltage category (IEC 60364)		IV
Operating temperature		-35°C to +70°C
Storage temperature		-40°C to +85°C
Tropicalization (IEC 60068-1)		Treatment 2 (relative humidity 95 % to 55°C)

Disassembly double terminals iC60 circuit breaker with the comb busbar in position

Comb busbar downstream	Comb busbar upstream
	

1- Pull lower "clip locking"
2- Pull upper "clip locking"
3- Remove the circuit breaker

Dimensions (mm)



Weight (g)

Circuit-breaker	
Type	**iC60H**
1P	125
2P (1P+N)	250
3P	375
4P	500

iC60L circuit breakers (curve B, C, K, Z)

DB116619 DB123525 DB122858

Country approval pictograms

IEC/EN 60947-2
IEC/EN 60898-1 up to 40 A

■ iC60L circuit breakers are multi-standard circuit breakers which combine the following functions:
- □ circuit protection against short-circuit currents,
- □ circuit protection against overload currents,
- □ suitable for industrial isolation according to IEC/EN 60947-2, standard.
- □ fault tripping indication by a red mechanical indicator in circuit breaker front face.

PB104442-40



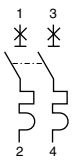
PB104452-40



Alternating current (AC) 50/60 Hz						
Breaking capacity (Icu) according to IEC/EN 60947-2						**Service breaking capacity (Ics)**
		Voltage (Ue)				
Ph/Ph (2P, 3P, 4P)		**12 to 133 V**	**220 to 240 V**	**380 to 415 V**	**440 V**	
Ph/N (1P)		**12 to 60 V**	**100 to 133 V**	**220 to 240 V**	**-**	
Rating (In)	0.5 to 4 A	100 kA	100 kA	100 kA	70 kA	100 % of Icu
	6 to 25 A	70 kA	50 kA	25 kA	20 kA	50 % of Icu (1)
	32 / 40 A	70 kA	36 kA	20 kA	15 kA	50 % of Icu
	50 / 63 A	70 kA	30 kA	15 kA	10 kA	50 % of Icu
Breaking capacity (Icn) according to IEC/EN 60898-1						
		Voltage (Ue)				
Ph/Ph		**400 V**				
Ph/N		**230 V**				
Rating (In)	0.5 to 40 A	15000 A				

Direct current (DC)						
Breaking capacity (Icu) according to IEC/EN 60947-2						**Service breaking capacity (Ics)**
		Voltage (Ue)				
Between +/-		**12 to 60 V**	**≤ 72 V**	**≤ 125 V**	**≤ 180 V**	**≤ 250 V**
Number of poles		**1P**		**2P**	**3P**	**4P**
Rating (In)	0.5 to 63 A	25 kA	20 kA	20 kA	20 kA	20 kA

Catalogue numbers

iC60L circuit breaker										
Type		**1P**				**2P**				
		E45092 				E45094 				
Auxiliaries		**Remote tripping and indication, module CA907000 and CA907002**				**Remote tripping and indication, module CA907000 and CA907002**				
Vigi iC60		**Vigi iC60 add-on residual current device, module CA902005**				**Vigi iC60 add-on residual current device, module CA902005**				
Rating (In)	**Quality label** (2)	**Curve**				**Curve**				
		B	**C**	**K**	**Z**	**B**	**C**	**K**	**Z**
0.5 A		**A9F93170**	**A9F94170**	**A9F95170**	**A9F92170**	**A9F93270**	**A9F94270**	**A9F95270**	**A9F92270**
1 A		**A9F93101**	**A9F94101**	**A9F95101**	**A9F92101**	**A9F93201**	**A9F94201**	**A9F95201**	**A9F92201**
1.6 A		**-**	**-**	**A9F95172**	**A9F92172**	**-**	**-**	**A9F95272**	**A9F92272**
2 A		**A9F93102**	**A9F94102**	**A9F95102**	**A9F92102**	**A9F93202**	**A9F94202**	**A9F95202**	**A9F92202**
3 A		**A9F93103**	**A9F94103**	**A9F95103**	**A9F92103**	**A9F93203**	**A9F94203**	**A9F95203**	**A9F92203**
4 A		**A9F93104**	**A9F94104**	**A9F95104**	**A9F92104**	**A9F93204**	**A9F94204**	**A9F95204**	**A9F92204**
6 A		**A9F93106**	**A9F94106**	**A9F95106**	**A9F92106**	**A9F93206**	**A9F94206**	**A9F95206**	**A9F92206**
10 A		**A9F93110**	**A9F94110**	**A9F95110**	**A9F92110**	**A9F93210**	**A9F94210**	**A9F95210**	**A9F92210**
16 A		**A9F93116**	**A9F94116**	**A9F95116**	**A9F92116**	**A9F93216**	**A9F94216**	**A9F95216**	**A9F92216**
20 A		**A9F93120**	**A9F94120**	**A9F95120**	**A9F92120**	**A9F93220**	**A9F94220**	**A9F95220**	**A9F92220**
25 A		**A9F93125**	**A9F94125**	**A9F95125**	**A9F92125**	**A9F93225**	**A9F94225**	**A9F95225**	**A9F92225**
32 A		**A9F93132**	**A9F94132**	**A9F95132**	**A9F92132**	**A9F93232**	**A9F94232**	**A9F95232**	**A9F92232**
40 A		**A9F93140**	**A9F94140**	**A9F95140**	**A9F92140**	**A9F93240**	**A9F94240**	**A9F95240**	**A9F92240**
50 A		**A9F93150**	**A9F94150**	**A9F95150**(3)	**A9F92150**	**A9F93250**	**A9F94250**	**A9F95250**	**A9F92250**
63 A		**A9F93163**	**A9F94163**	**A9F95163**(3)	**A9F92163**	**A9F93263**	**A9F94263**	**A9F95263**	**A9F92263**
Width in 9-mm modules		2				4			
Accessories		**Module CA907000 and CA907001**				**Module CA907000 and CA907001**			

(1) 100 % of Icu for ratings 6 to 25 A under Ue 100 to 133 V AC Ph/Ph and Ue 12 to 60 V AC Ph/N.
(2) Information to be provided by the country.
(3) Without approval

iC60L circuit breakers (curve B, C, K, Z) (cont.)

PB104436-40



■ Insulated terminals IP20

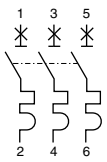
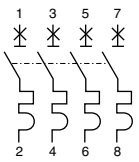
Visi-trip window
■ Fault tripping is indicated by a red mechanical indicator on the front face

■ Large circuit labelling area

Positive contact indication
■ Suitable for industrial isolation according to IEC/EN 60947-2 standard.
■ The presence of the green strip guarantees physical opening of the contacts and allows operations to be performed on the downstream circuit in complete safety

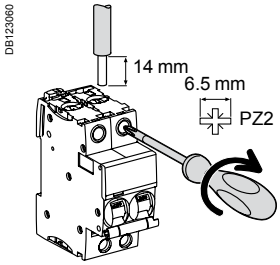
■ Double clip for dismounting with comb busbar in place

■ Increased product service life thanks to:
□ overvoltage resistance by high level of industrial performances conception (pollution degree, rated impulse withstand voltage and insulation voltage),
□ high performance limitation (see limitation curves),
□ fast closing independent of the speed of actuation of the toggle.
■ Remote indication, open/closed/tripped, by optional auxiliary contacts.
■ Top or bottom electrical feeding.

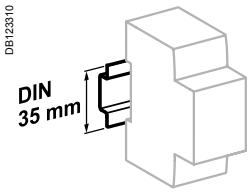
	3P				4P			
E45095					E45097 			
	Remote tripping and indication, module CA907000 and CA907002				**Remote tripping and indication, module CA907000 and CA907002**			
	Vigi iC60 add-on residual current device, module CA902005				**Vigi iC60 add-on residual current device, module CA902005**			
	Curve				**Curve**			
	B	**C**	**K**	**Z**	**B**	**C**	**K**	**Z**
	A9F93370	**A9F94370**	**A9F95370**	**A9F92370**	**A9F93470**	**A9F94470**	**A9F95470**	**A9F92470**
	A9F93301	**A9F94301**	**A9F95301**	**A9F92301**	**A9F93401**	**A9F94401**	**A9F95401**	**A9F92401**
	-	**-**	**A9F95372**	**A9F92372**	**-**	**-**	**A9F95472**	**A9F92472**
	A9F93302	**A9F94302**	**A9F95302**	**A9F92302**	**A9F93402**	**A9F94402**	**A9F95402**	**A9F92402**
	A9F93303	**A9F94303**	**A9F95303**	**A9F92303**	**A9F93403**	**A9F94403**	**A9F95403**	**A9F92403**
	A9F93304	**A9F94304**	**A9F95304**	**A9F92304**	**A9F93404**	**A9F94404**	**A9F95404**	**A9F92404**
	A9F93306	**A9F94306**	**A9F95306**	**A9F92306**	**A9F93406**	**A9F94406**	**A9F95406**	**A9F92406**
	A9F93310	**A9F94310**	**A9F95310**	**A9F92310**	**A9F93410**	**A9F94410**	**A9F95410**	**A9F92410**
	A9F93316	**A9F94316**	**A9F95316**	**A9F92316**	**A9F93416**	**A9F94416**	**A9F95416**	**A9F92416**
	A9F93320	**A9F94320**	**A9F95320**	**A9F92320**	**A9F93420**	**A9F94420**	**A9F95420**	**A9F92420**
	A9F93325	**A9F94325**	**A9F95325**	**A9F92325**	**A9F93425**	**A9F94425**	**A9F95425**	**A9F92425**
	A9F93332	**A9F94332**	**A9F95332**	**A9F92332**	**A9F93432**	**A9F94432**	**A9F95432**	**A9F92432**
	A9F93340	**A9F94340**	**A9F95340**	**A9F92340**	**A9F93440**	**A9F94440**	**A9F95440**	**A9F92440**
	A9F93350	**A9F94350**	**A9F95350**	**A9F92350**	**A9F93450**	**A9F94450**	**A9F95450**	**A9F92450**
	A9F93363	**A9F94363**	**A9F95363**	**A9F92363**	**A9F93463**	**A9F94463**	**A9F95463**	**A9F92463**
	4				6			
	Module CA907000 and CA907001				**Module CA907000 and CA907001**			

iC60L circuit breakers (curve B, C, K, Z) (cont.)

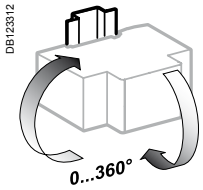
Connection



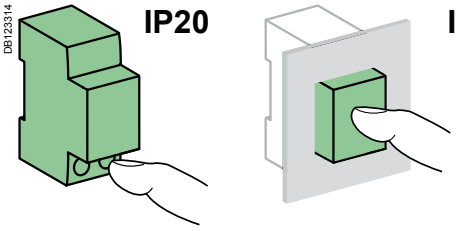
Rating	Tightening torque	Without accessory: Copper cables – Rigid	Without accessory: Copper cables – Flexible or with ferrule	With accessories: 50 mm² Al terminal	With accessories: Screw-on connection for ring terminal	With accessories: Multi-cables terminal – Rigid cables	With accessories: Multi-cables terminal – Flexible cables
		DB122945	DB122946	DB122935 Al	DB118789 Ø	DB118787	
0.5 to 25 A	2 N.m	1 to 25 mm²	1 to 16 mm²	-	Ø 5 mm	-	-
32 to 63 A	3.5 N.m	1 to 35 mm²	1 to 25 mm²	50 mm²		3 x 16 mm²	3 x 10 mm²



Clip on DIN rail 35 mm.



Indifferent position of installation.



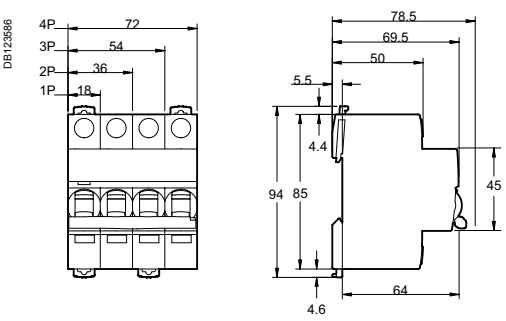
Technical data

Main characteristics		
According to IEC/EN 60947-2		
Insulation voltage (Ui)		500 V AC
Pollution degree		3
Rated impulse withstand voltage (Uimp)		6 kV
Thermal tripping	Reference temperature	50 °C
	Temperature derating	See module CA908007
Magnetic tripping	B curve	4 In ± 20 %
	C curve	8 In ± 20 %
	K curve	12 In ± 20 %
	Z curve	3 In ± 20 %
Utilization category		A
According to IEC/EN 60898-1		
Rated making and breaking capacity of an individual pole (Icn1)		Icn1 = Icn
Additional characteristics		
Breaking capacity under 1 pole with IT 380-415 V isolated neutral system (case of double fault)	40 A	4 kA
	50/63 A	3 kA
Degree of protection (IEC 60529)	Device only	IP20
	Device in modular enclosure	IP40 Insulation class II
Endurance (O-C)	Electrical	10,000 cycles
	Mechanical	20,000 cycles
Overvoltage category (IEC 60364)		IV
Operating temperature		-35°C to +70°C
Storage temperature		-40°C to +85°C
Tropicalization (IEC 60068-1)		Treatment 2 (relative humidity 95 % to 55°C)

Weight (g)

Circuit-breaker	
Type	**iC60L**
1P	125
2P	250
3P	375
4P	500

Dimensions (mm)



C120N circuit breakers (curves C, D)

DB123398

Country approval pictograms

PB107914-30



PB107917-40



PB107920-30



PB107923-30



IEC/EN 60947-2

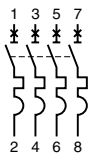
C120N circuit breakers are multistandard circuit breakers that combine the following functions:
- circuit protection against short-circuit currents,
- circuit protection against overload currents,
- suitability for isolation in the industrial sector to IEC/EN 60947-2,
- fault tripping and indication by adding auxiliaries.

Alternating current (AC) 50/60 Hz			
Breaking capacity (Icu) to IEC/EN 60947-2			Service breaking capacity (Ics)
Type		Voltage (V)	
1P, 2P, 3P, 4P		230 to 400 V	
Rating (In)	80 and 100 A	10 kA	75 % of Icu

Direct current (DC)						
Breaking capacity (Icu) according to IEC/EN 60947-2						Service breaking capacity (Ics)
		Voltage (Ue)				
Between +/-		12 to 125 V	≤ 144 V	≤ 250 V	≤ 375 V	≤ 500 V
Number of poles		1P		2P	3P	4P
Rating (In)	80 and 100 A	15 kA	10 kA	10 kA	10 kA	10 kA	100 % of Icu

Catalogue numbers

C120N circuit breaker

Type	1P		2P		3P		4P	
								
Auxiliaries	Remote indication and tripping, module CA907008 and CA907013		Remote indication and tripping, module CA907008 and CA907013		Remote indication and tripping, module CA907008 and CA907013		Remote indication and tripping, module CA907008 and CA907013	
Vigi C120	Vigi C120 add-on residual current device, module CA902016		Vigi C120 add-on residual current device, module CA902016		Vigi C120 add-on residual current device, module CA902016		Vigi C120 add-on residual current device, module CA902016	
Rating (In)	Curve		Curve		Curve		Curve	
	C	D	C	D	C	D	C	D
80 A	A9N60729	A9N60745	A9N60733	A9N60749	A9N60737	A9N60753	A9N60741	A9N60757
100 A	A9N60730	A9N60746	A9N60734	A9N60750	A9N60738	A9N60754	A9N60742	A9N60758
Width in 9-mm modules	3		6		9		12	
Accessories	Module CA907012 and CA907013		Module CA907012 and CA907013		Module CA907012 and CA907013		Module CA907012 and CA907013	

C120 circuit breakers

■ Terminals insulated to IP20

PB107917-40



■ Location for 4 clip-on terminal markers

Positive contact indication

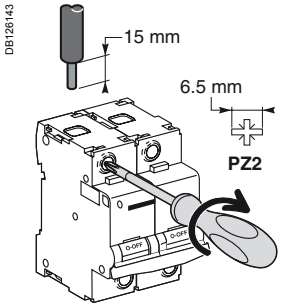
■ Suitability for isolation in the industrial sector to IEC/EN 60947-2.

■ The presence of the green strip guarantees that the contacts open physically and allows work to be carried out safely on the downstream circuit.

■ Longer product service life thanks to:
□ good overvoltage withstand capacity: products designed to offer a high industrial performance level (degree of pollution, rated impulse withstand voltage and insulation voltage).
□ high limitation performances (see limitation curves).
□ fast closure independent of toggle operating speed.
■ Remote indication of the open/closed/tripped state by auxiliary contacts (optional).
■ Power supply from above or below.

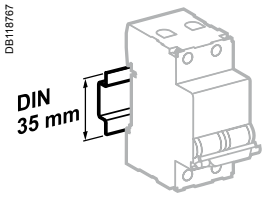
C120 circuit breakers (cont.)

Connection

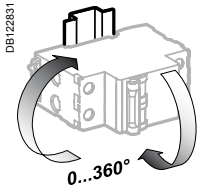


Rating	Tightening torque	Without access. Copper cables Rigid/ semi-rigid	Without access. Copper cables Flexible or with ferrule	With accessories 50 mm² Al Terminal	With accessories Screw-on connection for ring terminal (1)	With accessories Multi-cable terminal Rigid cables	With accessories Multi-cable terminal Flexible cables
		DB122945	DB122946	DB122935	DB118789	DB118787	
80 and 100 A	3.5 N.m	1.5 to 50 mm²	1.5 to 35 mm²	16 to 50 mm²	Ø 5 mm	3 x 16 mm²	3 x 10 mm²

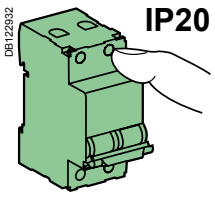
(1) For lugs up to 63 A, front or rear access.

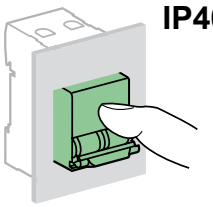


Clips onto 35 mm DIN rail.



Any installation position.





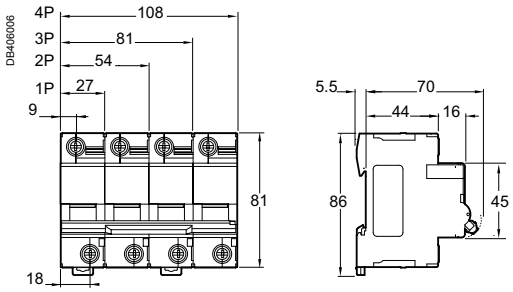
Technical data

Main characteristics		
To IEC/EN 60947-2		
Insulation voltage (Ui)		500 V AC
Degree of pollution		3
Rated impulse withstand voltage (Uimp)		6 kV
Thermal tripping	Reference temperature	50°C
Magnetic tripping	Curve C	8 In ± 20 %
	Curve D	12 In ± 20 %
Limitation class		3
Additional characteristics		
Degree of protection (IEC 60529)	Device only	IP20
	Device in a modular enclosure	IP40
Endurance (O-C)	Electrical	5000 cycles (O-C)
	Mechanical	20000 cycles
Operating temperature		-30°C to +70°C
Storage temperature		-40°C to +80°C
Tropicalisation (IEC 60068-1)		Treatment 2 (relative humidity 95 % at 55°C)

Weight (g)

Circuit breaker	
Type	**C120**
1P	205
2P	410
3P	615
4P	820

Dimensions (mm)



C120N circuit breakers (curves B, C, D)

DB406142 DB123525
Country approval pictograms


PB107914-30


PB107917-40


PB107920-30


PB107923-30

IEC/EN 60898-1

C120N circuit breakers are multistandard circuit breakers that combine the following functions:
- circuit protection against short-circuit currents,
- circuit protection against overload currents,
- suitability for isolation in the industrial sector to IEC/EN 60947-2,
- fault tripping and indication by adding auxiliaries.

Alternating current (AC) 50/60 Hz						
Breaking capacity (Icu) to IEC/EN 60947-2						**Service breaking capacity (Ics)**
Type		**Voltage (V)**				
1P		**12 to 130 V**	**220 to 240 V**	**380 to 415 V**	**440 V**	
Rating (In)	63 to 125 A	20 kA	10 kA	3 kA (1)	-	75 % of Icu
2P/3P/4P		**12 to 130 V**	**220 to 240 V**	**380 to 415 V**	**440 V**	
	63 to 125 A	-	20 kA	10 kA	6 kA	75 % of Icu
Breaking capacity (Icn) to IEC/EN 60898-1						
Type		**Voltage (V)**				
1P, 2P, 3P, 4P		**230 to 400 V**				
Rating (In)	63 to 125 A	10000 A				75 % of Icn

(1) One-pole breaking capacity in IT isolated neutral system (double fault).

Direct current (DC)						
Breaking capacity (Icu) according to IEC/EN 60947-2						**Service breaking capacity (Ics)**
	Voltage (Ue)					
Between +/-	**12 to 125 V**	**≤ 144 V**	**≤ 250 V**	**≤ 375 V**	**≤ 500 V**	
Number of poles	**1P**		**2P**	**3P**	**4P**	
Rating (In) 63 to 125 A	15 kA	10 kA	10 kA	10 kA	10 kA	100 % of Icu

Catalogue numbers

C120N circuit breaker

Type	**1P**			**2P**		
						
Auxiliaries	**Remote indication and tripping, module CA907008 and CA907013**			**Remote indication and tripping, module CA907008 and CA907013**		
Vigi C120	**Vigi C120 add-on residual current device, module CA902016**			**Vigi C120 add-on residual current device, module CA902016**		
Rating (In)	**Curve**			**Curve**		
	B	**C**	**D**	**B**	**C**	**D**
63 A	**A9N18340**	**A9N18356**	**A9N18378**	**A9N18344**	**A9N18360**	**A9N18382**
80 A	**A9N18341**	**A9N18357**	**A9N18379**	**A9N18345**	**A9N18361**	**A9N18383**
100 A	**A9N18342**	**A9N18358**	**A9N18380**	**A9N18346**	**A9N18362**	**A9N18384**
125 A	**A9N18343**	**A9N18359**	**A9N18381**	**A9N18347**	**A9N18363**	**A9N18385**
Width in 9-mm modules	3			6		
Accessories	**Module CA907012 and CA907013**			**Module CA907012 and CA907013**		

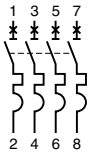
(1) Country France only

C120N circuit breakers (curves B, C, D) (cont.)

PB107917-40



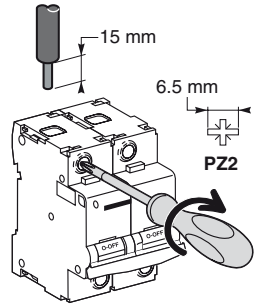
■ Longer product service life thanks to:
□ good overvoltage withstand capacity: products designed to offer a high industrial performance level (degree of pollution, rated impulse withstand voltage and insulation voltage).
□ high limitation performances (see limitation curves).
□ fast closure independent of toggle operating speed.
■ Remote indication of the open/closed/tripped state by auxiliary contacts (optional).
■ Power supply from above or below.

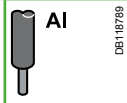
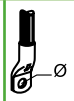
	3P			4P		
						
	Remote indication and tripping, module CA907008 and CA907013			**Remote indication and tripping, module CA907008 and CA907013**		
	Vigi C120 add-on residual current device, module CA902016			**Vigi C120 add-on residual current device, module CA902016**		
	Curve			**Curve**		
	B	**C**	**D**	**B**	**C**	**D**
	A9N18348	**A9N18364**	**A9N18386**	**A9N18352**	**A9N18371**	**A9N18390**
	A9N18349	**A9N18365**	**A9N18387**	**A9N18353**	**A9N18372** **A9N18373(1)**	**A9N18391**
	A9N18350	**A9N18367**	**A9N18388**	**A9N18354**	**A9N18374** **A9N18375(1)**	**A9N18392**
	A9N18351	**A9N18369**	**A9N18389**	**A9N18355**	**A9N18376** **A9N18377(1)**	**A9N18393**
	9			12		
	Module CA907012 and CA907013			**Module CA907012 and CA907013**		

C120N circuit breakers (curves B, C, D) (cont.)

Connection

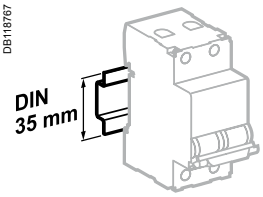
DB126143



Rating	Tightening torque	Without access. Copper cables: Rigid/ semi-rigid	Without access. Copper cables: Flexible or with ferrule	With accessories: 50 mm² Al Terminal	With accessories: Screw-on connection for ring terminal(1)	With accessories: Multi-cable terminal: Rigid cables	With accessories: Multi-cable terminal: Flexible cables
		DB122945 	DB122946 	DB122935 Al 	DB118789  Ø	DB118787 	
63 to 125 A	3.5 N.m	1.5 to 50 mm²	1.5 to 35 mm²	16 to 50 mm²	Ø 5 mm	3 x 16 mm²	3 x 10 mm²

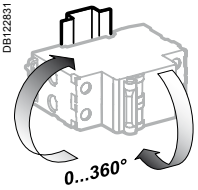
(1) For lugs up to 63 A, front or rear access.

DB118767



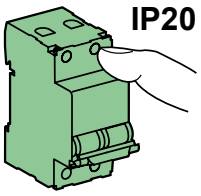
Clips onto 35 mm DIN rail.

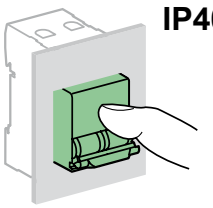
DB122831



Any installation position.

DB122932





Technical data

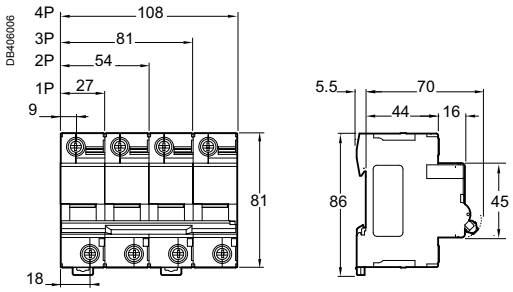
Main characteristics			
To IEC/EN 60947-2			
Insulation voltage (Ui)			500 V AC
Degree of pollution			3
Rated impulse withstand voltage (Uimp)			6 kV
Thermal tripping	Reference temperature		50°C
To IEC/EN 60898-1			
Magnetic tripping	Curve B		3 and 5 In
	Curve C		5 and 10 In
	Curve D		10 and 14 In
Limitation class			3
Additional characteristics			
Degree of protection (IEC 60529)	Device only		IP20
	Device in a modular enclosure		IP40
Endurance (O-C)	Electrical	63 A	10000 cycles (O-C)
		80...125 A	5000 cycles (O-C)
	Mechanical		20000 cycles
Operating temperature			-30°C to +70°C
Storage temperature			-40°C to +80°C
Tropicalisation (IEC 60068-1)			Treatment 2 (relative humidity 95 % at 55°C)

Weight (g)

Circuit breaker	
Type	**C120N**
1P	205
2P	410
3P	615
4P	820

Dimensions (mm)

DB406006





C120H circuit breakers (curves B, C, D)

DB406142 DB123525

Country approval pictograms

PB107913-30



PB107916-30



PB107919-30



PB107922-30



IEC/EN 60898-1

C120H circuit breakers are multistandard circuit breakers that combine the following functions:

- circuit protection against short-circuit currents
- circuit protection against overload currents
- suitability for isolation in the industrial sector to IEC/EN 60947-2
- fault tripping and indication by adding auxiliaries.

Alternating current (AC) 50/60 Hz						
Breaking capacity (Icu) to IEC/EN 60947-2						**Service breaking capacity (Ics)**
Type		**Voltage (V)**				
1P		**12 to 130 V**	**220 to 240 V**	**380 to 415 V**	**440 V**	
Rating (In)	63 to 125 A	30 kA	15 kA	4,5 kA (1)	-	50 % of Icu
2P, 3P, 4P		**12 to 130 V**	**220 to 240 V**	**380 to 415 V**	**440 V**	
	63 to 125 A	-	30 kA	15 kA	10 kA	50 % of Icu
Breaking capacity (Icn) to IEC/EN 60898-1						
Type		**Voltage (V)**				
1P, 2P, 3P, 4P		**230 to 400 V**				
Rating (In)	63 to 125 A	15000 A				50 % of Icn

(1) One-pole breaking capacity in IT isolated neutral system (double fault).

Direct current (DC)						
Breaking capacity (Icu) according to IEC/EN 60947-2						**Service breaking capacity (Ics)**
	Voltage (Ue)					
Between +/-	**12 to 125 V**	**≤ 144 V**	**≤ 250 V**	**≤ 375 V**	**≤ 500 V**	
Number of poles	**1P**		**2P**	**3P**	**4P**	
Rating (In) 63 to 125 A	20 kA	15 kA	15 kA	15 kA	15 kA	100 % of Icu

Catalogue numbers

C120H circuit breaker

Type	**1P**			**2P**		
						
Auxiliaries	**Remote indication and tripping, module CA907008 and CA907013**			**Remote indication and tripping, module CA907008 and CA907013**		
Vigi C120	**Vigi C120 add-on residual current device, module CA902016**			**Vigi C120 add-on residual current device, module CA902016**		
Rating (In)	**Curve**			**Curve**		
	B	**C**	**D**	**B**	**C**	**D**
63 A	**A9N18401**	**A9N18445**	**A9N18489**	**A9N18412**	**A9N18456**	**A9N18500**
80 A	**A9N18402**	**A9N18446**	**A9N18490**	**A9N18413**	**A9N18457**	**A9N18501**
100 A	**A9N18403**	**A9N18447**	**A9N18491**	**A9N18414**	**A9N18458**	**A9N18502**
125 A	**A9N18404**	**A9N18448**	**A9N18492**	**A9N18415**	**A9N18459**	**A9N18503**
Width in 9 mm modules	3			6		
Accessories	**Module CA907012 and CA907013**			**Module CA907012 and CA907013**		

C120H circuit breakers (curves B, C, D) (cont.)

PB107916-40



■ Terminals insulated to IP20

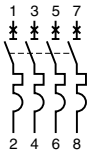
■ Location for 4 clip-on terminal markers

Positive contact indication

■ Suitability for isolation in the industrial sector to IEC/EN 60947-2.

■ The presence of the green strip guarantees that the contacts open physically and allows work to be carried out safely on the downstream circuit.

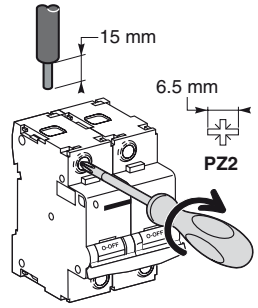
■ Longer product service life thanks to:
□ good overvoltage withstand capacity: products designed to provide a high industrial performance level (degree of pollution, rated impulse withstand voltage and insulation voltage).
□ high limitation performances (see limitation curves).
□ fast closure independent of toggle operating speed.
■ Remote indication of the open/closed/tripped state by auxiliary contacts (optional).
■ Power supply from above or below.

	3P			4P		
						
	Remote indication and tripping, module CA907008 and CA907013			**Remote indication and tripping, module CA907008 and CA907013**		
	Vigi C120 add-on residual current device, module CA902016			**Vigi C120 add-on residual current device, module CA902016**		
	Curve			**Curve**		
	B	**C**	**D**	**B**	**C**	**D**
	A9N18423	**A9N18467**	**A9N18511**	**A9N18434**	**A9N18478**	**A9N18522**
	A9N18424	**A9N18468**	**A9N18512**	**A9N18435**	**A9N18479**	**A9N18523**
	A9N18425	**A9N18469**	**A9N18513**	**A9N18436**	**A9N18480**	**A9N18524**
	A9N18426	**A9N18470**	**A9N18514**	**A9N18437**	**A9N18481**	**A9N18525**
	9			12		
	Module CA907012 and CA907013			**Module CA907012 and CA907013**		

C120H circuit breakers (curves B, C, D) (cont.)

Connection

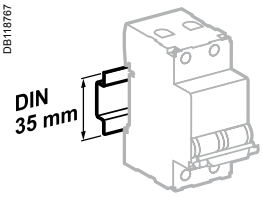
DB126143



Rating	Tightening torque	Without access. Copper cables Rigid	Without access. Copper cables Flexible or with ferrule	With accessories 50 mm² Al term.	With accessories Screw-on connection for ring terminal (1)	With accessories Multi-cable terminal Rigid cables	With accessories Multi-cable terminal Flexible cables
		DB122945	DB122946	DB122935	DB118789	DB118787	
				Al	Ø		
63 to 125 A	3.5 N.m	1.5 to 50 mm²	1.5 to 35 mm²	16 to 50 mm²	Ø 5 mm	3 x 16 mm²	3 x 10 mm²

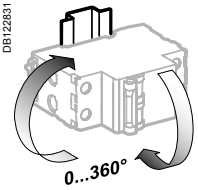
(1) For lugs up to 63 A, front or rear accessories.

DB118767



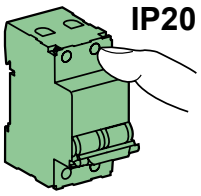
Clips onto 35 mm DIN rail.

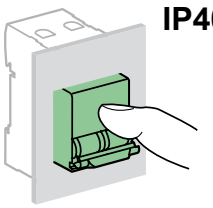
DB122831



Any installation position.

DB122932





Technical data

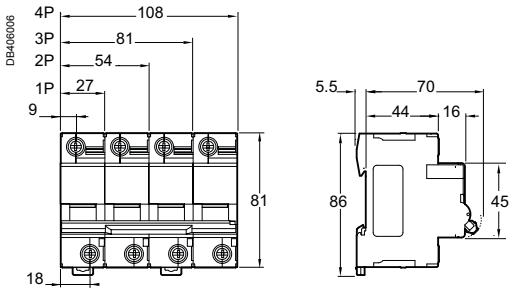
Main characteristics			
To IEC/EN 60947-2			
Insulation voltage (Ui)			500 V AC
Degree of pollution			3
Rated impulse withstand voltage (Uimp)			6 kV
Thermal tripping	Reference temperature		50°C
To IEC/EN 60898-1			
Magnetic tripping	Curve B		3 and 5 In
	Curve C		5 and 10 In
	Curve D		10 and 14 In
Limitation class			3
Additional characteristics			
Degree of protection (IEC 60529)	Device only		IP20
	Device in a modular enclosure		IP40 (IPXXD)
Endurance (O-C)	Electrical	63 A	10000 cycles (O-C)
		80...125 A	5000 cycles (O-C)
	Mechanical		20000 cycles
Operating temperature			-30°C to +70°C
Storage temperature			-40°C to +80°C
Tropicalisation (IEC 60068-1)			Treatment 2 (relative humidity 95% at 55°C)

Weight (g)

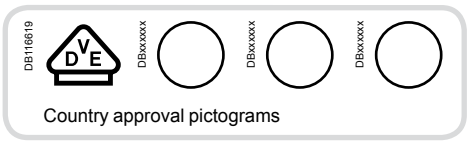
Circuit breaker	
Type	**C120H**
1P	205
2P	410
3P	615
4P	820

Dimensions (mm)

DB406006



NG125N circuit breakers (curves B, C, D)



Country approval pictograms

IEC/EN 60947-2

■ NG125N circuit breakers are circuit breakers which combine the following functions:
- □ circuit protection against short-circuit currents,
- □ circuit protection against overload currents,
- □ suitability for isolation in the industrial sector to IEC/EN 60947-2,
- □ tripping upon fault is indicated by a red mechanical state indicator light on the front face of the circuit breaker.



NG125N 1P



NG125N 2P



NG125N 3P



NG125N 4P

Alternating current (AC) 50/60 Hz

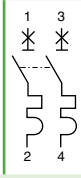
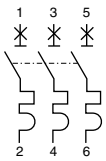
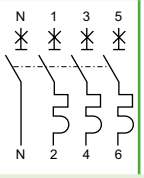
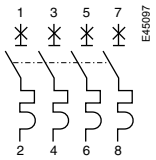
Breaking capacity (Icu) to IEC/EN 60947-2	Voltage (Ue)							Service breaking capacity (Ics)
Ph/Ph (2P, 3P, 3P+N, 4P)	-	-	220 to 240 V	-	380 to 415 V	440 V	500 V	
Ph/N (1P)	110 to 130 V	220 to 240 V	-	380 to 415 V	-	-	-	
Rating (In) 10 to 125 A	50 kA	25 kA	50 kA	6 kA(2)	25 kA	20 kA	10 kA	75 % of Icu

Direct current (DC)

Breaking capacity (Icu) according to IEC/EN 60947-2	Voltage (Ue)					Service breaking capacity (Ics)
	12 to 125 V	⩽ 144 V	⩽ 250 V	⩽ 375 V	⩽ 500 V	
Number of poles	1P		2P	3P	4P	
Rating (In) 10 to 125 A	25 kA	20 kA	20 kA	20 kA	20 kA	100 % of Icu

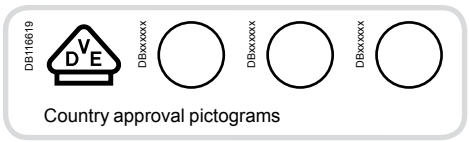
Catalogue numbers

NG125N circuit breaker

Type		1P	2P	3P			3P+N	4P		
										
Auxiliaries		Remote indication and tripping, module CM907004 and CM907005								
Vigi NG125		Vigi NG125 add-on residual current device, module CM902008								
Rating (In)	Quality label (1)	Curve	Curve	Curve			Curve	Curve		
		C	C	B	C	D	C	B	C	D
10 A		18610	18621	-	18632	-	-	-	18649	-
16 A		18611	18622	-	18633	-	-	-	18650	-
20 A		18612	18623	-	18634	-	-	-	18651	-
25 A		18613	18624	-	18635	-	-	-	18652	-
32 A		18614	18625	-	18636	-	-	-	18653	-
40 A		18615	18626	-	18637	-	-	-	18654	-
50 A		18616	18627	-	18638	-	-	-	18655	-
63 A		18617	18628	-	18639	-	-	-	18656	-
80 A		18618	18629	18663	18641	18669	18646	18666	18657	18672
100 A		-	-	18664	18643	18670	18647	18667	18659	18673
125 A		-	-	18665	18645	18671	18648	18668	18661	18674
Width in 9 mm modules		3	6	9			12	12		
Accessories		Module CM907004 and CM907006								

(1) Information to be supplied by the country concerned.
(2) Breaking capacity under 1 pole in IT isolated neutral system (case of a double fault).

NG125N circuit breakers (curves B, C, D) (cont.)



Country approval pictograms

IEC/EN 60947-2

■ NG125N circuit breakers are circuit breakers which combine the following functions:
- □ circuit protection against short-circuit currents,
- □ circuit protection against overload currents,
- □ suitability for isolation in the industrial sector to IEC/EN 60947-2,
- □ tripping upon fault is indicated by a red mechanical state indicator light on the front face of the circuit breaker.



NG125N 1P



NG125N 2P



NG125N 3P



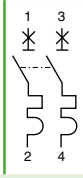
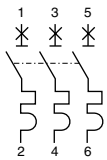
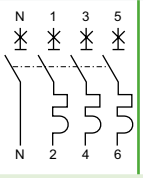
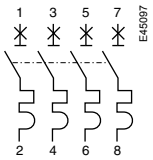
NG125N 4P

Alternating current (AC) 50/60 Hz								
Breaking capacity (Icu) to IEC/EN 60947-2								**Service breaking capacity (Ics)**
	Voltage (Ue)							
Ph/Ph (2P, 3P, 3P+N, 4P)	**-**	**-**	**220 to 240 V**	**-**	**380 to 415 V**	**440 V**	**500 V**	
Ph/N (1P)	**110 to 130 V**	**220 to 240 V**	**-**	**380 to 415 V**	**-**	**-**	**-**	
Rating (In) 10 to 125 A	50 kA	25 kA	50 kA	6 kA(2)	25 kA	20 kA	10 kA	75 % of Icu

Direct current (DC)						
Breaking capacity (Icu) according to IEC/EN 60947-2						**Service breaking capacity (Ics)**
	Voltage (Ue)					
	12 to 125 V	**⩽ 144 V**	**⩽ 250 V**	**⩽ 375 V**	**⩽ 500 V**	
Number of poles	**1P**		**2P**	**3P**	**4P**	
Rating (In) 10 to 125 A	25 kA	20 kA	20 kA	20 kA	20 kA	100 % of Icu

Catalogue numbers

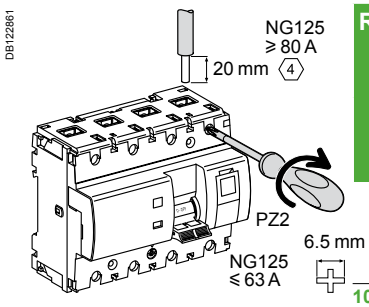
NG125N circuit breaker

Type		**1P**	**2P**	**3P**			**3P+N**	**4P**		
										
Auxiliaries		**Remote indication and tripping, module CM907004 and CM907005**								
Vigi NG125		**Vigi NG125 add-on residual current device, module CM902008**								
Rating (In)	**Quality label** (1)	**Curve**	**Curve**	**Curve**			**Curve**	**Curve**		
		C	**C**	**B**	**C**	**D**	**C**	**B**	**C**	**D**
10 A		**18610**	**18621**	-	**18632**	-	-	-	**18649**	-
16 A		**18611**	**18622**	-	**18633**	-	-	-	**18650**	-
20 A		**18612**	**18623**	-	**18634**	-	-	-	**18651**	-
25 A		**18613**	**18624**	-	**18635**	-	-	-	**18652**	-
32 A		**18614**	**18625**	-	**18636**	-	-	-	**18653**	-
40 A		**18615**	**18626**	-	**18637**	-	-	-	**18654**	-
50 A		**18616**	**18627**	-	**18638**	-	-	-	**18655**	-
63 A		**18617**	**18628**	-	**18639**	-	-	-	**18656**	-
80 A		**18618**	**18629**	**18663**	**18640**	**18669**	**18646**	**18666**	**18658**	**18672**
100 A		-	-	**18664**	**18642**	**18670**	**18647**	**18667**	**18660**	**18673**
125 A		-	-	**18665**	**18644**	**18671**	**18648**	**18668**	**18662**	**18674**
Width in 9 mm modules		3	6	9			12	12		
Accessories		**Module CM907004 and CM907006**								

(1) Information to be supplied by the country concerned.
(2) Breaking capacity under 1 pole in IT isolated neutral system (case of a double fault).

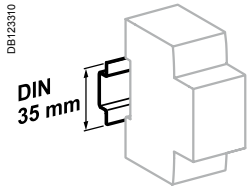
NG125N circuit breakers (curves B, C, D) (cont.)

Connection

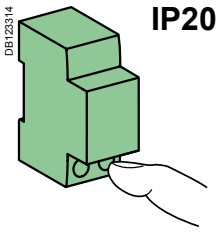


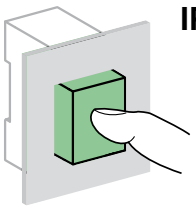
Rating		Tightening torque	Without accessories: Copper cables – Rigid	Without accessories: Copper cables – Flexible or with ferrule	With accessories: 70 mm² Al terminal – Rigid single cables	With accessories: Screw-on connection for ring terminal	With accessories: Small ring terminal	With accessories: Multi-cable terminal – Rigid cables	With accessories: Multi-cable terminal – Flexible cables
			DB122945	DB122946 / DB123410	DB123488	DB118789	DB118787 Ø 6 mm		
10 to 63 A		3.5 N.m	1.5 to 50 mm²	1.5 to 35 mm²	-	-	-	3 x 16 mm²	3 x 10 mm²
1P, 2P	80 to 125 A	6 N.m	16 to 70 mm²	10 to 50 mm²	-	2 x 35 mm² 1 x 50 mm²	1 x 70 mm²		
3P, 3P+N, 4P	80 to 125 A				25 to 70 mm²				

■ On 3P, 3P+N and 4P ≥ 80 A: upstream voltage taps for each pole, by 6.35 mm Fast-on terminal.



Clips on to 35 mm DIN rail.





Technical data

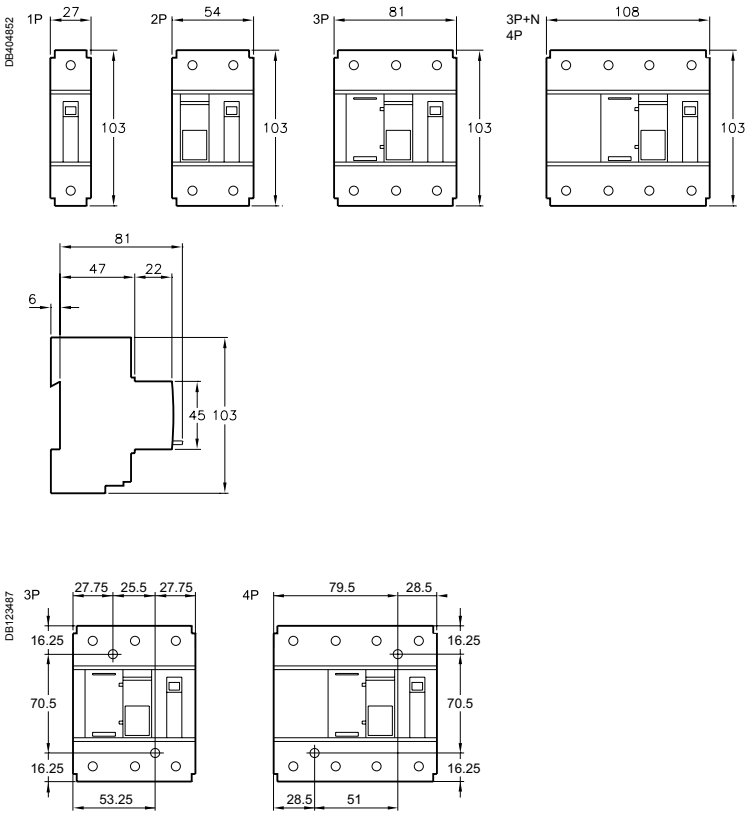
Main characteristics		
According to IEC/EN 60947-2		
Insulation voltage (Ui)		690 V AC
Degree of pollution		3
Rated impulse withstand voltage (Uimp)		8 kV
Thermal tripping	Reference temperature	40°C
Magnetic tripping (Ii)	Curve B	4 In ± 20 %
	Curve C	8 In ± 20 %
	Curve D	12 In ± 20 %
Utilization category		A
Additional characteristics		
Degree of protection (IEC 60529)	Device only	IP20
	Device in modular enclosure	IP40
Endurance (O-C)	Electrical	≤ 63 A: 10,000 cycles
		≥ 63 A: 5000 cycles
	Mechanical	20,000 cycles
Operating temperature		-30°C to +70°C
Storage temperature		-40°C to +70°C
Tropicalization (IEC 60068-1)		Treatment 2 (relative humidity of 95 % at 55°C)

NG125N circuit breakers (curves B, C, D) (cont.)

Weight (g)

Circuit breaker	
Type	**NG125N**
1P	240
2P	480
3P	720
3P+N	960
4P	960

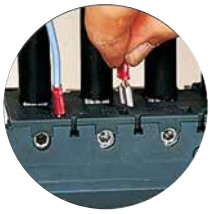
Dimensions (mm)



Spacing for mounting on panel

NG125N circuit breakers (curves B, C, D) (cont.)

3P, 4P 80 A
- ■ Voltage taps:
- □ auxiliaries power supply
- □ measurement
- □ emergency stop
- □ remote reporting



- ■ Cable strength:
- □ ribbed cage
- □ terminal depth
- □ tightening by Allen hex key (NG125 80 A)

1P, 2P
- ■ Padlocking in position: O or I, manual control is inhibited, tripping is enabled

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- ■ Test button to check satisfactory operation of the tripping mechanism









- ■ Pull-out strength
- □ metallic lock

3P, 4P
- ■ Integrated padlocking device

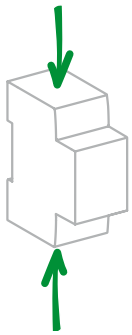
- ■ Central manual control, 3 positions:
- □ ON
- □ tripped on fault
- □ open

- ■ Impact and vibration resistance:
- □ high-strength enclosure
- □ IK 05

- ■ Circuit breaker tripped indicator

DB123493

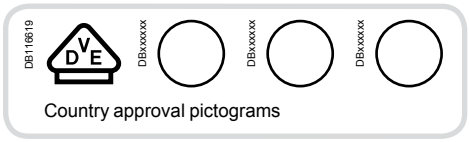
- ■ Electric power supply through the top or bottom



- ■ Positive contact indication:
- □ suitability for isolation in the industrial sector to IEC/EN 60947-2
- □ the presence of the green strip guarantees that the contacts open physically and allows work to be carried out safely on the downstream circuit

- ■ Longer product service life due to:
- □ good overvoltage withstand capacity,
- □ high limitation performances,
- □ fast closure independent of the speed of actuation of the toggle.

NG125H circuit breakers (curve C)



Country approval pictograms

IEC/EN 60947-2

■ NG125H circuit breakers are circuit breakers which combine the following functions:
- □ circuit protection against short circuit currents,
- □ circuit protection against overload currents,
- □ suitability for isolation in the industrial sector to IEC/EN 60947-2,
- □ tripping upon fault is indicated by a red mechanical state indicator light on the front face of the circuit breaker.



NG125H 1P



NG125H 2P



NG125H 3P

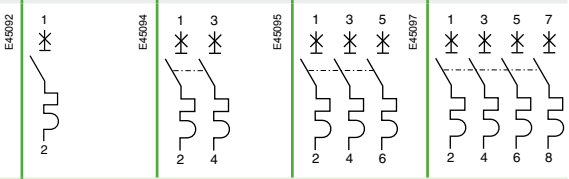


NG125H 4P

Alternating current (AC) 50/60 Hz								
Breaking capacity (Icu) to IEC/EN 60947-2								Service breaking capacity (Ics)
	Voltage (Ue)							
Ph/Ph (2P, 3P, 4P)	-	-	220 to 240 V	-	380 to 415 V	440 V	500 V	
Ph/N (1P)	110 to 130 V	220 to 240 V	-	380 to 415 V	-	-	-	
Rating (In) 10 to 80 A	70 kA	36 kA	70 kA	9 kA(2)	36 kA	30 kA	12 kA	75 % of Icu

Direct current (DC)						
Breaking capacity (Icu) according to IEC/EN 60947-2						Service breaking capacity (Ics)
	Voltage (Ue)					
	12 to 125 V	⩽ 144 V	⩽ 250 V	⩽ 375 V	⩽ 500 V	
Number of poles	1P		2P	3P	4P	
Rating (In) 10 to 80 A	36 kA	25 kA	25 kA	25 kA	25 kA	100 % of Icu

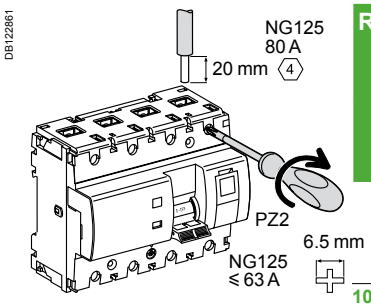
Catalogue numbers

NG125H circuit breaker					
Type		1P	2P	3P	4P
					
Auxiliaries		Remote indication and tripping, module CM907004 and CM907005			
Vigi NG125		Vigi NG125 add-on residual current device, module CM902008			
Rating (In)	Quality label (1)	Curve C	Curve C	Curve C	Curve C
10 A		18705	18714	18723	18732
16 A		18706	18715	18724	18733
20 A		18707	18716	18725	18734
25 A		18708	18717	18726	18735
32 A		18709	18718	18727	18736
40 A		18710	18719	18728	18737
50 A		18711	18720	18729	18738
63 A		18712	18721	18730	18739
80 A		18713	18722	18731	18740
Width in 9 mm modules		3	6	9	12
Accessories		Module CM907004 and CM907006			

(1) Information to be supplied by the country concerned.
(2) Breaking capacity under 1 pole in IT isolated neutral system (case of a double fault).

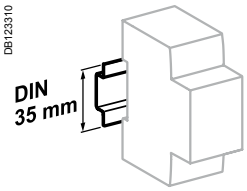
NG125H circuit breakers (curve C) (cont.)

Connection

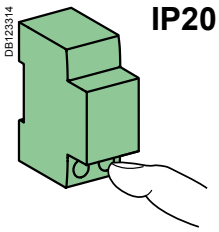


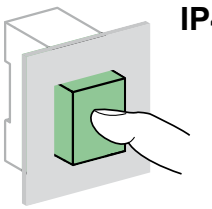
Rating		Tightening torque	Without accessories: Copper cables – Rigid	Without accessories: Copper cables – Flexible or with ferrule	With accessories: 70 mm² Al terminal – Rigid single cables	With accessories: Screw-on connection for ring terminal	With accessories: Small ring terminal	With accessories: Multi-cable terminal – Rigid cables	With accessories: Multi-cable terminal – Flexible cables
		DB122945	DB122946	DB123410	DB123488	DB118789	DB118787		
10 to 63 A		3.5 N.m	1.5 to 50 mm²	1.5 to 35 mm²	-	-	-	3 x 16 mm²	3 x 10 mm²
1P, 2P	80 A	6 N.m	16 to 70 mm²	10 to 50 mm²	-	2 x 35 mm² 1 x 50 mm²	1 x 70 mm²		
3P, 4P	80 A				25 to 70 mm²				

■ On 3P and 4P 80 A: upstream voltage taps for each pole, by 6.35 mm Fast-on terminal.



Clips on to 35 mm DIN rail.





Technical data

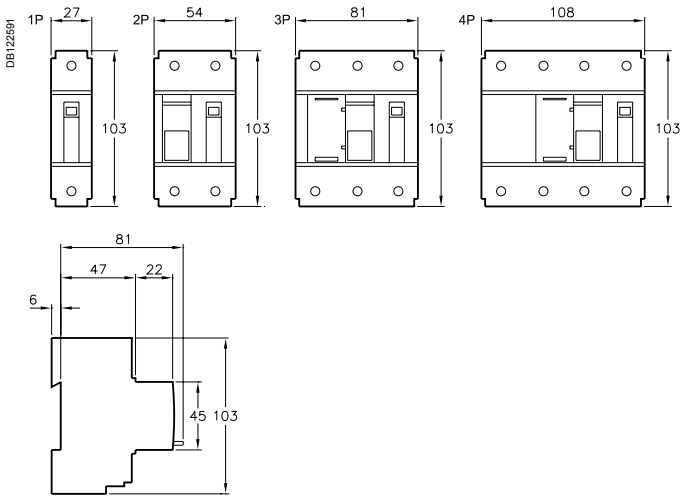
Main characteristics		
According to IEC/EN 60947-2		
Insulation voltage (Ui)		690 V AC
Degree of pollution		3
Rated impulse withstand voltage (Uimp)		8 kV
Thermal tripping	Reference temperature	40°C
Magnetic tripping (Ii)	Curve C	8 In ± 20 %
Utilization category		A
Additional characteristics		
Degree of protection (IEC 60529)	Device only	IP20
	Device in modular enclosure	IP40 Insulation class II
Endurance (O-C)	Electrical	≤ 63 A: 10,000 cycles
		≥ 63 A: 5000 cycles
	Mechanical	20,000 cycles
Operating temperature		-30°C to +70°C
Storage temperature		-40°C to +70°C
Tropicalization (IEC 60068-1)		Treatment 2 (relative humidity of 95 % at 55°C)

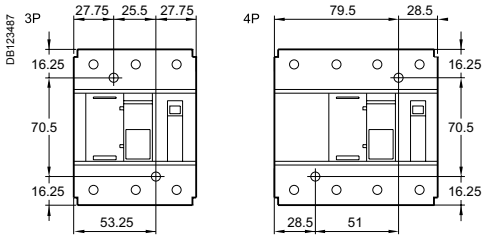
NG125H circuit breakers (curve C) (cont.)

Weight (g)

Circuit breaker	
Type	**NG125H**
1P	240
2P	480
3P	720
4P	960

Dimensions (mm)

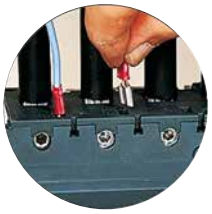




Spacing for mounting on panel

NG125H circuit breakers (curve C) (cont.)

3P, 4P 80 A
■ Voltage taps:
□ auxiliaries power supply
□ measurement
□ emergency stop
□ remote reporting



■ Cable strength:
□ ribbed cage
□ terminal depth
□ tightening by Allen hex key (NG125 80 A)

1P, 2P
■ Padlocking in position: O or I, manual control is inhibited, tripping is enabled



■ Test button to check satisfactory operation of the tripping mechanism

■ Pull-out strength
□ metallic lock

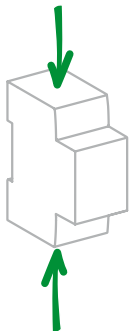
3P, 4P
■ Integrated padlocking device

■ Central manual control, 3 positions:
□ ON
□ tripped on fault
□ open

■ Impact and vibration resistance:
□ high-strength enclosure
□ IK 05

■ Circuit breaker tripped indicator

■ Electric power supply through the top or bottom

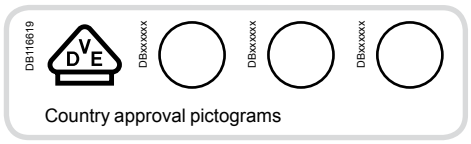


■ Positive contact indication:
□ suitability for isolation in the industrial sector to IEC/EN 60947-2
□ the presence of the green strip guarantees that the contacts open physically and allows work to be carried out safely on the downstream circuit

■ Longer product service life due to:
□ good overvoltage withstand capacity,
□ high limitation performances,
□ fast closure independent of the speed of actuation of the toggle.

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NG125L circuit breakers (curves B, C, D) (cont.)



Country approval pictograms

IEC/EN 60947-2

■ NG125L circuit breakers are circuit breakers which combine the following functions:
□ circuit protection against short-circuit currents;
□ circuit protection against overload currents;
□ suitability for isolation in the industrial sector to IEC/EN 60947-2;
□ tripping upon fault is indicated by a red mechanical state indicator light on the front face of the circuit breaker.



NG125L 1P



NG125L 2P



NG125L 3P



NG125L 4P

Alternating current (AC) 50/60 Hz

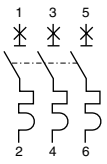
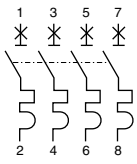
Breaking capacity (Icu) to IEC/EN 60947-2 Voltage (Ue)								Service breaking capacity (Ics)
Ph/Ph (2P, 3P, 4P)	-	-	220 to 240 V	-	380 to 415 V	440 V	500 V	
Ph/N (1P)	110 to 130 V	220 to 240 V	-	380 to 415 V	-	-	-	
Rating (In) 10 to 80 A	100 kA	50 kA	100 kA	12.5 kA(2)	50 kA	40 kA	15 kA	75 % of Icu

Direct current (DC)

Breaking capacity (Icu) according to IEC/EN 60947-2 Voltage (Ue)						Service breaking capacity (Ics)
	12 to 125 V	≤ 144 V	≤ 250 V	≤ 375 V	≤ 500 V	
Number of poles	1P		2P	3P	4P	
Rating (In) 10 to 80 A	50 kA	36 kA	36 kA	36 kA	36 kA	100 % of Icu

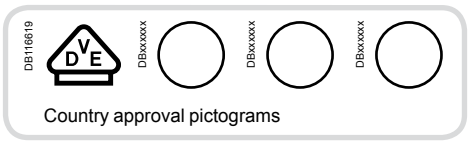
Catalogue numbers

NG125L circuit breaker

Type		1P			2P			3P			4P		
													
Auxiliaries		Remote indication and tripping, module CM907004 and CM907005											
Vigi NG125		Vigi NG125 add-on residual current device, module CM902008											
Rating (In)	Quality label (1)	Curve			Curve			Curve			Curve		
		B	C	D	B	C	D	B	C	D	B	C	D
10 A		18741	18777	18830	18750	18788	18839	18759	18799	18848	18768	18821	18857
16 A		18742	18778	18831	18751	18789	18840	18760	18800	18849	18769	18822	18858
20 A		18743	18779	18832	18752	18790	18841	18761	18801	18850	18770	18823	18859
25 A		18744	18780	18833	18753	18791	18842	18762	18802	18851	18771	18824	18860
32 A		18745	18781	18834	18754	18792	18843	18763	18803	18852	18772	18825	18861
40 A		18746	18782	18835	18755	18793	18844	18764	18804	18853	18773	18826	18862
50 A		18747	18783	18836	18756	18794	18845	18765	18805	18854	18774	18827	18863
63 A		18748	18784	18837	18757	18795	18846	18766	18806	18855	18775	18828	18864
80 A		18749	18785	18838	18758	18796	18847	18767	18807	18856	18776	18829	18865
Width in 9 mm modules		3			6			9			12		
Accessories		Module CM907004 and CM907006											

(1) Information to be supplied by the country concerned.
(2) Breaking capacity under 1 pole in IT isolated neutral system (case of a double fault).

NG125L circuit breakers (curves B, C, D)



Country approval pictograms

IEC/EN 60947-2

■ NG125L circuit breakers are circuit breakers which combine the following functions:
□ circuit protection against short-circuit currents;
□ circuit protection against overload currents;
□ suitability for isolation in the industrial sector to IEC/EN 60947-2;
□ tripping upon fault is indicated by a red mechanical state indicator light on the front face of the circuit breaker.



NG125L 1P



NG125L 2P



NG125L 3P



NG125L 4P

Alternating current (AC) 50/60 Hz

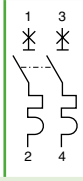
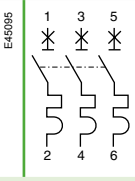
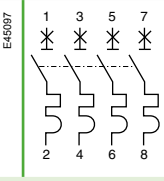
Breaking capacity (Icu) to IEC/EN 60947-2								Service breaking capacity (Ics)
	Voltage (Ue)							
Ph/Ph (2P, 3P, 4P)	-	-	220 to 240 V	-	380 to 415 V	440 V	500 V	
Ph/N (1P)	110 to 130 V	220 to 240 V	-	380 to 415 V	-	-	-	
Rating (In) 10 to 80 A	100 kA	50 kA	100 kA	12.5 kA(2)	50 kA	40 kA	15 kA	75 % of Icu

Direct current (DC)

Breaking capacity (Icu) according to IEC/EN 60947-2						Service breaking capacity (Ics)
	Voltage (Ue)					
	12 to 125 V	≤ 144 V	≤ 250 V	≤ 375 V	≤ 500 V	
Number of poles	1P		2P	3P	4P	
Rating (In) 10 to 80 A	50 kA	36 kA	36 kA	36 kA	36 kA	100 % of Icu

Catalogue numbers

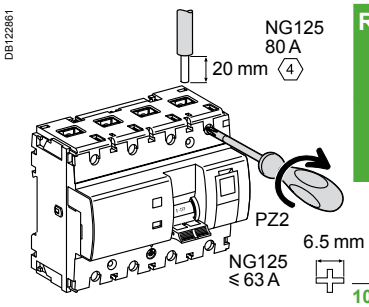
NG125L circuit breaker

Type		1P			2P			3P			4P		
													
Auxiliaries		Remote indication and tripping, module CM907004 and CM907005											
Vigi NG125		Vigi NG125 add-on residual current device, module CM902008											
Rating (In)	Quality label (1)	Curve			Curve			Curve			Curve		
		B	C	D	B	C	D	B	C	D	B	C	D
10 A		18741	18777	18830	18750	18788	18839	18759	18799	18848	18768	18810	18857
16 A		18742	18778	18831	18751	18789	18840	18760	18800	18849	18769	18811	18858
20 A		18743	18779	18832	18752	18790	18841	18761	18801	18850	18770	18812	18859
25 A		18744	18780	18833	18753	18791	18842	18762	18802	18851	18771	18813	18860
32 A		18745	18781	18834	18754	18792	18843	18763	18803	18852	18772	18814	18861
40 A		18746	18782	18835	18755	18793	18844	18764	18804	18853	18773	18815	18862
50 A		18747	18783	18836	18756	18794	18845	18765	18805	18854	18774	18816	18863
63 A		18748	18784	18837	18757	18795	18846	18766	18806	18855	18775	18817	18864
80 A		18749	18785	18838	18758	18796	18847	18767	18807	18856	18776	18818	18865
Width in 9 mm modules		3			6			9			12		
Accessories		Module CM907004 and CM907006											

(1) Information to be supplied by the country concerned.
(2) Breaking capacity under 1 pole in IT isolated neutral system (case of a double fault).

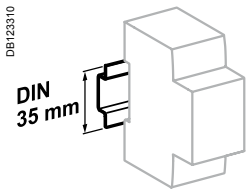
NG125L circuit breakers (curves B, C, D) (cont.)

Connection

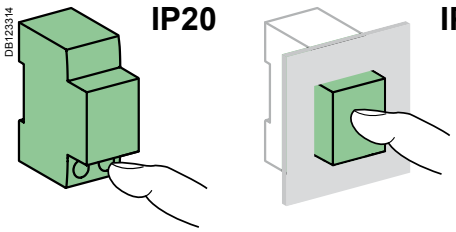


Rating		Tightening torque	Without accessories: Copper cables		With accessories: 70 mm² Al terminal	Screw-on connection for ring terminal	Small ring terminal	Multi-cable terminal	
			Rigid	Flexible or with ferrule	Rigid single cables			Rigid cables	Flexible cables
		DB122945	DB122946	DB123410	DB123488	DB118789	DB118787		
10 to 63 A		3.5 N.m	1.5 to 50 mm²	1.5 to 35 mm²	-	-	-	3 x 16 mm²	3 x 10 mm²
1P, 2P	80 A	6 N.m	16 to 70 mm²	10 to 50 mm²	-	2 x 35 mm² 1 x 50 mm²	1 x 70 mm²		
3P, 4P	80 A				25 to 70 mm²				

■ On 3P and 4P 80 A: upstream voltage taps for each pole, by 6.35 mm Fast-on terminal.



Clips on to 35 mm DIN rail.



Technical data

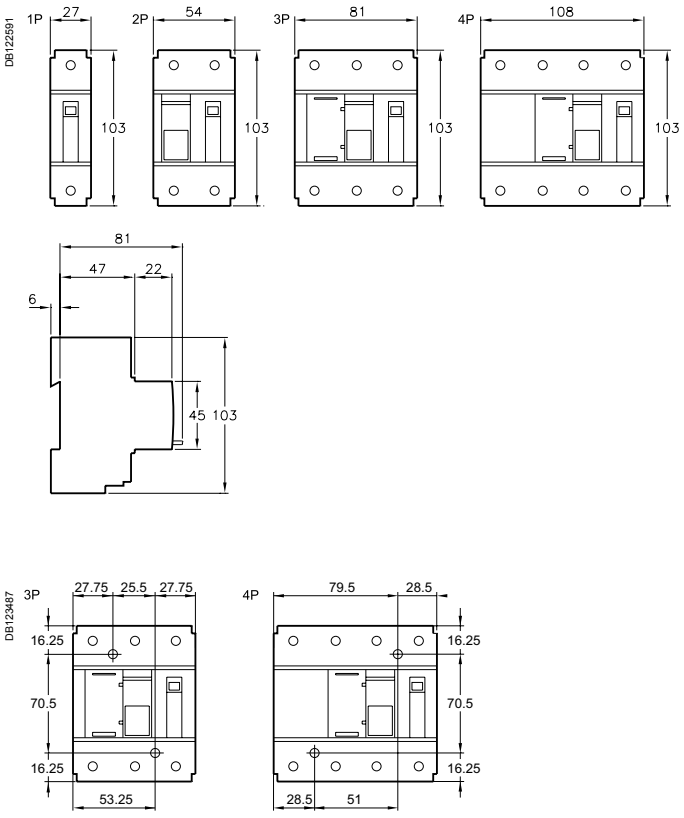
Main characteristics		
According to IEC/EN 60947-2		
Insulation voltage (Ui)		690 V AC
Degree of pollution		3
Rated impulse withstand voltage (Uimp)		8 kV
Thermal tripping	Reference temperature	40°C
Magnetic tripping (Ii)	Curve B	4 In ± 20 %
	Curve C	8 In ± 20 %
	Curve D	12 In ± 20 %
Utilization category		A
Additional characteristics		
Degree of protection (IEC 60529)	Device only	IP20
	Device in modular enclosure	IP40
Endurance (O-C)	Electrical	≤ 63 A: 10,000 cycles
		≥ 63 A: 5000 cycles
	Mechanical	20,000 cycles
Operating temperature		-30°C to +70°C
Storage temperature		-40°C to +70°C
Tropicalization (IEC 60068-1)		Treatment 2 (relative humidity of 95 % at 55°C)

NG125L circuit breakers (curves B, C, D) (cont.)

Weight (g)

Circuit breaker	
Type	**NG125L**
1P	240
2P	480
3P	720
4P	960

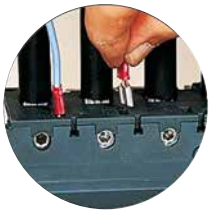
Dimensions (mm)



Spacing for mounting on panel

NG125L circuit breakers (curves B, C, D) (cont.)

3P, 4P 80 A
- ■ Voltage taps:
- □ auxiliaries power supply
- □ measurement
- □ emergency stop
- □ remote reporting



- ■ Cable strength:
- □ ribbed cage
- □ terminal depth
- □ tightening by Allen hex key (NG125 80 A)

1P, 2P
- ■ Padlocking in position: O or I, manual control is inhibited, tripping is enabled

056918N_SE-90

- ■ Test button to check satisfactory operation of the tripping mechanism









- ■ Pull-out strength
- □ metallic lock

3P, 4P
- ■ Integrated padlocking device

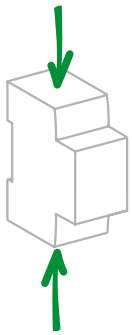
- ■ Central manual control, 3 positions:
- □ ON
- □ tripped on fault
- □ open

- ■ Impact and vibration resistance:
- □ high-strength enclosure
- □ IK 05

- ■ Circuit breaker tripped indicator

DB123493

- ■ Electric power supply through the top or bottom



- ■ Positive contact indication:
- □ suitability for isolation in the industrial sector to IEC/EN 60947-2
- □ the presence of the green strip guarantees that the contacts open physically and allows work to be carried out safely on the downstream circuit

- ■ Longer product service life due to:
- □ good overvoltage withstand capacity,
- □ high limitation performances,
- □ fast closure independent of the speed of actuation of the toggle.

C60H-DC, C curve

DB123430 DB123525 DB405571

Country approval pictograms

IEC 60947-2

PB107193-34.eps



PB107194-34.eps



The C60H-DC supplementary protectors are used in direct current circuits (Industrial control and automations, transport, renewable energy...).
They combine the following functions of circuit protection against short-circuit and overload currents, control and isolation.

CE

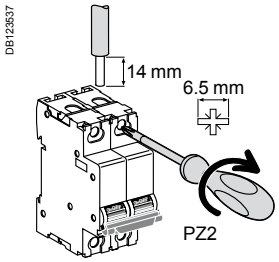
Direct current (DC)						
Breaking capacity (Icu) according to IEC 60947-2 Type						Rated service breaking capacity (Ics)
1P	**110 V**	**220 V**	**250 V**	**440 V**	**500 V**	
Rating (In) 0.5 to 63 A	20 kA	10 kA	6 kA	-	-	75 % Icu
2P (in series)	**110 V**	**220 V**	**250 V**	**440 V**	**500 V**	
0.5 to 63 A	-	20 kA	20 kA	10 kA	6 kA	75 % Icu

Catalogue numbers

C60H-DC		
Type	**1P**	**2P**
	DB116588 Supply from above or below, observing the polarity	DB124110 Supply from above DB124111 Supply from below
Auxiliaries	**Remote signalisation and tripping, module CA907008**	
Rating (In)	**Curve C**	**Curve C**
0.5 A	**A9N61500**	**A9N61520**
1 A	**A9N61501**	**A9N61521**
2 A	**A9N61502**	**A9N61522**
3 A	**A9N61503**	**A9N61523**
4 A	**A9N61504**	**A9N61524**
5 A	**A9N61505**	**A9N61525**
6 A	**A9N61506**	**A9N61526**
10 A	**A9N61508**	**A9N61528**
13 A	**A9N61509**	**A9N61529**
15 A	**A9N61510**	**A9N61530**
16 A	**A9N61511**	**A9N61531**
20 A	**A9N61512**	**A9N61532**
25 A	**A9N61513**	**A9N61533**
30 A	**A9N61514**	**A9N61534**
32 A	**A9N61515**	**A9N61535**
40 A	**A9N61517**	**A9N61537**
50 A	**A9N61518**	**A9N61538**
63 A	**A9N61519**	**A9N61539**
Number of modules of 9 mm	2	4
Accessories	**Modules CA907013 and CA907012**	

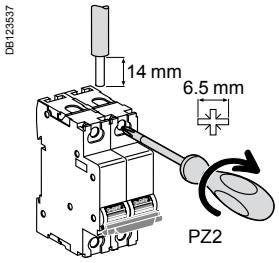
C60H-DC (cont.), C curve

Connection

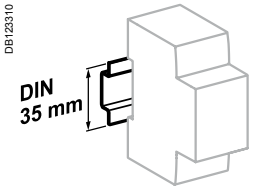


Rating	Tightening torque	Without accessory: Copper cables		With accessories: 50 mm² Al terminal	Screw-on connection for ring terminal	Multi-cables terminal	
		Rigid / Stranded	Flexible or with ferrule			Rigid cables	Flexible cables
		DB122945	DB122946	DB122935 Al	DB118789 Ø	DB118787	
≤ 25 A	2.5 N.m	1 to 25 mm²	1 to 16 mm²	-	Ø 5 mm	-	-
> 25 A	3.5 N.m	1 to 35 mm²	1 to 25 mm²	50 mm²		3 x 16 mm²	3 x 10 mm²

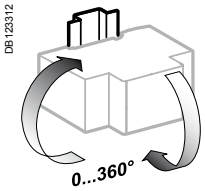
Multi-cables connection



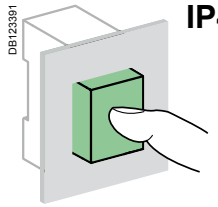
Rating	Tightening torque	Without accessory: 2 Copper cables		3 Multi-cables / Different wires	
		Rigid / Stranded	Flexible or with ferrule	Flexible / Stranded	Flexible / Stranded / Rigid
		DB122945	DB122946	DB118787	
≤ 25 A	2.5 N.m	2 x 1 mm² to 2 x 10 mm²		3 x 1 mm²	2 x 2.5 mm² + 1 x 1.5 mm²
> 25 A	3.5 N.m	2 x 1 mm² to 2 x 16 mm²		3 x 4 mm²	2 x 10 mm² + 1 x 6 mm²



Clip on DIN rail 35 mm.



Indifferent position of installation.





Technical data

- Tripping curves: C curve - Overcurrent protection for any type of application.
- Positive break indication - the green strip indicates that all the poles are open and allows work to be carried out on the downstream circuit in complete safety.
- Suitable for isolation as defined in IEC 60947-2.
- Increase in the service life of the product: thanks to fast closure independent of the speed of action on the handle.
- Current limitation in the event of a fault: fast opening of the contacts prevents the loads from being destroyed in the event of a short-circuit.

Main characteristics		
According to IEC 60947-2		
Insulation voltage (Ui)		500 V DC
Rated voltage (Un)	1P	250 V DC
	2P	500 V DC
Operating voltage (Ue)	1P	24...250 V DC
	2P	24...500 V DC
Pollution degree		3
Rated impulse withstand voltage (Uimp) under frame		6 kV
Magnetic tripping (Ii)		8.5 In (± 20 %) (compatible with curve C)
Additional characteristics		
Degree of protection (IEC 60529)	Device in modular enclosure	IP40
Utilization category		A (no delay in accordance with IEC 60947-2 standards)
Endurance (O-C)	Electrical	3,000 cycles (where L/R=2 ms)
		6,000 cycles where the circuit is resistive
	Mechanical	20,000 cycles
Tropicalization (IEC 60068-2)		Treatment 2 (relative humidity 95 % at 55°C
Operating temperature		-25°C to 70°C
Storage temperature		-40°C to 85°C

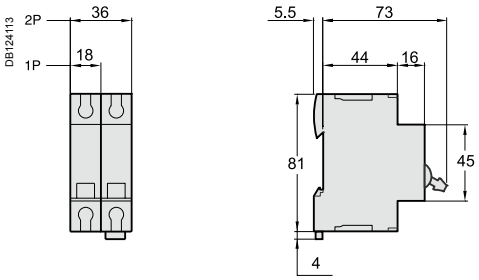
Failure to match polarity during connection may lead to a fire hazard and/or serious injury.
■ The connection polarity must be observed (marked on the front panel).
■ Use only with direct current.

C60H-DC (cont.), C curve

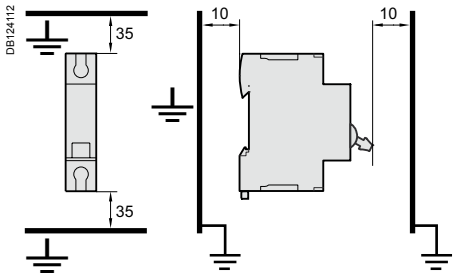
Weight (g)

Circuit-breaker	
Type	**C60H-DC**
1P	128 g
2P	256 g

Dimensions (mm)



C60H-DC



Details of minimum distance between circuit-breaker and earthed metal parts for circuit-breaker intended for use without enclosure.

DC circuit supplementary protectors for photovoltaic installations

C60PV-DC

PB108403-50



The C60PV-DC is a DC circuit breaker dedicated to multi string photovoltaic installations.

This circuit breaker is designed to protect the cables located between each string of photovoltaic modules and the photovoltaic inverter against overloads and short circuits (see application diagram).

Combined with a switch (of the C60NA-DC type, for example), the C60PV-DC will be installed in a string PV protection enclosure at the end of each string of photovoltaic modules.

It can be locked (by a padlocking device) in OFF position as a safety measure for removal of the PV inverter.
Since a fault current can flow in the reverse direction to the operating current, the C60PV-DC can detect and protect against any bidirectional current.

To ensure the safety of the installation, it is necessary, depending on the various types of application, to combine the C60PV-DC with:
- a residual current device at the AC end,
- a fault passage detector (insulation monitoring device) at the DC end
- an earth protection circuit breaker at the DC end (see Practical Advice CA908035).

In all cases, fast action on site will be required to clear the fault (protection not ensured in the event of a double fault).

C60PV-DC is not polarity sensitive: (+) and (-) wires can inversed without any risk.

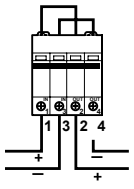
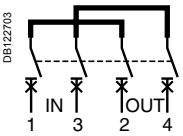
The C60PV-DC is: delivered with three inter-pole barrier to provide increased isolation distance between two adjacent connectors.

DB404840



IEC / EN 60947-2

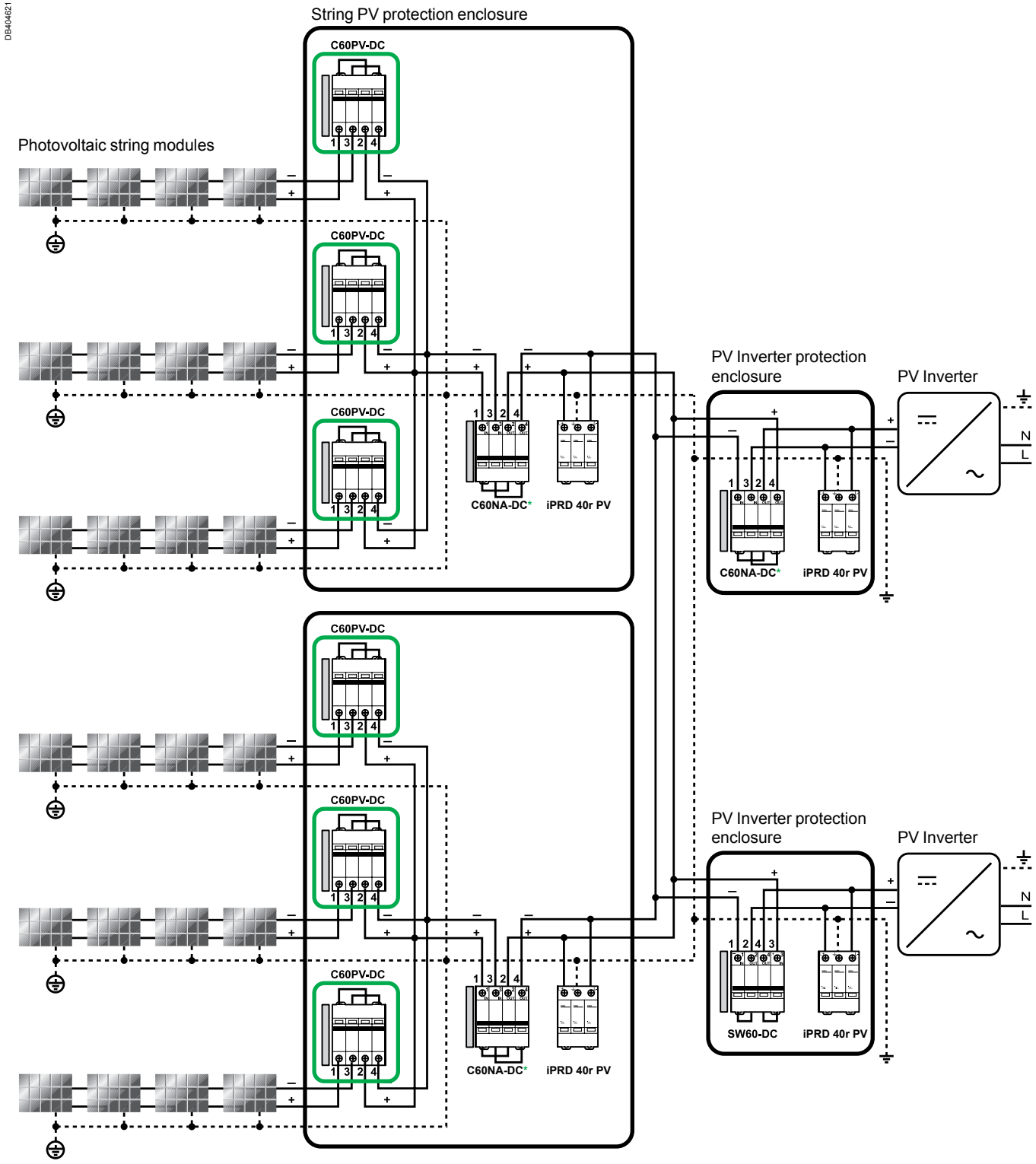
CE

Main characteristics	
Operating voltage (Ue)	800 V DC
Rated insulation voltage (Ui)	1,000 V DC
Breaking capacity (Icu)	1.5 kA
Impulse voltage (Uimp)	6 kV
Electrical connection	By the bottom for In and Out
Number of poles	2P
Number of modules of 9 mm	8
Diagrams	DB122506  DB122703 
Standards	IEC 60947-2 EN 60947-2

Rating (A)	Catalogue numbers	
	Curve B	Curve C
1	-	**A9N61653**
2	-	**A9N61654**
3	-	**A9N61655**
5	-	**A9N61656**
8	**A9N61657**	-
10	**A9N61650**	-
13	**A9N61658**	-
15	**A9N61659**	-
16	**A9N61651**	-
20	**A9N61652**	-
25	**A9N61660**	-
Auxiliaries	See modules CA907008 and CA907013	

C60PV-DC (cont.)

Application diagram



***C60NA-DC:**
20 A/1000 V DC or
32 A/800 V DC or
50 A/700 V DC

Technical data

- Position contact indication - suitability for isolation according to IEC/EN 60947-2 standard.
- The presence of the green strip guarantees physical opening of the contacts and allows operations to be performed on the downstream circuit in complete safety.
- Increased product service life thanks to fast closing independent of the speed of actuation of the toggle.
- Pre-wired product: Input / Output on the same side.

Main characteristics

Rated service breaking capacity (Ics)		100 % of the Icu
Magnetic tripping (Ii)	Ratings 1...5 A	8.5 In (± 20 %) (compatible with curve C)
	Ratings 8...25 A	5.7 In (± 20 %) (compatible with curve B)
Endurance (O-C)	Electrical	1,500 cycles (where L/R=2 ms)
	Mechanical	20,000 cycles
Mechanical		20,000 cycles
Degree of pollution		2
Category		A (no delay in accordance with IEC / EN 60947-2 standards)
Degree of protection (IEC 60529)	Device in modular enclosure	IP40
Tropicalisation		Relative humidity: 95 % at 55°C in accordance with IEC 60068-2 and GB 14048.2 standards
Temperature	Operating	-25°C to 70 °C
	Storage	-40°C to 85°C

Additional characteristics

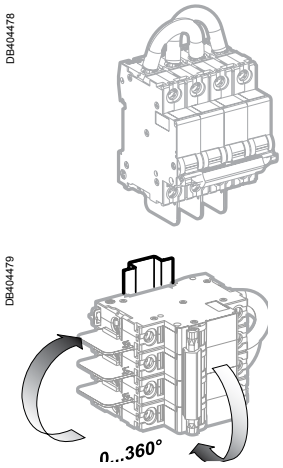
Rating (A)	Voltage drop (mV)	Impedance (mΩ)	Power loss (W)
1	9200	9200	9.2
2	5104	2552	10.2
3	2980	993.3	8.9
5	2000	400	10
8	1384	173	11.1
10	680	68	6.8
13	572	44	7.4
15	600	40	9
16	648	40.5	10.4
20	588	29.4	11.8
25	488	19.5	12.2

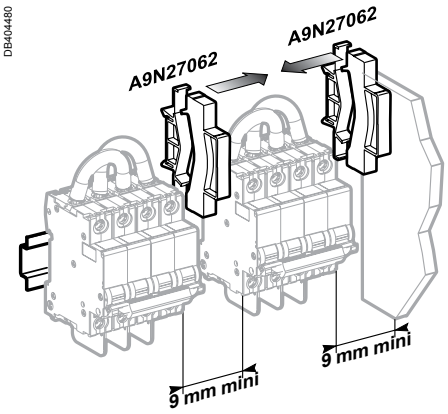
Derating table (A)

C60PV-DC	Ambient temperature (°C)																				
Rating	**-30**	**-25**	**-20**	**-15**	**-10**	**-5**	**0**	**+5**	**+10**	**+15**	**+20**	**+25**	**+30**	**+35**	**+40**	**+45**	**+50**	**+55**	**+60**	**+65**	**+70**
1 A	1.18	1.17	1.15	1.14	1.12	1.1	1.09	1.07	1.05	1.04	1.02	**1**	0.98	0.96	0.94	0.92	0.9	0.88	0.86	0.84	0.82
2 A	2.54	2.5	2.45	2.41	2.36	2.31	2.26	2.21	2.16	2.11	2.06	**2**	1.94	1.88	1.82	1.76	1.7	1.63	1.56	1.48	1.41
3 A	3.78	3.71	3.65	3.58	3.51	3.45	3.38	3.3	3.23	3.16	3.08	**3**	2.92	2.84	2.75	2.66	2.57	2.48	2.38	2.27	2.17
5 A	6	5.92	5.83	5.74	5.66	5.57	5.48	5.39	5.29	5.2	5.1	**5**	4.9	4.8	4.69	4.58	4.47	4.36	4.24	4.12	4
8 A	9.64	9.5	9.36	9.22	9.08	8.93	8.78	8.63	8.48	8.32	8.16	**8**	7.83	7.67	7.49	7.31	7.13	6.95	6.76	6.56	6.36
10 A	12.6	12.4	12.2	11.9	11.7	11.5	11.2	11	10.8	10.5	10.3	**10**	9.7	9.4	9.2	8.9	8.6	8.2	7.9	7.6	7.2
13 A	15.5	15.3	15.1	14.8	14.6	14.4	14.2	14	13.7	13.5	13.2	**13**	12.7	12.5	12.2	12	11.7	11.4	11.1	10.8	10.5
15 A	18.6	18.3	18	17.7	17.4	17.1	16.7	16.4	16.1	15.7	15.4	**15**	14.6	14.3	13.9	13.5	13.0	12.6	12.2	11.7	11.2
16 A	19.4	19.1	18.9	18.6	18.3	18.0	17.6	17.3	17.0	16.7	16.3	**16**	15.7	15.3	14.9	14.6	14.2	13.8	13.4	13.0	12.5
20 A	24.1	23.7	23.4	23.0	22.7	22.3	21.9	21.6	21.2	20.8	20.4	**20**	19.6	19.2	18.7	18.3	17.9	17.4	16.9	16.4	15.9
25 A	30.4	29.9	29.5	29.0	28.5	28.1	27.6	27.1	26.6	26.1	25.5	**25**	24.5	23.9	23.3	22.7	22.1	21.5	20.9	20.2	19.6

Technical data (cont.)

Moreover it is recommended to use:
- a terminal Screw Shield snaps onto the front of the C60PV-DC protective devices to provide greater insulation of the terminal screws
- a spacer clips 9 mm in each side to provide isolation.



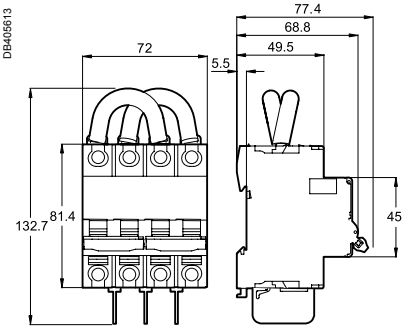


⚠ Required to have a 9 mm space isolation in each side"

Weight (g)

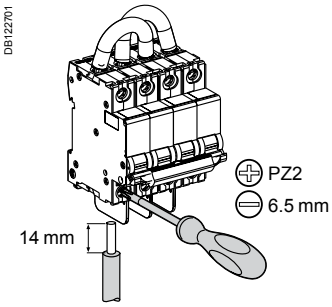
Circuit breaker	
Type	C60PV-DC
	545

Dimensions (mm)



C60PV-DC ⩽ 25 A

Connection



		Without accessory		With accessories	
Rating	Tightening torque	Copper cables UL 486A file no. #E216919		50 mm² Cu/Al Terminal	Ring tongue terminal screw connection
		Rigids	Flexibles with ferrule		
		DB112804	DB112805	DB118755	DB118756
⩽ 25 A	2.5 N.m	1 to 25 mm²	1 to 16 mm²	50 mm²	Ø 5 mm

PB108404-60



The C60NA-DC is a direct current switch-disconnector dedicated to disconnection of the string of photovoltaic modules and the PV inverter.

It is designed to isolate the string of photovoltaic modules and the inverter from the rest of the photovoltaic installation for maintenance operations in complete safety.

Combined with a circuit breaker (of the C60PV-DC type, for example), the C60NA-DC will be installed in a string PV protection enclosure close to the strings of photovoltaic modules. It can also be installed near the PV inverter.

It can be locked (by a padlocking device) in OFF position to ensure safety during maintenance operations.
Since a fault current can flow in the reverse direction to the normal operating current, the C60NA-DC can switch a multi-directional current.

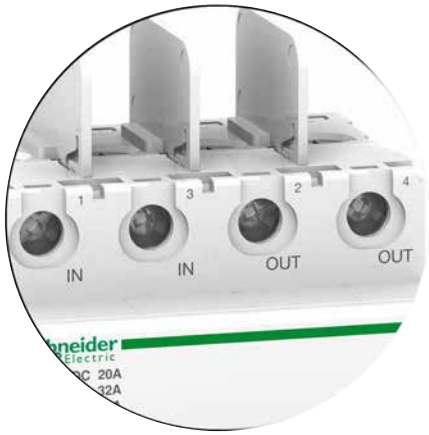
C60NA-DC is not polarity sensitive: (+) and (-) wires can inversed without any risk.

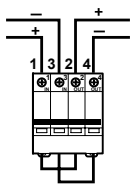
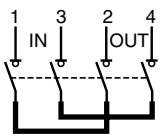
The C60NA-DC is delivered with three inter-pole barrier to provide increased isolation distance between two adjacent connectors.

IEC / EN 60947-3

CE

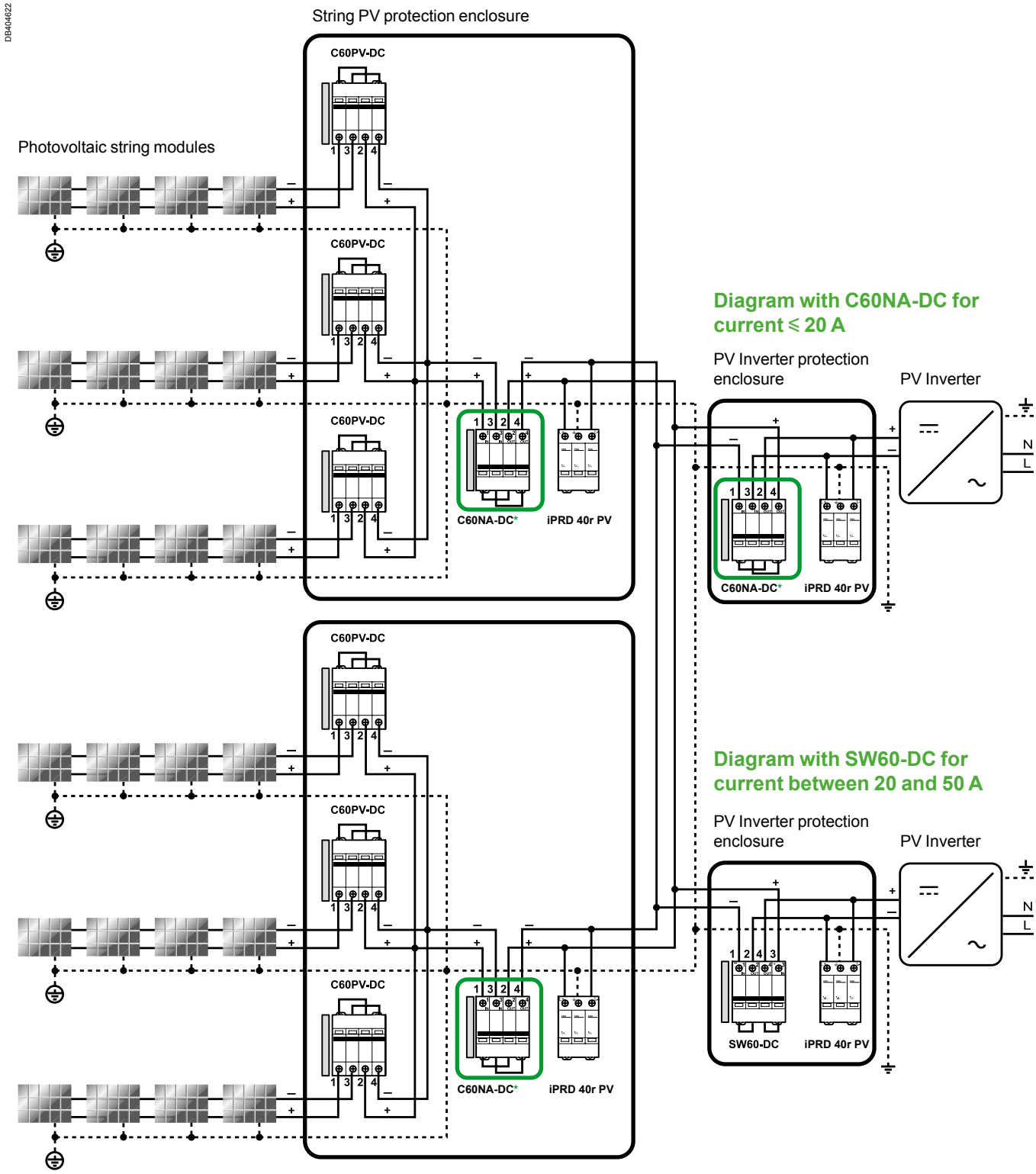
DB404841



Main characteristics	
Operating voltage (Ue)	20 A: 1000 V CC
	32 A: 800 V CC
	50 A: 700 V CC
Rated insulation voltage (Ui)	1,000 V DC
Rated operational current (Ie)	50 A
Impulse voltage (Uimp)	6 kV
Permissible rated short-time withstand current (Icw)	600 A
Rated short-circuit closing current (Icm)	1 kA
Electrical connection	By the top for In and Out
Number of poles	2P
Number of modules of 9 mm	8
Diagrams	DB122506  DB122704 
Standards	IEC 60947-3 EN 60947-3
Catalogue number	**A9N61690**
Auxiliaries	See modules CA907008 and CA907013

Additional characteristics			
Rating (A)	**Voltage drop (mV)**	**Impedance (mΩ)**	**Power loss (W)**
20 A	100	5.02	2
32 A	151	5.02	5.14
50 A	251	5.02	12.55

Application diagram



MN, MX, MNx, MNS, MX+OF, OF, SD, OF+SD/OF, OF+SD24

***C60NA-DC:**
20 A/1000 V DC or
32 A/800 V DC or
50 A/700 V DC

Technical data

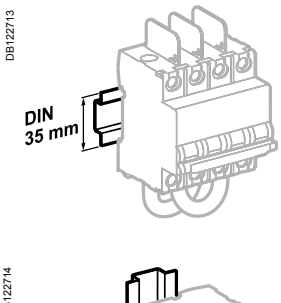
- Position contact indication - suitability for isolation according to IEC/EN 60947-3 standard.
- The presence of the green strip guarantees physical opening of the contacts and allows operations to be performed on the downstream circuit in complete safety.
- Increased product service life thanks to fast closing independent of the speed of actuation of the toggle.
- Pre-wired product: Input / Output on the same side.

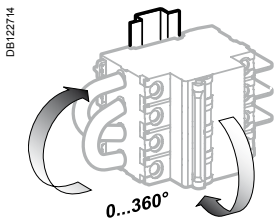
Endurance (O-C)	Electrical	300 cycles
	Mechanical	20,000 cycles
Degree of pollution		2
Category		DC21B
Degree of protection (IEC 60529)	Device in modular enclosure	IP40
Tropicalisation		Relative humidity: 95 % at 55°C in accordance with IEC 60068-2 and GB 14048.2 standards
Temperature	Operating	-25°C to 70°C
	Storage	-40°C to 85°C

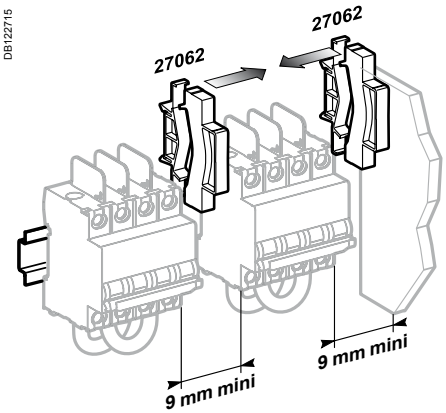
Derating table (A)

C60NA-DC	Ambient temperature (°C)											
Rating	**+5**	**+10**	**+15**	**+20**	**+25**	**+30**	**+35**	**+40**	**+45**	**+50**	**+60**	**+70**
50 A	63	61	60	58	56	54	52	**50**	48	46	41	35

Moreover it is recommended to use:
- a terminal Screw Shield snaps onto the front of the C60NA-DC protective devices to provide greater insulation of the terminal screws
- a Spacer clips 9 mm in each side to provide isolation.







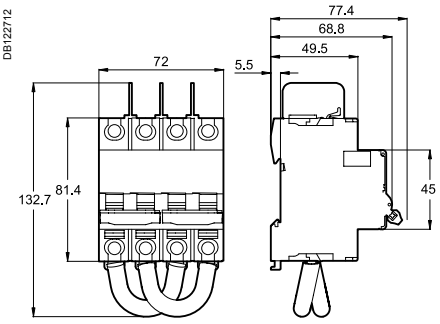
⚠ **Required to have a 9 mm space isolation in each side"**

Technical data (cont.)

Weight (g)

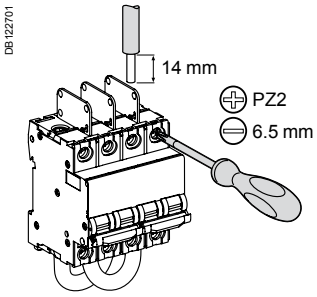
Switch disconnector	
Type	**C60NA-DC**
	530

Dimensions (mm)



C60NA-DC

Connection



		Without accessory		With accessories		
Rating	**Tightening torque**	**Copper cables UL 486A file no. #E216919**		**50 mm² Cu/Al Terminal**	**Screw on connection for ring terminal**	**Multi-cables terminal**
		Rigids	**Flexibles with ferrule**			**Rigid cables** / **Flexible cables**
		DB112804	DB112805	DB118755	DB118756	DB118757
50 A	3.5 N.m	1 to 35 mm²	1 to 25 mm²	50 mm²	Ø 5 mm	3 x 16 mm² / 3 x 10 mm²

PB108406-60



The SW60-DC is a direct current switch-disconnector dedicated to disconnection of the string of photovoltaic modules and the PV inverter.

It is designed to isolate the inverter from the rest of the photovoltaic installation for maintenance operations in complete safety.

Combined with a circuit breaker (of the C60PV-DC type, for example) and a switch (of the C60NA-DC type, for example), the SW60-DC will be installed in the string PV protection enclosure close to the PV inverter (see application diagram).

It can be locked (by a padlocking device) in OFF position to ensure safety when removing the PV inverter.

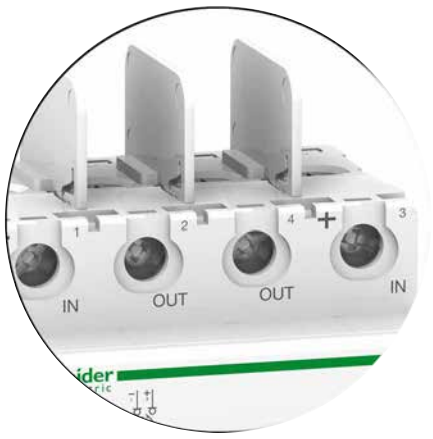
SW60-DC is polarity sensitive: (+) and (-) has to be respected for connection.

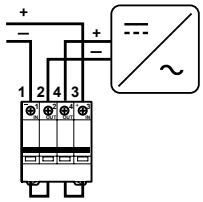
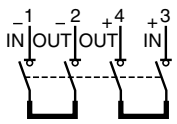
The SW60-DC is: delivered with three inter-pole barrier to provide increased isolation distance between two adjacent connectors.

IEC / EN 60947-3

CE

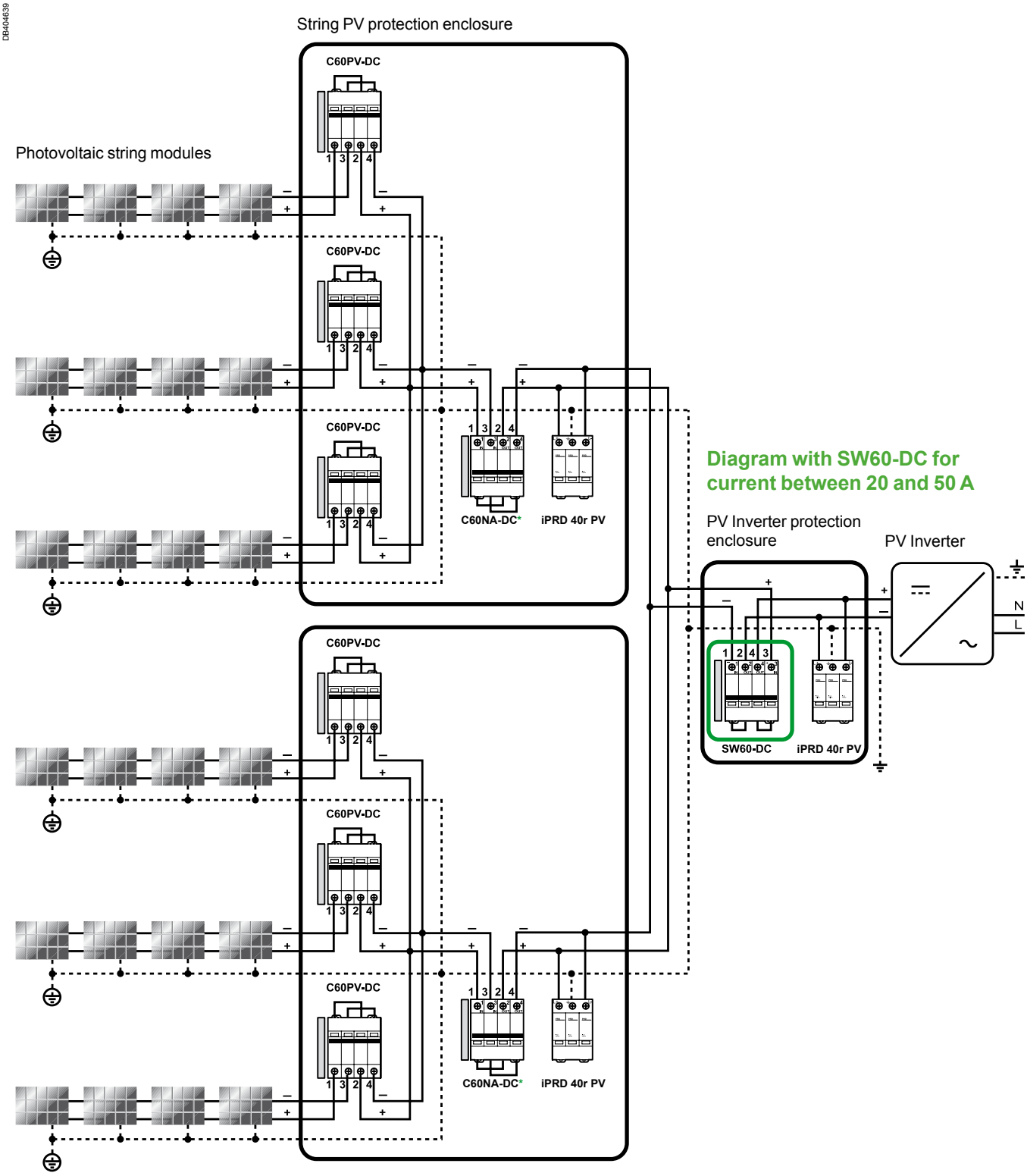
DB404842



General technical data	
Operating voltage (Ue)	1000 V DC
Rated insulation voltage (Ui)	1000 V DC
Rated operational current (Ie)	50 A
Impulse voltage (Uimp)	6 kV
Permissible rated short-time withstand current (Icw)	600 A
Rated short-circuit closing current (Icm)	1 kA
Electrical connection	By the top for In and Out
Number of poles	2P
Number of modules of 9 mm	8
Diagrams	DB122699  DB122700 
Standards	IEC 60947-3 EN 60947-3
Catalogue number	**A9N61699**

Applications

DB404639



MN, MX, MNx, MN⊡, MX+OF, OF, SD, OF+SD/OF, OF+SD24

***C60NA-DC:**
20 A/1000 V DC or
32 A/800 V DC or
50 A/700 V DC

Technical data

- Position contact indication - suitability for isolation according to IEC/EN 60947-3 standard.
- The presence of the green strip guarantees physical opening of the contacts and allows operations to be performed on the downstream circuit in complete safety.
- Increased product service life thanks to fast closing independent of the speed of actuation of the toggle.
- Pre-wired product: Input / Output on the same side.

Main characteristics

Endurance (O-C)	Electrical	1,500 cycles
	Mechanical	20,000 cycles
Degree of pollution		2
Category		DC21A
Degree of protection (IEC 60529)	Device in modular enclosure	IP40
Tropicalisation		Relative humidity: 95 % at 55°C in accordance with IEC 60068-2 and GB 14048.2 standards
Temperature	Operating	-25°C to 70°C
	Storage	-40°C to 85°C
	Rating adjustment	40°C

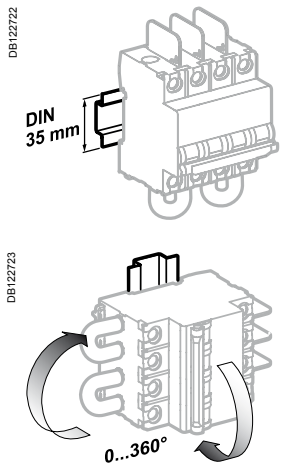
Additional characteristics

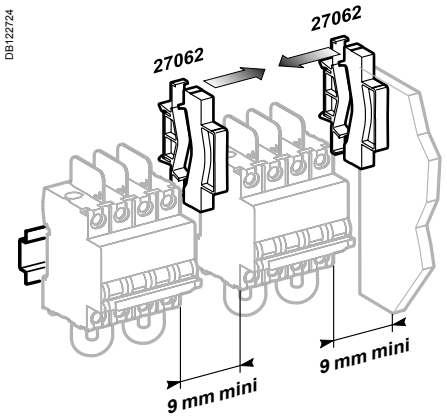
Rating (A)	Voltage drop (mV)	Impedance (mΩ)	Power loss (W)
50 A	251	5.02	12.54

Derating table (A)

SW60PV-DC	Ambient temperature (°C)											
Rating	+5	+10	+15	+20	+25	+30	+35	+40	+45	+50	+60	+70
50 A	63	61	60	58	56	54	52	**50**	48	46	41	35

Moreover it is recommended to use:
- a terminal Screw Shield snaps onto the front of the SW60-DC protective devices to provide greater insulation of the terminal screws.
- a Spacer clips 9 mm in each side to provide isolation.





⚠ 9 mm spacers must be used on both sides of the device to create a local ventilation space around the product.

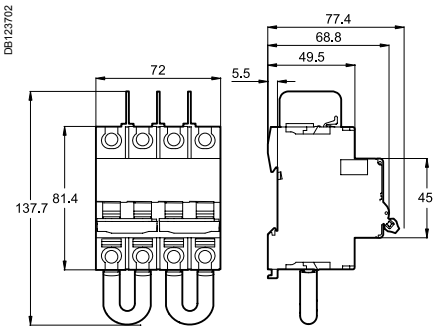
⚠ Failure to match polarity during connection may lead to a fire hazard and/or serious injury.
The connection polarity must be observed (marked on the front panel).
Use only with direct current.

Technical data (cont.)

Weight (g)

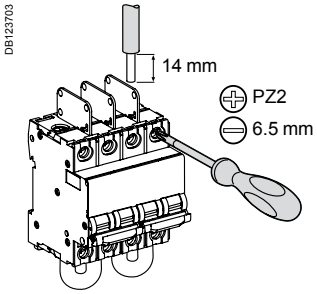
Switch disconnector	
Type	**SW60-DC**
	530

Dimensions (mm)



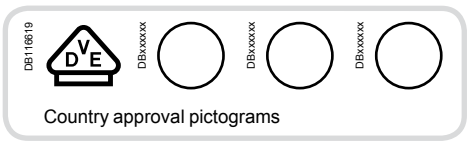
SW60-DC

Connection



		Without accessory		With accessories			
Rating	**Tightening torque**	**Copper cables UL 486A file no. #E216919**		**50 mm² Cu/Al Terminal**	**screw on connection for ring terminal**	**Multi-cables terminal**	
		Rigids	**Flexibles with ferrule**			**Rigid cables**	**Flexible cables**
		DB112804 DB112805	DB118755	DB118756	DB118757		
50 A	3.5 N.m	1 to 35 mm²	1 to 25 mm²	50 mm²	Ø 5 mm	3 x 16 mm²	3 x 10 mm²

iC60L circuit breakers instantaneous circuit breakers (ICB) (curve MA)



Country approval pictograms

IEC/EN 60947-2

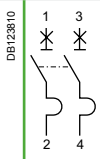
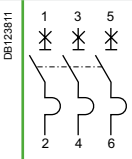




- iC60L curve MA circuit breakers combine the following functions:
  - circuit protection against short-circuit currents,
  - suitability for industrial isolation according to IEC/EN 60947-2, standard,
  - fault tripping indication by a red mechanical indicator in circuit breaker front face,
  - to be associated with overload protection for motor.

Alternating current (AC) 50/60 Hz					
Breaking capacity (Icu) according to IEC/EN 60947-2					Service breaking capacity (Ics)
		Voltage (Ue)			
Ph/Ph (2P, 3P)		220 to 240 V	380 to 415 V	440 V	
Rating (In)	1.6 to 16 A	40 kA	20 kA	15 kA	50 % of Icu
	25 à 40 A	30 kA	15 kA	10 kA	50 % of Icu

Catalogue numbers

iC60L instantaneous trip circuit breaker			
Type		2P	3P
			
Auxiliaries		Remote tripping and indication, module CA907000 and CA907002	Remote tripping and indication, module CA907000 and CA907002
Vigi iC60		Vigi iC60 add-on residual current device, module CA902005	Vigi iC60 add-on residual current device, module CA902005
Rating (In)	Quality label (1)	Curve MA	Curve MA
1.6 A		A9F90272	A9F90372
2.5 A		A9F90273	A9F90373
4 A		A9F90204	A9F90304
6.3 A		A9F90276	A9F90376
10 A		A9F90210	A9F90310
12.5 A		A9F90282	A9F90382
16 A		A9F90216	A9F90316
25 A		A9F90225	A9F90325
40 A		A9F90240	A9F90340
Width in 9-mm modules		4	6
Accessories		Module CA907000 and CA907001	Module CA907000 and CA907001

(1) Information to be provided by the country.

iC60L circuit breakers instantaneous circuit breakers (ICB) (curve MA) (cont.)

PB104434-40



■ Insulated terminals IP20

Visi-trip window
■ Fault tripping is indicated by a red mechanical indicator on the front face

■ Large circuit labelling area

Positive contact indication
■ Suitable for industrial isolation according to IEC/EN 60947-2 standard.
■ The presence of the green strip guarantees physical opening of the contacts and allows operations to be performed on the downstream circuit in complete safety

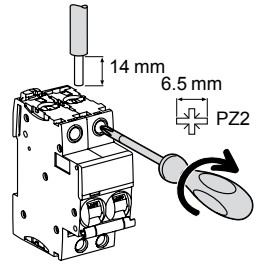
■ Double clip for dismounting with comb busbar in place

■ Increased product service life thanks to:
□ overvoltage resistance by high level of industrial performances conception (pollution degree, rated impulse withstand voltage and insulation voltage),
□ high performance limitation (see limitation curves),
□ fast closing independent of the speed of actuation of the toggle.
■ Remote indication, open/closed/tripped, by optional auxiliary contacts.
■ Top or bottom electrical feeding.

iC60L circuit breakers instantaneous circuit breakers (ICB) (curve MA) (cont.)

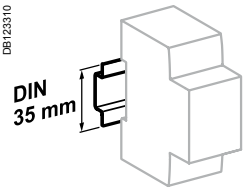
Connection

DB123060



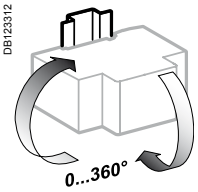
Rating	Tightening torque	Without accessory: Copper cables – Rigid	Without accessory: Copper cables – Flexible or with ferrule	With accessories: 50 mm² Al terminal	With accessories: Screw-on connection for ring terminal	With accessories: Multi-cables terminal – Rigid cables	With accessories: Multi-cables terminal – Flexible cables
		DB122945	DB122946	DB122935	DB118789	DB118787	
1.6 to 16 A	2 N.m	1 to 25 mm²	1 to 16 mm²	-	Ø 5 mm	-	-
25 to 40 A	3.5 N.m	1 to 35 mm²	1 to 25 mm²	50 mm²		3 x 16 mm²	3 x 10 mm²

DB123310



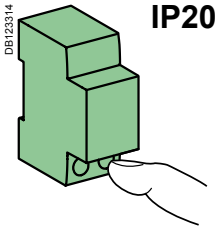
Clip on DIN rail 35 mm.

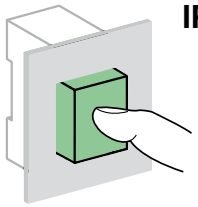
DB123312



Indifferent position of installation.

DB123314





Technical data

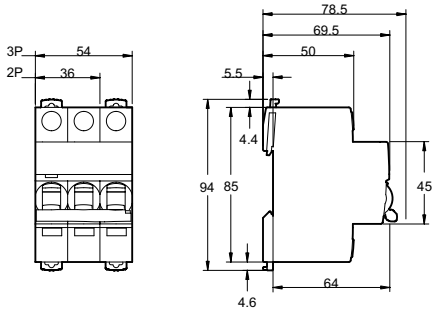
Main characteristics		
According to IEC/EN 60947-2		
Insulation voltage (Ui)		500 V AC
Pollution degree		3
Rated impulse withstand voltage (Uimp)		6 kV
Thermal tripping	Reference temperature	50 °C
	Temperature derating	See module CA908007
Magnetic tripping	MA curve	12 In ± 20 %
Utilization category		A
Additional characteristics		
Degree of protection (IEC 60529)	Device only	IP20
	Device in modular enclosure	IP40 Insulation class II
Endurance (O-C)	Electrical	10,000 cycles
	Mechanical	20,000 cycles
Overvoltage category (IEC 60364)		IV
Operating temperature		-35°C to +70°C
Storage temperature		-40°C to +85°C
Tropicalization (IEC 60068-1)		Treatment 2 (relative humidity 95 % to 55°C)

Weight (g)

Circuit-breaker	
Type	**iC60L**
2P	250
3P	375

Dimensions (mm)

DB124053



NG125LMA circuit breakers (curve MA)

DB116619

Country approval pictogram

IEC/EN 60947-2

- NG125LMA circuit breakers combine the following functions:
- circuit protection against short-circuit currents,
- suitability for industrial isolation according to IEC/EN 60947-2, standard,
- fault tripping indication by a red mechanical indicator in circuit breaker front face,
- they must be associated with overload protection for motor.

056924_SE-30



NG125LMA 2P

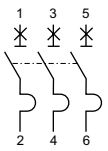
056939_SE-30



NG125LMA 3P

Alternating current (AC) 50/60 Hz					
Breaking capacity (Icu) to IEC/EN 60947-2					Service breaking capacity (Ics)
	Voltage (Ue)				
Ph/Ph (2P, 3P)	220 to 240 V	380 to 415 V	440 V	500 V	
Rating (In) 4 to 80 A (trip units)	100 kA	50 kA	40 kA	15 kA	75 % of Icu

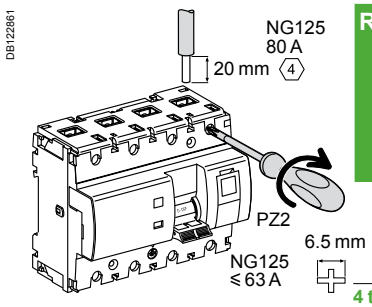
Catalogue numbers

NG125LMA circuit breaker				
Type			2P	3P
			DB123810 	DB123811 
Auxiliaries			Remote indication and tripping, module CM907004 and CM907005	
Vigi NG125			Vigi NG125 add-on residual current device, module CM902008	
Rating (In)	Quality label (1)	Magn. I (A)	Curve MA	Curve MA
4 A		50	**18868**	**18879**
6.3 A		75	**18869**	**18880**
10 A		120	**18870**	**18881**
12.5 A		150	**18871**	**18882**
16 A		190	**18872**	**18883**
25 A		300	**18873**	**18884**
40 A		480	**18874**	**18885**
63 A		750	**18875**	**18886**
80 A		960	**18876**	**18887**
Width in 9 mm modules			6	9
Accessories			Module CM907004 and CM907006	

(1) Information to be supplied by the country concerned.

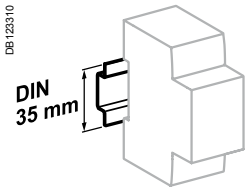
NG125LMA circuit breakers (curve MA) (cont.)

Connection

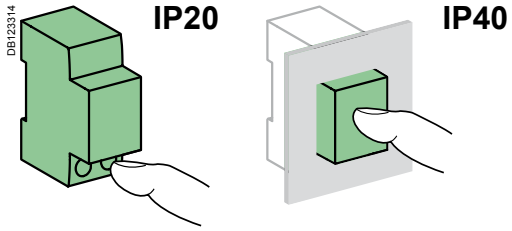


Rating		Tightening torque	Without accessories: Copper cables		With accessories: 70 mm² Al terminal	Screw-on connection for ring terminal	Small ring terminal	Multi-cable terminal	
			Rigid	Flexible or with ferrule	Rigid single cables			Rigid cables	Flexible cables
		DB122945	DB122946	DB123410	DB123488	DB118789	DB118787		
4 to 63 A		3.5 N.m	1.5 to 50 mm²	1.5 to 35 mm²	-	-	-	3 x 16 mm²	3 x 10 mm²
2P	80 A	6 N.m	16 to 70 mm²	10 to 50 mm²	-	2 x 35 mm² 1 x 50 mm²	1 x 70 mm²		
3P	80 A				25 to 70 mm²				

■ On 3P 80 A: upstream voltage taps for each pole, by 6.35 mm Fast-on terminal.



Clips on to 35 mm DIN rail.



Technical data

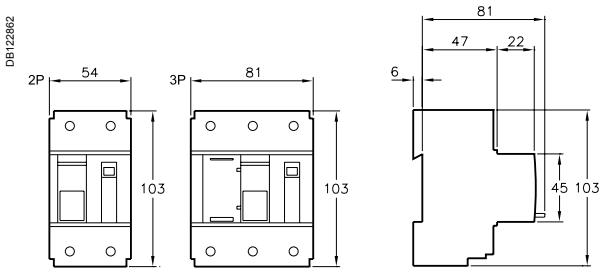
Main characteristics		
According to IEC/EN 60947-2		
Insulation voltage (Ui)		690 V AC
Degree of pollution		3
Rated impulse withstand voltage (Uimp)		8 kV
Thermal tripping	Reference temperature	40°C
Magnetic tripping (Ii)	MA curve	12 In ± 20 %
Utilization category		A
Additional characteristics		
Degree of protection (IEC 60529)	Device only	IP20
	Device in modular enclosure	IP40
Endurance (O-C)	Electrical	10,000 cycles
	Mechanical	20,000 cycles
Operating temperature		-30°C to +70°C
Storage temperature		-40°C to +70°C
Tropicalization (IEC 60068-1)		Treatment 2 (relative humidity of 95 % at 55°C)

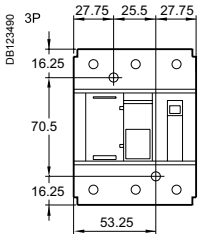
NG125LMA circuit breakers (curve MA) (cont.)

Weight (g)

Circuit breaker	
Type	**NG125LMA**
2P	480
3P	720

Dimensions (mm)





Spacing for mounting on panel

NG125LMA circuit breakers (curve MA) (cont.)

3P 80 A
- ■ Voltage taps:
- □ auxiliaries power supply
- □ measurement
- □ emergency stop
- □ remote reporting



■ Cable strength:
□ ribbed cage
□ terminal depth
□ tightening by Allen hex key (NG125 80 A)

■ Padlocking in position:
O or I, manual control is inhibited, tripping is enabled

056918N_SE-90

■ Test button to check satisfactory operation of the tripping mechanism





3P
■ Pull-out strength:
□ metallic lock

3P
■ Integrated padlocking device

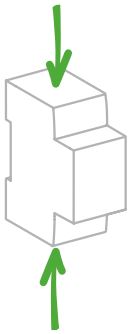
■ Impact and vibration resistance:
□ high-strength enclosure
□ IK 05

■ Central manual control, 3 positions:
□ ON
□ tripped on fault
□ open

■ Circuit breaker tripped indicator

DB123493

■Electric power supply through the top or bottom



■ Positive contact indication:
□ suitability for isolation in the industrial sector to IEC/EN 60947-2
□ the presence of the green strip guarantees that the contacts open physically and allows work to be carried out safely on the downstream circuit

■ Longer product service life due to:
□ good overvoltage withstand capacity,
□ high limitation performances,
□ fast closure independent of the speed of actuation of the toggle.

D0 fuse disconnectors switches

DB116619 DB116619

Country approval pictograms

IEC/EN 60947-1, IEC/EN 60947-3, IEC 60269-1, IEC 60269-3, VDE 0660-100, VDE 0660-107

PB110951-40



PB110955-40



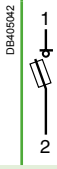
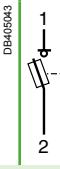
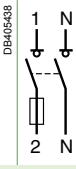
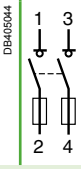
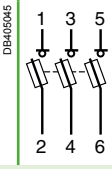
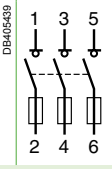
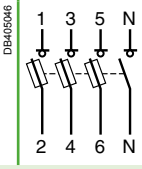
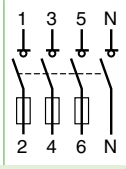
- The plug-in fuse switches disconnectors D01 and the switches disconnectors fuse D02 provide protection against overloads and short circuits.
- They are used for service sector and industrial applications.
- Depending on the versions, they should be provided with D01 or D02 type cartridges.

Accessories

- The D02 gauges allow you to limit the rating of the fuses, depending on the model used, from 20 A to 50 A.

Catalogue numbers

Fuse disconnectors switches

Type	1P	1P+N		2P	3P		3P+N	
	D01	D01	D02	D02	D01	D02	D01	D02
	DB405042 	DB405043 	DB405438 	DB405044 	DB405045 	DB405439 	DB405046 	DB405440 
D01 fuse switches disconnectors								
Rating (In)								
10 A	-	**MGN01610**		-	-		**MGN01710**	
13 A	-	**MGN01613**		-	-		**MGN01713**	
16 A	-	**MGN01616**		-	**MGN01316**		**MGN01716**	
Width in 9 mm modules	-	4		-	6		8	
D02 switches disconnectors fuse								
Rating (In)								
63 A	**MGN02163**	**MGN02663**		**MGN02263**	**MGN02363**		**MGN02763**	
Width in 9 mm modules	3	6		6	9		12	

PB110959-30



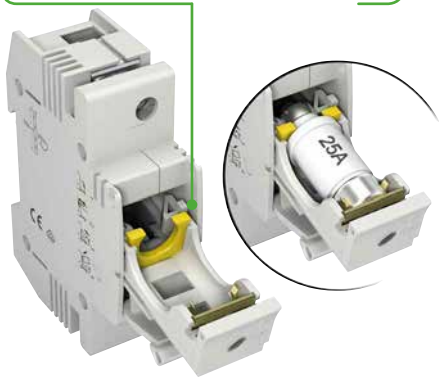
Accessories for D02 switches disconnectors fuse

Type	Rating	Colour	
Fuse gauge	20 A	Blue	**MGN09120**
	25 A	Yellow	**MGN09125**
	32-35-40 A	Black	**MGN09135**
	50 A	White	**MGN09150**

D02 : Gauges

- These allow fitting of fuses from 20 A to 50 A

PB110960-50



Connection

- Upstream/downstream by tunnel terminals
- For D01: by 18 mm forked comb busbar

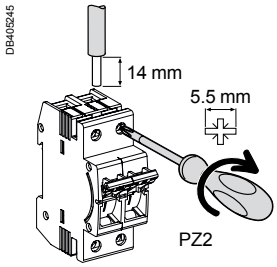
PB110951-60



Blown-fuse indicator

D0 fuse disconnectors switches (cont.)

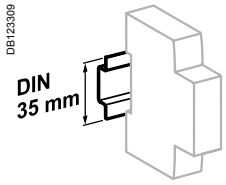
Connection



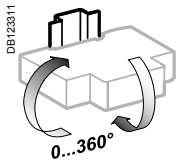
Type	Tightening torque	Copper cables	
		Rigid	Flexible or with ferrule
		DB122945	DB122946
D01	2 N.m	1.5 to 25 mm²	1.5 to 16 mm²
D02	3 N.m	1.5 to 35 mm²	1.5 to 25 mm²

Technical data

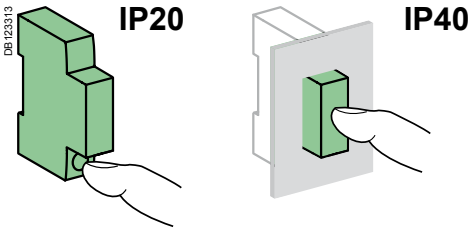
Main characteristics		D01	D02
Operating voltage (Ue)		230/400 V AC	230/400 V AC 110 V DC (2P)
Operating frequency (Hz)		45-62 Hz	45-62 Hz
Service breaking capacity (Isc)	AC	50 kA	50 kA
	DC	-	8 kA
Rated insulation voltage (Ui)		400 V	400 V
Rated impulse withstand voltage (Ui)		6000 V	6000 V
Utilization category (IEC 60947-3)	400 V AC	AC-22A	AC-22A (63 A) AC-23A (35 A)
	110 V DC (2P)	-	DC-22B (63 A)
	48 V DC (1P)	-	DC-22A (63 A)
Endurance (O-C)	Electrical	1500 cycles	1500 cycles
	Mechanical	10,000 cycles	8500 cycles
Additional characteristics			
Degree of protection	Device only	IP20	
	Device in modular enclosure	IP40	
Operating temperature		-5°C to +40°C	
Storage temperature		-25°C to +55°C	



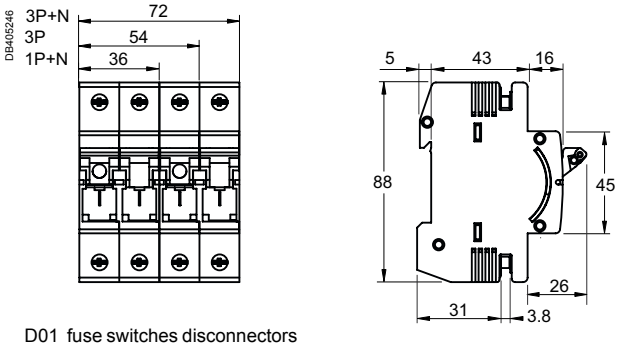
Clip on DIN rail 35 mm.



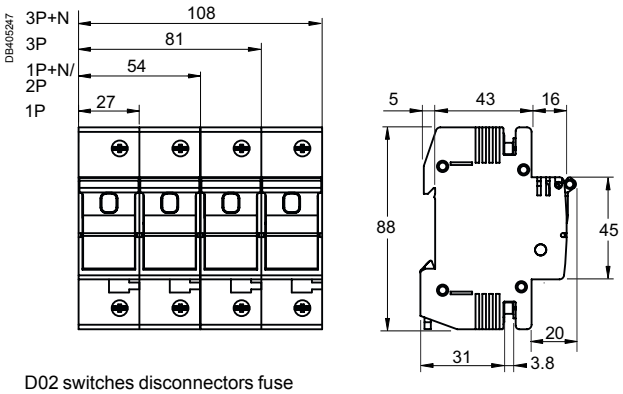
Indifferent position of installation.



Dimensions (mm)



D01 fuse switches disconnectors



D02 switches disconnectors fuse

Choice of earth leakage protection devices

Choice of sensitivity

The sensitivity of an earth leakage protection device depends mainly on the function it has to perform:
- Protection from electric shock by direct contact.
- Protection from electric shock by indirect contact.
- Protection from fire due to current leakage.

The following table gives a reminder of:
- The circuits that must be protected against these various risks (obligation or recommendation).
- The type of earth leakage protection device to be used in each case, its sensitivity, and its location in the distribution diagram.

Type of protection	Standard requirements		Additional Schneider Electric recommandations	Sensitivity (IΔn)		
	National standard *To be filled in according to the country standard*	**International standard IEC 60364**		**30 mA (*)**	**100 mA to 3000 mA** (depending on the earthing system)	**300 mA (or 500 mA)**
Protection from electric shock by direct contact						
DB123167 	To be filled in according to the country standard	Power supply for ■ General-purpose power sockets, up to 20 A ■ Appliances in the vicinity of a bathtub, shower, pond or swimming pool ■ Portable appliances for outdoor use, up to 32 A ■ Lighting To be modified according to national obligations (above)	None	**Setup in final distribution switchboard** ■ Residual current device protecting a circuit ■ Residual current circuit breaker protecting a group of circuits		
Protection from electric shock by indirect contact						
DB123168 	To be filled in according to the country standard	The entire power distribution system, except for devices: ■ With class II insulation ■ Operating at Safety Extra Low Voltage (class III) To be modified according to national obligations (above)	None	If ground continuity is not ensured over the time	**Setup in final distribution switchboard** ■ Residual current circuit breaker or device, on incoming feeder **Setup in subdistribution board or main switchboard** ■ Residual current device protecting a circuit ■ Residual current device or circuit breaker protecting a group of circuits ■ On incoming feeder: residual current circuit breaker or device	
Protection from fire due to current leakage						
DB123169 	To be filled in according to the country standard	■ High-risk premises: □ explosion (BE3) □ fire (BE2) ■ Agricultural and horticultural buildings ■ Equipment for fairs, exhibitions and shows ■ Temporary outdoor recreational installations To be modified according to national obligations (above)	■ Dilapidated buildings or electrical installations ■ Humid atmospheres: agricultural buildings, public swimming pools ■ Presence of chemical agents			**Setup in final distribution switchboard** ■ Residual current circuit breaker or device, on incoming feeder **Setup in subdistribution board or main switchboard** ■ Residual current device protecting each circuit to a high-risk zone ■ Residual current device or circuit breaker protecting a group of circuits ■ On incoming feeder: residual current circuit breaker or device

(*) The 10 mA sensitivity is useful for certain very specific applications, where there is a risk that someone could sustain a non-dangerous current (10 to 30 mA) without being able to get free. Example: healthcare equipment for hospital beds. Generally, devices with this very high sensitivity are liable to cause frequent tripping, due to the natural leakage currents of the installation.

Choice of earth leakage protection devices (cont.)

Interference immunity

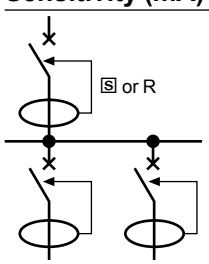
Schneider Electric provides various equipment technologies capable of overcoming the consequences of interference of all kinds.

Operating conditions		Examples	Types				
			AC	A	A-SI	F	B
Loads							
With no special characteristics		■ General-purpose power sockets ■ Incandescent lighting ■ Household appliances: microwave oven, dishwasher, clothes dryer ■ Electric heating, water heater	■	■	■	■	■
Including a rectifier	Single phase	■ Household appliances: induction cooking appliances, washing machines (variable speed) ■ Single-phase variable speed drives	–	■	■	■	■
	Three phase	■ Three-phase variable speed industrial drives ■ Three-phase uninterruptible power supplies	–	–	–	–	■
Generating high-frequency interference (current peaks, harmonics)		■ Fluorescent lighting powered by extra low voltage transformer, by electronic ballast ■ Variable luminosity lighting ■ Powerful IT equipment ■ Single-phase variable speed industrial drives ■ Air conditioning ■ Telecommunications equipment ■ Capacitor banks	–	–	■	■	■
Including an anti-harmonic filter in the power supply		■ Microcomputer systems ■ Computer peripherals (printers, scanners, etc.)	–	–	■	–	■
Electrical environment							
Vicinity of equipment generating transient overvoltages		■ High-powered switching devices ■ Reactive energy compensation banks	–	–	■	■	■
Circuits powered by an uninterruptible power supply		■ Backed-up networks	–	–	■	–	■
"Isolated neutral" (IT) earthing system		–	–	–	■	–	■
Major risk of lightning strokes		■ Buildings protected by a lightning protection system ■ Mountainous or humid regions ■ Regions with high keraunic level	–	–	■	■	■
Atmosphere							
Ambient temperature which could be less than -5°C		–	–	■	■	■	■
Severe environments whose code varies between AF2 and AF4 according to IEC 60364-5-51		■ Indoor swimming pools ■ Yacht harbours, marinas, camping grounds ■ Water treatment ■ Chemical industries, heavy industries, paper mills ■ Mines and cellars, road tunnels ■ Markets, stock raising, food processing industries	–	–	■ (1)	–	–

(1) Atmospheres with high concentrations of chemicals or dust: see tables 1 and 2 in the CA908015E catalog module for description of corrosive atmosphere classes and appropriate additional protection.

Selectivity

Residual current devices of average sensitivity (100 mA and more) are available in a selective (S) and delayed (R) version.
This option ensures that, in the event of an earth fault downstream of the installation, only the defective part is switched off.
The table below shows (in green) which upstream/downstream equipment combinations provide this selectivity.



Sensitivity (mA) - Downstream		Sensitivity (mA) - Upstream												
		Instantaneous						Selective S					Delayed R	
		30	100	300	500	1000	3000	100	300	500	1000	3000	1000	3000
Instantaneous	30	-	-	-	-	-	-							
	100	-	-	-	-	-	-	-						
	300	-	-	-	-	-	-	-	-	-				
	500	-	-	-	-	-	-	-	-	-	-		-	
	1000	-	-	-	-	-	-	-	-	-	-		-	
	3000	-	-	-	-	-	-	-	-	-	-	-	-	-
Selective S	100	-	-	-	-	-	-	-	-	-	-	-		
	300	-	-	-	-	-	-	-	-	-	-	-	-	
	500	-	-	-	-	-	-	-	-	-	-	-	-	
	1000	-	-	-	-	-	-	-	-	-	-	-	-	
	3000	-	-	-	-	-	-	-	-	-	-	-	-	-
Delayed R	1000	-	-	-	-	-	-	-	-	-	-	-	-	-
	3000	-	-	-	-	-	-	-	-	-	-	-	-	-



Overview of the earth leakage protection product range

Selection guide

Type			Residual current circuit breakers			
			iID		RCCB-ID 125 A	RCCB-ID type B
			PB104497-35 		62074_SE-35 	PB101616_SE-35 
Standards			IEC/EN 61008		IEC/EN 61008-1 and VDE 0664	IEC/EN 61008 and VDE 0664
Voltage (V)	Ue		110/230	230/400	230/400	230/400
Number of poles		1P+N	–	–	–	–
		2P	■	■	■	–
		3P	–	–	–	–
		4P	■	■	■	■
Type		AC	–	■	■	–
		A	■	■	■	–
		SI	–	■	■	–
		B	–	–	–	■
Impulse voltage (kV)	Uimp		6	6	4	4
Insulation voltage (V)	Ui		500	500	400	400
Current rating (A)	In		63	16 to 100	125	25 to 125
Frequency (Hz)			50	50	50	50
Rated breaking capacity (A)	Icn		–	–	–	–
Rated conditional short-circuit current	Inc		10000	10000	10000	10000
Rated residual breaking and making capacity (A)	(IΔm)		1500	1500	1250	10 In (500 A min.)
Sensitivity (mA)	(IΔn)	10	–	■	–	–
		30	■	■	■	■
		100	–	■	■	–
		300	–	■	■	■
		500	–	■	■	■
		1000	–	–	–	–
		3000	–	–	–	–
		300 S	–	■	■	■
		500 S	–	■	–	–
		1000 S	–	–	–	–
		3000 S	–	–	–	–
Electrical characteristics						
Curves		B	–		–	–
		C	–		–	–
		D	–		–	–
		L	–		–	–
		K	–		–	–
		MA	–		–	–
For more details, see module			**CA902002**		**CM902001**	**CM902002**
Accessories			**CA907000, CA907001**		**CM902001**	**CM902002**
Auxiliaries			**CA907000, CA907002**		**CM902001**	**CM902002**

Inc: rated conditional short-circuit current
Value of the alternating component of the prospective current that a residual current circuit breaker protected by an appropriate short-circuit protective device (SCPD) mounted in series can withstand in specified conditions of use.

IΔc: rated residual short-circuit current
Value of the alternating component of the prospective residual current that a residual current circuit breaker protected by an appropriate short-circuit protective device (SCPD) mounted in series can withstand in specified conditions of use.

Im: rated making and breaking capacity
Value of the alternating component of the prospective current that a residual current circuit breaker is capable of establishing or interrupting in specified conditions of use.

IΔm: rated making and breaking capacity
Value of the alternating component of the prospective residual current that a residual current circuit breaker is capable of establishing and withstanding during its opening time and interrupting in specified conditions of use and behaviour.

SCPD
Short-circuit protective device (a fuse in the case of our markings): this is the max. fuse that can be used to resist the value Inc = IΔc.

Overview of the earth leakage protection product range (cont.)

	Add-on residual current devices					Residual current devices RCBO
	Vigi iC60			Vigi C120	Vigi NG125	iCV40N
	PB104466-40		PB107924-40	056945N_SE-35	PB104341B-35	
						
	IEC/EN 61009			IEC/EN 61009	IEC/EN 61009	IEC/EN 61009
	110/230	230/400	400/415	230/400	230/400	230
	–	–	–	–	–	■
	■	■	■	■	■	–
	–	■	–	■	■	–
	–	■	–	■	■	–
	■	■	–	■	■	■
	■	■	■	■	■	–
	–	■	–	■	■	■
	–	–	–	–	–	–
	6	6	6	6	8	4
	500	500	500	500	690	400
	25-40-63	25-40-63	63	10-125	63-125	4 to 40
	50/60	50/60	50/60	50/60	50/60	50/60
	–	–	–	–	–	6000
	–	–	–	–	–	–
	–	–	–	–	–	6000
	–	■	–	–	–	–
	■	■	■	■	■	■
	–	■	–	–	–	–
	■	■	–	■	■	■
	–	■	–	■	■	–
	–	–	–	–	■	–
	–	–	–	–	■	–
	–	■	–	■	■	–
	–	■	–	■	■	–
	–	■	–	■	■	–
	–	–	–	–	■	–
	Depending on circuit breaker used			Depending on circuit breaker used	Depending on circuit breaker used	■
						■
						–
						–
						–
						–
	CA902005			**CA902016**	**CM902008**	
	CA907000, CA907001			**CA907012, CA907013**	**CM907004, CM907006**	
	CA907000, CA907002			**CA907008, CA907013**	**CM907004, CM907005**	

Protection
Earth leakage protection
iID double terminals residual current circuit breakers (A type)

DB106619 DB123865 DB123854

Country approval pictograms

KEMA KEUR approval, only for 2P/4P 25 A to 63 A catalogue numbers.

IEC/EN 61008-1

PB107413-40



PB107414-40



- The iID double tunnel terminals residual current circuit breakers provide:
- protection of persons against electric shock by direct contact (⩽ 30 mA),
- protection of persons against electric shock by indirect contact (⩾ 100 mA),
- protection of installations against the risk of fire (300 mA or 500 mA).

Catalogue numbers

iID double terminals residual current circuit breakers

Type			A									Width in 9 mm module
Product			iID									
Auxiliaries			Can accept auxiliaries, module CA907002									
2P		Sensitivity	10 mA	30 mA	30 mA Type G	100 mA	100 mA S	100 mA Type G	300 mA	300 mA S	500 mA	
DB122476 N 1 / N 2	Rating	16 A	A9Z20216	-	-	-	-	-	-	-	-	4
		25 A	A9Z20225	A9Z21225	-	-	-	-	A9Z24225	-	-	
		40 A	-	A9Z21240	A9Z81240	A9Z22240	-	A9Z82240	A9Z24240	A9Z25240	-	
		63 A	-	A9Z21263	A9Z81263	A9Z22263	-	-	A9Z24263	A9Z25263	-	
		80 A		A9Z21280	-	A9Z22280	-	-	A9Z24280	A9Z25280	-	
		100 A	-	A9Z21291	-	A9Z22291	-	-	A9Z24291	A9Z25291	-	
4P		Sensitivity	10 mA	30 mA	30 mA Type G	100 mA	100 mA S	100 mA Type G	300 mA	300 mA S	500 mA	
DB122477 N 1 3 5 / N 2 4 6	Rating	25 A	-	A9Z21425	-	-	-	-	A9Z24425	-	A9Z26425	8
		40 A	-	A9Z21440	-	A9Z22440	-	-	A9Z24440	A9Z25440	A9Z26440	
		63 A	-	A9Z21463	-	A9Z22463	-	-	A9Z24463	A9Z25463	A9Z26463	
		80 A	-	A9Z21480	A9Z81480	A9Z22480	-	-	A9Z24480	A9Z25480	A9Z26480	
		100 A	-	A9Z21491	A9Z81491	A9Z22491	-	A9Z82491	A9Z24491	A9Z25491	A9Z26491	
4P Type THV		Sensitivity	10 mA	30 mA	30 mA Type G	100 mA	100 mA S	100 mA Type G	300 mA	300 mA S	500 mA	
DB122477 N 1 3 5 / N 2 4 6	Rating	40 A	-	A9Z81440	A9Z91440	A9Z82440	A9Z83440	A9Z92440	-	-	-	8
		63 A	-	A9Z81463	A9Z91463	A9Z82463	A9Z83463	A9Z92463	-	-	-	
Voltage rating (Ue)		2P	230 - 240 V									
		4P	400 - 415 V									
Operating frequency			50/60 Hz									
Accessories			Module CA907000 and CA907001									

Protection
Earth leakage protection
iID double terminals residual current circuit breakers (SI type)

DB106619 DB123865 DB123854

Country approval pictograms

KEMA KEUR approval, only for 2P/4P 25 A to 63 A catalogue numbers.

IEC/EN 61008-1

PB107413-40



PB107414-40



- The iID double tunnel terminals residual current circuit breakers provide:
  - protection of persons against electric shock by direct contact (≤ 30 mA),
  - protection of persons against electric shock by indirect contact (≥ 100 mA),
  - protection of installations against the risk of fire (300 mA).

The **SI** type provides increased immunity from electrical interference and polluted or corrosive environments.

Catalogue numbers

iID double terminals residual current circuit breakers

Type			SI					Width in 9 mm module
Product			iID					
Auxiliaries			Can accept auxiliaries, module CA907002					
2P		Sensitivity	10 mA	30 mA	100 mA	100 mA S	300 mA S	
DB122476	Rating	25 A	A9Z30225	A9Z31225	-	-	-	4
		40 A	-	A9Z31240	A9Z32240	-	A9Z35240	
		63 A	-	A9Z31263	A9Z32263	-	A9Z35263	
		80 A		A9Z31280	A9Z32280	-	A9Z35280	
		100 A		A9Z31291	A9Z32291	-	A9Z35291	
4P		Sensitivity	10 mA	30 mA	100 mA	100 mA S	300 mA S	
DB122477	Rating	25 A	-	A9Z31425	-	-	-	8
		40 A	-	A9Z31440	A9Z32440	-	A9Z35440	
		63 A	-	A9Z31463	A9Z32463	-	A9Z35463	
		80 A	-	A9Z31480	A9Z32480	-	A9Z35480	
		100 A	-	A9Z31491	A9Z32491	-	A9Z35491	
4P Type THV		Sensitivity	10 mA	30 mA	100 mA	100 mA S	300 mA S	
DB122477	Rating	40 A	-	-	-	A9Z93440	A9Z95440	8
		63 A	-	-	-	A9Z93463	A9Z95463	
Voltage rating (Ue)		2P	230 - 240 V					
		4P	400 - 415 V					
Operating frequency			50/60 Hz					
Accessoires			Module CA907000 and CA907001					

iID double terminals residual current circuit breakers (A, SI types) (cont.)

Connection between double-terminal protection devices

With comb busbar at the back/cables at the front
Back
Front
Without comb busbar at the back/cables at the front

DB404815



Rating	Tightening torque	Comb busbar	Copper cables	
		Thickness of the teeth	Rigid	Flexible or with ferrule
			DB122945	DB122946
All	3.5 N.m	1.5 mm	1 to 35 mm²	1 to 25 mm²

Connection between double-terminal and single-terminal protection devices

Cables at the back/comb busbar at the front
Back
Front

DB404817



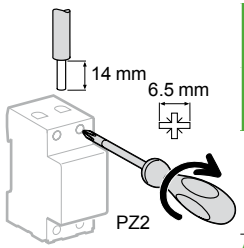
Rating	Tightening torque	Copper cables		Comb busbar
		Rigid	Flexible or with ferrule	Thickness of the teeth
		DB122945	DB122946	
All	3.5 N.m	1 to 25 mm²	1 to 16 mm²	1.5 mm

■ Connection by comb busbar or by cable (according to EN 50027).

Connection

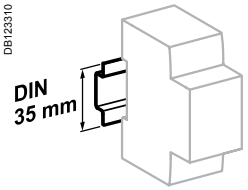
With accessories

DB123947

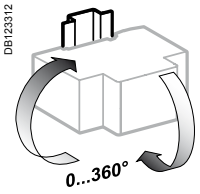


Rating	50 mm² Al terminal	Screw-on connection for ring terminal	Multi-cables terminal	
			Rigid cables	Flexible cables
	DB122935 Al DB118789	Ø DB118787		
All	50 mm²	Ø 5 mm	3 x 16 mm²	3 x 10 mm²

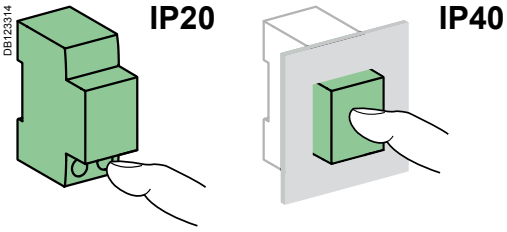
iID double terminals residual current circuit breakers (A, SI types)



Clip on DIN rail 35 mm.



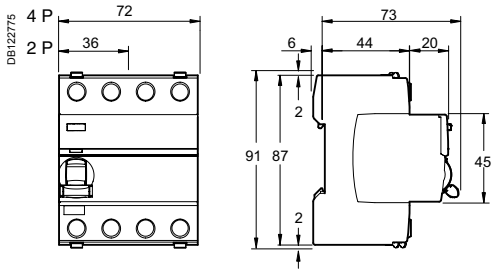
Indifferent position of installation.



Technical data

Main characteristics			
Insulation voltage (Ui)			500 V
Pollution degree			3
Rated impulse withstand voltage (Uimp)			6 kV
According to IEC/EN 61008-1			
Making and breaking capacity (Im/IΔm)			1500 A
Surge current withstand (8/20 µs) without tripping	AC and A types (no selective Ⓢ)		250 Â
	AC, A types (selective Ⓢ)		3 kÂ
	SI type		3 kÂ
Conditional rated short circuit current (Inc/IΔc)	With iC60N/H/L		Equal to breaking capacity of iC60
	With fuse	100 A	10,000 A
Behaviour in case of voltage drop			Residual current protection down to 0 V according to IEC/EN 61008-1 § 3.3.4
Additional characteristics			
Degree of protection	Device only		IP20
	Device in modular enclosure		IP40 Insulation class II
Endurance (O-C)	Electrical (AC1)	16 to 63 A	15,000 cycles
		80 to 100 A	10,000 cycles
	Mechanical		20,000 cycles
Operating temperature	AC type		-5°C to +60°C
	A and SI types	-25°C	-25°C to +60°C
Storage temperature			-40°C to +85°C

Dimensions (mm)



Weight (g)

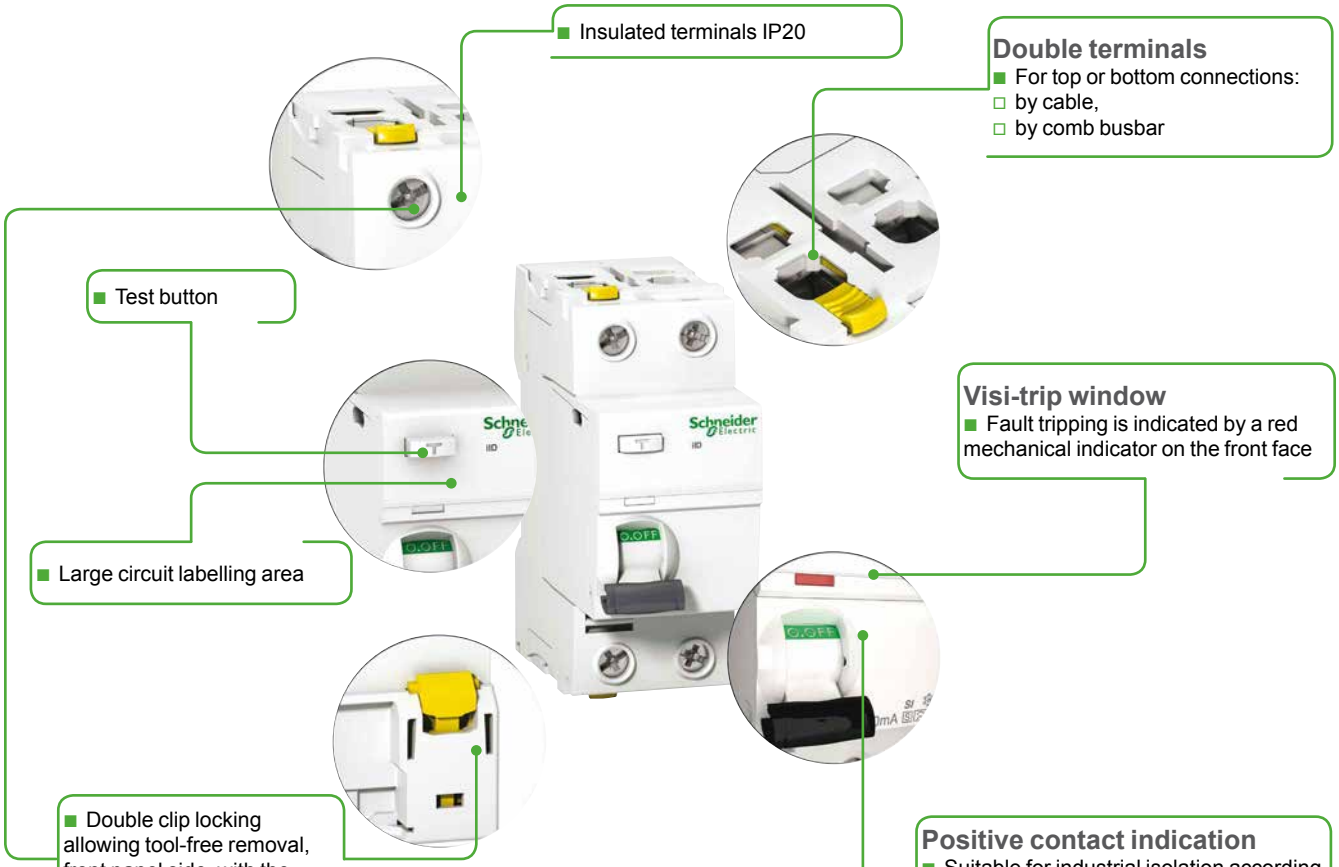
iID double terminals residual current circuit breakers	
Type	**iID**
2P	210
4P	370

ID double terminals residual current circuit breakers (A, SI types) (cont.)

PB107414-40

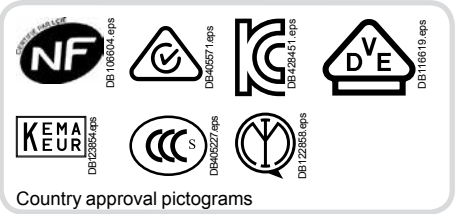


PB107413-60



SI type
The **SI** type provides increased immunity from electrical interference and polluted or corrosive environments.

Acti9 iID B-SI type residual current circuit breakers (RCCB)


Country approval pictograms


A9Z61225-40.eps


A9Z61425-40.eps

IEC/EN 61008-2-1
IEC/EN 62423
IEC 61543
VDE 0664

As per the above standards:
- The Acti9 iID B-SI type residual current circuit breakers provide:
  - protection of persons against electric shock by direct contact (30 mA),
  - protection of persons against electric shock by indirect contact (≥ 300 mA),
  - protection of installations against the risk of fire (300 mA or 500 mA).

B-SI type
The Acti9 iID B-SI type residual current circuit breakers provide:
- protection in the event of a continuous earth fault current on networks generated by:
  - controllers and variable speed drives,
  - battery chargers and inverters, such as used in photovoltaic application,
  - backed-up power supplies.
- They include protection against earth fault currents:
  - sinusoidal AC residual currents (AC type),
  - pulsed DC residual currents (A type),
  - multi frequency residual current (F type).
- The use of Acti9 iID B-SI type residual current circuit breaker can be made mandatory, according to standards applicable in country.
- For applications using 3-poles drives, such as:
  - crane,
  - lift,
  - HVAC,
  - pumping system.

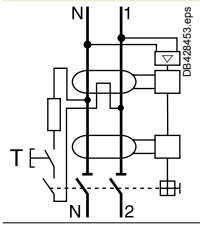
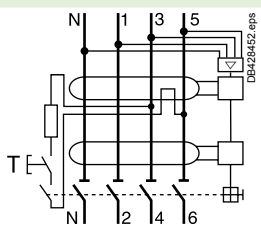
B type is needed.

For more information, see earth leakage protection guide CA908066E.

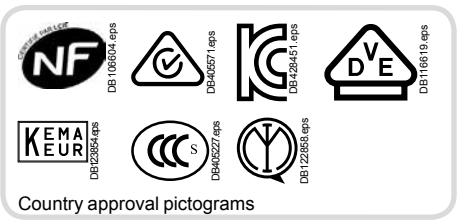
- The Acti9 iID B-SI type works optimally with the variable speed drives manufactured by Schneider Electric, even with a long cable length between motor and variable speed drive (up to 50 m).
- **SI** technology is embedded in Acti9 iID B-SI type residual current circuit breaker, providing increased immunity from electrical interference and polluted environments.
- The Acti9 iID B-SI type is compatible with Schneider Electric AC and A types wired in parallel or in series in the installation, following coordination tables (refer to earth leakage protection guide CA908066E).

Catalog numbers

Acti9 iID B-SI type residual current circuit breakers

Type			B-SI				Width in 9 mm module
2P		**Sensitivity**	**30 mA**	**300 mA**	**300 mA S**	**500 mA**	
	Rating	25 A	**A9Z61225**	**A9Z64225**	-	-	**8**
		40 A	**A9Z61240**	**A9Z64240**	-	-	
		63 A	**A9Z61263**	**A9Z64263**	-	-	
Voltage rating (Ue)			230 V				
Operating frequency			50 Hz				
4P		**Sensitivity**	**30 mA**	**300 mA**	**300 mA S**	**500 mA**	
	Rating	25 A	**A9Z61425**	**A9Z64425**	-	-	8
		40 A	**A9Z61440**	**A9Z64440**	**A9Z65440**	**A9Z66440**	
		63 A	**A9Z61463**	**A9Z64463**	**A9Z65463**	**A9Z66463**	
		80 A	**A9Z61480**	**A9Z64480**	**A9Z65480**	**A9Z66480**	
Voltage rating (Ue)			400 V				
Operating frequency			50 Hz				

Acti9 iID B type EV residual current circuit breakers (RCCB) for Electric Vehicle


Country approval pictograms


A9Z51216-40.eps


A9Z51440-40.eps

IEC/EN 61008-2-1
IEC/EN 62423
IEC 61543
VDE 0664

As per the above standards:
- The Acti9 iID B type EV residual current circuit breakers provide:
  - protection of persons against electric shock by direct contact (30 mA),
  - protection of persons against electric shock by indirect contact,
  - protection of installations against the risk of fire.

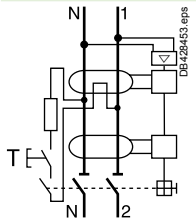
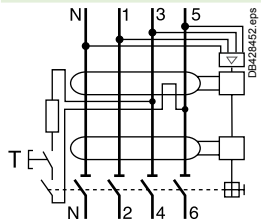
B type
The Acti9 iID B type EV residual current circuit breakers provide:
- protection in the event of a continuous earth fault current on networks generated by electric car charging station.

- The use of Acti9 iID B type EV residual current circuit breaker can be made mandatory, according to standards applicable in country.

- The Acti9 iID B type EV is compatible with Schneider Electric AC and A types wired in parallel or in series in the installation, following coordination tables (refer to earth leakage protection guide CA908066E).

Catalog numbers

Acti9 iID B type EV residual current circuit breakers

Type			B	Width in 9 mm module
2P		**Sensitivity**	**30 mA**	
 DB428453.eps	Rating	16 A	**A9Z51216**	8
		25 A	**A9Z51225**	
		40 A	**A9Z51240**	
Voltage rating (Ue)			230 V	
Operating frequency			50 Hz	
4P		**Sensitivity**	**30 mA**	
 DB428452.eps	Rating	40 A	**A9Z51440**	8
		63 A	**A9Z51463**	
Voltage rating (Ue)			400 V	
Operating frequency			50 Hz	

Acti9 iID B-SI type residual current circuit breakers (RCCB)


A9261225-40.eps


A9261425-40.eps


PB104488-14.eps

IEC/EN 61008-2-1
IEC/EN 62423
IEC 61543
VDE 0664

As per the above standards:
- The Acti9 iID B-SI type residual current circuit breakers provide:
  - protection of persons against electric shock by direct contact (30 mA),
  - protection of persons against electric shock by indirect contact (≥ 300 mA),
  - protection of installations against the risk of fire (300 mA or 500 mA).

B-SI type

The Acti9 iID B-SI type residual current circuit breakers provide:
- protection in the event of a continuous earth fault current on networks generated by:
  - controllers and variable speed drives,
  - battery chargers and inverters, such as used in photovoltaic application,
  - backed-up power supplies.

- They include protection against earth fault currents:
  - sinusoidal AC residual currents (AC type),
  - pulsed DC residual currents (A type),
  - multi frequency residual current (F type).

- The use of Acti9 iID B-SI type residual current circuit breaker can be made mandatory, according to standards applicable in country.

- For applications using 3-poles drives, such as:
  - crane,
  - lift,
  - HVAC,
  - pumping system.

B type is needed.

For more information, see earth leakage protection guide CA908066E.

- The Acti9 iID B-SI type works optimally with the variable speed drives manufactured by Schneider Electric, even with a long cable length between motor and variable speed drive (up to 50 m).

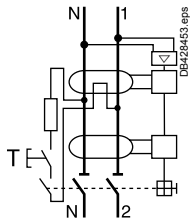
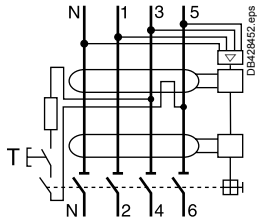
- **SI** technology is embedded in Acti9 iID B-SI type residual current circuit breaker, providing increased immunity from electrical interference and polluted environments.

- The Acti9 iID B-SI type is compatible with Schneider Electric AC and A types wired in parallel or in series in the installation, following coordination tables (refer to earth leakage protection guide CA908066E).

Accessories
- 4P sealable screw shield.

Acti9 iID B-SI type residual current circuit breakers (RCCB) (cont.)

Catalog numbers

Acti9 iID B-SI type residual current circuit breakers							
Type			**B-SI**				**Width in 9 mm module**
2P		**Sensitivity**	**30 mA**	**300 mA**	**300 mA S**	**500 mA**	
	Rating	25 A	**A9Z61225**	**A9Z64225**	-	-	**8**
		40 A	**A9Z61240**	**A9Z64240**	-	-	
		63 A	**A9Z61263**	**A9Z64263**	-	-	
Voltage rating (Ue)			230 V				
Operating frequency			50 Hz				
4P		**Sensitivity**	**30 mA**	**300 mA**	**300 mA S**	**500 mA**	
	Rating	25 A	**A9Z61425**	**A9Z64425**	-	-	8
		40 A	**A9Z61440**	**A9Z64440** **A9Z63440***	**A9Z65440**	**A9Z66440**	
		63 A	**A9Z61463**	**A9Z64463** **A9Z63463***	**A9Z65463**	**A9Z66463**	
		80 A	**A9Z61480**	**A9Z64480**	**A9Z65480**	**A9Z66480**	
Voltage rating (Ue)			400 V				
Operating frequency			50 Hz				

(*) Supplied with screw shield accessory.

Accessory		
Type	**Number of pole**	**Ref. no.**
Screw shield (set of 20) for upstream or downstream	4P	**A9A26981**

Acti9 iID B type EV residual current circuit breakers (RCCB) for Electric Vehicle







IEC/EN 61008-2-1
IEC/EN 62423
IEC 61543
VDE 0664

As per the above standards:
- The Acti9 iID B type EV residual current circuit breakers provide:
  - protection of persons against electric shock by direct contact (30 mA),
  - protection of persons against electric shock by indirect contact,
  - protection of installations against the risk of fire.

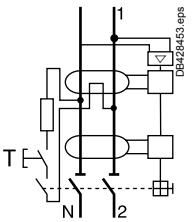
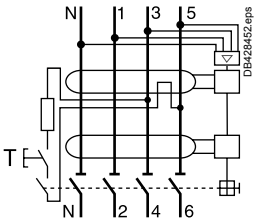
B type
The Acti9 iID B type EV residual current circuit breakers provide:
- protection in the event of a continuous earth fault current on networks generated by:
  - electric car charging station.

- The use of Acti9 iID B type EV residual current circuit breaker can be made mandatory, according to standards applicable in country.

- The Acti9 iID B type EV is compatible with Schneider Electric AC and A types wired in parallel or in series in the installation, following coordination tables (refer to earth leakage protection guide CA908066E).

Accessories
- 4P sealable screw shield.

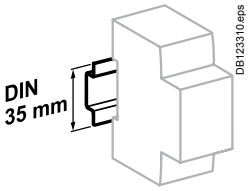
Catalog numbers

Acti9 iID B type EV residual current circuit breakers				
Type			**B**	**Width in 9 mm module**
2P		**Sensitivity**	**30 mA**	
	Rating	16 A	**A9Z51216**	8
		25 A	**A9Z51225** **A9Z52225***	
		40 A	**A9Z51240**	
Voltage rating (Ue)			230 V	
Operating frequency			50 Hz	
4P		**Sensitivity**	**30 mA**	
	Rating	40 A	**A9Z51440**	8
		63 A	**A9Z51463**	
Voltage rating (Ue)			400 V	
Operating frequency			50 Hz	

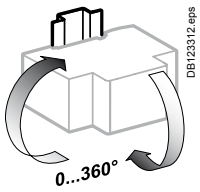
(*) Supplied with screw shield accessory.

Accessory		
Type	**Number of pole**	**Ref. no.**
Screw shield (set of 20) for upstream or downstream	4P	**A9A26981**

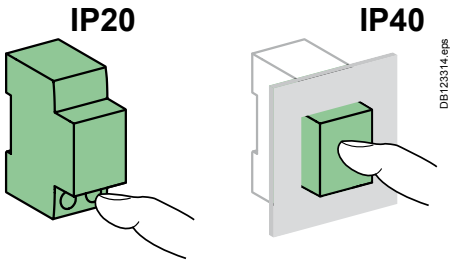
Acti9 iID B type EV and Acti9 iID B-SI type residual current circuit breakers (RCCB)



Clip on DIN rail 35 mm.



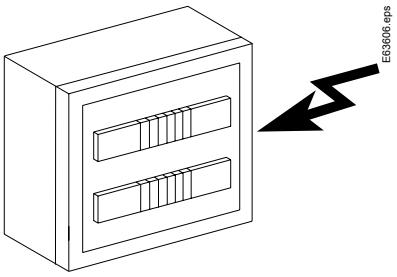
Indifferent position of installation.

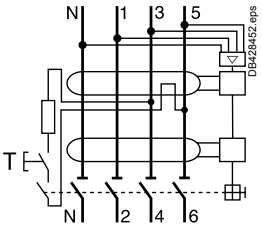


Technical data

Electrical characteristics			
Insulation voltage (Ui)		2P	250 V
		4P	500 V
Pollution degree			3
Rated impulse withstand voltage (Uimp)			6 kV
According to IEC/EN 61008-2-1			
Making and breaking capacity (Im/IΔm)			1500 A
Surge current withstand (8/20 µs) without tripping	No selective Ⓢ		3 kÂ
	Selective Ⓢ		5 kÂ
Conditional rated short circuit current (Inc/IΔc)	With 100 A gG fuse		10,000 A
Additional characteristics			
Degree of protection (IEC 60529)	Device only		IP20
	Device in modular enclosure		IP40 Insulation class II
Endurance (O-C)	Electrical	≤ 63 A	15,000 cycles
		> 63 A	10,000 cycles
	Mechanical		20,000 cycles
Range of test button operating voltage	30 mA	2P	180...270 V AC
		4P	300...450 V AC
	300, 500 mA	2P	140...330 V AC
		4P	220...450 V AC
Impulse withstand according to IEC 60068-2-27			15 g
Vibration withstand according to IEC 60068-2-6			3 g
Electromagnetic compatibility			According to IEC 61543
Operating temperature			-25°C to +60°C
Storage temperature			-40°C to +85°C
Dissipated power			Module CA908009

Dielectric test



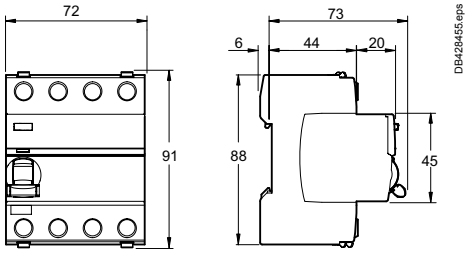


⚠ **To perform the dielectric test, disconnect terminals:**
4P: 1, 3, 5 and 2, 4, 6
2P: 1 and 2

Weight (g)

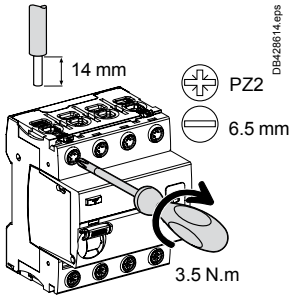
Residual current circuit breakers	
Type	**iID**
2P	350
4P	415

Dimensions (mm)



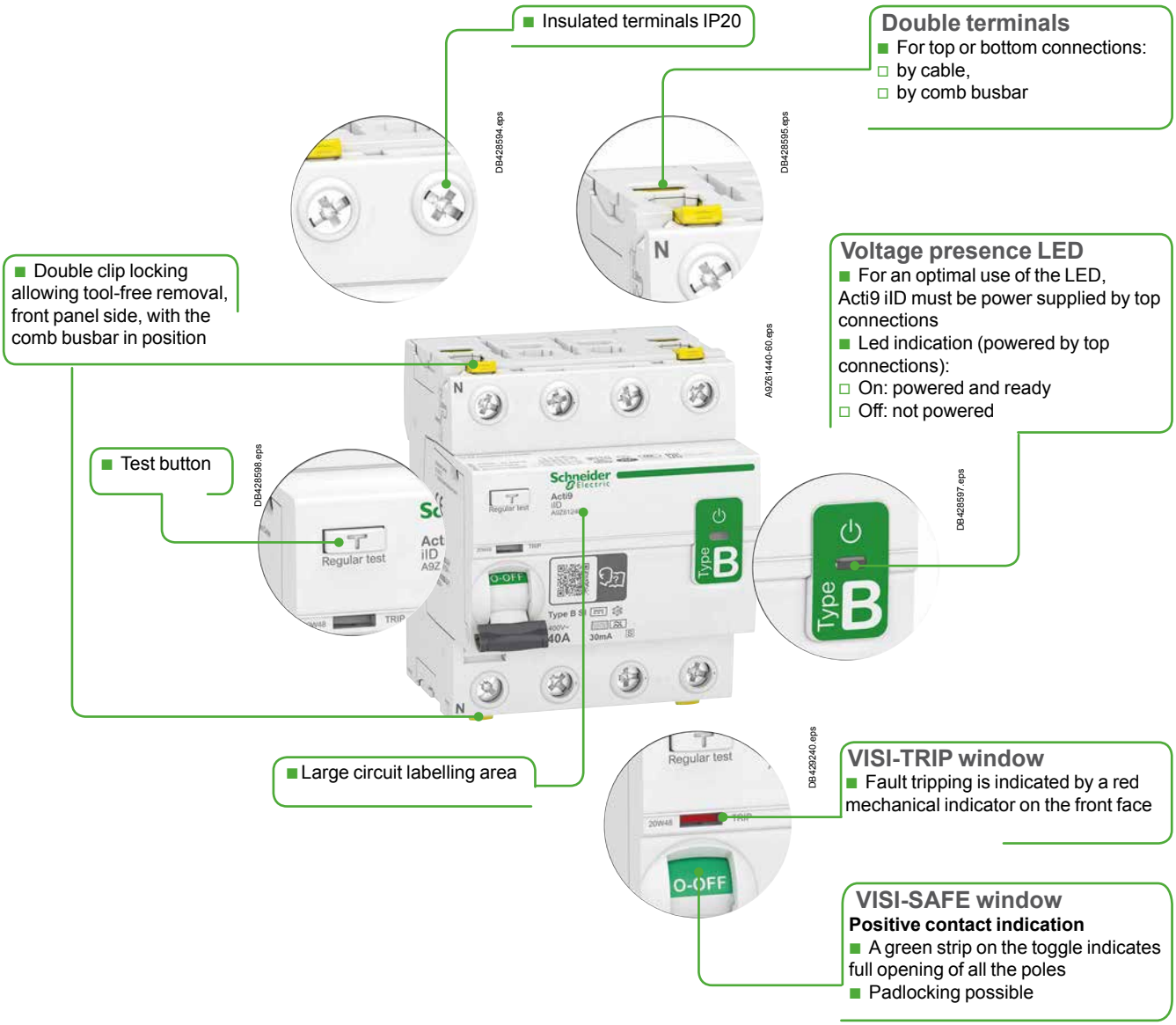
Acti9 iID B type EV and Acti9 iID B-SI type residual current circuit breakers (RCCB) (cont.)

Connection

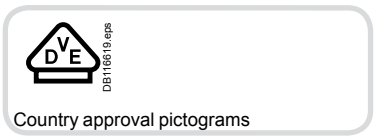


Rating	Without accessory				With accessories			
	Back		Front					
	Copper cables		Copper cables		50 mm² Al terminal	Screw-on connection for ring terminal	Multi-cables terminal	
	Rigid	Flexible or with ferrule	Rigid	Flexible or with ferrule			Rigid cables	Flexible cables
	DB122945.eps	DB122946.eps	DB122945.eps	DB122946.eps	Al DB122935.eps	Ø DB118789.eps	DB118787.eps	
All	1 to 25 mm²	1 to 16 mm²	1 to 35 mm²	1 to 25 mm²	50 mm²	Ø 5 mm	3 x 16 mm²	3 x 10 mm²

Accessories: modules CA907000 and CA907001



Protection,
Earth leakage protection
Acti9 iID40 residual current circuit breakers bottom connection



Country approval pictograms





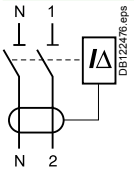
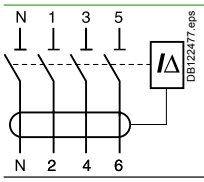
CEI/EN 61008-2-1

As per the above standard:
- The residual current circuit breakers offer the following earth leakage protection functions:
  - protection of persons against electric shock by direct contact (30 mA),
  - protection of persons against electric shock by indirect contact (300 mA),
  - protection of installations against the risk of fire (300 mA)

A-SI type
The A-SI type provides increased immunity from electrical interference and polluted or corrosive environments.

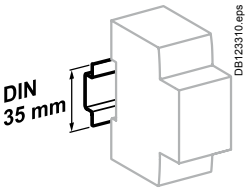
Catalog numbers

Acti9 iID40 residual current circuit breakers

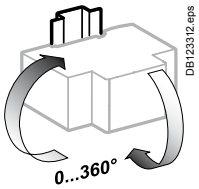
Type			A	A-SI		Width in 9-mm modules
Electrical auxiliaries, Remote control			**Catalog modules CA907002 and CA904010**			
1P+N		**Sensitivity**	**30 mA**	**30 mA**	**300 mA**	
	Rating	25 A	**A9R43625**	**A9R83625**	-	4
		40 A	**A9R43640**	**A9R83640**	-	
		63 A	-	-	-	
3P+N		**Sensitivity**	**30 mA**	**30 mA**	**300 mA**	
	Rating	25 A	**A9R43725**	**A9R83725**	-	8
		40 A	**A9R43740**	**A9R83740**	-	
		63 A	**A9R43763**	**A9R83763**	**A9R93763**	
Voltage rating (Ue)		1P+N	230 - 240 V AC			
		3P+N	400 - 415 V AC			
Operating frequency			50/60 Hz			
Accessories			**Catalog modules CA907001 and CA907015**			
Comb busbars			**Catalog module CA907026**			
PowerTag energy sensors			**Catalog modules CA907029 and CA908058**			

Life Is On Schneider Electric

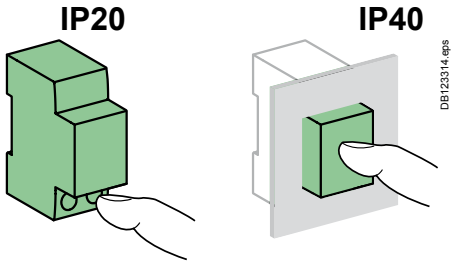
Acti9 iID40 residual current circuit breakers bottom connection



Clip on DIN rail 35 mm.



Indifferent position of installation.

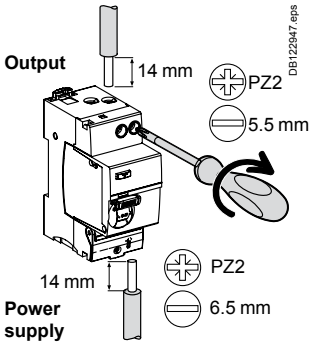


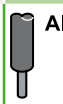
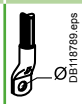
Technical data

Main characteristics		
Insulation voltage (Ui)		500 V AC
Voltage rating (Ue)	Phase-to-neutral	230 V AC
	Phase-to-phase	400 V AC
Rated impulse withstand voltage (Uimp)		6 kV
According to IEC/EN 61008-2-1		
Rated residual breaking and making capacity (IΔm)		1.5 kA
Breaking and making capacity (Im)		1.5 kA
Conditional rated short circuit current (Inc/IΔc)	With circuit breaker	Equal to breaking capacity of the circuit breaker
	25/40 A With fuse 80 A	10000 A
	63 A With fuse 100 A	
8/20 µs impulse withstand without tripping	AC and A types	250 Â
	A-SI type	3 kÂ
Behaviour in case of voltage drop	 DB407011.eps	Residual current protection down to 0 V according to IEC/EN 61009-1 § 3.3.8

Additional characteristics		
Degree of protection (IEC 60529)	Device only	IP20
	Device in modular enclosure	IP40
Endurance (O-C)	Electrical (AC1)	15000 cycles
	Mechanical	20000 cycles
Operating temperature	AC type	-5°C to +60°C
	A, A-SI type  DB406521.eps	-25 °C to +60°C
Storage temperature		-40°C to +85°C

Connection



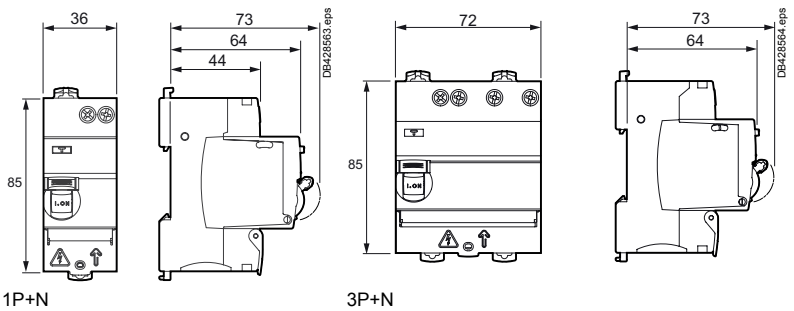
	Comb busbar		Tightening torque	Without accessory: Copper cables		With accessories*: 50 mm² Al terminal	Screw-on connection for ring terminal	Multi-cables terminal	
				Rigid	Flexible or with ferrule			Rigid cables	Flexible cables
				 DB122945.eps	 DB122946.eps	 Al DB122935.eps	 DB118789.eps	 DB118787.eps	
Top	■		2 N.m	1 to 16 mm²	1 to 10 mm²	-	Ø 5 mm	-	-
Bottom	-		3.5 N.m	1 to 35 mm²	1 to 25 mm²	50 mm²	Ø 5 mm	3 x 16 mm²	3 x 10 mm²

* see Catalog modules CA907001 and CA907015

Weight (g)

Residual current circuit breakers	
Type	**Acti9 iID40**
1P+N	195
3P+N	360

Dimensions (mm)



1P+N

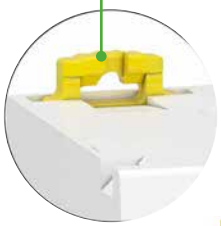
3P+N

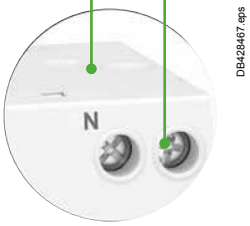
Acti9 iID40 residual current circuit breakers bottom connection



■ Insulated terminals IP20

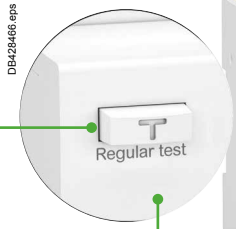
■ Double clip for dismounting with comb busbar in place





Output terminals
■ Direct power supply of the outgoers by comb busbar
■ Compatible with Acti9 horizontal comb busbars with 9 mm modules (catalog module CA907026)

■ Test button





VISI-TRIP window
■ Fault tripping is indicated by a red mechanical indicator on the front face

■ Indication flap of connection direction
■ Sealing possible



Power supply terminals
■ 25 mm² flexible

VISI-SAFE window
Positive contact indication
■ A green strip on the toggle indicates full opening of all the poles
■ Downstream maintenance operations can be carried out in better safety conditions
■ Padlocking possible

■ Large circuit labelling area



RCCB-ID 125 A residual current circuit breaker (A, SI, B types)

IEC/EN 61008-1
VDE 0664

PB111262-33



16973

PB111263-33



16921

PB107510-33



16940

PB101616-33



16766

PB100573-18



16938

PB100572-18



16939

As per the above standards:
- The RCCB-ID 125 A residual current circuit breakers provide:
  - protection of persons against electric shock by direct contact (30 mA),
  - protection of persons against electric shock by indirect contact (⩾ 100 mA),
  - protection of installations against the risk of fire (300 mA or 500 mA).

The **SI** type provides increased immunity from electrical interference and polluted or corrosive environments.

B type
- The RCCB-ID B type residual current circuit breakers provide specific protection of three-phase installations and people even in the presence of DC fault currents on the network generated by:
  - 3-poles controllers and variable speed drives,
  - 3-poles battery chargers and inverters,
  - 3-poles backed-up power supplies.

Instantaneous
It ensures instantaneous tripping (without time delay).

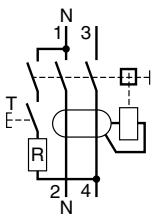
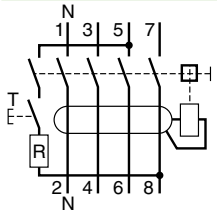
Selective S
It ensures total discrimination with a non-selective RCD placed downstream.

OFsp auxiliary
- Electrical indication: by OFsp auxiliary mounted to the left, it has a double changeover switch indicating the "open" or "closed" position of the RCCB-ID 125 A.

Accessories
- 2P and 4P sealable screw shield.

Catalogue numbers

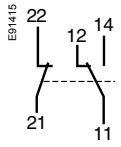
RCCB-ID 125 A residual current circuit breakers

Type			AC				A			
2P		**Sensitivity**	**30 mA**	**100 mA**	**300 mA**	**500 mA**	**30 mA**	**300 mA**	**300 mA S**	**500 mA**
E91413 	Rating	125 A				-	**16970**	**16971**	-	-
4P		**Sensitivity**	**30 mA**	**100 mA**	**300 mA**	**500 mA**	**30 mA**	**300 mA**	**300 mA S**	**500 mA**
E91414 	Rating	125 A				**16908**	**16924**	**16926**	**16925**	**16927**
Voltage rating (Ue)		2P	230 V							
		4P	400 V							
Operating frequency			50 Hz							

RCCB-ID 125 A residual current circuit breaker (A, SI, B types) (cont.)

Catalogue numbers

Auxiliary

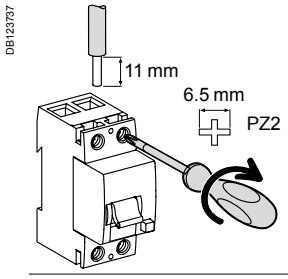
Type				Width in 9 mm module
Contact OFsp	Contact	Voltage		
	1 A	110 V DC	**16940**	1
	6 A	230 V AC (AC15)		

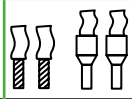
Accessory

Type	Number of pole	
Screw shield (set of 10) for upstream or downstream	2P	**16938**
	4P	**16939**

Connection

■ By tunnel terminals for:



Type	Tightening torque	Copper cables	
		Rigid	Flexible or with ferrule
		DB112804 	DB112805 
RCCB-ID	3 N.m	1 x 1.5 to 50 mm²	1 x 1.5 to 35 mm²
		2 x 1.5 to 16 mm²	2 x 1.5 to 16 mm²
OFsp	0.8 N.m	1 to 1.5 mm²	1 to 1.5 mm²

	SI		B				Width in 9 mm module
	30 mA	300 mA	-				
	16972	**16973**	-	-	-	-	4
	30 mA	300 mA	30 mA	300 mA	300 mA S	500 mA	
	16920	**16921**	**16763**	**16764**	**16765**	**16766**	8

RCCB-ID 125 A residual current circuit breaker (A, SI, B types) (cont.)

OFsp contact status, depending on the position of the residual current circuit breaker

Type				
RCCB-ID 125 A	Closed	■	-	-
	Open	-	■	-
	Tripped on fault	-	-	■
Contact OFsp	22/21 12/11	Open	Closed	Closed
	14/11	Closed	Open	Open

DB122835



Indication of the status of the RCCB-ID via the 3-position toggle and front panel indicator

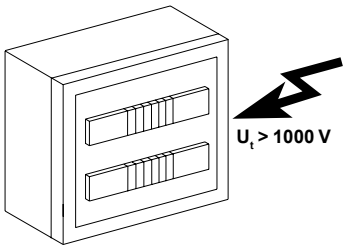
- Open (toggle in high position and green indicator)
- Closed (toggle in low position and red indicator)
- Tripped on fault (toggle in middle position and green indicator)

Technical data

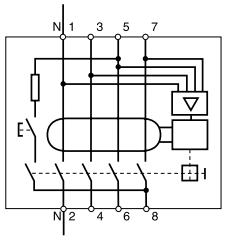
Electrical characteristics			
Insulation voltage (Ui)			400 V
Pollution degree			3
Rated impulse withstand voltage (Uimp)			4 kV
According to IEC/EN 61008-1			
Making and breaking capacity (Im/IΔm)			1250 A
Surge current withstand (8/20 µs) without tripping	AC and A types (no selective Ⓢ)		250 Â
	SI and B types (no selective Ⓢ)		3 kÂ
	AC, A, SI and B types (selective Ⓢ)		3 kÂ
Conditional rated short circuit current (Inc/IΔc)	With FU 125 A gC fuse		10,000 A
Behaviour in case of voltage drop			Residual current protection down to 0 V according to IEC/EN 61008-1 § 3.3.4
Additional characteristics			
Degree of protection	Device only		IP20 IP40 with screw shield
	Device in modular enclosure		IP40 Insulation class II
Endurance (O-C)	Electrical		> 2 000 cycles
	Mechanical		> 5 000 cycles
Operating temperature	-25°C		-25°C to +40°C
Storage temperature	AC, A, SI types		-40°C to +85°C
	B type		-40°C to +60°C
Range of test button operating voltage	30 mA	2P	160...250 V AC
		4P	250...440 V AC
	100, 300, 500 mA	2P	185...250 V AC
		4P	185...440 V AC

Dielectric test

E63606



DB109414



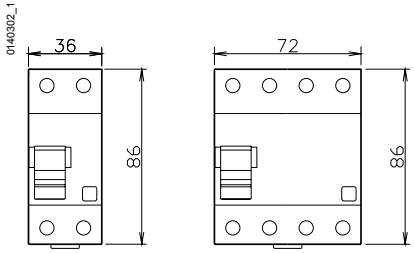
⚠ To perform the dielectric test, disconnect terminals 3, 5, 7 and 4, 6, 8.

Weight (g)

Residual current circuit breakers and auxiliary			
Type		**RCCB-ID 125 A**	**OFsp**
2P		230	40
4P	AC, A and SI types	420	
	B type	500	

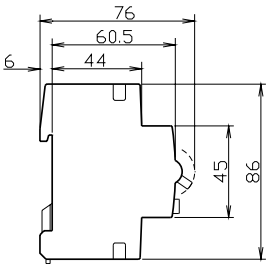
Dimensions (mm)

0140302_1

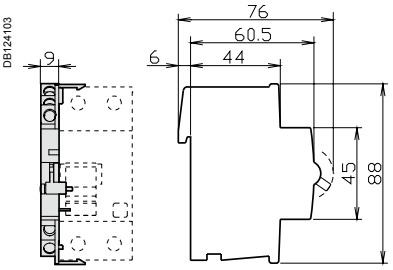


2P
RCCB-ID 125 A

4P



DB124103



Contact OFsp

Acti9 Vigi iC40 add-on residual current devices "Outgoer"



Country approval pictograms

IEC/EN 61009-2-1

As per the above standard:
The residual current devices offer the following earth leakage protection functions:
- □ protection of persons against electric shock by direct contact (30 mA),
- □ protection of persons against electric shock by indirect contact (300 mA),
- □ protection of installations against the risk of fire (300 mA)
- ■ Circuit protection is ensured by a circuit breaker associated to the Vigi add-on.

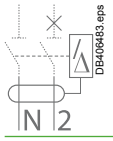
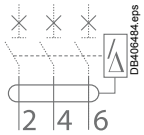
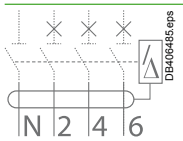
A-SI type

The A-SI type provides increased immunity from electrical interference and polluted or corrosive environments.

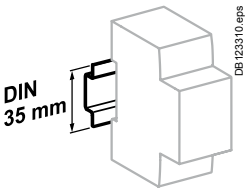


Catalog numbers

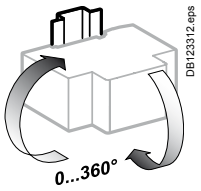
Acti9 Vigi iC40 add-on residual current devices "Outgoer"

Type			A		A-SI		Width in 9 mm modules
Auxiliaries			**Without auxiliaries**				
1P+N		**Sensitivity**	**30 mA**	**300 mA**	**30 mA**	**300 mA**	
	Rating	25 A	**A9Y80625**	**A9Y81625**	**A9Y84625**	**A9Y85625**	2
		25 A type G	**A9Y87625**	-	-	-	
		40 A	**A9Y80640**	**A9Y81640**	**A9Y84640**	**A9Y85640**	
3P		**Sensitivity**	**30 mA**	**300 mA**	**30 mA**	**300 mA**	
	Rating	25 A	**A9Y80325**	**A9Y81325**	**A9Y84325**	**A9Y85325**	4
		40 A	**A9Y80340**	**A9Y81340**	**A9Y84340**	**A9Y85340**	
3P+N		**Sensitivity**	**30 mA**	**300 mA**	**30 mA**	**300 mA**	
	Rating	25 A	**A9Y80725**	**A9Y81725**	**A9Y84725**	**A9Y85725**	4
		40 A	**A9Y80740**	**A9Y81740**	**A9Y84740**	**A9Y85740**	
Accessories			**Catalog modules CA907001 and CA907015**				
PowerTag energy sensors			**Catalog modules CA907029 and CA908058**				

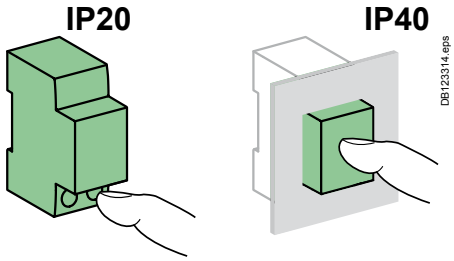
Acti9 Vigi iC40 add-on residual current devices "Outgoer"



Clip on DIN rail 35 mm.



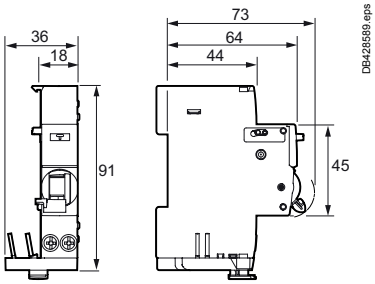
Indifferent position of installation.



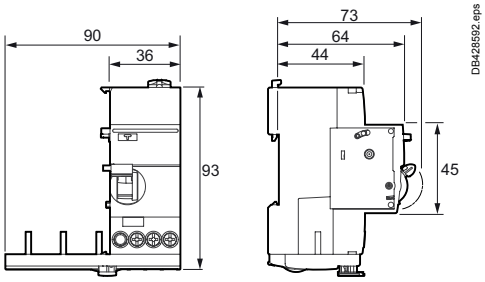
Technical data

Main characteristics		
According to IEC/EN 61009-2-1		
Insulation voltage (Ui)	Phase-to-neutral	400 V
	Phase-to-phase	440 V
Voltage rating (Ue)	Phase-to-neutral	230 V
	Phase-to-phase	400 V
Operating frequency		50/60 Hz
8/20 µs impulse withstand without tripping	AC, A types	250 Â
	A-SI type	3 kÂ
Pollution degree		3
Behaviour in case of voltage drop	 DB407011.eps	Residual current protection down to 0 V according to IEC/ EN 61009-1 § 3.3.8
Rated impulse withstand voltage (Uimp)		4 kV
Additional characteristics		
Degree of protection (IEC 60529)	Device only	IP20
	Device in modular enclosure	IP40 Insulation class II
Operating temperature	AC type	-5°C to +60°C
	A, A-SI types  DB406521.eps	-25°C to +60°C
Storage temperature		-40°C to +85°C

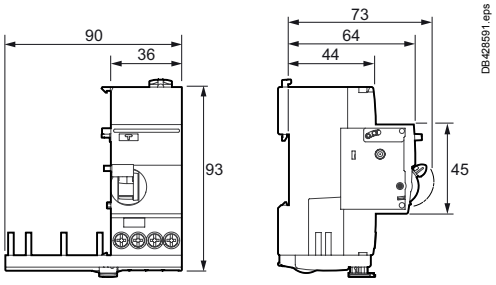
Dimensions (mm)



Acti9 Vigi iC40 "Outgoer" 1P+N

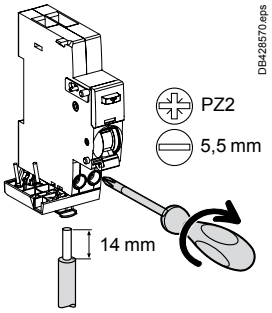


Acti9 Vigi iC40 "Outgoer" 3P

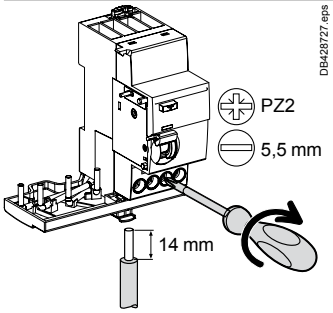


Acti9 Vigi iC40 "Outgoer" 3P+N

Connection



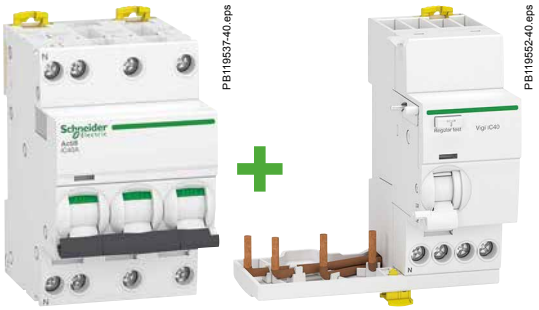
Tightening torque	Copper cables	
	Rigid DB122945.eps	Flexible or with ferrule  DB122946.eps
2 N.m	1 to 16 mm²	1 to 10 mm²
Acti9 Vigi iC40 1P+N		
2 N.m	1 to 16 mm²	1 to 10 mm²
Acti9 Vigi iC40 3P, 3P+N		



Weight (g)

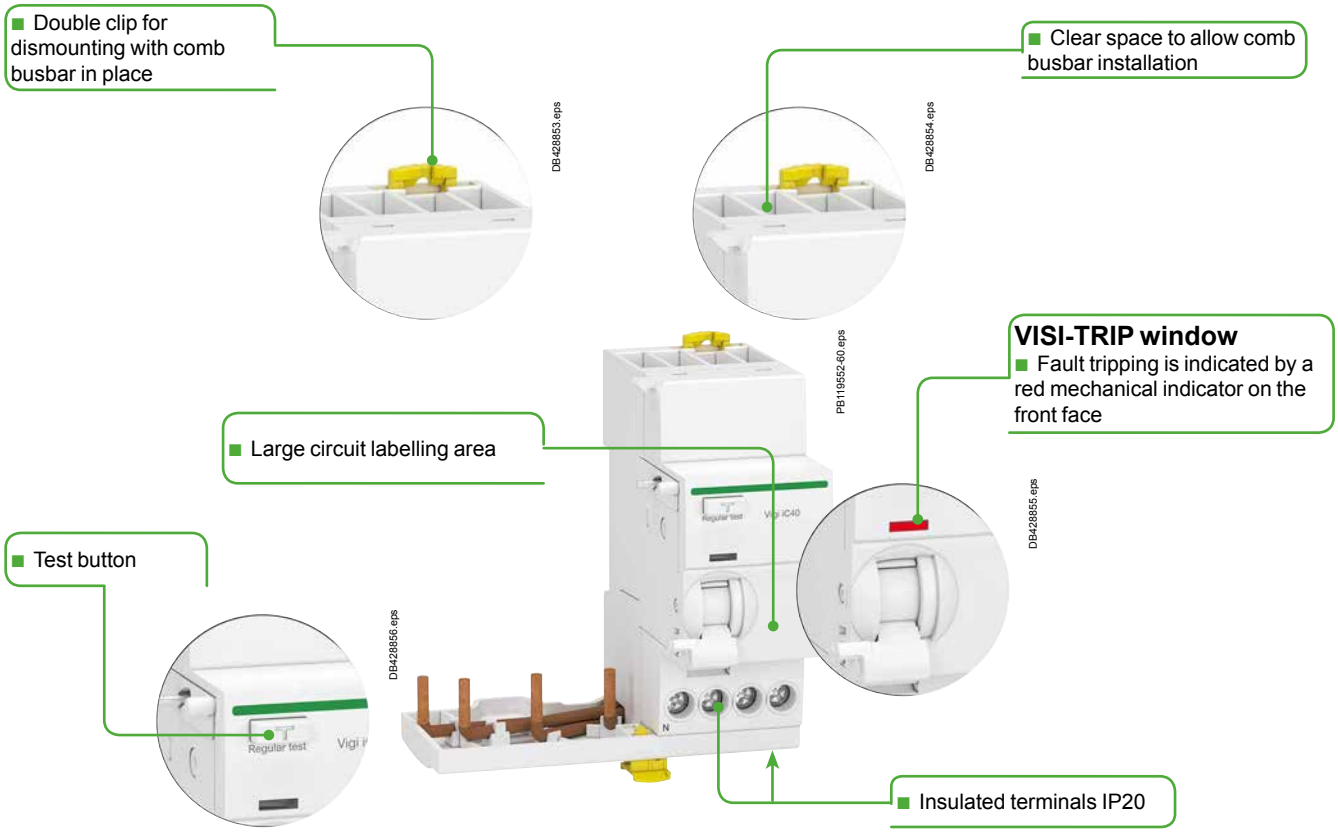
Add-on residual current devices	
Type	**Acti9 Vigi iC40**
1P+N	85
3P	155
3P+N	160

Acti9 Vigi iC40 add-on residual current devices "Outgoer"



Circuit breaker + Vigi association

Circuit breaker	Vigi 25 A	Vigi 40 A
2 A to 25 A	■	■
32 A - 40 A	-	■



Vigi iC60 add-on residual current devices for iC60 double terminals (A type)

DB116619

Country approval pictogram

IEC/EN 61009-1

- Combined with iC60 double tunnel terminals circuit breaker, the Vigi iC60 provide:
- protection of persons against electric shock by direct contact (30 mA),
- protection of persons against electric shock by indirect contact (≥ 100 mA),
- protection of installations against the risk of fire (300 mA or 500 mA).

PB107416-40



PB107418-40



PB107420-40



Catalogue numbers

Vigi iC60 add-on residual current devices

Type			A					Width in 9 mm modules
Product			Vigi iC60					
Auxiliaries			Without auxiliaries					
2P		Sensitivity	30 mA	100 mA	300 mA	300 mA S	500 mA	
DB405510	Rating	25 A	A9W21225	A9W22225	A9W24225	-	A9W26225	3
		63 A	A9W21263	A9W22263	A9W24263	A9W25263	A9W26263	4
3P		Sensitivity	30 mA	100 mA	300 mA	300 mA S	500 mA	
DB122463	Rating	25 A	A9W21325	-	A9W24325	-	A9W26325	6
		63 A	A9W21363	-	A9W24363	A9W25363	A9W26363	7
4P		Sensitivity	30 mA	100 mA	300 mA	300 mA S	500 mA	
DB405511	Rating	25 A	A9W21425	A9W22425	A9W24425	-	A9W26425	6
		63 A	A9W21463	A9W22463	A9W24463	A9W25463	A9W26463	7
Voltage rating (Ue)		2P	230 - 240 V					
		3P-4P	400 - 415 V					
Operating frequency			50/60 Hz					
Accessories			Module CA907000					

Vigi iC60 add-on residual current devices for iC60 double terminals (SI type)

DB116619

Country approval pictogram

IEC/EN 61009-1

- Combined with iC60 double tunnel terminals circuit breaker, the Vigi iC60 provide:
- protection of persons against electric shock by direct contact (≤ 30 mA),
- protection of persons against electric shock by indirect contact (≥ 300 mA),
- protection of installations against the risk of fire (300 mA).

The **SI** type provides increased immunity from electrical interference and polluted or corrosive environments.

PB107415-40



PB107417-40



PB107419-40



Catalogue numbers

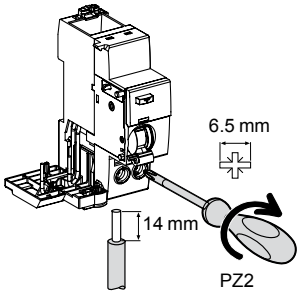
Vigi iC60 add-on residual current devices

Type			SI			Width in 9 mm modules
Product			Vigi iC60			
Auxiliaries			Auxiliaries			
2P		Sensitivity	10 mA	30 mA	300 mA S	
DB405510	Rating	25 A	A9W30225	A9W31225	-	3
		63 A	-	A9W31263	A9W35263	4
3P		Sensitivity	10 mA	30 mA	300 mA S	
DB122463	Rating	25 A	-	A9W31325	-	6
		63 A	-	A9W31363	A9W35363	7
4P		Sensitivity	10 mA	30 mA	300 mA S	
DB405511	Rating	25 A	-	A9W31425	-	6
		63 A	-	A9W31463	A9W35463	7
Voltage rating (Ue)		2P	230 - 240 V			
		3P-4P	400 - 415 V			
Operating frequency			50/60 Hz			
Accessories			Module CA907000			

Vigi iC60 add-on residual current devices for iC60 double terminals (A, SI types)

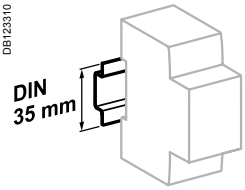
Connection

DB124393



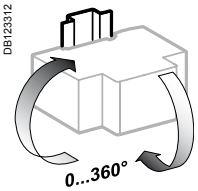
Type	Rating	Tightening torque	Copper cables	
			Rigid	Flexible or with ferrule
			DB122945	DB122946
Vigi iC60	25 A	2 N.m	1 to 25 mm²	1 to 16 mm²
	63 A	3.5 N.m	1 to 35 mm²	1 to 25 mm²

DB123310



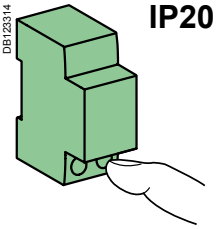
Clip on DIN rail 35 mm.

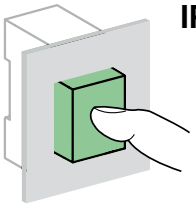
DB123312



Indifferent position of installation.

DB123314





Technical data

Main characteristics		
Insulation voltage (Ui)		500 V
Pollution degree		3
Rated impulse withstand voltage (Uimp)		6 kV
According to IEC/EN 61009-1		
Surge current withstand (8/20 µs) without tripping	AC and A types (no selective)	250 Â
	AC, A types (selective Ⓢ)	3 kÂ
	SI type	3 kÂ
Behaviour in case of voltage drop		Residual current protection down to 0 V according to IEC/EN 61009-1 § 3.3.8
Additional characteristics		
Degree of protection	Device only	IP20
	Device in modular enclosure	IP40 Insulation class II
Operating temperature	AC type	-5°C to +60°C
	A and SI types	-25°C to +60°C
Storage temperature		-40°C to +85°C

Vigi iC60 add-on residual current devices for iC60 double terminals (A, SI types) (cont.)

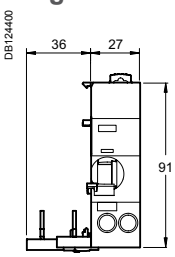
Weight (g)

Add-on residual current devices	
Type	**Vigi iC60**
2P	165
3P	210
4P	245

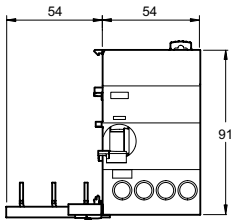
Dimensions (mm)

Vigi iC60 25 A

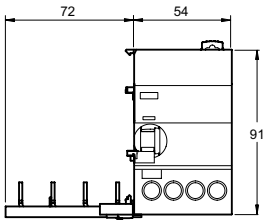
DB124400



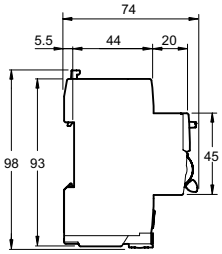
2P



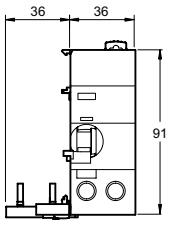
3P



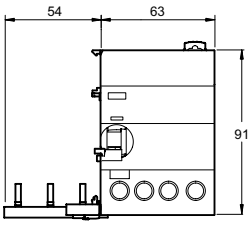
4P



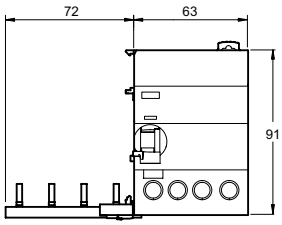
Vigi iC60 63 A



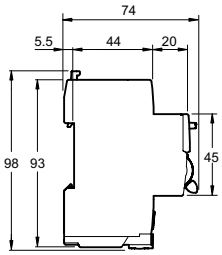
2P



3P



4P



Vigi iC60 add-on residual current devices for iC60 double terminals (A, SI types) (cont.)

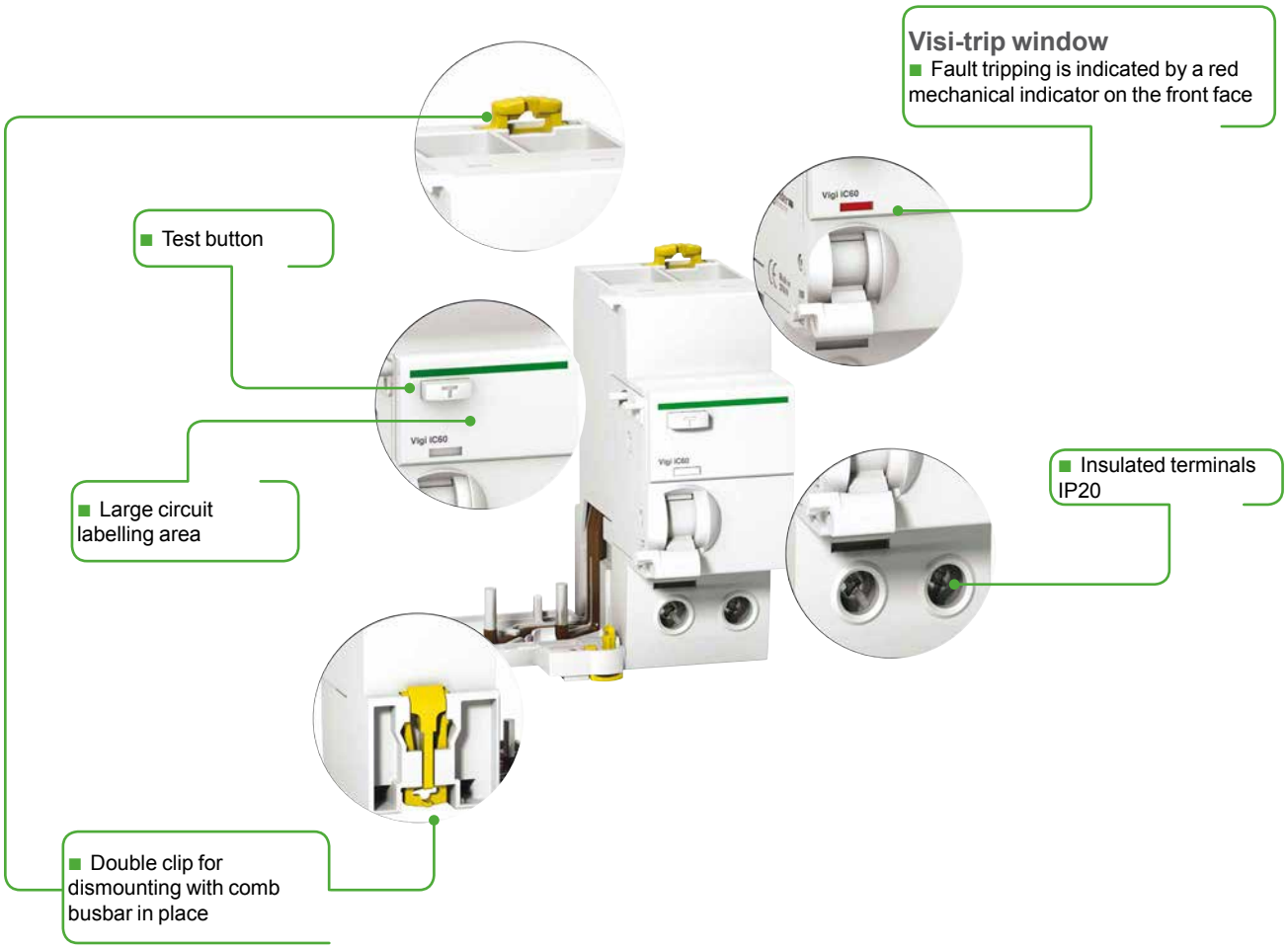
DB124384



Association iC60N, H + Vigi iC60

iC60	Vigi iC60 25 A	Vigi iC60 63 A
0.5 A to 25 A	■	■
32 A - 40 A	NO	■
50 A - 63 A	NO	■

PB107416-60



Type SI

The **SI** type provides increased immunity from electrical interference and polluted or corrosive environments.

Vigi C120 add-on residual current devices (type A)

DB123430

Country approval pictograms

EN 61009

When a Vigi C120 device is combined with a C120 circuit breaker, it provides the following functions:
- protection of persons against electric shock by direct contact (30 mA),
- protection of persons against electric shock by indirect contact (≥ 300 mA),
- protection of installations against fire hazards (300 mA to 1000 mA).

PB107924-30



2P

PB107925-30



3P

PB107926-30



4P

Catalogue numbers

Vigi C120 add-on residual current devices

Type		A						Width in 9 mm modules
Product		Vigi C120						
Auxiliaries		Without auxiliary						
2P	Sensitivity	30 mA	300 mA	500 mA	300 mA Ⓢ	500 mA Ⓢ	1000 mA Ⓢ	
DB122462		A9N18572	A9N18573	A9N18574	-	-	-	7
3P	Sensitivity	30 mA	300 mA	500 mA	300 mA Ⓢ	500 mA Ⓢ	1000 mA Ⓢ	
DB122463		A9N18575	A9N18576	A9N18577	-	-	-	10
4P	Sensitivity	30 mA	300 mA	500 mA	300 mA Ⓢ	500 mA Ⓢ	1000 mA Ⓢ	
DB122464		A9N18578	A9N18579	A9N18580	A9N18587	A9N18588	A9N18589	10
Operating voltage (Ue)	2P	230 - 240 V						
	3P-4P	400 - 415 V						
Operating frequency		50/60 Hz						
Accessories		Module CA907012 and CA907013						

Vigi C120 add-on residual current devices (type A-SI)

DB123430

Country approval pictograms

EN 61009

When a Vigi C120 device is combined with a C120 circuit breaker, it provides the following functions:
- protection of persons against electric shock by direct contact (30 mA),
- protection of persons against electric shock by indirect contact (≥ 300 mA),
- protection of installations against fire hazards (300 mA to 1000 mA).

Special feature of type A-SI :
They are appropriate for operating in environments with:
- high risk of nuisance tripping: frequent lightning strikes, IT system, presence of electronic ballasts, frequency converters, presence of switchgear incorporating lighting type interference filters, computer system, etc.
- blind sources:
- ☐ presence of harmonics or high frequency rejections
- ☐ presence of DC components: diodes, diode bridges, switch-mode power supplies, etc.
- protected against nuisance tripping caused by transient voltage surges (lightning strike, operation of switchgear on the network, etc.)

PB107924-30



2P

PB107925-30



3P

PB107926-30



4P

Catalogue numbers

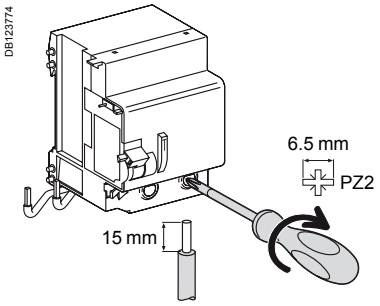
Vigi C120 add-on residual current devices

Type		A-SI					Width in 9 mm modules
Product		Vigi C120					
Auxiliaries		Without auxiliary					
2P	Sensitivity	30 mA	300 mA	500 mA	300 mA S	1000 mA S	
DB122462		A9N18591	A9N18592	-	A9N18556	A9N18557	7
3P	Sensitivity	30 mA	300 mA	500 mA	300 mA S	1000 mA S	
DB122463		A9N18594	A9N18595	-	A9N18558	A9N18559	10
4P	Sensitivity	30 mA	300 mA	500 mA	300 mA S	1000 mA S	
DB122464		A9N18597 A9N18554(1)	A9N18598 A9N18555(1)	A9N18599	A9N18560	A9N18561	10
Operating voltage (Ue)	2P	230 - 240 V					
	3P-4P	400 - 415 V					
Operating frequency		50 Hz					
Accessories		Module CA907012 and CA907013					

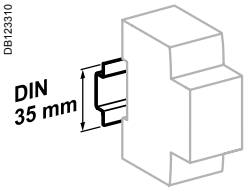
(1) specific offer for France

Vigi C120 add-on residual current devices (types A and A-SI)

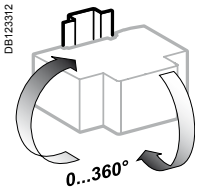
Connection



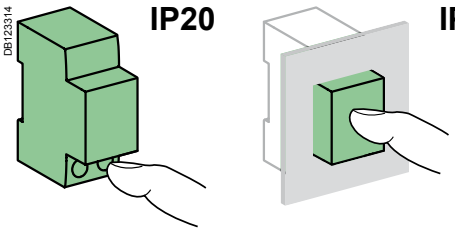
Type	Sensitivity	Tightening torque	Copper cables	
			Rigid	Flexible or with ferrule
		DB122945	DB122946	
Vigi C120	30...1000 mA	3.5 N.m	1 to 50 mm²	1 to 35 mm²



Clips onto 35 mm DIN rail.



Any installation position.



Technical data

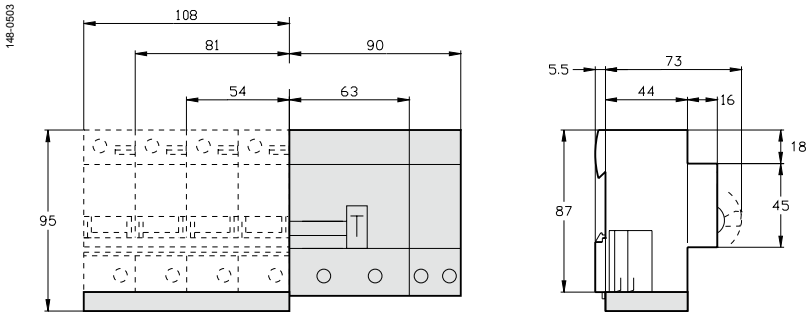
Main characteristics		
To IEC 60947-2		
Insulation voltage (Ui)		500 V AC
Degree of pollution		3
Rated impulse withstand voltage (Uimp)		6 kV
To EN 61009		
Impulse current withstand (8/20 µs) without tripping	Types AC and A (non-selective Ⓢ)	250 Â
	Types AC and A (selective Ⓢ)	3 kÂ
	Types A-SI (non-selective Ⓢ)	3 kÂ
	Types A-SI (selective Ⓢ)	5 kÂ
Additional characteristics		
Degree of protection	Device only	IP20
	Device in a modular enclosure	IP40 Insulation class II
Operating temperature	Type AC	-5 °C to +60 °C
	Types A and A-SI	-25 °C to +60 °C
Storage temperature		-40 °C to +85 °C

Weight (g)

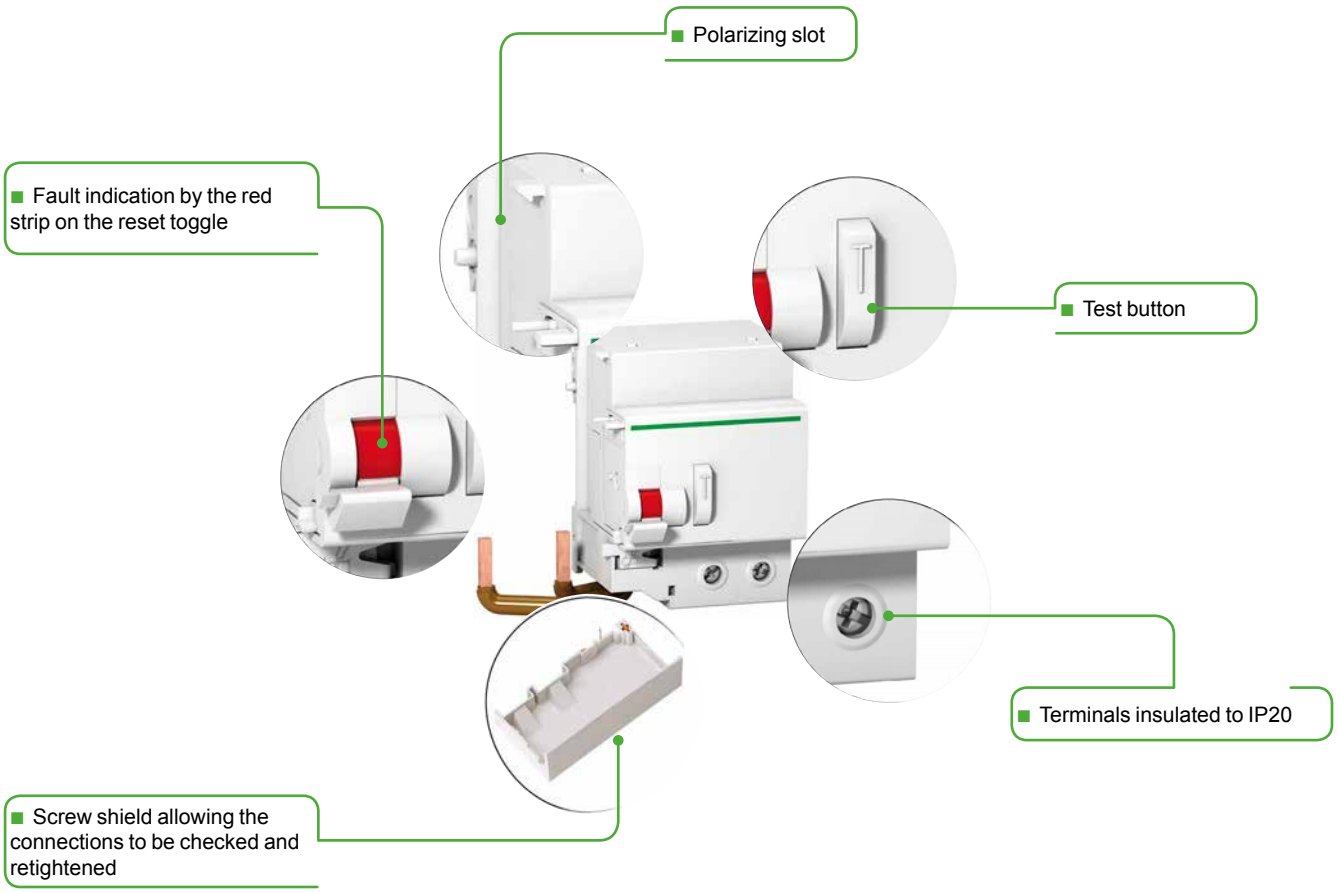
Add-on residual current devices	
Type	**Vigi C120**
2P	325
3P	500
4P	580

Dimensions (mm)

C120 + Vigi C120



Vigi C120 add-on residual current devices (types A and A-SI) (cont.)



Type A-SI
The A-SI type provides increased immunity from electrical interference and polluted or corrosive environments.

Vigi NG125 add-on residual current devices (A type)

DB116619

Country approval pictogram

IEC/EN 61009-1

054383M-40



PB103998-40



■ When it is combined with an NG125 circuit breaker, the Vigi NG125 add-on residual current device offers the following functions:
- □ protection of persons against electric shocks by direct contact (30 mA),
- □ protection of persons against electric shocks by indirect contact (≥ 300 mA),
- □ protection of installations against fire risks (300 mA or 500 mA).

Catalogue numbers

Vigi NG125 add-on residual current devices

Type			A						Width in 9 mm modules
Product			Vigi NG125						
Auxiliaries			Module CM907005						
2P		Sensitivity	30 mA	300 mA	300 mA S	1000 mA S	300…1000 I/S	300…3000 I/S/R	
DB122462	Rating	63 A	**19010** 19008 (1)	**19012** 19009 (1)	**19030**	**19031**	-	-	5
3P		Sensitivity	30 mA	300 mA	300 mA S	1000 mA S	300…1000 I/S	300…3000 I/S/R	
DB122463	Rating	63 A	**19013**	**19014**	**19032**	**19033**	-	-	9
			-	-	-	-	-	**19036** 19053 (2)	11
		125 A	**19039**	-	-	-	**19044**	**19047** 19055 (2)	11
4P		Sensitivity	30 mA	300 mA	300 mA S	1000 mA S	300…1000 I/S	300…3000 I/S/R	
DB122464	Rating	63 A	**19015**	**19016**	**19034**	**19035**	-	-	9
			-	-	-	-	-	**19037** 19054 (2)	11
		125 A	**19041**	**19042**	-	-	**19046**	**19049** 19056 (2)	11
Voltage rating (Ue)			230 - 240 V, 400 - 415 V Except: (1) 110…220 V and (2) 440…500 V						
Operating frequency			50/60 Hz						
Accessories			Module CM907006						

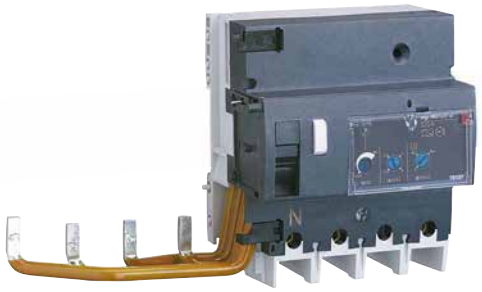
Vigi NG125 add-on residual current devices (SI type)

DB116619

Country approval pictogram

IEC/EN 61009-1

057484-40

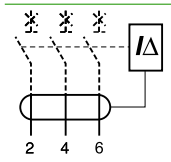
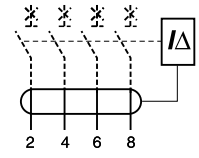


■ When it is combined with an NG125 circuit breaker, the Vigi NG125 add-on residual current device offers the following functions:
□ protection of persons against electric shocks by direct contact (30 mA),
□ protection of persons against electric shocks by indirect contact (≥ 300 mA),
□ protection of installations against fire risks (300 mA or 500 mA).

SI types are appropriate for operating in environments with:
■ High risk of nuisance tripping: frequent lightning strikes, IT system, presence of electronic ballasts, frequency converters, presence of switchgear incorporating lighting type interference filters, computer system, etc.
■ Blind sources
□ presence of harmonics or high frequency rejections,
□ presence of DC components: diodes, diode bridges, switch-mode power supplies, etc.
■ Protected against nuisance tripping caused by transient voltage surges (lightning strike, operation of switchgear on the network, etc.).

Catalogue numbers

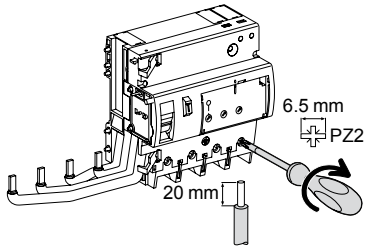
Vigi NG125 add-on residual current devices

Type			SI		Width in 9 mm modules
Product			Vigi NG125		
Auxiliaries			Module CM907005		
3P		Sensitivity	30 mA	300…3000 I/S/R	
DB122463 	Rating	125 A	19100	19106	11
4P		Sensitivity	30 mA	300…3000 I/S/R	
DB122464 	Rating	125 A	19101	19107	11
Voltage rating (Ue)			230 - 240 V, 400 - 415 V		
Operating frequency			50/60 Hz		
Accessories			Module CM907006		

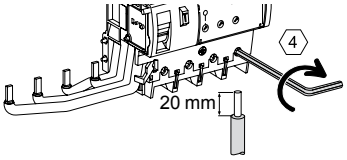
Protection
Earth leakage protection
Vigi NG125 add-on residual current devices (A, SI types)

Connection

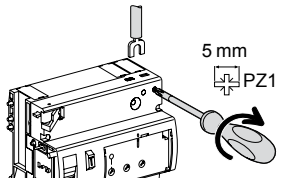
DB123404



DB123405

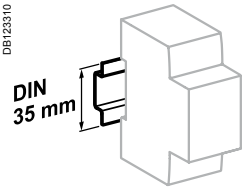


DB123408



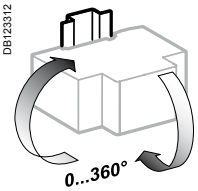
Rating	Tightening torque	Without accessories: Copper cables: Rigid	Without accessories: Copper cables: Flexible or with ferrule	Without accessories: Copper cables: Screw clamp terminal	With accessories: 70 mm² Al terminal	With accessories: Screw-on connection for ring terminal
		DB122945	DB122946	DB123409 DB123410	DB123488	
63 A	3.5 N.m	1.5 to 50 mm²	1 to 35 mm²	-	-	-
125 A	6 N.m	16 to 70 mm²	10 to 50 mm²	-	25 to 70 mm²	2 x 35 mm² 1 x 50 mm²
Pre-alarm	1 N.m	2 x 2.5 mm²	2 x 1.5 mm²	2 x 1.5 mm²	-	-

DB123310



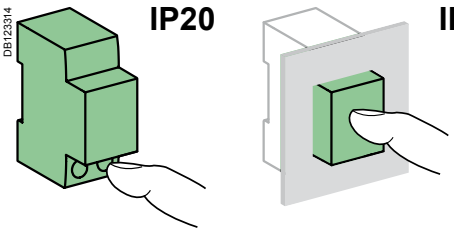
Clip on DIN rail 35 mm.

DB123312



Indifferent position of installation.

DB123314



Technical data

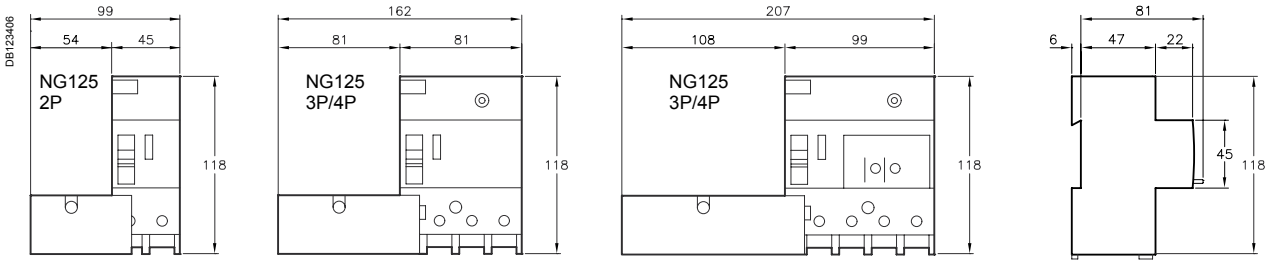
Main characteristics		
Insulation voltage (Ui)		690 V
Pollution degree		3
Rated impulse withstand voltage (Uimp)		8 kV
According to IEC/EN 61009-1		
Surge current withstand (8/20 µs) without tripping	Selective S or R	5 kÂ
	Instantaneous	3 kÂ
Behaviour in case of voltage drop		Residual current protection down to 0 V according to IEC/EN 61009-1 § 3.3.8
Additional characteristics		
Degree of protection	Device only	IP20
	Device in modular enclosure	IP40
Operating temperature	AC type	-5°C to +60°C
	A and SI types	-25°C to +60°C
Storage temperature		-40°C to +85°C
Additional characteristics		
Vigi 125 A and adjustable		
Plug-in auxiliaries	MXV	Remote tripping
	SDV	Indication of tripping upon earth fault
Adjustable Vigi		
Sensitivity adjustable by notch (IΔn)		300, 500, 1000, 3000 mA
Tripping time	Instantaneous	
	Selective S	60 ms
	Time-delayed	150 ms
Leakage current indication on 3P and 4P 300...3000 I/S/R (pre-alarm)		On front face by LED
		Remote, by potential-free normally-open contact 250 V - 1 A (low level)
		Threshold setting by potentiometer from 10 % to 50 % of IΔn
Disconnection essential for dielectric test		By integral pushbutton

Vigi NG125 add-on residual current devices (A, SI types) (cont.)

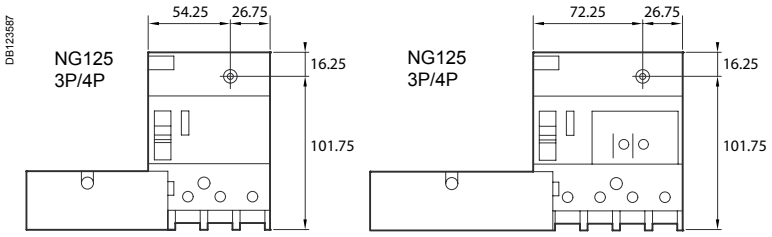
Weight (g)

Add-on residual current devices			
Number of 9 mm modules	**2P**	**3P**	**4P**
5 modules	250	-	-
9 modules	-	410	450
11 modules	-	750	800

Dimensions (mm)



2P (5 modules) 63, 125 A (9 modules) 63, 125 A (11 modules)



Spacing for mounting on panel

Vigi NG125 add-on residual current devices (A, SI types) (cont.)

056341_SE-50

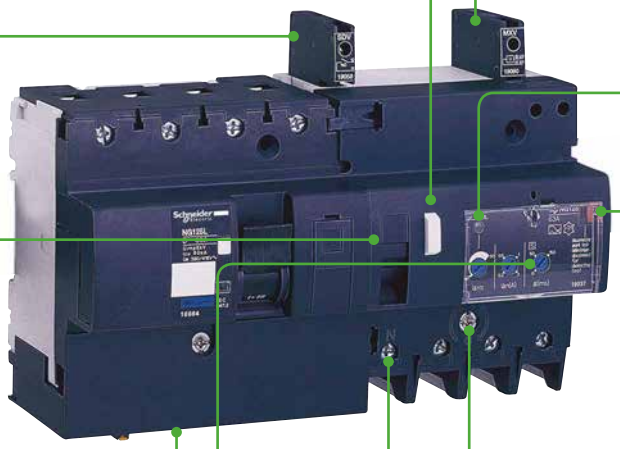


Association NG125 + Vigi NG125

	Vigi NG125 63 A	Vigi NG125 125 A
NG125 ⩽ 63 A	■	**NO**
NG125 80…125 A*	**NO**	■

(*) No Vigi add-on residual current device for 2P circuit breakers of rating 80 A.

PB104468-40



■ Test button

Vigi 125 A and adjustable
■ **MXV** remote tripping auxiliary

Vigi 125 A and adjustable
■ Auxiliary for electrical indication of tripping upon earth fault: **SDV**

■ Earth fault indicator light

■ Mechanical indication of earth fault

Vigi 125 A adjustable
■ Disconnection (essential) for dielectric test by integral pushbutton

3P, 4P
■ Device for unlocking on DIN rail on front face

■ Rigid connections isolated by supplied wire cover

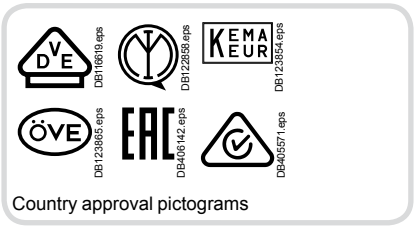
■ Insulated terminals IP20

■ Alert threshold setting
■ Setting of tripping threshold IΔn
■ Setting of time delay

SI type

SI types are appropriate for operating in environments with:
■ High risk of nuisance tripping: frequent lightning strikes, IT system, presence of electronic ballasts, frequency converters, presence of switchgear incorporating lighting type interference filters, computer system, etc.
■ Blind sources
□ presence of harmonics or high frequency rejections,
□ presence of DC components: diodes, diode bridges, switch-mode power supplies, etc.
■ Protected against nuisance tripping caused by transient voltage surges (lightning strike, operation of switchgear on the network, etc.).

Protection,
Earth leakage protection
Acti9 iCV40N residual current devices RCBO
6000 A


Country approval pictograms



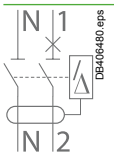
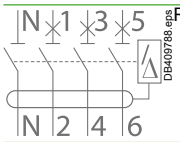
CEI/EN 61009-2-1

As per the above standard:
The residual current devices offers the following functions of earth leakage protection and circuit protection.
- ■ Earth leakage protection:
- □ protection of persons against electric shock by direct contact (≤ 30 mA),
- □ protection of persons against electric shock by indirect contact (300 mA),
- □ protection of installations against the risk of fire (300 mA).
- ■ Circuit protection:
- □ circuit protection against short-circuit currents,
- □ circuit protection against overload currents,
- □ disconnection.

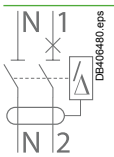
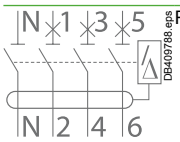
A-SI type
The A-SI type provides increased immunity from electrical interference and polluted or corrosive environments.

Catalog numbers

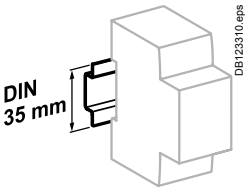
Acti9 iCV40N RCBO - B curve

Type		A			Width in 9-mm modules
Auxiliaries		Catalog module CA907002			
1P+N	Sensitivity	10 mA	30 mA	100 mA	
 Rating	6 A	-	A9DG3606	-	4
	10 A	A9DGA610	A9DG3610	-	
	13 A	-	A9DG3613	-	
	16 A	A9DGA616	A9DG3616	-	
	20 A	-	-	-	
	25 A	-	-	-	
	32 A	-	-	A9DGB632	
	40 A	-	-	A9DGB640	
3P+N	Sensitivity	10 mA		100 mA	
 Rating	10 A	-	A9DG3710	-	10
	13 A	-	A9DG3713	-	
	16 A	-	A9DG3716	-	
Accessories		Catalog modules CA907001 and CA907015			
Comb busbars		Catalog module CA907026			
PowerTag energy sensors		Catalog modules CA907029 and CA908058			

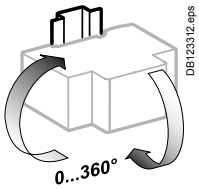
Acti9 iCV40N RCBO - C curve

Type		A				A-SI		Width in 9-mm modules
Auxiliaries		Catalog module CA907002						
1P+N	Sensitivity	10 mA	30 mA	100 mA	300 mA	30 mA	300 mA	
 Rating	6 A	-	A9DC3606	-	-	A9DF3606	A9DF7606	4
	10 A	A9DCA610	A9DC3610	-	A9DC7610	A9DF3610	A9DF7610	
	13 A	-	A9DC3613	-	A9DC7613	A9DF3613		
	13 A type G	-	A9DCG613	-	-	-	-	
	16 A	A9DCA616	A9DC3616	-	A9DC7616	A9DF3616	A9DF7616	
	20 A	-	A9DC3620	-		A9DF3620	A9DF7620	
	25 A	-	A9DC3625	-		A9DF3625	A9DF7625	
	32 A	-	A9DC3632	A9DCB632		A9DF3632	A9DF7632	
	40 A	-	A9DC3640	A9DCB640		A9DF3640	A9DF7640	
3P+N	Sensitivity	10 mA	30 mA	100 mA	300 mA	30 mA	300 mA	
 Rating	10 A	-	A9DC3710	-	A9DC7710	A9DF3710	-	10
	13 A	-	A9DC3713	-	-	A9DF3713	-	
	16 A	-	A9DC3716	-	A9DC7716	A9DF3716	-	
	20 A	-	A9DC3720	-	-	A9DF3720	-	
	25 A	-	A9DC3725	-	-	A9DF3725	-	
	32 A	-	A9DC3732	-	-	A9DF3732	-	
	40 A	-	A9DC3740	-	-	A9DF3740	-	
Accessories		Catalog modules CA907001 and CA907015						
Comb busbars		Catalog module CA907026						
PowerTag energy sensors		Catalog modules CA907029 and CA908058						

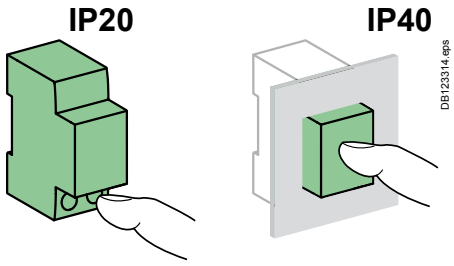
Protection,
Earth leakage protection
Acti9 iCV40N residual current devices RCBO
6000 A



Clip on DIN rail 35 mm.



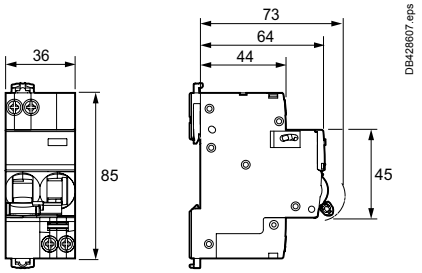
Indifferent position of installation.



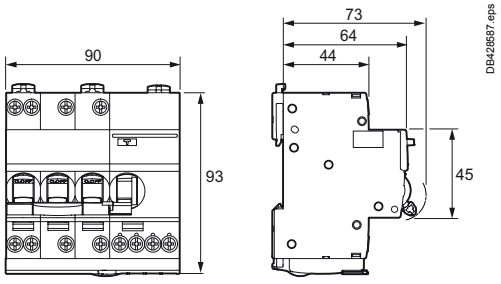
Technical data

Main characteristics			
Insulation voltage (Ui)	Phase-to-neutral		400 V
	Phase-to-phase		440 V
Voltage rating (Ue)	Phase-to-neutral		230 V
	Phase-to-phase		400 V
Operating frequency			50/60 Hz
According to EN 61009-2-1			
Rated impulse withstand voltage (Uimp)			4 kV
Magnetic tripping	B curve		3 to 5 In
	C curve		5 to 10 In
Operating temperature			30°C
Limitation class			3
Rated breaking capacity (Icn)			6000 A
Service breaking capacity (Ics)			100 % Icn
Rated residual breaking and making capacity (IΔm)	1P+N	IEC 61009-2-1	500 A
		EN 61009-2-1	4500 A
	3P+N	IEC/EN 61009-2-1	3000 A
8/20 µs impulse withstand without tripping	AC type		250 Â
	A type		250 Â
	A-SI type		3 kÂ
Pollution degree			3
Behaviour in case of voltage drop	 DB407011.eps		Residual current protection down to 0 V according to NF/EN 61009-1 § 3.3.8
Additional characteristics			
Degree of protection (IEC 60529)	Device only		IP20
	Device in modular enclosure		IP40 Insulation class II
Endurance (O-C)	Electrical	≤ 25 A	20000 cycles
		≥ 32 A	10000 cycles
	Mechanical		20000 cycles
Operating temperature	AC type		-5°C to +60°C
	A, A-SI types	 DB406521.eps	-25°C to +60°C
Storage temperature			-40°C to +85°C

Dimensions (mm)



Residual current devices 1P+N



Residual current devices 3P+N

Weight (g)

Residual current devices	
Type	**Acti9 iCV40N RCBO**
1P+N	210
3P+N	500

Acti9 iCV40H residual current devices RCBO
10000 A

Country approval pictograms

CEI/EN 61009-2-1

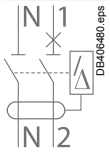
As per the above standard:
The residual current devices offers the following functions of earth leakage protection and circuit protection.
- ■ Earth leakage protection:
- □ protection of persons against electric shock by direct contact (30 mA),
- □ protection of persons against electric shock by indirect contact (300 mA),
- □ protection of installations against the risk of fire (300 mA).
- ■ Circuit protection:
- □ circuit protection against short-circuit currents,
- □ circuit protection against overload currents,
- □ disconnection.

A-SI type
The A-SI type provides increased immunity from electrical interference and polluted or corrosive environments.

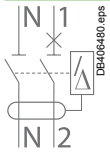
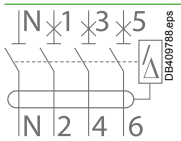




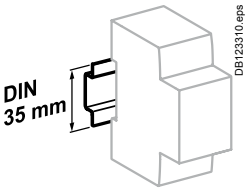
Catalog numbers

Acti9 iCV40H RCBO - B curve				
Type			**A**	**Width in 9-mm modules**
Auxiliaries			**Catalog module CA907002**	
1P+N		**Sensitivity**	**30 mA**	
	Rating	6 A	**A9DG4606**	4
		10 A	**A9DG4610**	
		16 A	**A9DG4616**	
		20 A	**A9DG4620**	
		25 A	**A9DG4625**	
		32 A	**A9DG4632**	
Accessories			**Catalog modules CA907001 and CA907015**	
Comb busbars			**Catalog module CA907026**	
PowerTag energy sensors			**Catalog modules CA907029 and CA908058**	

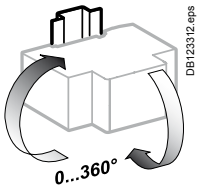
Catalog numbers

Acti9 iCV40H RCBO - C curve						
Type			**A**		**A-SI**		**Width in 9-mm modules**
Auxiliaries			**Catalog module CA907002**				
1P+N		**Sensitivity**	**30 mA**	**300 mA**	**30 mA**	**300 mA**	
	Rating	6 A	**A9DC4606**	**A9DC8606**	**A9DF4606**	**A9DF8606**	4
		10 A	**A9DC4610**	**A9DC8610**	**A9DF4610**	**A9DF8610**	
		16 A	**A9DC4616**	**A9DC8616**	**A9DF4616**	**A9DF8616**	
		20 A	**A9DC4620**	**A9DC8620**	**A9DF4620**	**A9DF8620**	
		25 A	**A9DC4625**	**A9DC8625**	**A9DF4625**	**A9DF8625**	
		32 A	**A9DC4632**	**A9DC8632**	**A9DF4632**	**A9DF8632**	
3P+N		**Sensitivity**	**30 mA**	**300 mA**	**30 mA**	**300 mA**	
	Rating	6 A	**A9DC4706**	-	-	-	10
		10 A	**A9DC4710**	-	-	-	
		13 A	**A9DC4713**	-	-	-	
		16 A	**A9DC4716**	-	-	-	
		20 A	**A9DC4720**	-	-	-	
		25 A	**A9DC4725**	-	-	-	
		32 A	**A9DC4732**	-	-	-	
Accessories			**Catalog modules CA907001 and CA907015**				
Comb busbars			**Catalog module CA907026**				
PowerTag energy sensors			**Catalog modules CA907029 and CA908058**				

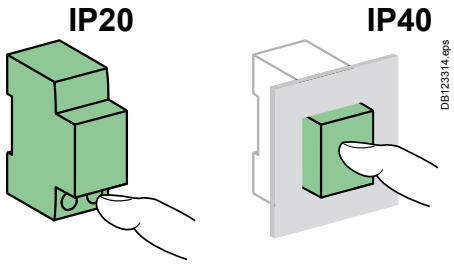
Protection,
Earth leakage protection
Acti9 iCV40H residual current devices RCBO
10000 A



Clip on DIN rail 35 mm.



Indifferent position of installation.

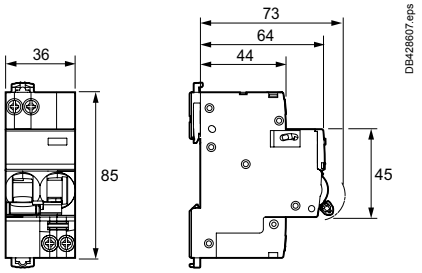


Technical data

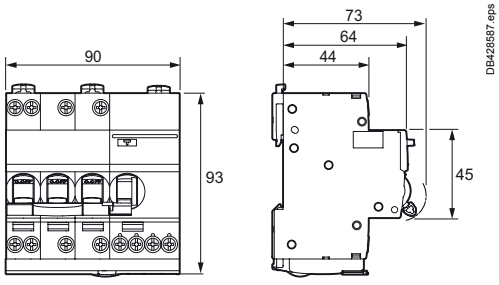
Main characteristics			
Insulation voltage (Ui)	Phase-to-neutral		400 V
	Phase-to-phase		440 V
Voltage rating (Ue)	Phase-to-neutral		230 V
	Phase-to-phase		400 V
Operating frequency			50/60 Hz
According to EN 61009-2-1			
Rated impulse withstand voltage (Uimp)			4 kV
Magnetic tripping	B curve		3 to 5 In
	C curve		5 to 10 In
Operating temperature			30°C
Limitation class			3
Rated breaking capacity (Icn)			10000 A
Service breaking capacity (Ics)			75 % Icn
Rated residual breaking and making capacity (IΔm)	1P+N	IEC 61009-2-1	500 A
		EN 61009-2-1	4500 A
	3P+N	EC/EN 61009-2-1	3000 A
8/20 µs impulse withstand without tripping	AC type		250 Â
	A type		250 Â
	A-SI type		3 kÂ
Pollution degree			3
Behaviour in case of voltage drop			Residual current protection down to 0 V according to NF/EN 61009-1 § 3.3.8

Additional characteristics			
Degree of protection (IEC 60529)	Device only		IP20
	Device in modular enclosure		IP40 Insulation class II
Endurance (O-C)	Electrical	≤ 25 A	20000 cycles
		32 A	10000 cycles
	Mechanical		20000 cycles
Operating temperature	AC type		-5°C to +60°C
	A, A-SI types		-25°C to +60°C
Storage temperature			-40°C to +85°C

Dimensions (mm)



Residual current devices 1P+N



Residual current devices 3P+N

Weight (g)

Residual current devices	
Type	**Acti9 iCV40H RCBO**
1P+N	210
3P+N	500

Acti9 iCV40 residual current devices RCBO

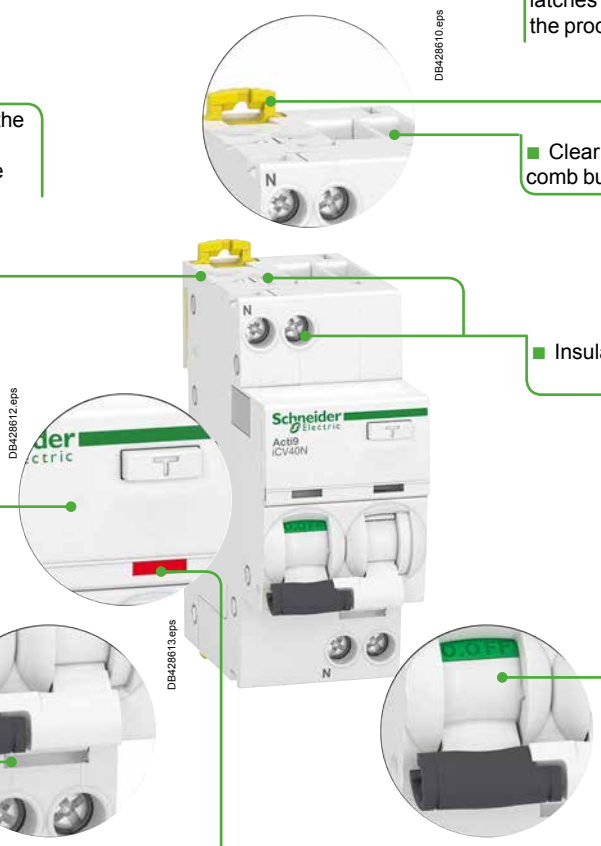
■ Automatic cable guiding in the correct position: terminals with guard

■ Reinforced cable pull-out strength: serrated terminals

■ Assembly and disassembly with comb busbar in place by operating toggle latches at the top and bottom of the products

■ Where there is a comb tooth, the connection of cables of cross section 16 mm² remains possible

■ Clear space to allow comb busbar installation



■ Insulated terminals IP20

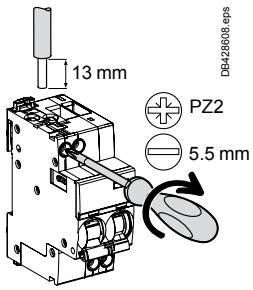
Markings
■ Area for marking by 12 mm high label on the front panel

Markings
■ Area for 4 marking clips alongside the downstream terminal

VISI-TRIP window
■ Fault tripping is indicated by a red mechanical indicator on the front face

VISI-SAFE window
Positive contact indication
■ A green strip on the toggle indicates full opening of all the poles
■ Downstream maintenance operations can be carried out in better safety conditions
■ Padlocking possible

Connection



Type	Connection	Tightening torque	Comb busbar	Copper cables	
				Rigid	Flexible or with ferrule
				DB122945.eps	DB122946.eps
Acti9 iCV40	Top	2 N.m	■	1 to 16 mm²	1 to 10 mm²
	Bottom		■		

■ Connection by comb busbar or cables (as per EN 50027).
■ Where there is a comb busbar tooth, the connection of cables of cross section 16 mm² remains possible.
■ See Comb busbars Choice guide (CA908048).

Protection
Earth leakage protection
Residual current device iC60 RCBO
6000 A

DB106604 DB116619 DB122858 DB123854 DB406142

Country approval pictograms (*)

(*) IInformation to be supplied by the country.

PB116502-40



PB116503-40



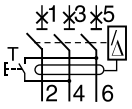
IEC/EN 61009-1
IEC/EN 61009-2-1

As per the above standards:
The iC60 RCBO residual current device provides:
- protection of final circuits against overcurrents and short-circuits.
- protection for people against electric shocks by direct contacts.
- earth fault indication by a red mechanical indicator in front face.

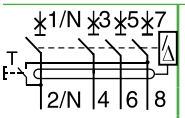
The A-SI type provides increased immunity from electrical interference.

Catalogue numbers

iC60 RCBO 6000 400 V AC

Type			A	Width in 9-mm modules
		Curve	C	
3P		Sensitivity (IΔn)	30 mA	
DB409025 	Rating (In)	10 A	A9D67310	6
		13 A	A9D67313	
		16 A	A9D67316	
		20 A	A9D67320	
		25 A	A9D67325	
		32 A	A9D67332	
Voltage rating (Ue)			400 V CA	
Operating frequency			50 Hz	
Auxiliaries and accessories			**Catalog module CA902045E**	

iC60 RCBO 6000 400 V AC

Type		AC		A			A-SI		Width in 9-mm modules
	Curve	C		B	C		B	C	
4P	Sensitivity (IΔn)	30 mA	300 mA	30 mA	30 mA	300 mA	30 mA	30 mA	
DB409026  Rating (In)z	10 A			A9D87410	A9D67410	A9D52410	A9D97410	A9D77410	8
	13 A			A9D87413	A9D67413	-	A9D97413	A9D77413	
	16 A			A9D87416	A9D67416	A9D52416	A9D97416	A9D77416	
	20 A			A9D87420	A9D67420	A9D52420	A9D97420	A9D77420	
	25 A			A9D87425	A9D67425	A9D52425	A9D97425	A9D77425	
	32 A			A9D87432	A9D67432	A9D52432	A9D97432	A9D77432	
Voltage rating (Ue)		400 V CA							
Operating frequency		50 Hz							
Auxiliaries and accessories		**Catalog module CA902045E**							

Protection
Earth leakage protection
Residual current device iC60 RCBO
10000 A

DB106604 DB116619 DB122858

Country approval pictograms (*)

(*) IInformation to be supplied by the country.

PB116501-40



PB116502-40



IEC/EN 61009-1
IEC/EN 61009-2-1

As per the above standards:
The iC60 RCBO residual current device provides:
- protection of final circuits against overcurrents and short-circuits.
- protection for people against electric shocks by direct contacts.
- earth fault indication by a red mechanical indicator in front face.

The A-SI type provides increased immunity from electrical interference.

Catalogue numbers

iC60 RCBO 10000 230 V AC

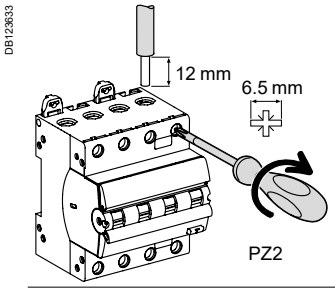
Type			AC		A			A-SI		Width in 9-mm modules
		Curve	C		B	C		B	C	
2P		Sensitivity (IΔn)	30 mA	300 mA	30 mA	30 mA	300 mA	30 mA	30 mA	
DB406024	Rating (In)	10 A			A9D37210	A9D17210	A9D54210	A9D47210	A9D27210	4
		13 A			A9D37213	A9D17213	-	A9D47213	A9D27213	
		15 A , NEK 400			A9D34215	A9D14215	-	-	-	
		16 A			A9D37216	A9D17216	A9D54216	A9D47216	A9D27216	
		20 A			A9D37220	A9D17220	A9D54220	A9D47220	A9D27220	
		25 A			A9D37225	A9D17225	A9D54225	A9D47225	A9D27225	
		32 A			A9D37232	A9D17232	A9D54232	A9D47232	A9D27232	
Voltage rating (Ue)			230 V CA							
Operating frequency			50 Hz							
Auxiliaries and accessories			**Catalog module CA902045E**							

iC60 RCBO 10000 230 V AC

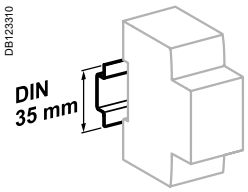
Type			A	Width in 9-mm modules
		Curve	C	
3P		Sensitivity (IΔn)	30 mA	
DB409025	Rating (In)	10 A	A9D17310	6
		13 A	A9D17313	
		16 A	A9D17316	
		20 A	A9D17320	
		25 A	A9D17325	
		32 A	A9D17332	
Voltage rating (Ue)			230 V CA	
Operating frequency			50 Hz	
Auxiliaries and accessories			**Catalog module CA902045E**	

Residual current device iC60 RCBO (cont.)

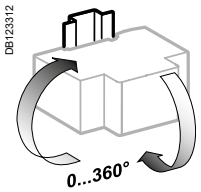
Connection



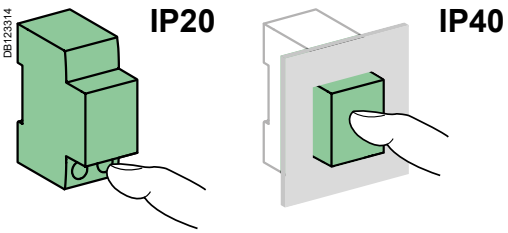
Rating	Tightening torque	Copper cables	
		Rigid	Flexible or with ferrule
		DB122945	DB122946
10 to 32 A	2 N.m	1 to 35 mm²	1 to 25 mm²



Clip on DIN rail 35 mm.



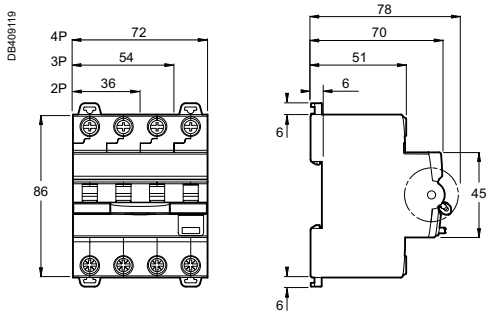
Indifferent position of installation.



Caractéristiques techniques

Main characteristics		6000 A	10000 A
Insulation voltage (Ui)		500 V	
Rated impulse withstand voltage (Uimp)		4 kV	
Rated residual operating current (IΔn)		30 mA, 300 mA	
Earth leakage protection type		AC, A, A-SI	
Thermal tripping	Reference temperature	30°C	
Magnetic tripping	Curve B	Between 3 and 5 In	
	Curve C	Between 5 and 10 In	
Limitation class	2P	3	
	3P, 4P	1	
Surge current withstand (8/20 µs) without tripping	AC Type	250 Â	
	A Type	250 Â	
	A-SI Type	3 kÂ	
According to IEC/EN 61009-1 and IEC/EN 61009-2-1			
Rated breaking capacity (Icn)		6000 A	10000 A
Service breaking capacity (Ics)		1 x Icn	0,75 x Icn
Rated residual breaking and making capacity phase/earth (IΔm)		6000 A	6000 A
Behaviour in case of voltage drop		Residual current protection down to 0 V according to IEC/EN 61008-1 § 3.3.4	
According to IEC/EN 60947-2			
Ultimate breaking capacity (Icu)		6 kA	15 kA
Service breaking capacity (Ics)		100 % of Icu	50 % of Icu
Additional characteristics			
Degree of protection	Device only	IP20	
	Device in modular enclosure	IP40	
Endurance (O-C)	Electrical	10,000 cycles	
	Mechanical	20,000 cycles	
Overvoltage category (IEC 60364)		III	
Operating temperature		-25°C to +60°C	
Storage temperature		-40°C to +70°C	
Range of test button operating voltage	2P	-	195.5...253 V AC
	3P	340...440 V AC	195.5...253 V AC
	4P	195.5...253 V AC	-
Tropicalization		Treatment 2 (relative humidity 95 % to 55°C)	

Dimensions (mm)

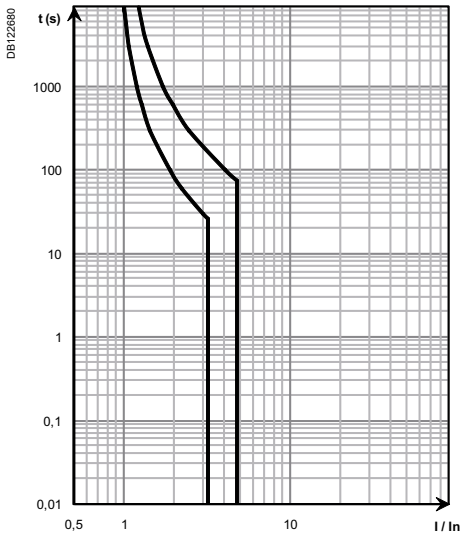


Weight (g)

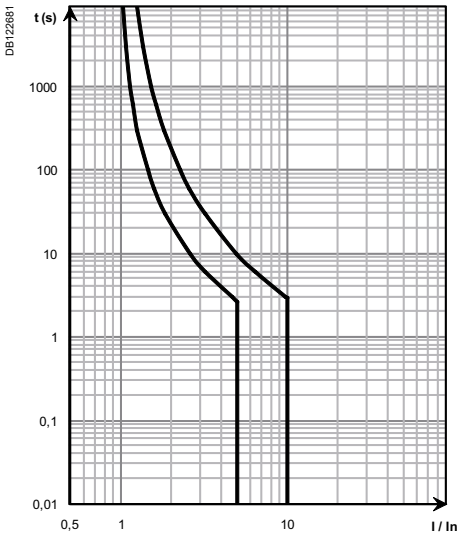
Residual current device	
Type	iC60 RCBO
2P	234
3P	334
4P	445

Residual current device iC60 RCBO (cont.)

Tripping curves

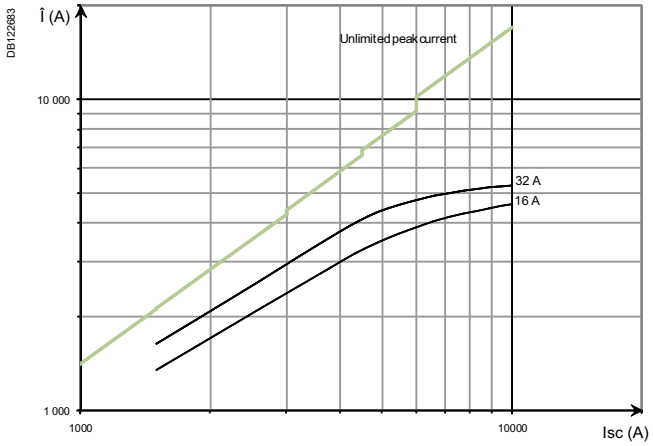


B curve

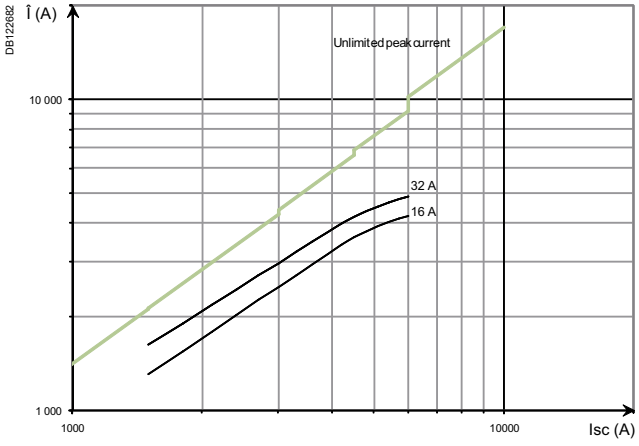


C curve

Peak limitation curves

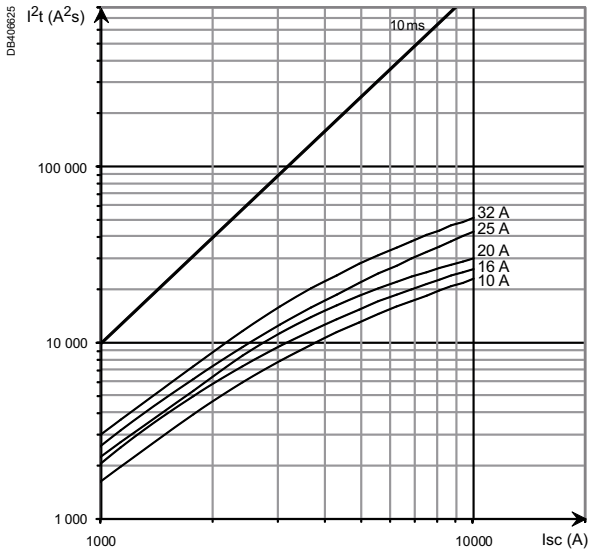


iC60 RCBO 10000 A - 2P/3P - 230 V

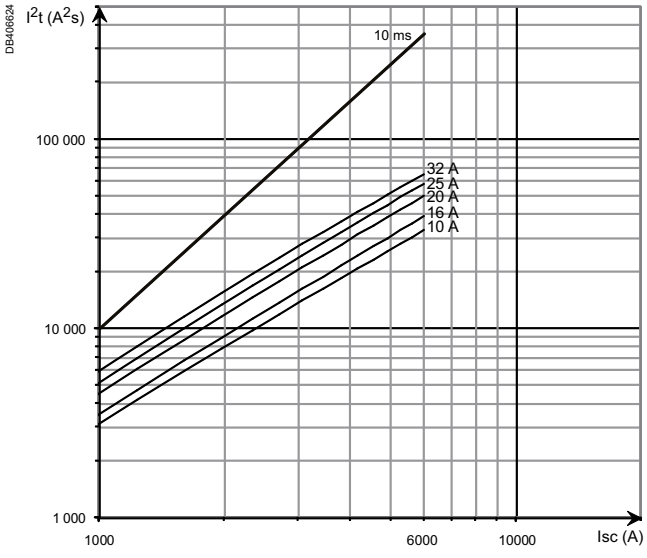


iC60 RCBO 6000 A - 3P/4P - 400 V

Energy curves



iC60 RCBO 10000 A - 2P/3P - 230 V



iC60 RCBO 6000 A - 3P/4P - 400 V

Protection
Earth leakage protection
Automatic recloser
REDs, REDtest

DB122858

IMQ only for REDs, cat. no. 18264, 18265, 18266, 18267, 18268, 18269, 18687 and 18689

Country approval pictogram

EN 50557

PB117731-40



REDs 2P

PB117732-40



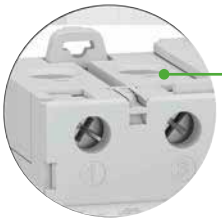
REDs 4P

PB117733-40



REDtest

DB409912



DB409913



■ REDs 2P, 4P: supply from above or below

The REDs and the REDtest, **RE**sidual current **D**evice recloser, is made up of a residual current device and a recloser.
The **REDs** and **REDtest** **REsidual current Devices** offer the following functions:
- protection of people against direct and indirect contacts
- protection of installations against insulation faults
- disconnection of on-load electric circuits, already protected against overloads and short-circuits
- automatic restart after insulation monitoring of the downstream circuit.

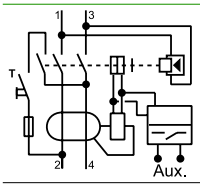
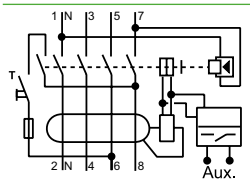
REDtest provides the following additional functions:
- automatic and periodical test of the device, without breaking downstream circuit (REDtest).

Only used on TT and TN-S earthing grounding systems.

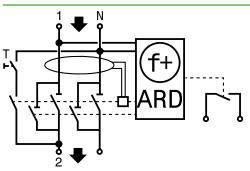
Residual current circuit breakers	2P	4P
Making and breaking capacity, rated residual current (IΔm = Im)	630 A	630 A

Catalogue numbers

REDs residual current circuit breakers REDs

A type					Width in mod. of 9 mm
2P		Sensitivity	30 mA	300 mA	
DB122885 	Rating	25 A	18687	18688	8
		40 A	18689	18690	
		63 A	18691	18692	
Voltage rating (Ue)			230 V		
Frequency rating			50Hz		
4P		Sensitivity	30 mA	300 mA	
DB122885 	Rating	25 A	18264	18265	14
		40 A	18266	18267	
		63 A	18268	18269	
		100 A	-	18270	
Voltage rating (Ue)			400 V		
Frequency rating			50 Hz		

REDtest residual current circuit breakers

A type				Width in mod. of 9 mm
2P		Sensitivity	30 mA	
DB406707 	Rating	25 A	18280	10
		40 A	18281	
Voltage rating (Ue)			230 V	
Frequency rating			50 Hz	

REDs, REDtest (cont.)

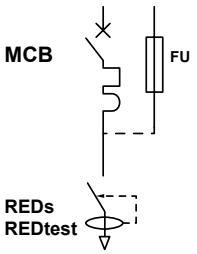
Coordination table, max short-circuit current (kA rms)

Circuit-breakers, fuse / A type REDs, REDtest coordination

Upstream		Circuit-breakers										Fuses			
Downstream		DPN	DPN N	iC60N / C120N				iC60H, L / C120H, L / NG125N, H, L				gG			
Products	Ratings (A)	0.5 to 40	0.5 to 40	0.5 to 25	32 - 40	50 - 63	80 - 100	0.5 to 25	32 - 40	50 - 63	80 - 100	gG 25	gG 40	gG 63	gG 100
REDs Type A 2P															
	25	6	10	10	-	-	-	10	-	-	-	10	-	-	-
	40	6	10	10	10	-	-	15	10	-	-	15	10	-	-
	63	-	-	10	10	10	-	15	15	10	-	25	15	10	-
REDs Type A 4P															
	25	6	10	10	-	-	-	10	-	-	-	10	-	-	-
	40	6	10	10	10	-	-	15	10	-	-	15	10	-	-
	63	-	-	10	10	10	-	15	10	10	-	25	15	10	-
	100	-	-	10	10	10	10	15	15	15	10	25	25	15	10
REDtest Type A 2P															
	25	6	6	6	-	-	-	6	-	-	-	6	-	-	-
	40	6	6	10	6	-	-	10	6	-	-	10	6	-	-

DB122883

		Circuit-breaker (MCB) or Fuse (FU)			
		⩽ 25 A	⩽ 40 A	⩽ 63 A	⩽ 100 A
REDs / REDtest	25 A	■	—	—	—
	40 A	■	■	—	—
REDs	63 A	■	■	■	—
	100 A	■	■	■	■



DB409915

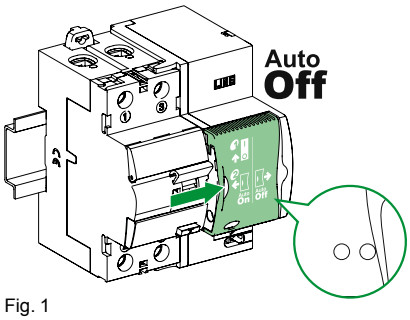


Fig. 1

DB409914

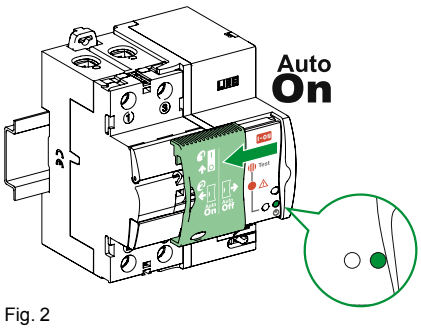


Fig. 2

Operation

REDs

The REDs operates in the residual current device mode, without automatic restart, when the sliding cover is open, i.e. to the right in the Auto Off position (Fig. 1).

The automatic restart mode and the Autotest are activated, when the sliding cover is closed, i.e. to the left in the Auto On position (Fig. 2).

Test

⚠ **This is only possible in manual mode, i.e. sliding cover open in the Auto Off position. You can then manually test the device by pressing the Test key.**
The downstream installation is then temporarily broken. You must then manually reclose the RED by activating the O-I lever to power supply the downstream circuit.

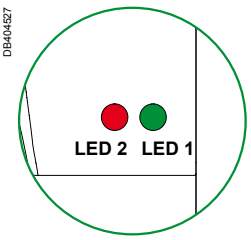
REDtest

■ **The REDtest carries out automatic testing of earth leakage protection every months.**
The test consists in opening and reclosing the REDtest, during which time continuity of supply of the downstream installation is guaranteed.
Autotest: after checking installation insulation, the REDtest monitors its residual current device, without breaking the downstream power supply (bypass by bypass contact).

REDs, REDtest (cont.)

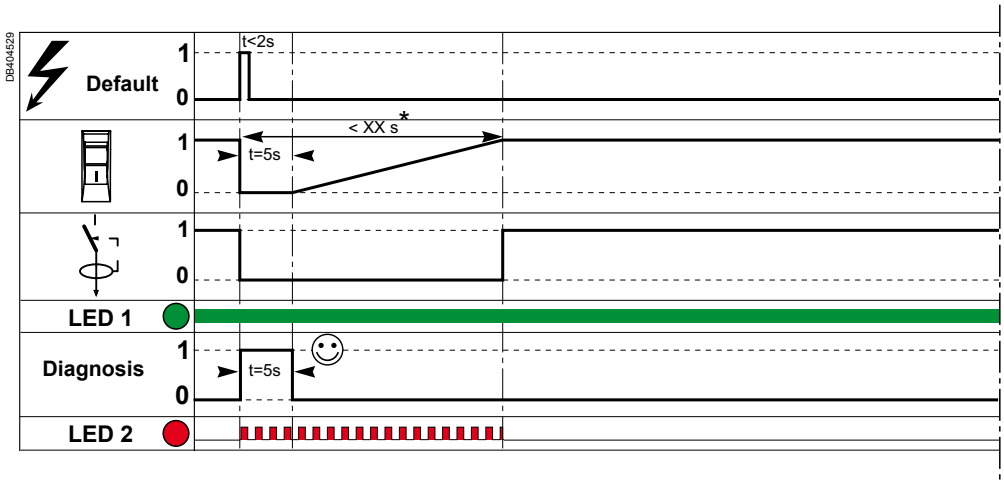
Operation ON mode: temporary network fault

REDs, REDtest



(*) Reclosing time:

REDtest	2P:	10 s
REDs	2P:	90 s
REDs	4P:	10 s



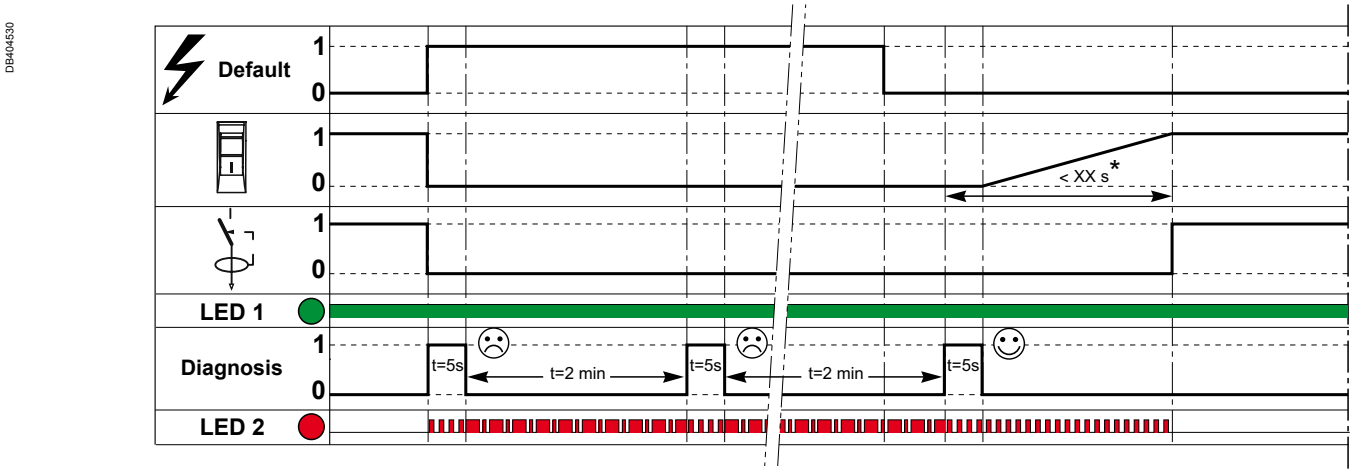
The built-in automatic recloser automatically recloses the residual current device after checking insulation of the downstream circuit.
Rd: lower level of insulation resistance, if R<Rd = no reclose
Rdo: higher level of insulation resistance, if Rd>Rdo = reclose

Operation ON mode: long network fault

REDs

If the circuit is faulty, the switch is prohibited from reclosing. After a time delay of 2 minutes, the downstream circuit insulation is rechecked.
There are then two possibilities:
- the installation is still faulty (the resistance to earth is lower than Rd): in this case a new check will be carried out in 2 minutes.
- the fault was temporary and has disappeared (the resistance to earth is higher than Rdo): the recloser automatically recloses the REDs.

IΔn	30 mA	300 mA
Rd	16 kΩ	5 kΩ
Rdo	8 kΩ	2.5 kΩ



(*) Reclosing time:

REDs	2P:	90 s
REDs	4P:	10 s

REDs, REDtest (cont.)

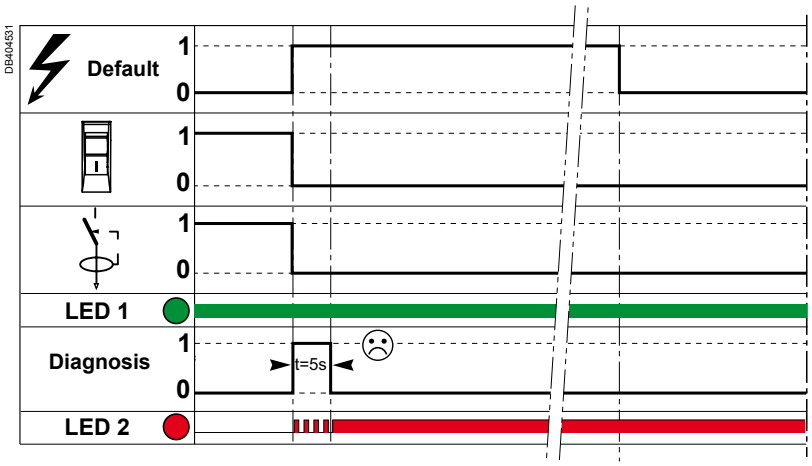
Operation ON mode: long network fault (cont.)

REDtest

If the circuit is faulty for a length of time "greater than 5 seconds", the switch is prohibited from reclosing.

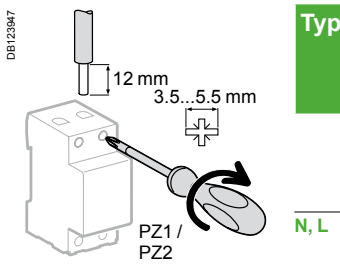
- The installation is faulty: the earth resistance is lower than Rd.

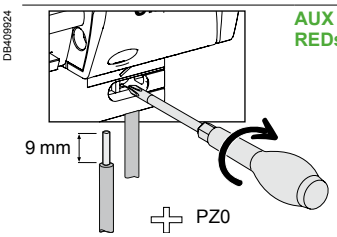
IΔn	30 mA
Rd	70 kΩ
Rdo	20 kΩ

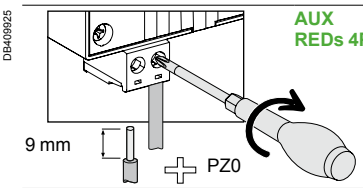


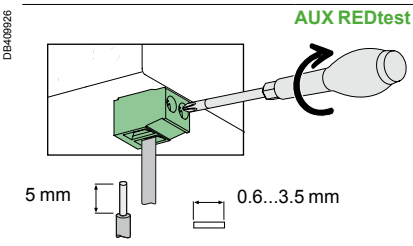
Connection

Type	Tightening torque	Copper cables	
		Rigid	Flexible or with ferrule
	DB122945	DB122946	
N, L	2 N.m	35 mm²	35 mm²
AUX REDs 2P	0.4 N.m	2.5 mm²	2.5 mm²
AUX REDs 4P	0.4 N.m	2.5 mm²	2.5 mm²
AUX REDtest	0.5 N.m	2.5 mm²	2.5 mm²



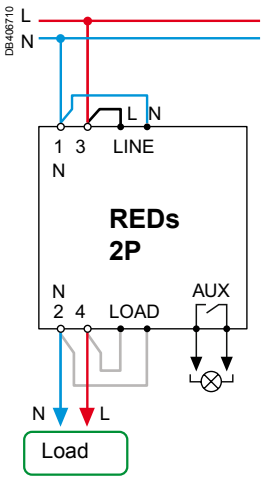




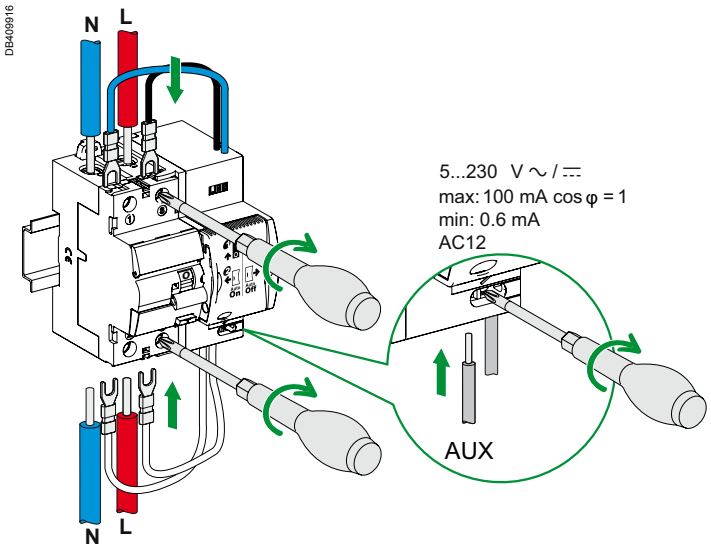


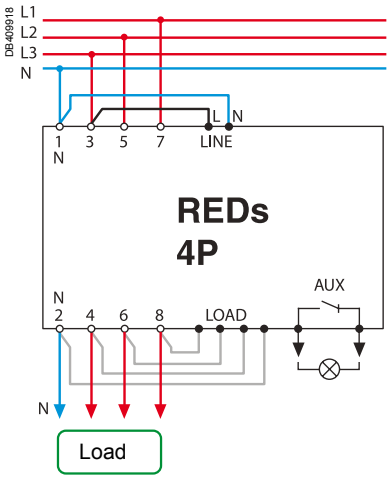
Connection by tunnel terminal with guard

REDs, REDtest (cont.)

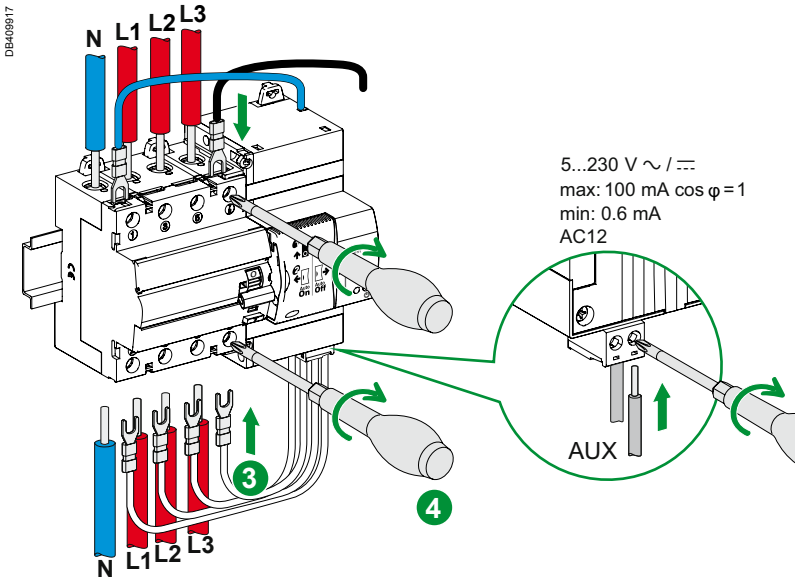


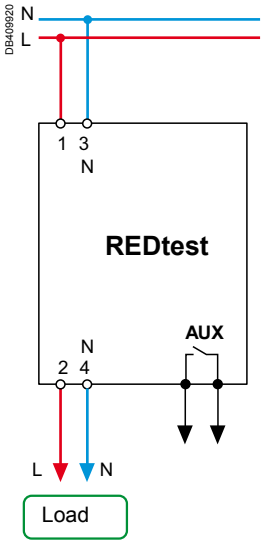
Wiring of non-polarized white wires

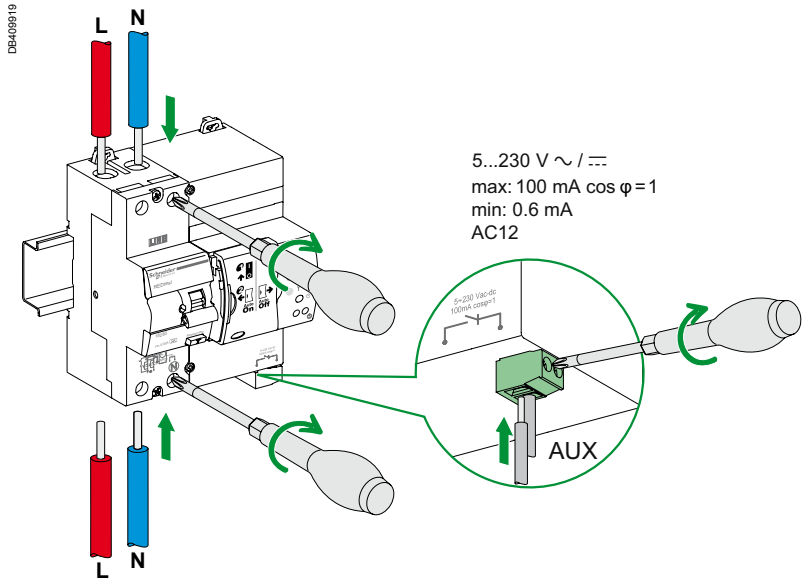




Wiring of non-polarized white wires

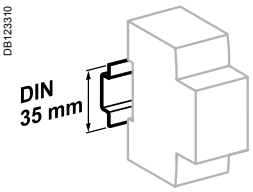






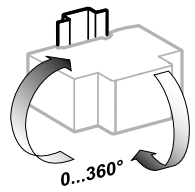
REDs, REDtest (cont.)

DB123310



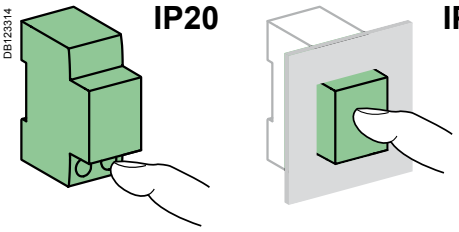
Clip on DIN rail 35 mm.

DB123312



Indifferent position of installation.

DB123314



Technical data.

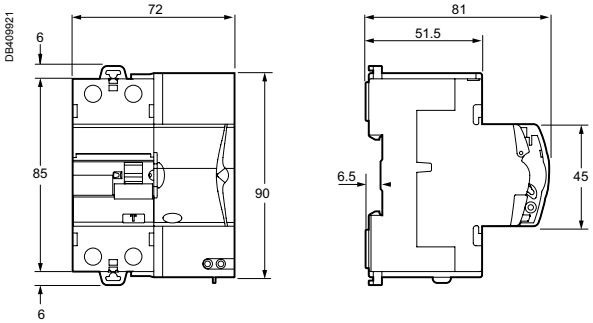
Main characteristics	2P		4P
Common technical data	**REDtest**	**REDs**	**REDs**
Earthing grounding systems	TT and TN-S only		
Impulse withstand voltage (Uimp)	4 kV		
Insulation voltage (Ui)	500 V		
8/20 µs wave immunity level	250 Â		
Tropicalization	Treatment 2 (relative humidity: 95 % at 55°C)		
Operating temperature	-5°C to +40°C		
Storage temperature	-20°C to +60°C		
Protection class	IP20 at terminals		
Additional characteristics			
Residual current device			
Tripping time	IΔn: ≤ 300 ms		
	5 IΔn: ≤ 40 ms		
Number of cycles (O-C)	1 000		4 000
Fixed sensitivity releases for all ratings	Instantaneous release		
Test button min operating voltage	195 V	100 V	170 V
Behaviour in case of voltage drop	Residual current protection down to 0 V according to IEC/EN 61008-1 § 3.3.4		
Recloser			
Max duration of a restart cycle	< 10 s	< 90 s	< 10 s
Maximum number of consecutive restart attempts (if no earth fault)	3		
Min interval between 2 closings	180 s		30 s
Insulation fault presence monitoring	Yes		
Insulation fault diagnosis	If fault: stopping of the restart cycle	If fault: diagnosis every 2 minutes with stopping of the restart cycle	
Stopping restart cycle if insulation fault present	Yes	Yes, during 15 minutes	
Not operating resistance to earth (Rd)	20 kΩ	8 kΩ (30 mA), 2.5 kΩ (300 mA)	
Operating resistance to earth (Rdo)	70 kΩ	16 kΩ (30 mA), 5 kΩ (300 mA)	
Power consumed by the electronics	8 VA	0 VA	
Indication			
Status indication	Mechanical: by O-I (open-closed) 2-position lever		
	■ Electrical: by 2 indicator lights on the front panel: □ left: red/yellow LED □ right: green LED		
	Remote: by 1 built-in auxiliary contact		
Auxiliary contact			
Voltage rating (Ue)	5...230 V AC/DC		
Insulation voltage (Ui)	350 V		
Current rating (In)	Min: 0.6 mA		
	Max: 100 mA, power factor = 1		
Utilization category	AC12		
Type Configurable	NO or NC	Intermittent 1 Hz/30 s or NO or NC	
Connection by tunnel terminal	Flexible or rigid cable: max 2.5 mm^2		

REDs, REDtest (cont.)

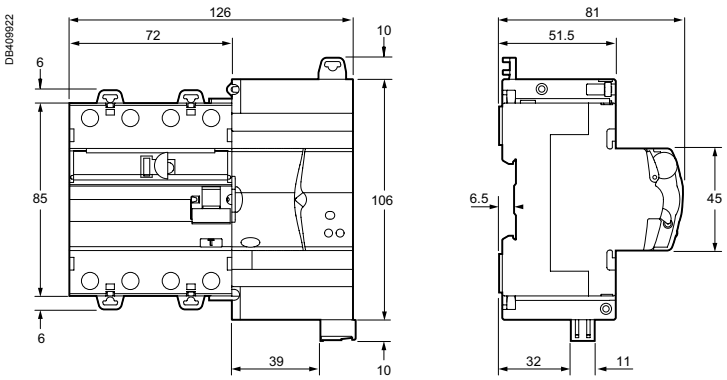
Weight (g)

Reclosers	2P	4P
REDs	330	■ 25/40 A: 630 ■ 63 A: 650 ■ 100 A: 650
REDtest	370	-

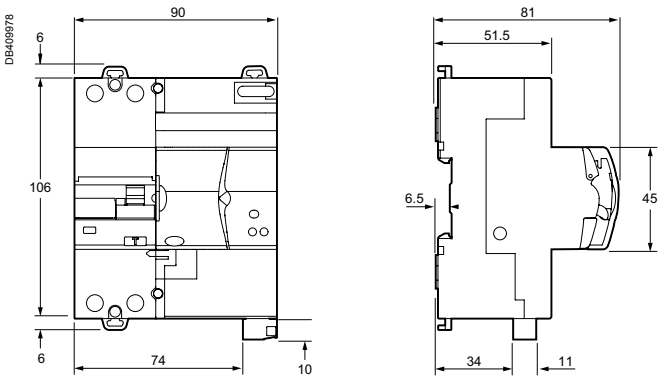
Dimensions (mm)



REDs 2P



REDs 4P



REDtest

Arc fault detection circuit breaker iDPN N Arc

DB116619

Country approval pictograms

PB115631-50



The iDPN N Arc is an arc fault detection device with protection against overload and short-circuit currents, which aims to reduce the risk of electrical fire.
By continuously analyzing a large number of electrical parameters, it detects the appearance of electric arcs that are responsible for starting fires. It isolates the circuit concerned which reduces flame appearance occurrence.

The European installation standard IEC 60364- 4-42, recommends the use of AFDD to protect against arc fault in final circuit:
· in locations with sleeping accommodations (e.g., hotels, nursing homes, bedrooms in homes)
· in locations with risks of fire due to high quantities of flammable materials (e.g., barns, wood-working shops, stores of combustible materials)
· in locations with combustible constructional materials (e.g., wooden buildings)
· in fire propagating structures (e.g. high rise buildings)
· in locations where irreplaceable goods are housed (e.g., museums).

More specifically, the installation of iDPN N Arc is highly recommended to protect circuits with highest risk of fire, such as:
· protruding cables (risk of knocks)
· outside cables (greater risk of deterioration)
· unprotected cables in secluded areas (like storage rooms)
· aging, deteriorating wiring or wiring for which the connection boxes are inaccessible.

iDPN N Arc must not be installed on circuits requiring high level of continuity of service.

The iDPN N Arc is not compatible with ATEX regulations.

IEC 60898-1

Circuit breakers for the protection against the overload (residential and similar installations).

IEC/EN 62606

General requirements for arc detection devices.

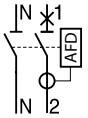
■ In addition to protection against overloads and short circuits, the iDPN N Arc monitors for electric arcs that occur in cables and connections, that may cause a fire. These arcs are the result of localised cable deterioration or loose connections.
■ It is used for three types of situations that can result in a fire:
□ parallel arc: insulation problems between two live conductors that cause a resistive short-circuit, too weak to be detected by a circuit breaker and with no earth leakage to be detected by a residual current circuit breaker,
□ series arc: a damaged conductor or connection that causes part of the current to flow through its carbonised insulation due to a local rise in temperature,
□ overheating of electronic components in loads, when exposed to an overvoltage for several seconds.

■ It combines the following functions:
□ circuit protection against overload and short-circuit currents (circuit breaker function),
□ protection against fire hazards by detection of abnormal electric arcs,
□ protection against load fire hazards due to slow overvoltages (network overvoltage),
□ fire hazard tripping indication via the front panel indicator,
□ device self-diagnostics via the test button,
□ positive contact indication (green strip).

■ The iDPN N Arc should be installed in the place of the circuit's final protection device.

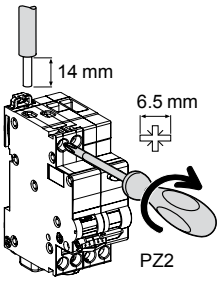
Catalogue numbers

iDPN N Arc 6000

Arc Fault Detection Devices (AFDD) to IEC/EN 62606				Width in 9 mm modules
1P+N		B curve	C curve	
DB406203 	Rating (In) 6 A	-	A9FDB606	4
	10 A	A9FDB7610	A9FDB610	
	13 A	A9FDB7613	A9FDB613	
	16 A	A9FDB7616	A9FDB616	
	20 A	-	A9FDB620	
	25 A	-	A9FDB625	
Operating voltage	230 V AC			
Operating frequency	50 Hz			

Connection

DB406199



Tightening torque	Copper cables only	
	Rigid	Flexible or with ferrule
	DB122945 	DB122946 
2 N.m	1 x 1 to 16 mm² 2 x 1 to 2.5 mm²	1 x 1 to 10 mm² 2 x 1 to 2.5 mm²

Arc fault detection circuit breaker iDPN N Arc (cont.)

PB115631-50

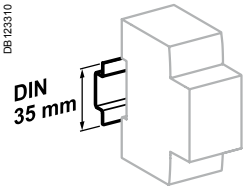


Test button
- For device self-diagnostic

Positive contact indication
- A green strip on the handle indicates that all the poles are open for insulation

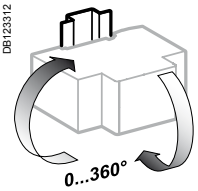
Red square indicator
- Fire hazard tripping indication via a "red" status indicator

DB123310



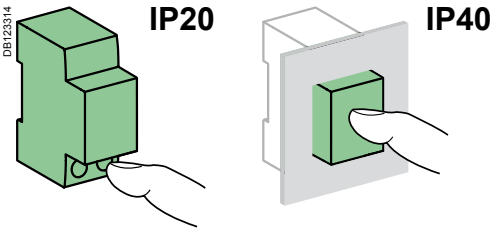
Clip on DIN rail 35 mm.

DB123312



Indifferent position of installation.

DB123314



Technical data

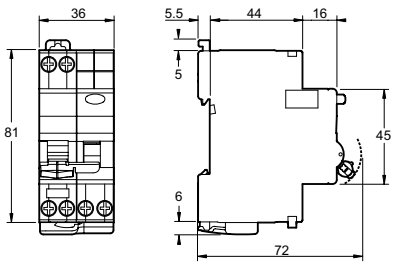
Main characteristics							
Tripping time/arc current value with Un = 230 V AC (to IEC/EN 62606)	Arc current	2.5 A	5 A	10 A	16 A	25 A
	Max. operating time	1 s	0.5 s	0.25 s	0.15 s	0.14 s
Overvoltage tripping time (neutral conductor break)		400 V AC, 200 ms				
Insulation voltage (Ui)		400 V AC				
Degree of pollution		2				
Rated impulse withstand voltage (Uimp)		4 kV				
Overvoltage category		III				
Limitation class		3				
Thermal tripping	Reference temperature	30°C				
Magnetic tripping	Curve B	Between 3 and 5 In				
	Curve C	Between 5 and 10 In				
Rated breaking capacity (Icn)		6 000 A				
Additional characteristics						
Degree of protection	Device alone	IP20				
	Device in a modular enclosure	IP40 Insulation class II				
Endurance (O-C)	Electrical ≤ 20 A	20,000 cycles				
	25 A	10,000 cycles				
	Mechanical	20,000 cycles				
Operating temperature		-25°C to +60°C				
Storage temperature		-40°C to +85°C				
Tropicalization (to IEC/EN 62606)		Severity B (to IEC 60068-2-30) during 28 days				

Weight (g)

Arc fault detection circuit breaker	
Type	**iDPN N Arc**
1P+N	198

Dimensions (mm)

DB406197



iPRF1 12.5r/PRD1 35r/PRD1 25r/PRD1 Master

Type 1 and 2 LV surge arresters

The Type 1 range of surge arresters meets the normative withstand capability of current wave type 10/350 µs (8/20 µs for Type 2 surge arresters).
It is suitable for use with TT, TN-S, TN-C and IT earthing connection systems (neutral point connection).
In addition, the PRD1 35r surge arrester covers the 400 V IT system.
iPRF1 12.5r and PRD1 surge arresters are fitted with a remote transfer contact to send "end-of-life indication" information.
PRD1 surge arresters are fitted with easy-to-replace withdrawable cartridges.

iPRF1 12.5r/PRD1 35r/PRD1 25r/PRD1 Master

The Type 1 surge arrester is recommended for electrical installations in the service sector and industrial buildings protected by a lightning conductor or by a meshed cage.
It protects electrical installations against direct lightning strikes.
It is used to conduct the direct lightning current, propagating from the earth conductor to the network conductors.
It must be installed with an upstream disconnection device, such as a fuse or circuit-breaker, whose breaking capacity must be at least equal to the maximum prospective short-circuit current at the installation point.
iPRF1 12.5r and PRD1 25r surge arresters also provide Type 2 protection and protect the electrical installation by finely clipping the lightning wave overvoltages.

PB104275-35-b



iPRF1 12.5r (3P+N)

DB408470



PRD1 35r (1P)

PB104260-35



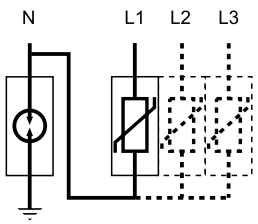
PRD1 25r (3P+N)

PB104264-35



PRD1 Master (3P+N)

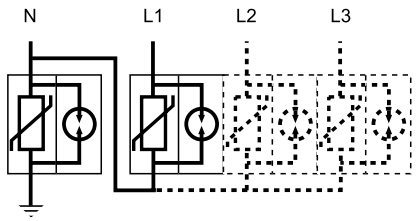
DB119038



iPRF1 12.5r (1P+N, 3P+N)

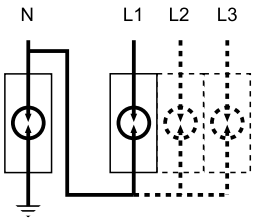
Type	Product solution	
Fixed surge arrester	**1P+N**	**3P+N**
iPRF1 12.5r T1, T2	**A9L16632**	**A9L16634**

DB119036



PRD1 25r (1P+N, 3P+N)

DB119037

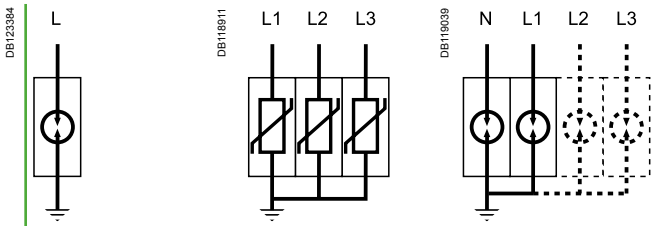


PRD1 Master (1P+N, 3P+N)

Cartridge surge arrester	1P+N	3P+N
PRD1 25r T1 + T2	**16330**	**16332**
PRD1 Master T1	**16361**	**16363**
PRD1 35r T1		

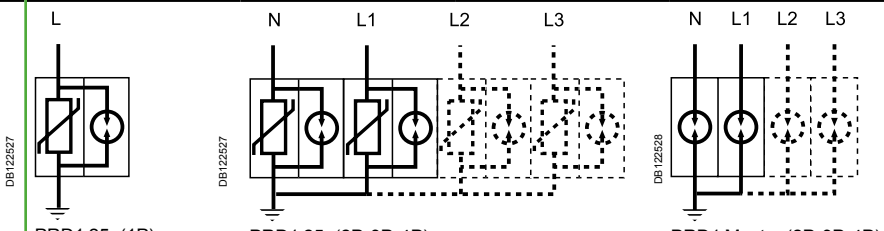
iPRF1 12.5r/PRD1 35r/PRD1 25r/PRD1 Master

Type 1 and 2 LV surge arresters (cont.)



PRD1 35r (1P) | iPRF1 12.5r (3P) | PRD1 35r (2P, 3P, 4P)

					Earthing system	Recommended accessory
	1P	**2P**	**3P**	**4P**		
					TT, TN-S	
			A9L16633		TN-C	



PRD1 25r (1P) | PRD1 25r (2P, 3P, 4P) | PRD1 Master (2P, 3P, 4P)

	1P	**2P**	**3P**	**4P**		
					TT, TN-S	
	16329	2 x **16329**		4 x **16329**	TT, TN-C	
			16331		TN-C	
					TT, TN-S	
	16360	2 x **16360**		4 x **16360**	TT, TN-C	
			16362		TN-C	
		2 x **16649**			IT distributed neutral, TT, TN-S	**16643**
	16649		3 x **16649**		IT non-distributed neutral, TN-C	**16644**
				4 x **16649**	IT distributed neutral	**16645**

iPRF1 12.5r/PRD1 35r/PRD1 25r/PRD1 Master

Type 1 and 2 LV surge arresters (cont.)

Type	Nb. of poles	Width	I imp (kA) (10/350) Impulse current	I max (kA) (8/20) Maximum discharge current	In - kA Nominal discharge current	Up - kV Voltage protection level	Un - (V) Rated voltage network	Uc - V Maximum continious operating voltage	Cat. no.
Fixed surge arrester		**9 mm modules**						(L-N)/(N-PE)	
iPRF1 12.5r	**Type** 1 + 2								
	1P+N	4	12.5 (L-N)/50 (N-PE)	50	25	≤ 1.5	230	350/255	**A9L16632**
	3P	8	12.5	50	25	≤ 1.5	230/400	350	**A9L16633**
	3P+N	8	12.5 (L-N)/50 (N-PE)	50	25	≤ 1.5	230/400	350/255	**A9L16634**
Withdrawable surge arrester									
PRD1 25r	**Type** 1 + 2								
	1P	4	25	40	25	≤ 1.5	230	350	**16329**
	1P+N	8	25 (L-N)/100 (N-PE)	40	25	≤ 1.5	230	350/350	**16330**
	3P	12	25	40	25	≤ 1.5	230/400	350	**16331**
	3P+N	16	25 (L-N)/100 (N-PE)	40	25	≤ 1.5	230/400	350/350	**16332**
PRD1 Master	**Type** 1								
	1P	4	25	50	25	≤ 1.5	230	350	**16360**
	1P+N	8	25 (L-N)/100 (N-PE)	50	25	≤ 1.5/2.5	230	350/350	**16361**
	3P	12	25	50	25	≤ 1.5	230/400	350	**16362**
	3P+N	16	25 (L-N)/100 (N-PE)	50	25	≤ 1.5/2.5	230/400	350/350	**16363**
PRD1 35r	**Type** 1								
	1P	4	35	50	35	≤ 2.5	400/690 (TN) 400 (IT)	440	**16649**
Spare cartridge									
C1 Master-350	-	4	-	-	25	≤ 1.5	-	350	**16314**
C1 25-350	-	23 mm	-	-	25	≤ 1.5	-	350	**16315**
C2 40-350	-	12 mm	-	-	20	≤ 1.5	-	350	**16316**
C1 Neutral-350	-	4	-	-	-	-	-	350	**16317**
C1 35-440	-	4		-	35	≤ 2.5	-	440	**16318**

PB104268-30



C1 Neutral-350

Surge arresters	Spare cartridge		
	Phase		Neutral
	Type 1	Type 2	
PRD1 25r			
PRD1 25r 1P	**16315**	**16316**	-
PRD1 25r 1P+N	**16315**	**16316**	**16317**
PRD1 25r 3P	3 x **16315**	3 x **16316**	-
PRD1 25r 3P+N	3 x **16315**	3 x **16316**	**16317**
PRD1 Master			
PRD1 Master 1P	**16314**	-	-
PRD1 Master 1P+N	**16314**	-	**16317**
PRD1 Master 3P	3 x **16314**	-	-
PRD1 Master 3P+N	3 x **16314**	-	**16317**
PRD1 35r			
PRD1 35r 1P	1 x **16318**	-	-
PRD1 35r 2P	2 x **16318**	-	-
PRD1 35r 3P	3 x **16318**	-	-
PRD1 35r 4P	4 x **16318**	-	-

DB123370



Accessories		
Type	**Number of poles (18 mm)**	
Wiring comb busbars for 2 x 1P	4	**16643**
Wiring comb busbars for 3 x 1P	6	**16644**
Wiring comb busbars for 4 x 1P	8	**16645**
200 mm flexible cable	-	**16646**

iPRF1 12.5r/PRD1 35r/PRD1 25r/PRD1 Master
Type 1 and 2 LV surge arresters (cont.)

Technical data

		iPRF1 12.5r	PRD1 35r	PRD1 25r	PRD1 Master
Operating frequency		50 Hz	50/60 Hz	50 Hz	50 Hz
Degree of protection	Front panel	IP40	IP40	IP40	IP40
	Terminals	IP20	IP20	IP20	IP20
	Impacts	IK05	IK05	IK05	IK05
Response time		≤ 25 ns	≤ 100 ns	≤ 25 ns	≤ 100 ns
Short circuit withstand (Isccr)		50 kA	50 kA	25 kA	50 kA
Temporary overvoltage withstand (U_T)	U_T (L-N)	335 V AC/5 s	580 V AC/5 s	415 V AC/5 s	415 V AC/5 s
	U_T (N-PE)	1200 V AC/200 ms	800 V AC/120 min	1200 V AC/200 ms	1200 V AC/200 ms
Temporary overvoltage **Safe failure mode** (U_T)	U_T (L-N)	440 V AC/120 min	1640 V AC/200 ms	440 V AC/120 min	440 V AC/120 min
Ground residual current (I_{PE})	I_{PE} (N-PE)	0.004 mA	≤ 0.005 mA	≤ 0.01 mA for 1P+N, 3P+N	≤ 0.01 mA for 1P+N, 3P+N
Follow current interrupting rating (I_{fi})	I_{fi} (L-N)	-	50 kA	25 kA/264 V AC 3 kA/350 V AC	50 kA
	I_{fi} (N-PE)	100 A	-	100 A	100 A
End-of-life indication		Green: correct operation	White: correct operation	White: correct operation	White: correct operation
		Red: at end of life	Red: at end of life	Red: at end of life	Red: at end of life
	Remote notification	1.5 A/250 V AC	1 A/250 V AC ≤ 1 A/30 V DC	1 A/250 V AC ≤ 1 A/30 V DC	1 A/250 V AC ≤ 1 A/30 V DC
By tunnel terminal	Rigid cable	10...35 mm²	16...35 mm²	10...35 mm²	10...35 mm²
	Flexible cable	10...25 mm²	10...25 mm²	10...25 mm²	10...25 mm²
Operating temperature		-25°C to +60°C	-40°C to +80°C	-40°C to +80°C	-40°C to +80°C
Humidity range		5 % to 95 %	5 % to 95 %	5 % to 95 %	5 % to 95 %
Standards		IEC 61643-11: 2011 T1, T2 EN 61643-11: 2012 Type 1 + Type 2	IEC 61643-11 T1 EN 61643-11 Type 1	IEC 61643-11: 2011 T1, T2 EN 61643-11: 2012 Type 1 + Type 2	IEC 61643-11: 2011 T1 EN 61643-11: 2012 Type 1
Approvals		CE, EAC	CE	CE, KEMA-KEUR	CE, KEMA-KEUR

Choice of disconnector / surge arrester

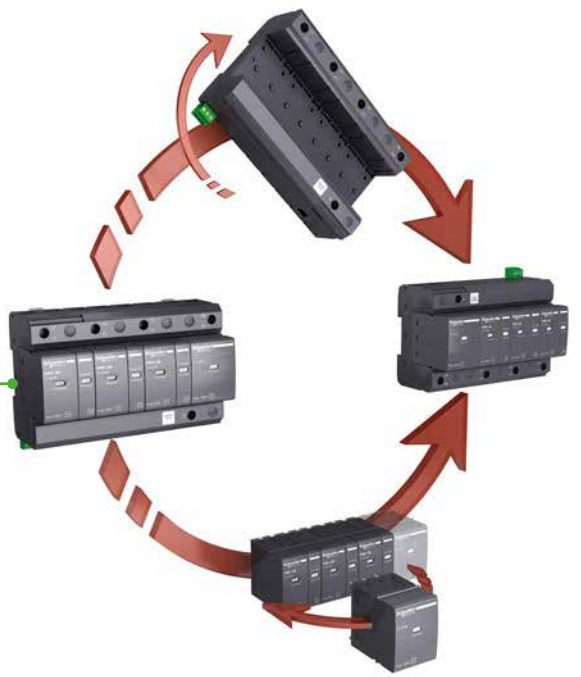
Type	I imp: impulse current	Isc: prospective short-circuit current at the installation point				
		10 kA	15 kA	25 kA	36 kA	50 kA
iPRF1 12.5r	12.5 kA	C120N 80 A curve C or Compact NSX100B 100 A *	C120H 80 A curve C or Compact NSX100B 100 A *	NG125N 80 A curve C or Compact NSX100B 100 A *	NG125H 80 A curve C or Compact NSX100F 100 A *	NG125L 80 A curve C or Compact NSX100N 100 A *
PRD1 35r	35 kA	Compact NSX160B 160 A			Compact NSX160F 160 A	Compact NSX160N 160 A
PRD1 25r	25 kA	Compact NSX100B 100 A			-	
PRD1 Master	25 kA	Compact NSX100B 100 A			Compact NSX100F 100 A	Compact NSX100N 100 A

(*) For lightning impulse current withstand

PB113738-90

PRD1 25r / PRD1 Master /PRD1 35r Reversible

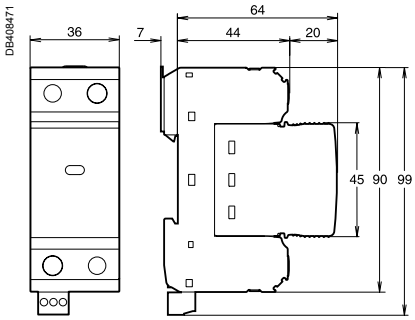
■ The surge arrester base can be turned over to allow the phase/neutral/earth cables to enter through either the top or the bottom



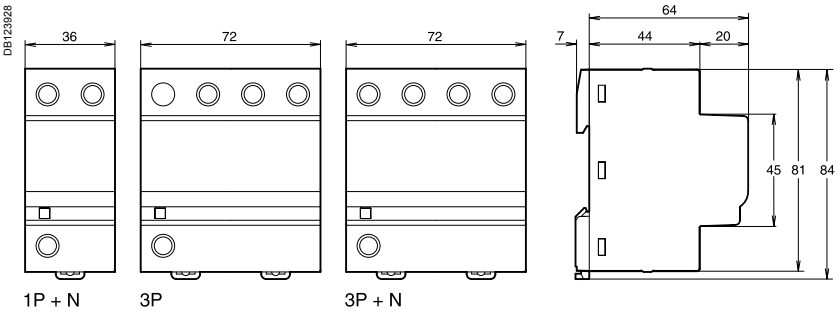
iPRF1 12.5r/PRD1 35r/PRD1 25r/PRD1 Master

Type 1 and 2 LV surge arresters (cont.)

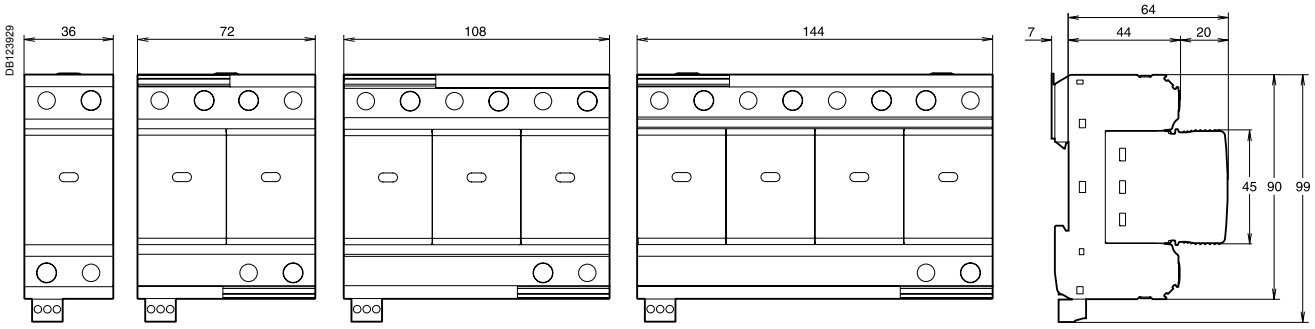
Dimensions (mm)



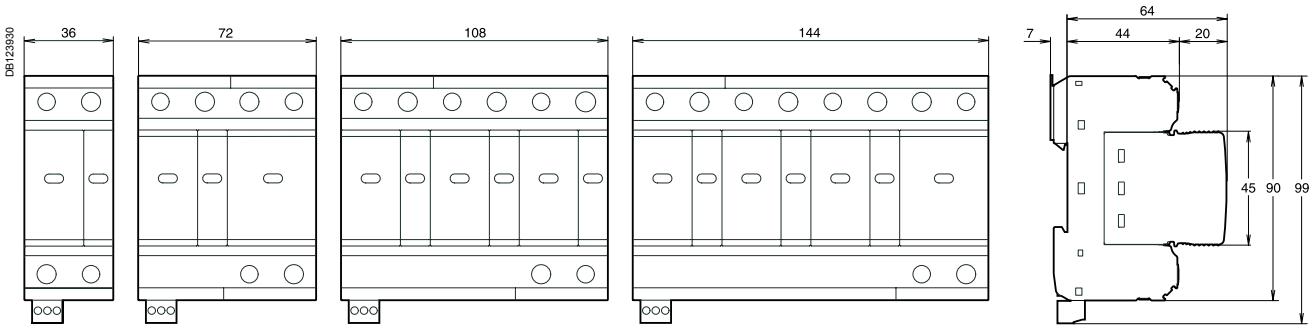
1P
PRD1 35r



1P + N 3P 3P + N
iPRF1 12.5r



1P 1P + N 3P 3P + N
PRD1 Master



1P 1P + N 3P 3P + N
PRD1 25r

Weight (g)

Surge arresters					
Type		**iPRF1 12,5r**	**PRD1 35r**	**PRD1 25r**	**PRD1 Master**
1P		-	401	334	394
1P+N		290	-	725	774
3P		590	-	1010	1175
3P+N		590	-	1338	1535
Cartridge	Neutral	-	-	229	229
	Phase	-	245	-	242



iPF surge arresters

Type 2 or 3 LV surge arresters

The iPF multi-pole single-piece surge arrester range is adapted for earthing systems: TT, TN-S, TN-C.
Type 2 surge arresters are tested with a 8/20 µs current wave.
Type 3 surge arresters are tested with a 12/50 µs and 8/20 µs combined wave.

Each surge arrester in the range has a specific application:
- **incoming protection (type 2):**
  - the iPF65(r) is recommended for a very high risk level (strongly exposed site)
  - the iPF40(r) is recommended for a high risk level
  - the iPF20 is recommended for a medium risk level
- **secondary protection (type 2 or 3):**
  - the iPF8 ensures secondary protection of loads to be protected and is placed in cascade with the incoming surge arresters. This surge arrester is required when the loads to be protected are at a distance of more than 10 m from the incoming surge arrester.

The iPF surge arresters with “r” indication have remote transfer of the information: “surge arrester to be replaced”.

PB105278-35

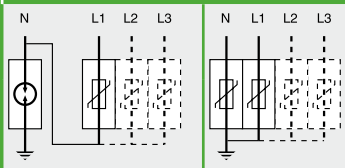


1P+N.

PB105280-35



3P+N.

Rated discharge current (Imax) / Nominal discharge current (In)	Type of protection		Network					
								
	Incoming	Secondary (type 2 or 3)	1P+N	3P+N	1P	2P	3P	4P
65 kA / 20 kA								
Very high risk level	iPF65				A9L15683			
			A9L15684					
						A9L15584		
							A9L15581	
				A9L15685				
				A9L15586				
								A9L15585
40 kA / 15 kA								
High risk level	iPF40				A9L15686			
			A9L15687					
						A9L15587		
							A9L15582	
				A9L15690				
				A9L15688				
								A9L15590
								A9L15588
20 kA / 5 kA								
Medium risk level	iPF20				A9L15691			
			A9L15692					
						A9L15592		
							A9L15597	
				A9L15693				
								A9L15593
8 kA / 2.5 kA								
Secondary protection: placed near the loads to be protected when they are at a distance of more than 10 m from the incoming surge arrester		iPF8						

Surge arrester/circuit breaker association	
Type of surge arrester	**Associated circuit breaker**
iPF65	Curve C 50 A
iPF40	Curve C 40 A
iPF20	Curve C 25 A
iPF8	Curve C 20 A

iPF surge arresters

Type 2 or 3 LV surge arresters (cont.)

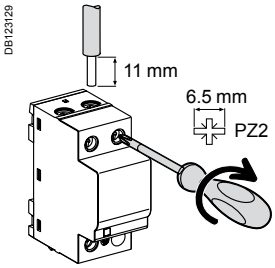
	Earthing system	Transfer	Surge arrester name	Width in mod. of 9 mm	Up - (kV) Voltage protection level			Un - (V) Rated voltage network	Uc - (V) Maximum continuous operating voltage		
					CM*		DM*		CM*		DM*
					L/⏚	N/⏚	L/N		L/⏚	N/⏚	L/N
			iPF65								
	TT & TN		iPF65 1P	2	≤ 1.5	-	-	230	340	-	-
	TT & TN-S		iPF65 1P+N	4	-	≤ 1.5	≤ 1.5		-	260	340
	TN-C		iPF65 2P		≤ 1.5	≤ 1.5	-		340	340	-
	TN-C		iPF65 3P	8	≤ 1.5	-	-	230/400	340	-	-
	TT & TN-S	■	iPF65r 3P+N		-	≤ 1.5	≤ 1.5		-	260	340
	TT & TN-S		iPF65 3P+N		-	≤ 1.5	≤ 1.5		-	260	340
	TN-C	■	iPF65r 4P		≤ 1.5	≤ 1.5	-		340	340	-
			iPF40								
	TT & TN		iPF40 1P	2	≤ 1.5	-	-	230	340	-	-
	TT & TN-S		iPF40 1P+N	4	-	≤ 1.5	≤ 1.5		-	260	340
	TN-C		iPF40 2P		≤ 1.5	≤ 1.5	-		340	340	-
	TN-C		iPF40 3P	8	≤ 1.5	-	-	230/400	340	-	-
	TT & TN-S	■	iPF40r 3P+N		-	≤ 1.5	≤ 1.5		-	260	340
	TT & TN-S		iPF40 3P+N		-	≤ 1.5	≤ 1.5		-	260	340
	TN-C	■	iPF40r 4P		≤ 1.5	≤ 1.5	-		340	340	-
	TN-C		iPF40 4P		≤ 1.5	≤ 1.5	-		340	340	-
			iPF20								
	TT & TN		iPF20 1P	2	≤ 1.1	-	-	230	340	-	-
	TT & TN-S		iPF20 1P+N	4	-	≤ 1.5	≤ 1.1		-	260	340
	TN-C		iPF20 2P		≤ 1.1	≤ 1.1	-		340	340	-
	TN-C		iPF20 3P	8	≤ 1.1	-	-	230/400	340	-	-
	TT & TN-S		iPF20 3P+N		-	≤ 1.5	≤ 1.1		-	260	340
	TN-C		iPF20 4P		≤ 1.1	≤ 1.1	-		340	340	-
			iPF8 (1)		**Type 2 / Type 3**						
	TT & TN		iPF8 1P	2	≤ 1 / ≤ 1.1	-	-	230	340	-	-
	TT & TN-S		iPF8 1P+N	4	-	≤ 1.5 / ≤ 1.2	≤ 1 / ≤ 1.1		-	260	340
	TN-C		iPF8 2P		≤ 1 / ≤ 1.1	≤ 1 / ≤ 1.1	-		340	340	-
	TN-C		iPF8 3P	8	≤ 1 / ≤ 1.1	-	-	230/400	340	-	-
	TT & TN-S		iPF8 3P+N		-	≤ 1.5 / ≤ 1.2	≤ 1 / ≤ 1.1		-	260	340
	TN-C		iPF8 4P		≤ 1 / ≤ 1.1	≤ 1 / ≤ 1.1	-		340	340	-

* **CM**: common mode (phase to earth and neutral to earth). * **DM**: differential mode (phase to neutral). **(1) Uoc**: combinated waveform voltage: 10 kV.

iPF surge arresters

Type 2 or 3 LV surge arresters (cont.)

Connection



Type	Tightening torque	Copper cables	
		Rigid	Flexible or with ferrule
		DB122945	DB122946
iPF	3.5 N.m	25 mm² max.	16 mm² max.

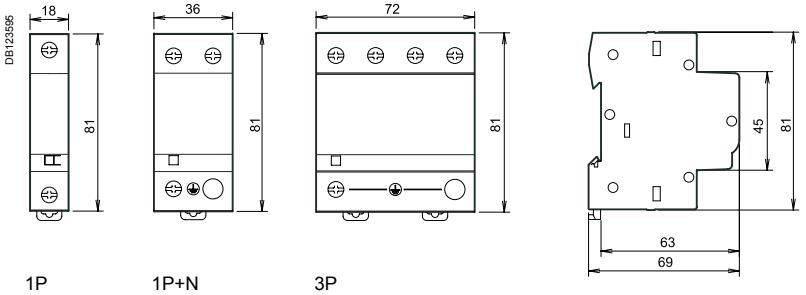
Technical data

Main characteristics		
Operating frequency		50/60 Hz
Operating voltage (Ue)		230/400 V AC
Permanent operating current (Ic)		< 1 mA
Response time		< 25 ns
End of life indication: by green/red indicator light	Green	In operation
	Red	At end of life
End of life remote indication		By contact NO, NC 250 V / 0.25 A
Additional characteristics		
Operating temperature		-25°C to +60°C
Type of connection terminals		Tunnel terminals, 2.5 to 35 mm²
Standards		IEC 61643-1 T2 and EN 61643-11 Type 2

Weight (g)

Surge arrester	
Type	**iPF**
1P	125
2P	210
3P	335
4P	420

Dimensions (mm)



1P

1P+N
2P

3P
3P+N
4P



iPRD surge arresters

Type 2 or 3 LV withdrawable surge arresters

DB123854 DB106604 DB406142

Country approval pictograms

iPRD withdrawable surge arresters allow quick replacement of damaged cartridges.
Type 2 surge arresters are tested with a 8/20 µs current wave.
Type 3 surge arresters are tested with a 1.2/50 µs and 8/20 µs combined wave.

Each surge arrester in the range has a specific application:

- ■ **incoming protection (type 2):**
  - □ the iPRD65r is recommended for a very high risk level (strongly exposed site)
  - □ the iPRD40(r) is recommended for a high risk level
  - □ the iPRD20(r) is recommended for a medium risk level
- ■ **secondary protection (type 2 or 3):**
  - □ the iPRD8(r) ensures secondary protection of loads to be protected and is placed in cascade with the incoming surge arresters. This surge arrester is required when the loads to be protected are at a distance of more than 10 m from the incoming surge arrester.

The iPRD surge arresters with “r” indication have remote transfer of the information: “cartridge to be replaced”.

PB110274-35



2P

PB110280-35



4P

Catalogue number iPRD surge arresters

Rated discharge current (Imax)	Nominal discharge current (In)	Type of protection		Network					
				DB122942 N L1 L2 L3		DB122943 N L1 L2 L3			
		Incoming	Secondary	1P+N	3P+N	1P	2P	3P	4P
iPRD65									
65 kA Very high risk level (strongly exposed site)	20 kA	iPRD65				A9L65101			
						A9L65121			
				A9L65501					
							A9L65201		
								A9L65301	
								A9L65321	
					A9L65601				
									A9L65401
iPRD40									
40 kA High risk level	15 kA	iPRD40				A9L40101			
						A9L40100			
				A9L40501					
				A9L40500					
							A9L40201		
							A9L40200		
								A9L40301	
								A9L40321	
								A9L40300	
					A9L40601				
					A9L40600				
									A9L40401
									A9L40421
									A9L40400
iPRD20									
20 kA Medium risk level	5 kA	iPRD20				A9L20100			
				A9L20501					
				A9L20500					
							A9L20200		
								A9L20300	
								A9L20321	
					A9L20601				
					A9L20600				
									A9L20400
									A9L20421
iPRD8									
8 kA Secondary protection: placed near the loads to be protected when they are at a distance of more than 10 m from the incoming surge arrester	2.5 kA		iPRD8			A9L08100			
				A9L08501					
				A9L08500					
							A9L08200		
								A9L08300	
								A9L08321	
					A9L08601				
					A9L08600				
									A9L08400
									A9L08421

Protection
Load protection
iPRD surge arresters
Type 2 or 3 LV withdrawable surge arresters (cont.)



Cartridge

Spare cartridges iPRD		
Type	**Spare cartridges for**	**Cat. no**
iPRD 65-350	iPRD65r	**A9L65102**
iPRD 40-350	iPRD40, iPRD40r	**A9L40102**
iPRD 20-350	iPRD20, iPRD20r	**A9L20102**
iPRD 8-350	iPRD8, iPRD8r	**A9L08102**
iPRD Neutral	All products (1P+N, 3P+N)	**A9L00002**

Spare cartridges iPRD IT		
Type	**Spare cartridges for**	**Cat. no**
C 65-460	iPRD65r IT	**A9L65122**
C 40-460	iPRD40r IT	**A9L40122**
C 20-460	iPRD20r IT	**A9L20122**
C 8-460	iPRD8r IT	**A9L08122**

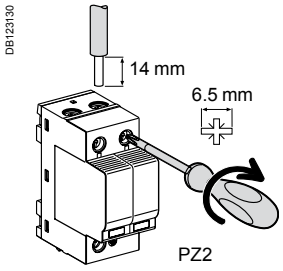
	Earthing system	Transfer	Surge arrester name	Width in mod. of 9 mm	Up - (kV) Voltage protection level			Un - (V) Rated voltage network	Uc - (V) Maximum continuous operating voltage		
					CM*		DM*		CM*		DM*
					L/⏚	N/⏚	L/N		L/⏚	N/⏚	L/N
			iPRD65								
A9L65101	TT & TN	■	iPRD65r 1P	2	≤ 1.5	-	-	230	350	-	-
A9L65121	IT	■	iPRD65r 1P IT		≤ 2.3	-	-		460	-	-
A9L65501	TT & TN-S	■	iPRD65r 1P+N	4	-	≤ 1.4	≤ 1.5		-	260	350
A9L65201	TN-C-S	■	iPRD65r 2P		≤ 1.5	≤ 1.5	-		350	350	-
A9L65301	TN-C	■	iPRD65r 3P	6	≤ 1.5	-	-	230/400	350	-	-
A9L65321	IT	■	iPRD65r 3P IT		≤ 2.3	-	-		460	-	-
A9L65601	TT & TN-S	■	iPRD65r 3P+N	8	-	≤ 1.4	≤ 1.5		-	260	350
A9L65401	TN-C-S	■	iPRD65r 4P		≤ 1.5	≤ 1.5	-		350	350	-
			iPRD40								
A9L40101	TT & TN	■	iPRD40r 1P	2	≤ 1.6	-	-	230	350	-	-
A9L40100	TT & TN		iPRD40 1P		≤ 1.6	-	-		350	-	-
A9L40501	TT & TN-S	■	iPRD40r 1P+N	4	-	≤ 1.4	≤ 1.6		-	260	350
A9L40500	TT & TN-S		iPRD40 1P+N		-	≤ 1.4	≤ 1.6		-	260	350
A9L40201	TN-C-S	■	iPRD40r 2P		≤ 1.6	≤ 1.6	-		350	350	-
A9L40200	TN-C-S		iPRD40 2P		≤ 1.6	≤ 1.6	-		350	350	-
A9L40301	TN-C	■	iPRD40r 3P	6	≤ 1.6	-	-	230/400	350	-	-
A9L40321	IT	■	iPRD40r 3P IT		≤ 2.2	-	-		460	-	-
A9L40300	TN-C		iPRD40 3P		≤ 1.6	-	-		350	-	-
A9L40601	TT & TN-S	■	iPRD40r 3P+N	8	-	≤ 1.4	≤ 1.6		-	260	350
A9L40600	TT & TN-S		iPRD40 3P+N		-	≤ 1.4	≤ 1.6		-	260	350
A9L40401	TN-C-S	■	iPRD40r 4P		≤ 1.6	≤ 1.6	-		350	350	-
A9L40421	IT	■	iPRD40r 4P IT		≤ 2.2	≤ 2.2	-		460	-	-
A9L40400	TN-C-S		iPRD40 4P		≤ 1.6	≤ 1.6	-		350	350	-
			iPRD20								
A9L20100	TT & TN		iPRD20 1P	2	≤ 1.2	-	-	230	350	-	-
A9L20501	TT & TN-S	■	iPRD20r 1P+N	4	-	≤ 1.4	≤ 1.2		-	260	350
A9L20500	TT & TN-S		iPRD20 1P+N		-	≤ 1.4	≤ 1.2		-	260	350
A9L20200	TN-C-S		iPRD20 2P		≤ 1.2	≤ 1.2	-		350	350	-
A9L20300	TN-C		iPRD20 3P	6	≤ 1.2	-	-	230/400	350	-	-
A9L20321	IT	■	iPRD20r 3P IT		≤ 1.8	-	-		460	-	-
A9L20601	TT & TN-S	■	iPRD20r 3P+N	8	-	≤ 1.4	≤ 1.2		-	260	350
A9L20600	TT & TN-S		iPRD20 3P+N		-	≤ 1.4	≤ 1.2		-	260	350
A9L20400	TN-C-S		iPRD20 4P		≤ 1.2	≤ 1.2	-		350	350	-
A9L20421	IT	■	iPRD20r 4P IT		≤ 1.8	≤ 1.8	-		460	-	-
			iPRD8 (1)		**Type 2 / Type 3 (1)**						
A9L08100	TT & TN		iPRD8 1P	2	≤ 1.2	-	-	230	350	-	-
A9L08501	TT & TN-S	■	iPRD8r 1P+N	4	-	≤ 1.4	≤ 1.2		-	260	350
A9L08500	TT & TN-S		iPRD8 1P+N		-	≤ 1.4	≤ 1.2		-	260	350
A9L08200	TN-C-S		iPRD8 2P		≤ 1.2	≤ 1.2	-		350	350	-
A9L08300	TN-C		iPRD8 3P	6	≤ 1.2	-	-	230/400	350	-	-
A9L08321	IT	■	iPRD8r 3P IT		≤ 1.6 / ≤ 1.8	-	-		460	-	-
A9L08601	TT & TN-S	■	iPRD8r 3P+N	8	-	≤ 1.4	≤ 1.2		-	260	350
A9L08600	TT & TN-S		iPRD8 3P+N		-	≤ 1.4	≤ 1.2		-	260	350
A9L08400	TN-C-S		iPRD8 4P		≤ 1.2	≤ 1.2	-		350	350	-
A9L08421	IT	■	iPRD8r 4P IT		≤ 1.6 / ≤ 1.8	≤ 1.6 / ≤ 1.8	-		460	-	-

* **CM**: common mode (phase to earth and neutral to earth). * **DM**: differential mode (phase to neutral). **(1) Uoc**: combinated waveform voltage: 10 kV.

iPRD surge arresters

Type 2 or 3 LV withdrawable surge arresters

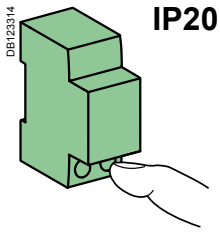
Connection iPRD surge arresters

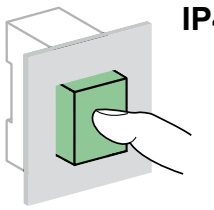


Type	Tightening torque	Copper cables	
		Rigid	Flexible or with ferrule
			
iPRD	3.5 N.m	2.5 to 25 mm²	4 to 16 mm²

Technical data iPRD surge arresters

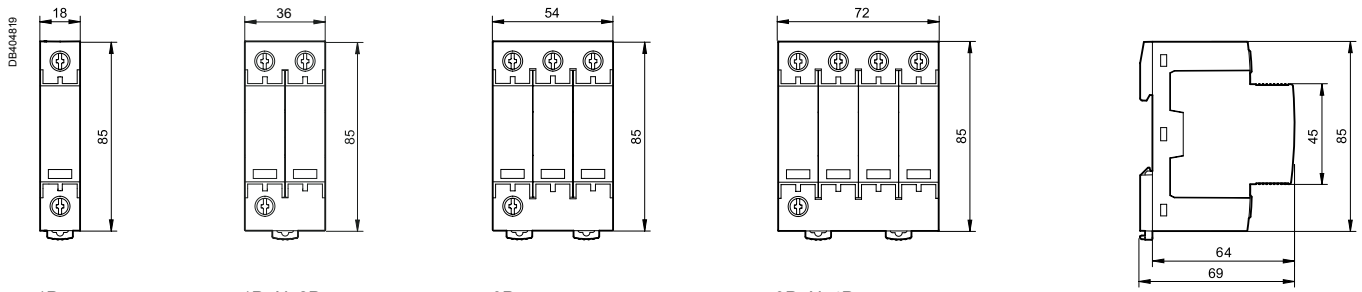
Main characteristics		iPRD	iPRD IT
Operating frequency		50/60 Hz	
Operating voltage (Ue)		230/400 V AC ±10 %	
Permanent operating current (Ic)		< 1 mA	
Response time		< 25 ns	
Short circuit current rating (Isccr)		50 kA (50 Hz)	-
Short circuit current rating (Isccr), case of double fault		-	5 kA (50 Hz)
Temporary overvoltage withstand (U_T)	U_T (L-N)	337 V AC / 5 s	337 V AC / 5 s
	U_T (L-PE)	442 V AC / 120 min	-
Temporary overvoltage **Safe failure mode** (U_T)	U_T (N-PE)	1200 V AC / 200 ms	1455 V AC / 200 ms
	U_T (L-PE)	1455 V AC / 200 ms	1455 V AC / 200 ms
Ground residual current (I_{PE})	I_{PE} (L-PE)	600 µA for 1P, 2P, 3P, 4P	
	I_{PE} (N-PE)	3 µA for 1P+N, 3P+N	-
Satisfactory operation indication: by mechanical indicator	White	In operation	
	Red	Cartridge must be replaced	
Remote indication of satisfactory operation		By contact NO, NC 250 V / 0.25 A	
Additional characteristics			
Degree of protection (IEC 60529)	Device only	IP20 (built-in)	
	Device in modular enclosure	IP40	
Operating temperature		-25°C to +60°C	
Storage temperature		-40°C to +85°C	
Humidity range		5 % to 95 %	
Type of connection terminals		Tunnel terminals, 2.5 to 35 mm²	
Standards		IEC 61643-11: 2011 T2, T3 and EN 61643-11: 2012 Type 2, Type 3	





Surge arrester/circuit breaker association			
Surge arrester	**Associated circuit breaker**		
	iPRD		**iPRD IT**
	Isc ⩽ 25 kA	**Isc ⩽ 50 kA**	**Isc (IT 400 V AC) ⩽ 5 kA**
iPRD65	Curve C 50 A	Curve C 63 A	Curve C 25 A
iPRD40	Curve C 40 A	Curve C 63 A	Curve C 20 A
iPRD20	Curve C 20 A	Curve C 63 A	Curve C 10 A
iPRD8	Curve C 10 A	Curve C 63 A	Curve C 10 A

iPRD dimensions (mm)



1P 1P+N, 2P 3P 3P+N, 4P

Weight (g)

Surge arrester	
Type	**iPRD**
1P	119
1P+N, 2P	220
3P	340
3P+N, 4P	450

iPRD surge arresters

Type 2 or 3 LV withdrawable surge arresters (cont.)

iPRD surge arresters

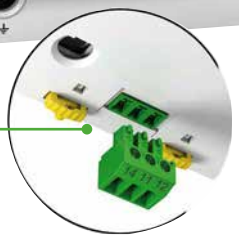
PB110281-60



Terminals
- IP20

Satisfactory operation indication
- By mechanical indicator
- white: operating
- red: cartridge must be replaced

- Transfer to Acti 9 Smartlink



Connection iPRD surge arrester with its short circuit disconnector

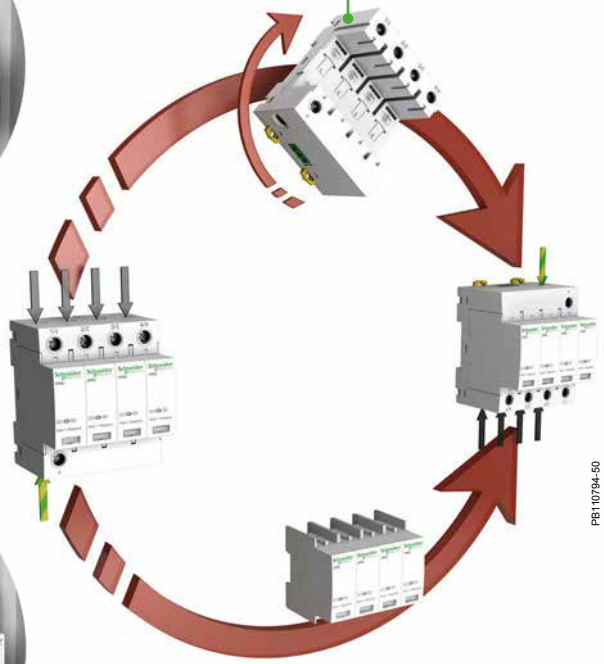
TT / TN-S
Power supply through the top
Connection with cables

PB110289-50



Surge arrester iPRD 3P+N + iC60N 3P+N

Reversible
- The surge arrester base can be turned over to allow the phase/neutral/earth cables to enter through either the top or the bottom



TT / TN-S
Power supply through the bottom
Connection with comb busbar

PB110793-50



Surge arrester iPRD 3P+N + iC60N 3P+N

PB110287-80

IT/TNC-S with neutral
Power supply through the top
Connection with comb busbar

PB110290-50



Surge arrester iPRD 4P + iC60N 4P

IT/TNC-S with neutral
Power supply through the bottom
Connection with comb busbar

PB110794-50



Surge arrester iPRD 4P + iC60N 4P

iPRC, iPRI surge arresters

Country approval pictograms

Protection against overvoltages related to lightning strikes.

Analogue telephone line protection: the iPRC surge arrester wired in series to the private installation input protects the telephones, the PABX, the modems (including ADSL), etc.

Protection for 2 low-current lines without common potential or 4 lines with common reference potential: the iPRI protects the measuring instrument and PLC "sensor" inputs and the DC power supply inputs up to 53 V and AC power supply inputs up to 37 V.
The input current must not exceed 300 mA.

PB104269-35



A9L16337

DB122624

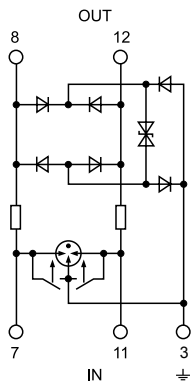
DSL

PB104270-35



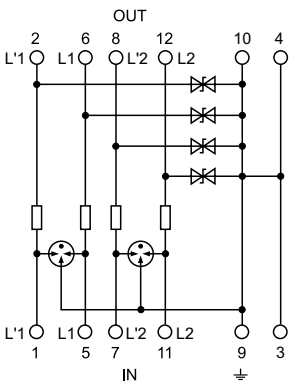
A9L16339

DB122585



Line L1	Cables 7-8
Line L2	Cables 11-12
–	–
–	–
⏚	Cable 3
IN	Ligne side
OUT	Protected side

DB126523



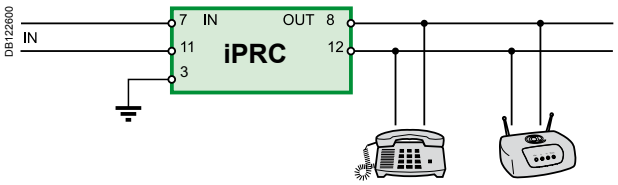
Line L1	Cables 5-6
Line L2	Cables 11-12
Line L'1	Cables 1-2
Line L'2	Cables 7-8
⏚	Cables 3-4-9-10
IN	Ligne side
OUT	Protected side

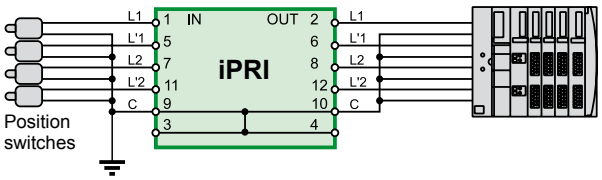
Catalogue numbers

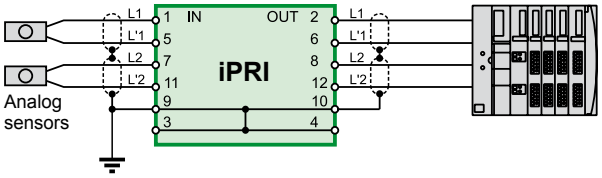
Surge arresters	iPRC	iPRI
Mains voltage (Un)	**<130 V AC**	**48 V DC**
Analogue telephone system	■	–
Telephone transmitter	■	–
Digital telephone system	–	■
Automation network	–	■
VLV load power supply (12…48 V)	–	■
xDSL compatibility	■	–
Cat. no..	**A9L16337**	**A9L16339**
Width in 9 mm modules	2	2

Diagrams

DB122600

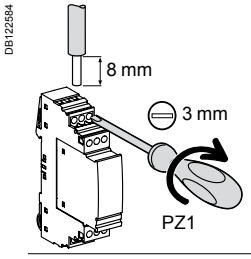




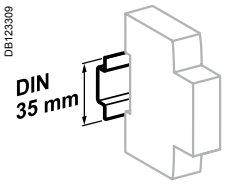


iPRC, iPRI surge arresters (cont.)

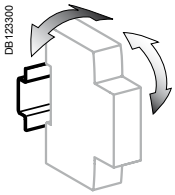
Connection



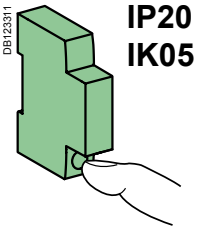
Tightening torque	Copper cables	
	Rigid	Flexible or with ferrule
		
0.8 N.m	0.2 to 4 mm²	0.2 to 2,5 mm²



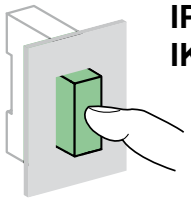
Clip on DIN rail 35 mm.



± 30° vertical.



IP20
IK05



IP40
IK05

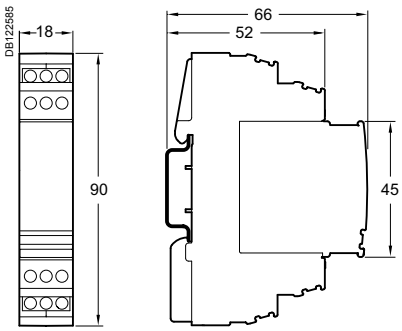
Technical data

Main characteristics			
		iPRC	iPRI
Number of protected lines		2	2
Test category	IEC/EN	C1, C2, C3, D1, B2	C1, C2, C3, D1, B2
Maximum continuous voltage (Uc)		180 V DC, 130 V AC	53 V DC, 37 V AC
Limitation voltage (Up)		300 V	70 V
Rated discharge current (8/20) (In)		10 kA	10 kA
Maximum discharge current (8/20) (Imax)		18 kA	10 kA
Response time		< 500 ns	≤ 1 ns
Nominal impulse current		100 A	70 A
Rated current (I_N)		450 mA (up to 45°C)	300 mA (up to 45°C)
Series resistor		2.2 Ω	4.7 Ω
End-of-life information by		Loss of dialling tone	Loss of transmission
Additional characteristics			
Degree of protection	Device only	IP20	IP20
	Device in modular enclosure	IP40	IP40
	IK	05	05
Operating temperature		-25°C to +60°C	-25°C to +60°C
Storage temperature		-40°C to +85°C	-40°C to +85°C

Weight (g)

Surge arresters		
Type	iPRC	iPRI
	25	65

Dimensions (mm)



Acti9 iPRE surge arrester

Surge arrester for Ethernet RJ45 sockets

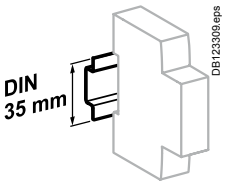
CE IEC

Country approval pictograms

Fine surge protection of Ethernet line Cat. 6



iPRE

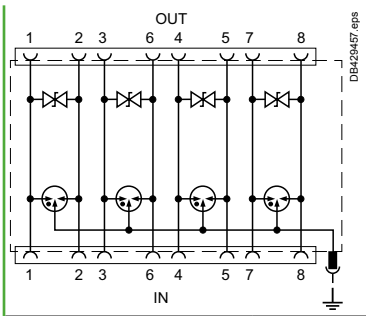


Clip on DIN rail 35 mm.

IEC/EN 61643-21

As per the above standard:
iPRE Ethernet line protection
The Acti9 iPRE RJ45 surge arrester protects the Internet line for residential, buildings and industry applications.
Telecommunication equipment are very exposed to lightning overvoltages as they often have long cables which behave like antennas to such surge lightnings and electrostatic discharges created by switching transients in buildings. The interfaces operate with low signal levels at high frequencies. This makes them particularly sensitive to surge voltages and can lead to the destruction of IT systems.
Short response times are essential to quickly limit the surge voltages without deteriorating signal quality. Wired in series to the private installation input, it allows better data exchange between computers and peripheral devices.

- Acti9 iPRE is suitable for category 5 & 6 Ethernet cabling system, high speed data networks up to 250 MHz.
- Acti9 iPRE is delivered with an earthing cable which provides protective grounding in computer rooms.
- Acti9 iPRE is DIN rail mounted.
- RJ45 system-specific connection.



IN	Line side
OUT	Protected side

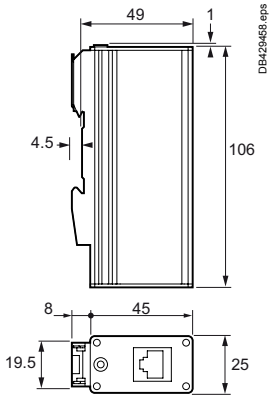
Weight (g)

Surge arresters	
Type	**Acti9 iPRE**
	105

Catalog number

Surge arresters	Acti9 iPRE
Catalog number	**A9L16441**

Dimensions (mm)



Technical data

Main characteristics	
	Acti9 iPRE
Connections (input - output)	RJ45/RJ45
Test category IEC/EN	C1, C2, D1
Maximum continuous operating voltage (Uc)	6.5 V DC
Voltage protection level at In Line-Line (Up)	35 V
Voltage protection level at In Line-Ground	500 V
Rated discharge current (8/20 µs) (In)	2.5 kA
Maximum discharge current (8/20 µs) (Imax)	10 kA
Nominal impulse current (10/350 µs) (limp)	1 kA
Rated load current (I_L)	300 mA (up to 45°C)
Response time	1 ns
Insertion attenuation at 250 MHz	3 db
End-of-life information by	Loss of transmission
Additional characteristics	
Degree of protection (IEC 60529)	IP20
Operating temperature	-40°C to +70°C
Storage temperature	-40°C to +70°C

iPRD PV-DC surge arresters

Withdrawable surge arresters type 2 for photovoltaic applications

DB123854

Country approval pictograms

UTE C 61740-51 T2
EN 50539-11: 2013 T2

PB110283-40



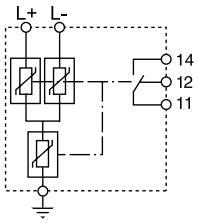
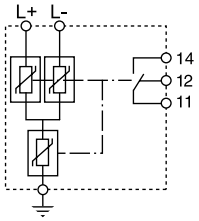
iPRD 40r 800PV

iPRD PV-DC direct current surge arresters are designed to protect against overvoltages due to a lightning strike: of the "DC" input to the inverter and of photovoltaic panels.

It should be installed in a switchboard inside the building. If the switchboard is located outside, it must be weatherproof.

Withdrawable iPRD PV-DC surge arresters allow damaged cartridges to be replaced quickly.
The surge arrester base can be turned over to allow the phase/neutral/earth cables to enter through either the top or the bottom
They offer remote reporting of the "cartridge must be changed" message.

Catalogue numbers

Internal diagram	I_{Total} (kA) Total discharge current	In (kA) Nominal discharge current	Up (kV) Protection level L+/⏚, L-/⏚, L+/L-	U_{CPV} (V) (1) Maximum continuous operating voltage L+/⏚, L-/⏚, L+/L-	Width in module of 9 mm	Cat. no.
iPRD 40r 800PV						
DB124052 	40	15	3	800	6	**A9L40271**
iPRD 40r 1000PV						
DB124052 	40	15	3.9	1000	6	**A9L40281**

(1) Ucpv ≥ 1.2 x Uoc stc (Uoc stc: maximum no-load voltage of the photovoltaic generator "photovoltaic module manufacturer's data")

PB110285-30



Replacement cartridges

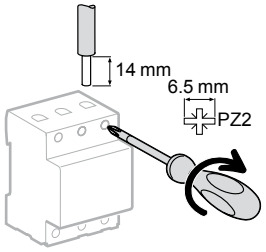
Replacement cartridges		
Type	**Replacement cartridges for**	**Cat. no.**
C 40-800PV	iPRD 40r 800PV	**A9L40172**
C 40-1000PV	iPRD 40r 1000PV	**A9L40182**

iPRD PV-DC surge arresters

Withdrawable surge arresters type 2 for photovoltaic applications (cont.)

Connection

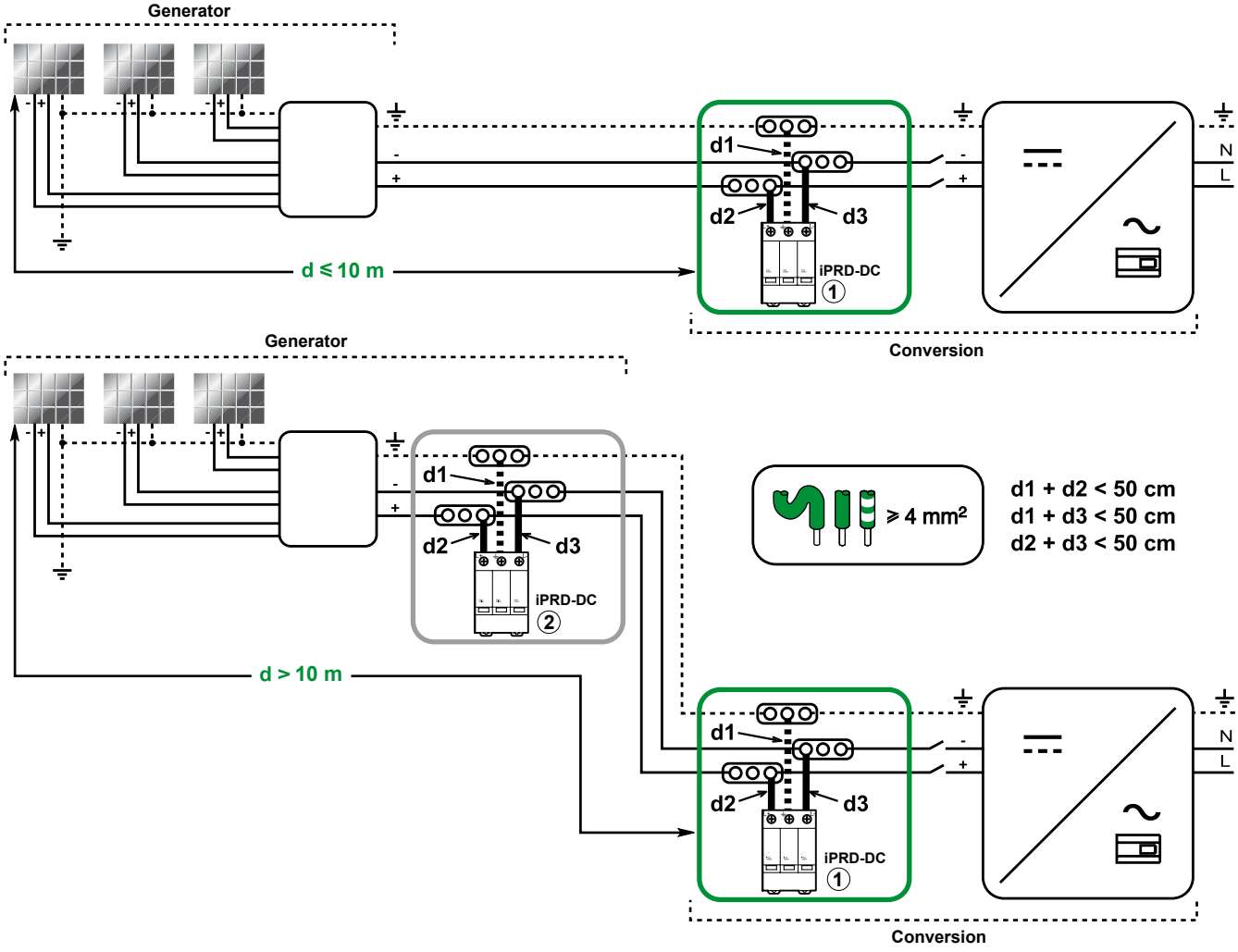
DB124057



Type	Tightening torque	Copper cables	
		Rigid	Flexible or with ferrule
		DB122945 	DB122946 
iPRD PV-DC	3.5 N.m	2.5 to 25 mm²	2.5 to 16 mm²

Depending on the distance between the "generator" part and the "conversion" part, it may be necessary to install two surge arresters or more, to ensure protection of each of the two parts.

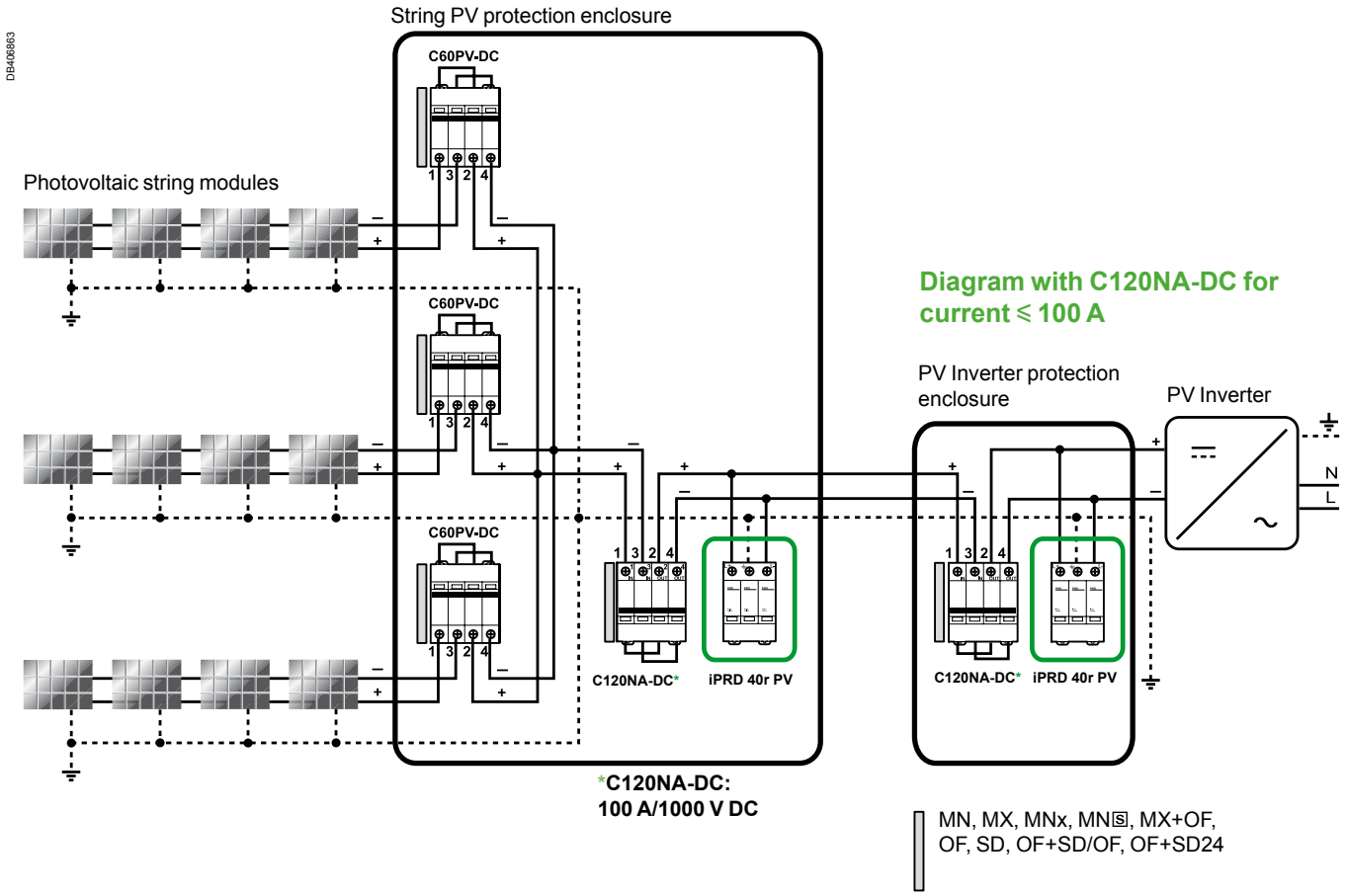
DB124049



iPRD PV-DC surge arresters

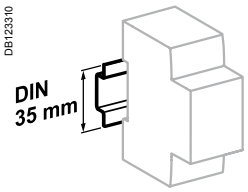
Withdrawable surge arresters type 2 for photovoltaic applications

Application diagram

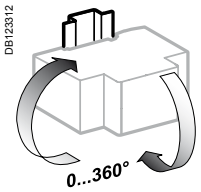


iPRD PV-DC surge arresters

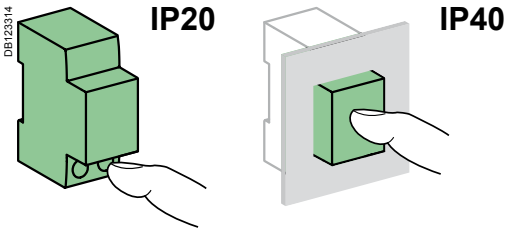
Withdrawable surge arresters type 2 for photovoltaic applications



Clip on DIN rail 35 mm.



Indifferent position of installation.



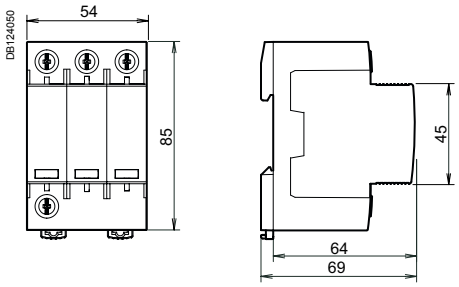
Technical data

Main characteristics			
Type of network		Isolated direct current	
Maximum continuous operating voltage (U_{CPV})	iPRD 40r 800PV	800 V	
	iPRD 40r 1000PV	1000 V	
Response time		< 25 ns	
Permanent operating current (Ic)		< 1 mA	
Short circuit current (I_{SCPV})		200 A	
Type of surge arresters		Type 2	
Ground residual current	I_{PE} (AC)	600 µA	
	I_{PE} (DC)	60 µA	
End-of-life indication mode		Circuit opened by integrated thermal disconnector	
Additional characteristics			
Degree of protection (IEC 60529)	Device only	IP20	
	Device in modular enclosure	IP40	
	Chocs	IK03	
Satisfactory operation indication	By the cartridges	White	Operational
		Red	Cartridge must be replaced
	By the NO/NC remote indication contact 250 V AC / 0.25 A		
Operating temperature		-25°C to +60°C	
Storage temperature		-40°C to +85°C	
Humidity range		5 % to 95 %	
Standards		UTE C 61740-51 T2 EN 50539-11: 2013 T2	

Weight (g)

Surge arresters	
Type	
iPRD 40r 800PV	400
iPRD 40r 1000PV	400

Dimensions (mm)



DB116619 DB123430 DB123807 DB404546

Country approval pictograms

IEC/EN 60947-3

As per the above standard:

The switch-disconnectors combine the following functions:
- Control (opening and closing of circuits under load).

iOF auxiliary

- Mounted on the left, it indicates the "open" or "closed" position of the switch and has a normally open (NO) or normally closed (NC) contact.

PB110905



1P

PB110906



2P

PB110907



3P

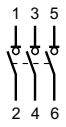
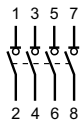
PB110908



4P

Catalog numbers

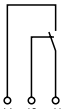
40 to 125 A iSW switch-disconnectors

Type				Width in 9 mm modules
1P	**Rating**	**Voltage (Ue)**		
DB118998 	40 A	240 V AC	**A9S65140**	2
	63 A	240 V AC	**A9S65163**	
	100 A	240 V AC	**A9S65191**	
	125 A	240 V AC	**A9S65192**	
2P				
DB118999 	40 A	415 V AC	**A9S65240**	4
	63 A	415 V AC	**A9S65263**	
	100 A	415 V AC	**A9S65291**	
	125 A	415 V AC	**A9S65292**	
3P				
DB119000 	40 A	415 V AC	**A9S65340**	6
	63 A	415 V AC	**A9S65363**	
	100 A	415 V AC	**A9S65391**	
	125 A	415 V AC	**A9S65392**	
4P				
DB119001 	40 A	415 V AC	**A9S65440**	8
	63 A	415 V AC	**A9S65463**	
	100 A	415 V AC	**A9S65491**	
	125 A	415 V AC	**A9S65492**	
Operating frequency		50/60 Hz		
Accessories		**Catalog modules CA907000 and CA907001**		

PB104474-35



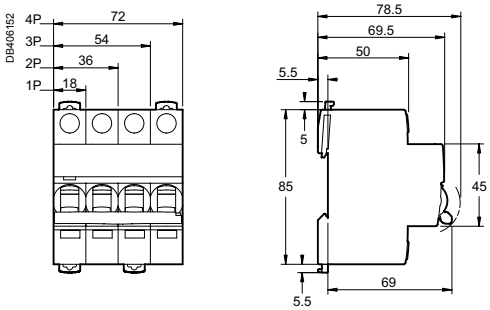
Auxiliary

Type			Width in 9 mm modules
iOF	**Voltage (Ue)**		
DB118810 	240...415 V AC	**A9A26924**	1
	24...130 V DC		

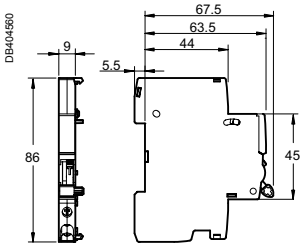
iSW switches (cont.)



Dimensions (mm)



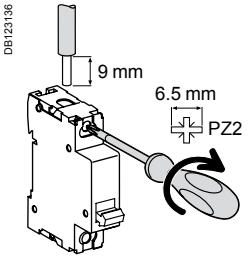
iSW



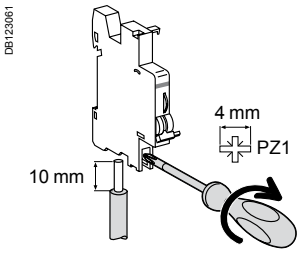
iOF

iSW switches (cont.)

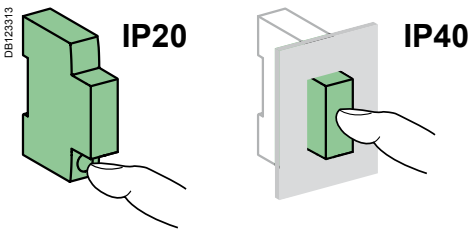
Connection



Type	Rating	Tightening torque	Copper cables	
			Rigid	Flexible or with ferrule
			DB122945	DB122946
iSW	40 to 125 A	3.5 N.m	⩽ 50 mm²	⩽ 35 mm²



Type	Tightening torque	Copper cables		Multi-cables terminal	
		Rigid	Flexible	Rigid cables	Cables with ferrule
	DB122945	DB123007	DB123011	DB123008	
iOF	1 N.m	1 to 4 mm²	0.5 to 2.5 mm²	2 x 2.5 mm²	2 x 1.5 mm²

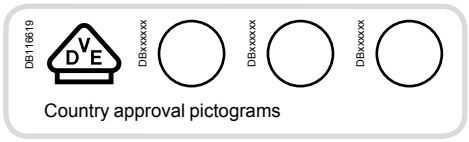


Technical data

Main characteristics			
Insulation voltage (Ui)		500 V AC	
Pollution degree		3	
Power circuit			
Rated impulse withstand voltage (Uimp)		6 kV	
Operating category		AC - 22 A	
Permissible rated short-time withstand current (Icw)		1500 A	
Conditional rated short-circuit current (Inc)		10 kA according to IEC 60947-3	
Rated short-circuit closing current (Icm)		5 kA	
Direct current use		**iSW 40/63 A**	
Operating category		DC-22A	
Voltage rating (Ue)		48 V DC	
		110 V DC with 2 poles in series	
Additional characteristics			
Degree of protection	Device only	IP20	
	Device in modular enclosure	IP40 Insulation class II	
Endurance (O-C)	Mechanical	20,000 cycles	
	Electrical	40 A - 63 A	15,000 cycles
		80 A - 100 A	10,000 cycles
		125 A	2 500 cycles
Operating temperature		-25°C to +60°C	
Storage temperature		-40°C to +85°C	
Tropicalization		Treatment 2 (relative humidity 95% at 55°C)	

iOF characteristics		
Rated voltage (Ue)	240…415 V AC	
	24…130 V DC	
Operating frequency	50/60 Hz	
Operating current	24 V DC	6 A
	48 V DC	2 A
	60 V DC	1.5 A
	130 V DC	1 A
	240 V AC	6 A
	415 V AC	3 A
Number of contacts	1 NO/NC	
Operating temperature	-35°C to +70°C	
Storage temperature	-40°C to +85°C	

NG125NA switches (cont.)



Country approval pictograms

IEC/EN 60947-3

- The NG125NA is a switch-disconnector with free tripping for making and breaking under load.
- It is especially suitable for the modular enclosure incoming feeder with remote breaking (e.g. emergency cutoff).

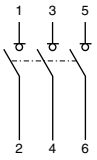
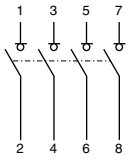


NG125NA 3P



NG125NA 4P

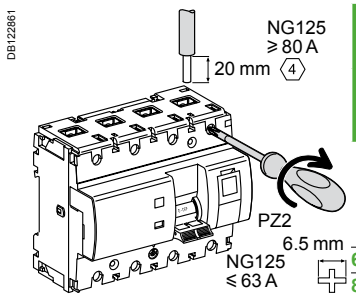
Catalogue numbers

NG125NA switch			
Type		**3P**	**3P+N**
			
Auxiliaries		**Remote indication and tripping, module CM907005**	
Rating (In)	**Quality label (1)**		
63 A		**18889**	**18893**
80 A		**18890**	**18894**
100 A		**18891**	**18895**
125 A		**18892**	**18896**
Width in 9 mm modules		9	12
Accessories		**Module CM907006**	

(1) Information to be supplied by the country concerned.

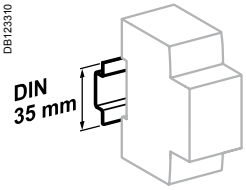
NG125NA switches (cont.)

Connection

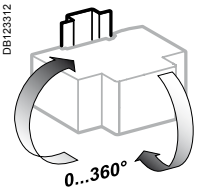


Rating	Tightening torque	Without accessories: Copper cables – Rigid	Without accessories: Copper cables – Flexible or with ferrule	With accessories: 70 mm² Al terminal	With accessories: Screw-on connection for ring terminal	With accessories: Small ring terminal	With accessories: Multi-cable terminal – Rigid cables	With accessories: Multi-cable terminal – Flexible cables
		DB122945	DB122946	DB123410	DB123488	DB118789	DB118787	
63 A	3.5 N.m	1.5 to 50 mm²	1.5 to 35 mm²	-	-	-	3 x 16 mm²	3 x 10 mm²
80 to 125 A	6 N.m	16 to 70 mm²	10 to 50 mm²	25 to 70 mm²	2 x 35 mm² 1 x 50 mm²	1 x 70 mm²		

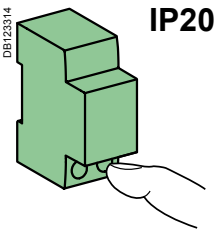
■ For rating ≥ 80 A: upstream voltage taps for each pole, by 6.35 mm Fast-on terminal.

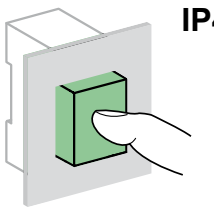


Clips onto 35 mm DIN rail.



Any installation position.





Technical data

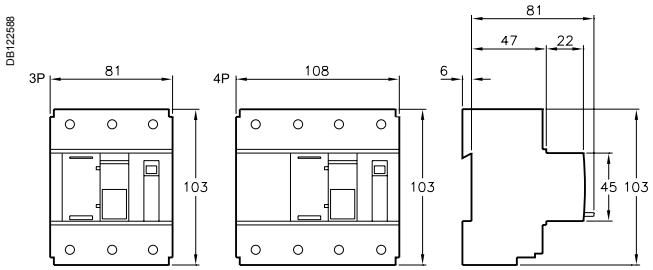
Main characteristics			
According to IEC/EN 60947-3			
Max. voltage rating (Ue)			500 V AC
Insulation voltage (Ui)			690 V AC
Degree of pollution			3
Rated impulse withstand voltage (Uimp)			8 kV
Short time withstand current (50 ms) Icw			1.5 kA
Rated short-circuit closing current (Icm)			2 kA
Utilization category			AC22A/B - AC23B
Additional characteristics			
Degree of protection (IEC 60529)	Device only		IP20
	Device in modular enclosure		IP40
Endurance (O-C)			**Category A** / **Category B**
	Electrical (except AC20 and DC20)	≤ 100 A	1500 cycles / 300 cycles
		125 A	1000 cycles / 200 cycles
	Mechanical		20,000 cycles
Operating temperature			-30°C to +70°C
Storage temperature			-40°C to +70°C
Tropicalization (IEC 60068-1)			Treatment 2 (relative humidity of 95% at 55°C)

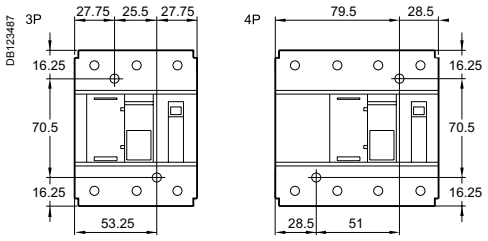
NG125NA switches (cont.)

Weight (g)

Switch	
Type	**NG125NA**
3P	720
4P	960

Dimensions (mm)

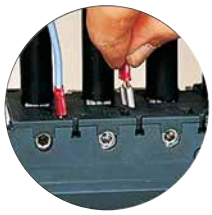




Spacing for mounting on panel

Protection
Switch up to 125 A
NG125NA switches (cont.)

For rating ⩾ 80 A
- ■ Voltage taps:
  - □ auxiliaries power supply
  - □ measurement
  - □ emergency stop
  - □ remote reporting



- ■ Cable strength:
  - □ ribbed cage
  - □ terminal depth
  - □ tightening by Allen hex key (NG125 ⩾ 80 A)

- ■ Integrated padlocking device

- ■ Test button to check satisfactory operation of the tripping mechanism







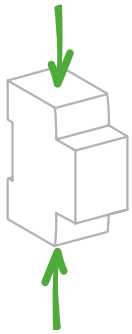
- ■ Pull-out strength:
  - □ metallic lock

- ■ Central manual control, 3 positions:
  - □ ON
  - □ tripped on fault
  - □ open

- ■ Impact and vibration resistance:
  - □ high-strength enclosure
  - □ IK 05

- ■ Circuit breaker tripped indicator

- ■ Electric power supply through the top or bottom



- ■ Positive contact indication:
  - □ suitability for isolation in the industrial sector to IEC/EN 60947-3;
  - □ the presence of the green strip guarantees that the contacts open physically and allows work to be carried out safely on the downstream circuit.

- ■ Longer product service life due to:
  - □ good overvoltage withstand capacity;
  - □ high limitation performances;
  - □ fast closure independent of the speed of actuation of the toggle.

056909N_SE-2011-90

DB123493

Accessories and auxiliaries for iC40, iCV40

Connection accessories
See module CA907001

7	Screw-on connection for ring terminal		**27053**
8	Comb busbar	**See module**	**CA907026**

Mounting accessories
See module CA907001

9	Padlocking device		**A9A26970**
19	Padlocking devices	(left)	**A9A26380**
		(right)	**A9A26381(1)**
10	Clip-on terminal markers	**See module**	**CA907001**

(1) only for iC40

Security accessories
See module CA907001

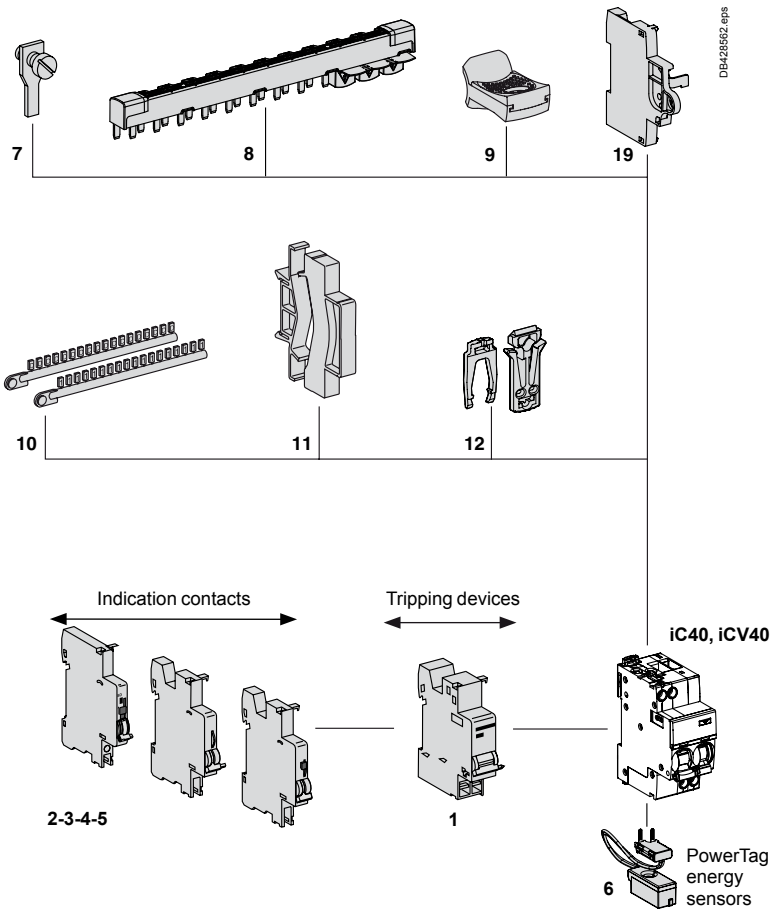
11	9 mm spacer	**A9A27062**

Spare part
See module CA907001

12	Locking clip	**A9A27052**

Electrical auxiliaries
See module CA907002

Indication			
2	iSD fault indicating contact		**A9A26927**
3	iOF open/close auxiliary contact		**A9A26924**
4	iOF/SD+OF auxiliary contact (OF+SD or OF+OF)	**See module**	**CA907002**
5	iOF+SD24 auxiliary contact	**See module**	**CA907002**
Tripping devices			
1	iMN undervoltage release or iMNs undervoltage release delayed or iMNx undervoltage release with external feeding or shunt release iMX, iMX+OF overvoltage release iMSU	**See module**	**CA907002**
PowerTag energy sensors			
6	Energy sensors PowerTag A9 P63	**See module**	**CA907029**



Note **Tripping devices must be installed first.**
If two tripping devices: the iMN must be installed first
Indication auxiliaries: respect specified position for SD functions.

Assembly rule
The mounting order and the number for the various auxiliaries must be complied with.
The tripping auxiliaries iMN, iMX, iMSU...) must be mounted first (1) as close as possible to the main device.
Then at the left, the indicating auxiliaries (iOF, iSD…) must be mounted (2) then (3), complying with the following association table.

Indicating auxiliaries (3)	+(2)	Tripping auxiliaries +(1)	Device
1 (iOF/SD+OF or iOF+SD24 or iSD)	1 iOF/SD+OF	1 (iMN, iMNs, iMNx or iMX, iMX+OF or iMSU)	iC40, iCV40
1 iOF	1 (iSD or iOF or iOF/SD+OF)	2 (iMN, iMNs, iMNx or iMX, iMX+OF or iMSU)	
–	1 iOF+SD24	2 (iMN, iMNs, iMNx or iMX, iMX+OF or iMSU)	
–	–	3 iMSU	
1 iSD	1 iSD	1 (iMN, iMNs, iMNx or iMX, iMX+OF or iMSU)	

Accessories and auxiliaries iID40

Connection accessories
See module CA907001

7	Screw-on connection for ring terminal		**27053**
8	Comb busbar	**See module**	**CA907026**
13	Multi-cable terminal	**See module**	**CA907001**
14	Al terminal		**27060**

Mounting accessories
See module CA907001

9	Padlocking device		**A9A26970**
19	Padlocking device	(left)	**A9A26380**
10	Clip-on terminal markers	**See module**	**CA907001**

Security accessories
See module CA907001

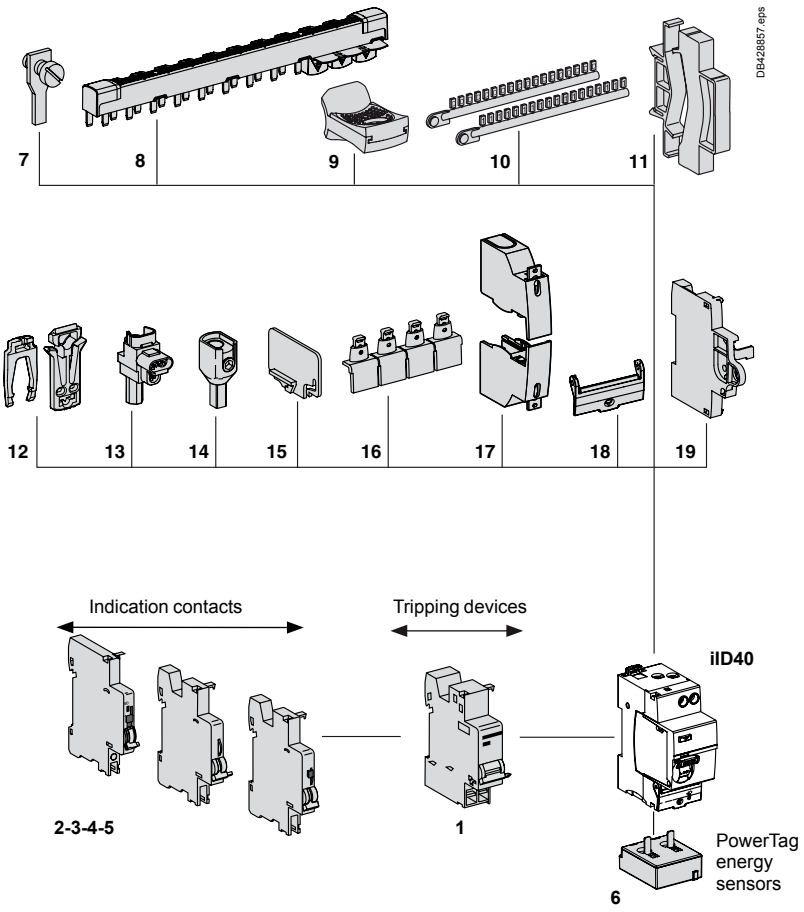
11	9 mm spacer		**A9A27062**
15	Interpole barrier	**See module**	**CA907001**
16	Screw shield	**See module**	**CA907001**
17	Terminal shield	**See module**	**CA907001**

Spare parts
See module CA907001

12	Locking clip		**A9A27052**
18	Flap	**See module**	**CA907001**

Electrical auxiliaries
See module CA907002

Signalisation			
2	iSD fault indicating contact		**A9A26927**
3	iOF open/close auxiliary contact		**A9A26924**
4	iOF/SD+OF auxiliary contact (OF+SD or OF+OF)	**See module**	**CA907002**
5	iOF+SD24 auxiliary contact	**See module**	**CA907002**
Déclencheurs			
1	iMN undervoltage release or iMNs undervoltage release delayed or iMNx undervoltage release with external feeding or shunt release iMX, iMX+OF overvoltage release iMSU	**See module**	**CA907002**
PowerTag energy sensors			
6	Energy sensors PowerTag A9 P63	**See module**	**CA907029**



Note **Tripping devices must be installed first.**
If two tripping devices: the iMN must be installed first
Indication auxiliaries: respect specified position for SD functions.

Assembly rule
The mounting order and the number for the various auxiliaries must be complied with.
The tripping auxiliaries iMN, iMX, iMSU...) must be mounted first (1) as close as possible to the main device.
Then at the left, the indicating auxiliaries (iOF, iSD…) must be mounted (2) then (3), complying with the following association table.

Indicating auxiliaries (3)	+(2)	Tripping auxiliaries +(1)	Device
1 (iOF/SD+OF or iOF+SD24 or iSD)	1 iOF/SD+OF	1 (iMN, iMNs, iMNx or iMX, iMX+OF or iMSU)	iID40
1 iOF	1 (iSD or iOF or iOF/SD+OF)	2 (iMN, iMNs, iMNx or iMX, iMX+OF or iMSU)	
–	1 iOF+SD24	2 (iMN, iMNs, iMNx or iMX, iMX+OF or iMSU)	
–	–	3 iMSU	
1 iSD	1 iSD	1 (iMN, iMNs, iMNx or iMX, iMX+OF or iMSU)	

Accessorisation / Auxiliarisation iC60, iID, Vigi iC60, iSW-NA

Connection accessories

See module CA907001

9	Splitter blocks	Linergy FM	**See module**	**LIN022**
		Linergy DX	**See module**	**LIN003**
10	50 mm² Al terminal			**27060**
11	Screw-on connection for ring terminal			**27053**
12	Multi-cables terminal		4 parts	**19091**
			3 parts	**19096**
13	Comb busbar		**See modules**	**CA907026, CA907027**

Mounting accessories

See module CA907001

14	Sealable terminal shields for top and bottom connection		1P (set of 2)	**A9A26975**
			2P (set of 2)	**A9A26976**
			3P	**1P + 2P**
			4P	**2P + 2P**
15	Interpole barrier		(set of 10)	**A9A27001**
16	Screw shields		4P (set of 20)	**A9A26981**
16"	Screw shields	Vigi iC60	(set of 12)	**A9A26982**
17	Clip-on terminal markers		**See module**	**CA907001**
18	9 mm spacer			**A9A27062**
19	Padlocking device		(set of 10)	**A9A26970**
20	Plug-in base			**A9A27003**
21	**Rotary handle**			
	Black handle			**A9A27005**
	Red handle			**A9A27006**
	No handle			**A9A27008**

Electrical auxiliaries

See module CA907002

Indication

4	iOF/SD+OF auxiliary contact (OF+SD or OF+OF combination switch)		**A9A26929**
5	iSD fault indicating contact		**A9A26927**
6	iOF open/close auxiliary contact		**A9A26924**
7	iOF+SD24 auxiliary contact	**See module**	**CA907002**

Control

8	iMDU voltage matching auxiliary		**A9C18195**

Tripping devices

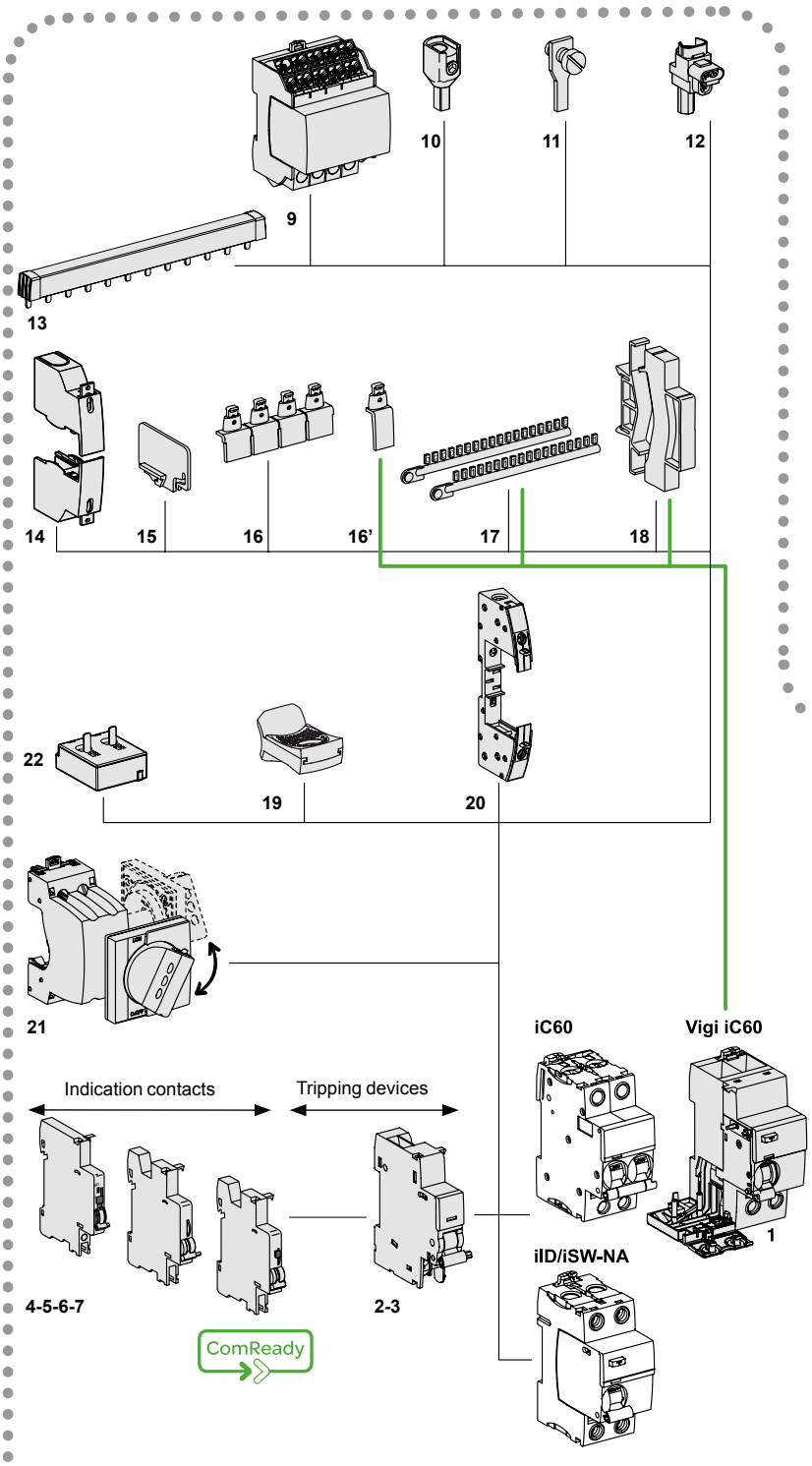
2	iMN undervoltage release or iMNs undervoltage release delayed or iMNx undervoltage release with external feeding	**See module**	**CA907002**
3	Shunt release iMX, iMX+OF overvoltage release iMSU	**See module**	**CA907002**

PowerTag energy sensors

22	Energy sensors PowerTag A9 M63, F63	**See module**	**CA907029**

Vigi iC60

1	Vigi iC60 add-on residual current device	**See module**	**CA902005**
	Double terminals Vigi iC60 add-on residual current device	**See module**	**CA902019**



Tripping devices must be installed first.
If two tripping devices are used: the iMN must be installed first
Indication auxiliaries: respect specified position for SD functions.
iSW-NA: when installing a tripping device (iMN, iMX, iMSU...), an iSD auxiliary contact must be associated, which indicates that the iSW-NA has been tripped open.

Accessorisation / Auxiliarisation iC60, iID, Vigi iC60, iSW-NA (cont.)

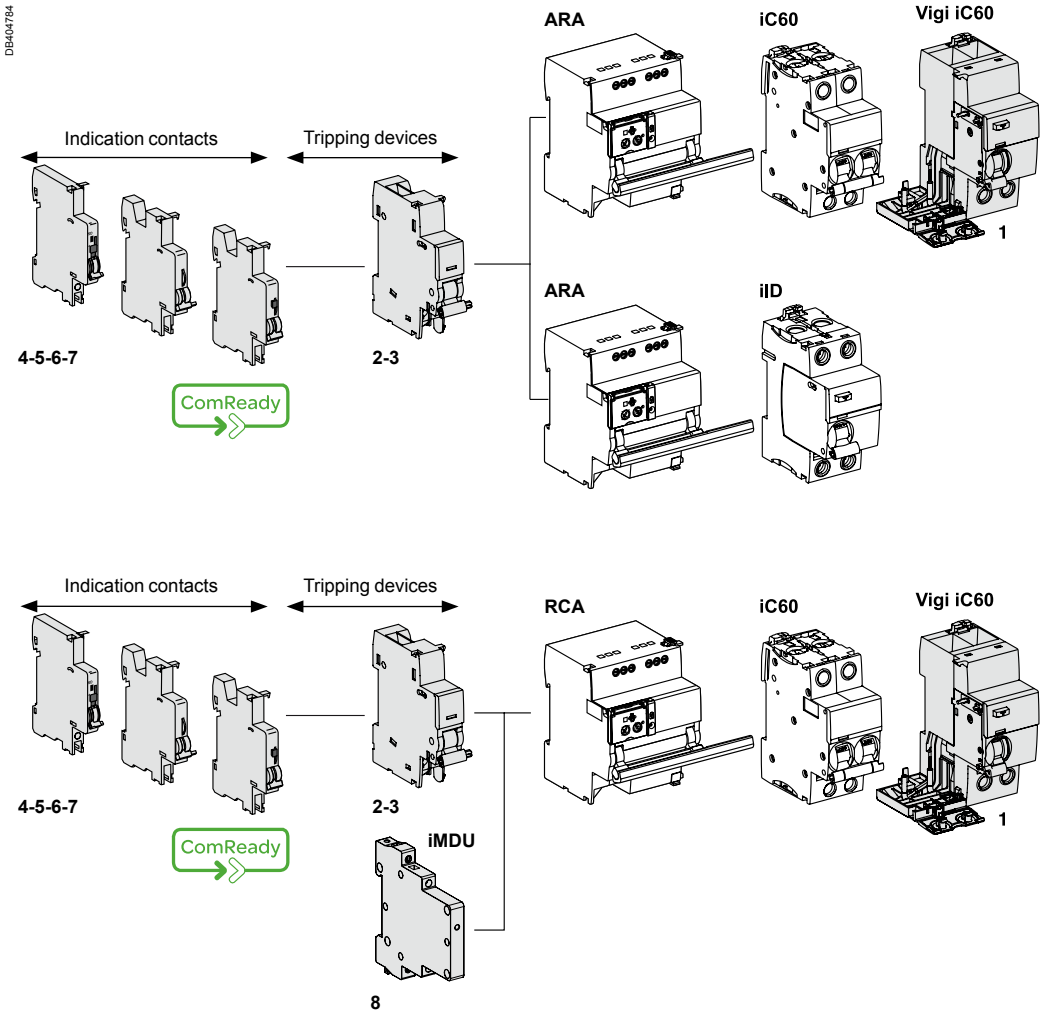
Assembly rule

The mounting order and the number for the various auxiliaries must be complied with.

The tripping auxiliaries iMN, iMX, iMSU...) should be mounted first 1 as close as possible to the main device.

Then at the left, the indicating auxiliaries (iOF, iSD) should be mounted 2 then 3 complying with the following association table.

Indicating auxiliaries		Tripping auxiliaries	Remote control	Device	Vigi iC60
3	+2	+1			
1 (iOF/SD+OF or iOF+SD24 or iSD)	1 iOF/SD+OF	1 (iMN, iMNs, iMNx or iMX, iMX+OF or iMSU)	–	iC60, iID, iSW-NA	Vigi iC60
1 iOF	1 (iSD or iOF or iOF/SD+OF)	2 (iMN, iMNs, iMNx or iMX, iMX+OF or iMSU)			
–	1 iOF+SD24	2 (iMN, iMNs, iMNx or iMX, iMX+OF or iMSU)			
–	–	3 iMSU			
1 iSD	1 iSD	1 (iMN, iMNs, iMNx or iMX, iMX+OF or iMSU)			
–	1 (iSD or iOF or iOF/SD+OF or iOF+SD24)	1 (iMN, iMNs, iMNx or iMX, iMX+OF or iMSU)	ARA, RCA	iC60	Vigi iC60
1 iOF	1 (iSD or iOF or iOF/SD+OF)	–			
–	1 (iSD or iOF or iOF/SD+OF or iOF+SD24)	1 (iMN, iMNs, iMNx or iMX, iMX+OF or iMSU) maxi	ARA	iID	–
1 iOF	1 (iSD or iOF or iOF/SD+OF)	–			



Accessorisation / Auxiliarisation Reflex iC60

Connection accessories
See module CA907001

3	Splitter blocks	Linergy FM	**See module**	**LIN022**
		Linergy DX	**See module**	**LIN003**
4	50 mm² Al terminal			**27060**
5	Screw-on connection for ring terminal			**27053**
6	Multi-cables terminal		4 parts	**19091**
			3 parts	**19096**
7	Comb busbar		**See modules**	**CA907026, CA907027**

Mounting accessories
See module CA907001

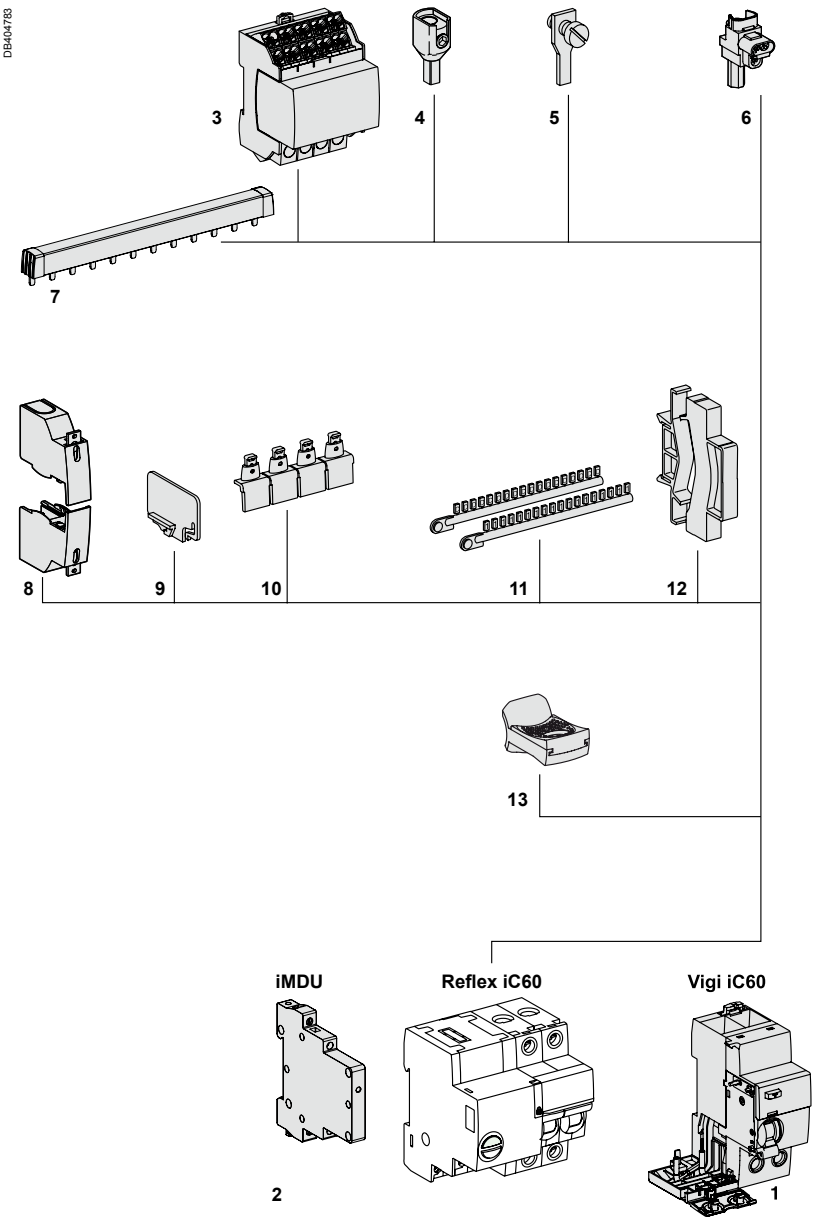
8	Sealable terminal shields for top and bottom connection	1P (set of 2)	**A9A26975**
		2P (set of 2)	**A9A26976**
		3P	**1P + 2P**
		4P	**2P + 2P**
9	Interpole barrier	(set of 10)	**A9A27001**
10	Screw shields	4P (set of 20)	**A9A26981**
11	Clip-on terminal markers	**See module**	**CA907001**
12	9 mm spacer		**A9A27062**
13	Padlocking device	(set of 10)	**A9A26970**

Electrical auxiliary
See module CA907002

Control		
2	iMDU voltage matching auxiliary	**A9C18195**

Vigi iC60
See module CA907005

1	Vigi iC60 add-on residual current device	**See module**	**CA902005**



Accessorisation / Auxiliarisation iSW

Connection accessories

See module CA907001

2	Splitter blocks	Linergy FM	**See module**	**LIN022**
		Linergy DX	**See module**	**LIN003**
3	50 mm² Al terminal			**27060**
4	Screw-on connection for ring terminal			**27053**
5	Multi-cables terminal		4 parts	**19091**
			3 parts	**19096**
6	Comb busbar		**See modules**	**CA907026, CA907027**

Mounting accessories

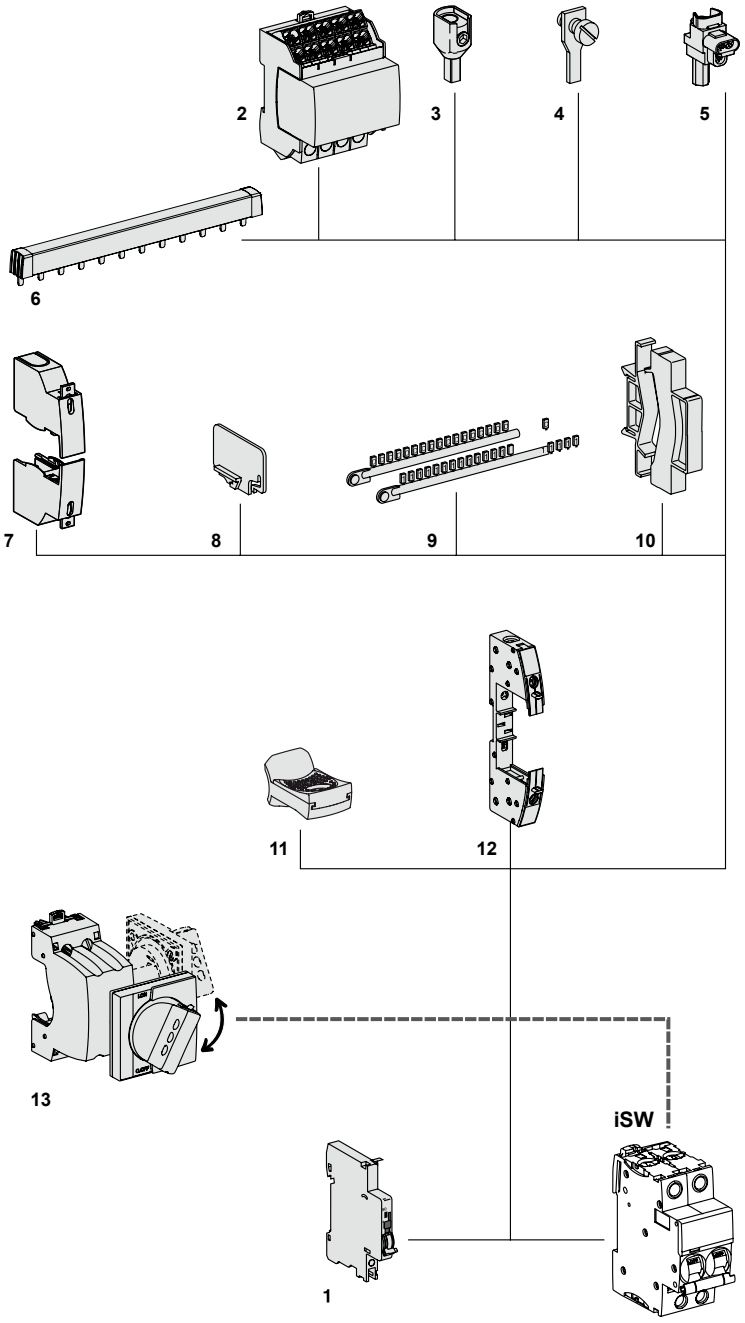
See module CA907001

7	Sealable terminal shields for top and bottom connection	1P (set of 2)	**A9A26975**
		2P (set of 2)	**A9A26976**
		3P	**1P + 2P**
		4P	**2P + 2P**
8	Interpole barrier	(set of 10)	**A9A27001**
9	Clip-on terminal markers	**See module**	**CA907001**
10	9 mm spacer		**A9A27062**
11	Padlocking device	(set of 10)	**A9A26970**
12	Plug-in base		**A9A27003**
13	Rotary handle		
	Black handle		**A9A27005**
	Red handle		**A9A27006**
	No handle		**A9A27008**

Electrical auxiliaries

See module CA907002

Indication		
1	iOF open/close auxiliary contact	**A9A26924**



Accessories and Auxiliaries for C120, Vigi C120 devices

Connection accessories

See module CA907012

7	Multi-cable terminal	4 parts	**19091**
		3 parts	**19096**
8	Screw-on connection for ring terminal	8 parts	**27053**
9	Terminal for rear connector		**18528**
10	50 mm² Al terminal		**27060**
11	Comb busbar	**See module**	**LIN001**

Mounting accessories

See module CA907012

12	Sealable terminal shields for top and bottom connection	1P (set of 2)	**18526**
13	Interpole barrier	(set of 10)	**27001**
14	Screw shields	4P (set of 2)	**18527**
15	Clip-on terminal markers	**See module**	**CA907012**
16	9 mm spacer		**A9N27062**
17	Padlocking device		**27145**
18	Plug-in base (1)		**26997**
19	**Rotary handle**		
	Removable extended handle		**27047**
	Fixed handle		**27048**
	Operating sub-assembly (2)		**27046**

(1) For 1P, centreline between two rows: 200 mm
(2) A complete rotary handle consists of a circuit-breaker operating sub-assembly, cat. no. **27046**, a handle cat. no. **27047** or a handle cat. no. **27048**.

Electrical auxiliaries

See module CA907008

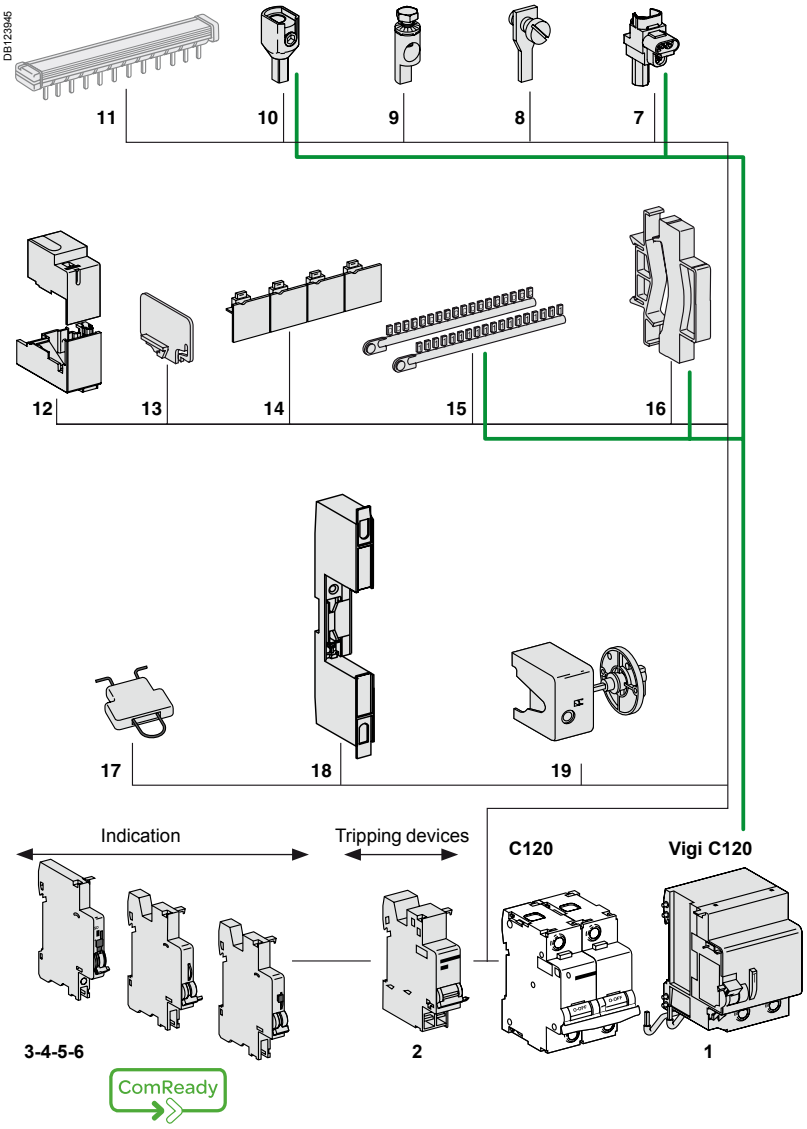
Indication		
3	SD fault indicating contact	**A9N26927**
4	OF+SD24 auxiliary contact	**A9N26899**
5	OF open/close auxiliary contact	**A9N26924**
6	OF+SD/OF auxiliary contact (OF+SD or OF+OF combination switch)	**A9N26929**

Tripping			
2	MN, MNx, MNS undervoltage release, MSU overvoltage release or MX, MX + OF shunt release	**See module**	**CA907008**

Vigi C120

See module CA902016

1	Vigi C120 add-on residual current device	**See module**	**CA902016**



Tripping devices must be installed first.
If two tripping devices are used: the MN must be installed first
Indication auxiliaries: respect specified position for SD functions.

Assembly rule

The mounting order and the number for the various auxiliaries must be complied with.
The tripping auxiliaries MN, MX, MSU...) should be mounted first 1 as close as possible to the main device.
Then at the left, the indicating auxiliaries (OF, SD) should be mounted 2 then 3 complying with the following association table.

Indicating auxiliaries		Tripping auxiliaries	Device	Vigi C120
3	+2	+1		
1 (OF+SD/OF or OF+SD24)	1 OF+SD/OF	1 (MN, MNx, MNS or MX, MX+OF or MSU)	C120	Vigi C120
1 OF	1 (OF+SD/OF or SD or OF)	2 (MN, MNx, MNS or MX, MX+OF or MSU)		
–	1 OF+SD24	2 (MN, MNx, MNS or MX, MX+OF or MSU)		
–	–	3 MSU		

Accessories and Auxiliaries for C120NA-DC devices

Connection accessories

See module CA907012

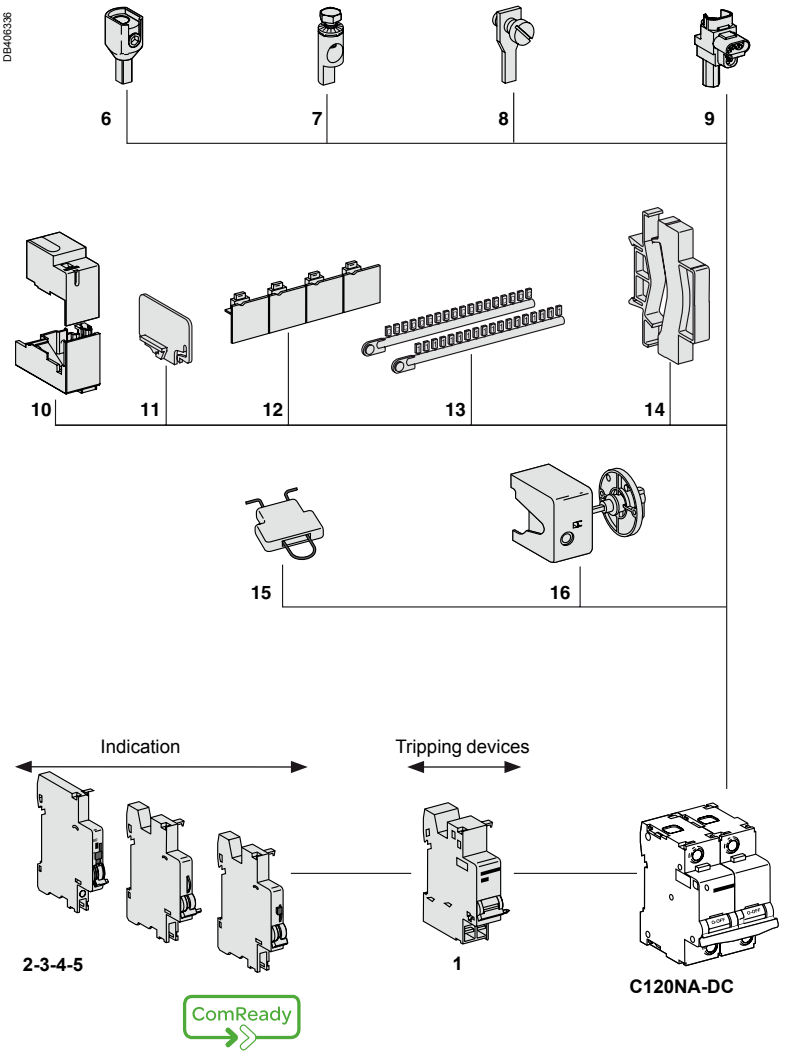
6	50 mm² Al terminal		**27060**
7	Terminal for rear connector		**18528**
8	Screw-on connection for ring terminal	8 parts	**27053**
9	Multi-cable terminal	4 parts	**19091**
		3 parts	**19096**

Mounting accessories

See module CA907012

10	Sealable terminal shields for top and bottom connection	1P (set of 2)	**18526**
11	Interpole barrier	(set of 10)	**27001**
12	Screw shields	4P (set of 2)	**18527**
13	Clip-on terminal markers	**See module**	**CA907012**
14	9 mm spacer		**A9N27062**
15	Padlocking device		**27145**
16	**Rotary handle**		
	Removable extended handle		**27047**
	Fixed handle		**27048**
	Operating sub-assembly (1)		**27046**

(1) A complete rotary handle consists of a circuit-breaker operating sub-assembly, cat. no. **27046**, a handle cat. no. **27047** or a handle cat. no. **27048**.



Electrical auxiliaries

See module CA907008

Indication		
2	SD fault indicating contact	**A9N26927**
3	OF+SD24 auxiliary contact	**A9N26899**
4	OF open/close auxiliary contact	**A9N26924**
5	OF+SD/OF auxiliary contact (OF+SD or OF+OF combination switch)	**A9N26929**

Tripping			
1	MN, MNx, MNⓈ undervoltage release or MX, MX + OF shunt release	**See module**	**CA907008**

Tripping devices must be installed first.
If two tripping devices are used: the MN must be installed first
Indication auxiliaries: respect specified position for SD functions.

Assembly rule

The mounting order and the number for the various auxiliaries must be complied with.

The tripping auxiliaries MN, MX...) should be mounted first ❶ as close as possible to the main device.

Then at the left, the indicating auxiliaries (OF, SD) should be mounted ❷ then ❸ complying with the following association table.

Indicating auxiliaries ❸	Indicating auxiliaries +❷	Indicating auxiliaries +❶	Device
1 (OF+SD/OF or OF+SD24)	1 OF+SD/OF	1 (MN, MNx, MNⓈ or MX, MX+OF)	C120NA-DC
1 OF	1 (OF+SD/OF or SD or OF)	2 (MN, MNx, MNⓈ or MX, MX+OF)	
–	1 OF+SD24	2 (MN, MNx, MNⓈ or MX, MX+OF)	

Accessories and Auxiliaries for C60 devices

Connection accessories

See module CA907012

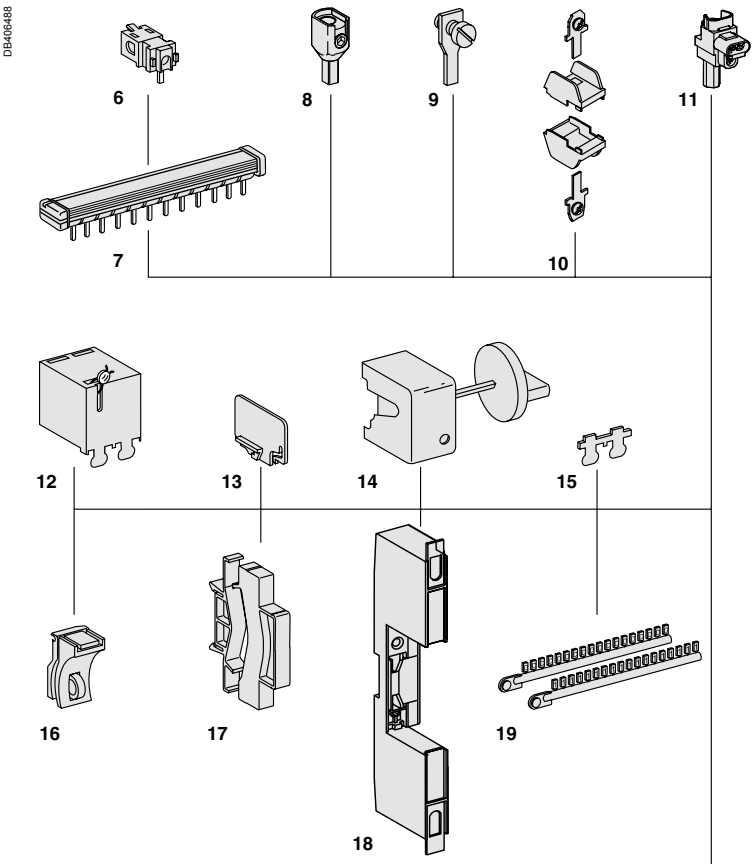
6	Insulated connector	**See module**	**LIN001**
7	Comb busbar	**See module**	**LIN001**
8	50 mm² Al terminal		**27060**
9	Ring tongue terminal screw connection		**27053**
10	Ring tongue terminal connections kit Ø 5 mm, (upstream/downstream)		**17400**
11	Insulated distribution terminal	4 parts	**19091**
		3 parts	**19096**

Mounting accessories

See module CA907012

12	Sealable terminal shield	**See module**	**CA907012**
13	Inter-pole barrier		**27001**
14	**Rotary handle**		
	Switching sub-assembly		**27046**
	Disconnectable handle		**27047**
	Fixed handle		**27048**
15	Screw shield	**See module**	**26981**
16	Padlocking accessory (to be locked in the "open" position)		**26970**
17	Spacer		**A9N27062**
18	Plug-in base		**26996**
19	Marker strip	**See module**	**CA907012**

(1) A complete rotary handle consists of a circuit-breaker operating sub-assembly, cat. no. **27046**, a handle cat. no. **27047** or a handle cat. no. **27048**.

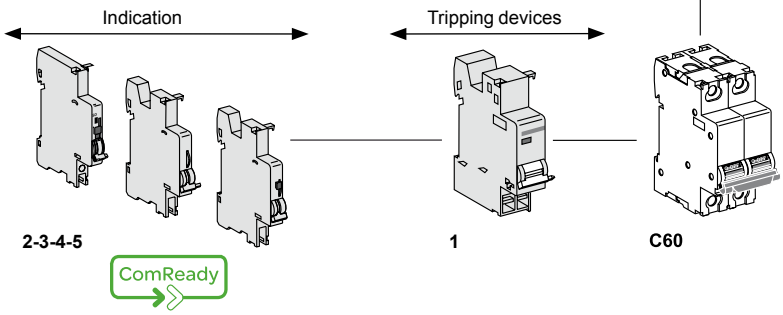


Electrical auxiliaries

See module CA907008

Indication		
2	SD fault indicating contact	**A9N26927**
3	OF+SD24 auxiliary contact	**A9N26899**
4	OF open/close auxiliary contact	**A9N26924**
5	OF+SD/OF auxiliary contact (OF+SD or OF+OF combination switch)	**A9N26929**

Tripping			
1	MN, MNx, MNS undervoltage release, MSU overvoltage release or MX, MX + OF shunt release	**See module**	**CA907008**



Tripping devices must be installed first.
If two tripping devices are used: the MN must be installed first
Indication auxiliaries: respect specified position for SD functions.

Assembly rule

The mounting order and the number for the various auxiliaries must be complied with.

The tripping auxiliaries MN, MX...) should be mounted first (1) as close as possible to the main device.

Then at the left, the indicating auxiliaries (OF, SD) should be mounted (2) then (3) complying with the following association table.

Indicating auxiliaries (3)	+(2)	Indicating auxiliaries +(1)	Device
1 (OF+SD/OF or OF+SD24)	1 OF+SD/OF	1 (MN, MNx, MNS or MX, MX+OF or MSU)	C60
1 OF	1 (OF+SD/OF or SD or OF)	2 (MN, MNx, MNS or MX, MX+OF or MSU)	
–	1 OF+SD24	2 (MN, MNx, MNS or MX, MX+OF or MSU)	
–	–	3 MSU	

Accessories and Auxiliaries for ID devices

Connection accessories

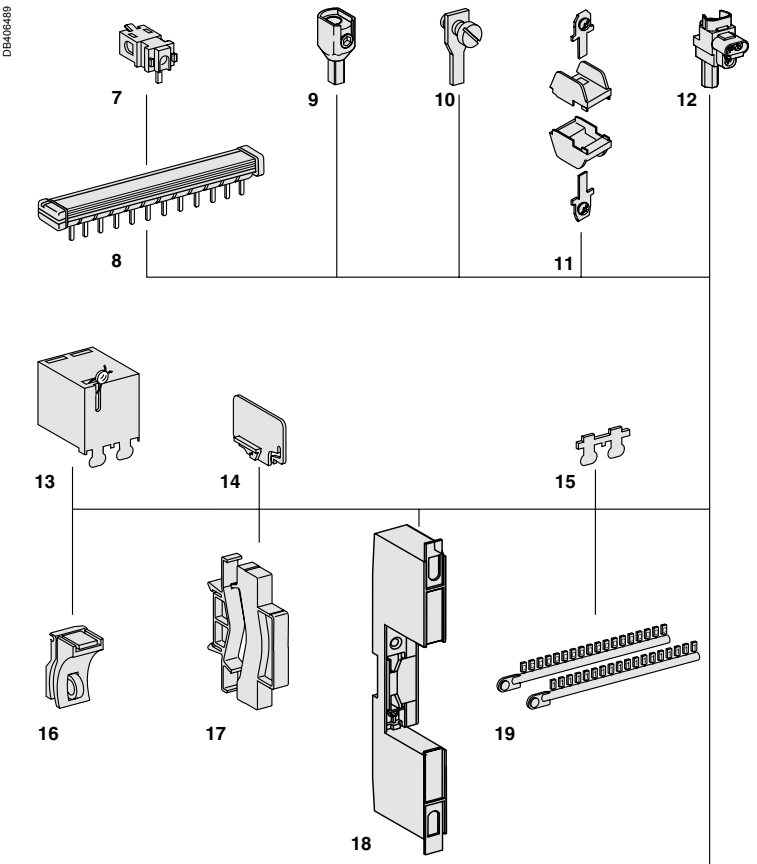
See module CA907012

7	Insulated connector	**See module**	**LIN001**
8	Comb busbar	**See module**	**LIN001**
9	50 mm² Al terminal		**27060**
10	Ring tongue terminal screw connection		**27053**
11	Ring tongue terminal connections kit Ø 5 mm, (upstream/downstream)		**17400**
12	Insulated distribution terminal	4 parts	**19091**
		3 parts	**19096**

Mounting accessories

See module CA907012

13	Sealable terminal shield	**See module**	**CA907012**
14	Inter-pole barrier		**27001**
15	Screw shield		**26981**
16	Padlocking accessory (to be locked in the "open" position)		**26970**
17	Spacer		**A9N27062**
18	Plug-in base		**26996**
19	Marker strip	**See module**	**CA907012**

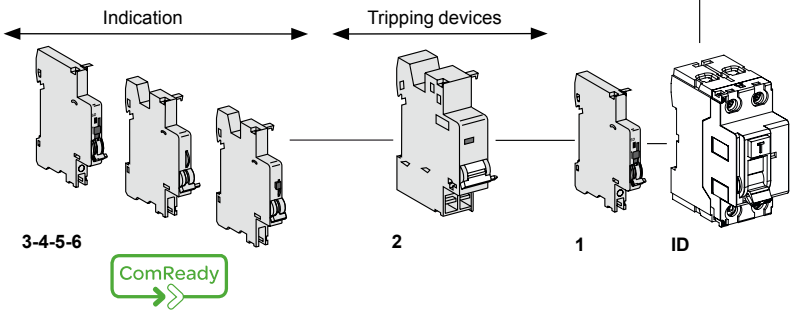


Electrical auxiliaries

See module CA907008

Indication		
1	OF.S auxiliary contact	**A9N26923**
3	SD fault indicating contact	**A9N26927**
4	OF+SD24 auxiliary contact	**A9N26899**
5	OF open/close auxiliary contact	**A9N26924**
6	OF+SD/OF auxiliary contact (OF+SD or OF+OF combination switch)	**A9N26929**

Tripping			
2	MN, MNx, MNS undervoltage release, MSU overvoltage release or MX, MX + OF shunt release	**See module**	**CA907008**



Tripping devices must be installed first.
If two tripping devices are used: the MN must be installed first
Indication auxiliaries: respect specified position for SD functions.

Assembly rule

The mounting order and the number for the various auxiliaries must be complied with.
The tripping auxiliaries MN, MX...) should be mounted first (1) as close as possible to the main device.
Then at the left, the indicating auxiliaries (OF, SD) should be mounted (2) then (3) complying with the following association table.

Indicating auxiliaries (3)	+(2)	Indicating auxiliaries +(1)	Device
–	1 (OF+SD/OF or OF or OF+SD24)	2 (MN, MNx, MNS or MX, MX+OF or MSU)	OF.S + ID
1 OF	1 OF	1 (MN, MNx, MNS or MX, MX+OF or MSU	

Accessories and Auxiliaries for C60H-DC devices

Connection accessories

See module CA907012

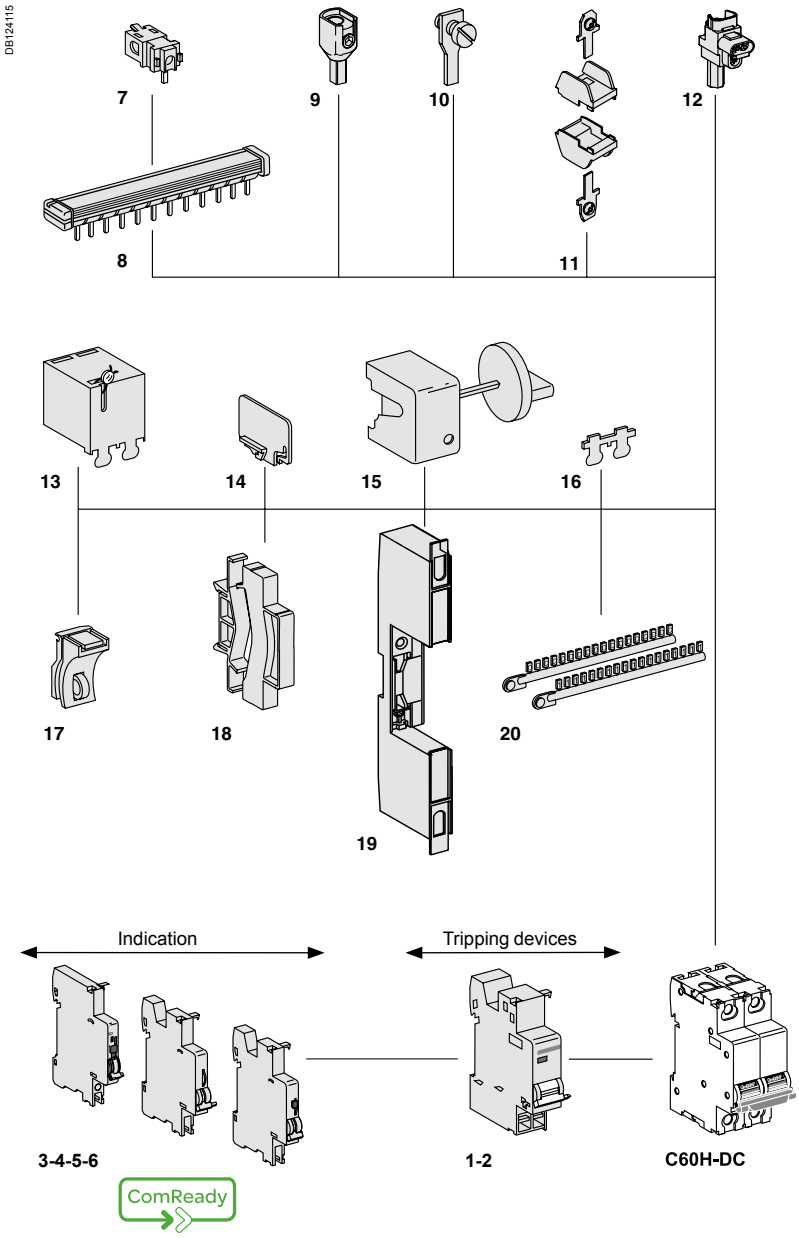
7	Insulated connector	**See module**	**LIN001**
8	Comb busbar	**See module**	**LIN001**
9	50 mm² Al terminal		**27060**
10	Ring tongue terminal screw connection		**27053**
11	Ring tongue terminal connections kit Ø 5 mm, (upstream/downstream)		**17400**
12	Insulated distribution terminal	4 parts	**19091**
		3 parts	**19096**

Mounting accessories

See module CA907012

13	Sealable terminal shield	**See module**	**CA907012**
14	Inter-pole barrier		**27001**
15	**Rotary handle**		
	Switching sub-assembly		**27046**
	Disconnectable handle		**27047**
	Fixed handle		**27048**
16	Screw shield	**See module**	**CA907012**
17	Padlocking accessory (to be locked in the "open" position)		**26970**
18	Spacer		**A9N27062**
19	Plug-in base		**26996**
20	Marker strip	**See module**	**CA907012**

(1) A complete rotary handle consists of a circuit-breaker operating sub-assembly, cat. no. **27046**, a handle cat. no. **27047** or a handle cat. no. **27048**.



Electrical auxiliaries

See module CA907008

Indication		
3	SD fault indicating switch	**A9N26927**
4	OF+SD24 auxiliary contact	**A9N26899**
5	OF open/closed contact	**A9N26924**
6	OF+SD/OF auxiliary contact (OF+SD or OF+OF combination switch)	**A9N26929**

Tripping			
1	MN, MNx, MNS undervoltage release	**See module**	**CA907008**
2	MX, MX + OF shunt release	**See module**	**CA907008**

Tripping devices must be installed first.
If two tripping devices are used: the MN must be installed first
Indication auxiliaries: respect specified position for SD functions.

Assembly rule

The mounting order and the number for the various auxiliaries must be complied with.
The tripping auxiliaries MN, MX...) should be mounted first (1) as close as possible to the main device.
Then at the left, the indicating auxiliaries (OF, SD) should be mounted (2) then (3) complying with the following association table.

Indicating auxiliaries		Indicating auxiliaries	Device
(3)	+(2)	+(1)	
1 (OF+SD/OF or OF+SD24)	1 OF+SD/OF	1 (MN, MNx, MNS or MX, MX+OF)	C60H-DC
1 OF	1 (OF+SD/OF or SD or OF)	2 (MN, MNx, MNS or MX, MX+OF)	
–	1 OF+SD24	2 (MN, MNx, MNS or MX, MX+OF)	

Accessories and Auxiliaries for iSW devices

Connection accessories

See module CA907012

1	Insulated connector	**See module**	**LIN001**
2	Comb busbar	**See module**	**LIN001**
3	50 mm² Al terminal		**27060**
4	Ring tongue terminal screw connection		**27053**
5	Ring tongue terminal connections kit Ø 5 mm, (upstream/downstream)		**17400**
6	Insulated distribution terminal	4 parts	**19091**
		3 parts	**19096**

Mounting accessories

See module CA907012

7	Sealable terminal shield	**See module**	**CA907012**
8	Inter-pole barrier		**27001**
9	**Rotary handle**		
	Switching sub-assembly		**27046**
	Disconnectable handle		**27047**
	Fixed handle		**27048**
10	Screw shield	**See module**	**CA907012**
11	Padlocking accessory (to be locked in the "open" position)		**26970**
12	Spacer		**A9N27062**
13	Plug-in base		**26996**

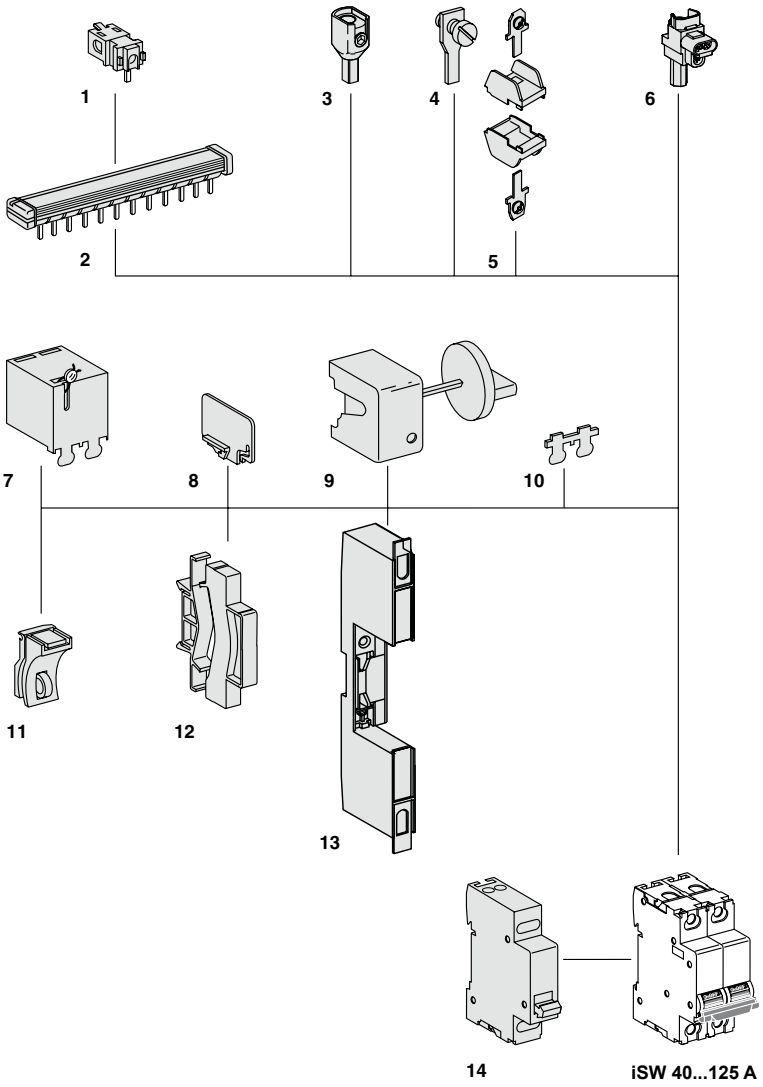
(1) A complete rotary handle consists of a circuit-breaker operating sub-assembly, cat. no. **27046**, a handle cat. no. **27047** or a handle cat. no. **27048**.

Electrical auxiliary

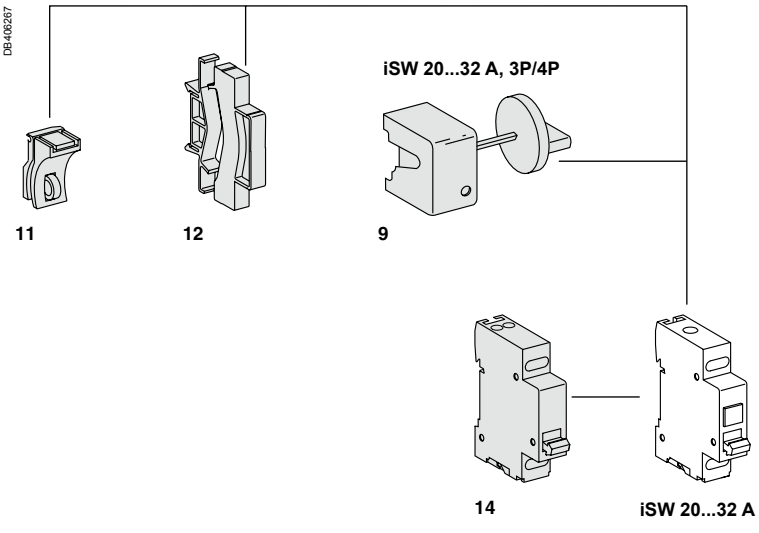
See module iSW CA904005

Indication		
14	OF iSW open/closed contact	**A9A15096**

iSW 40...125 A



iSW 20...32 A



Accessories and Auxiliaries for SW60-DC, C60NA-DC, C60PV-DC devices

Connection accessories

See module CA907012

7	50 mm² Al terminal		**27060**
8	Ring tongue terminal screw connection		**27053**
9	Insulated distribution terminal	4 parts	**19091**
		3 parts	**19096**

Mounting accessories

See module CA907012

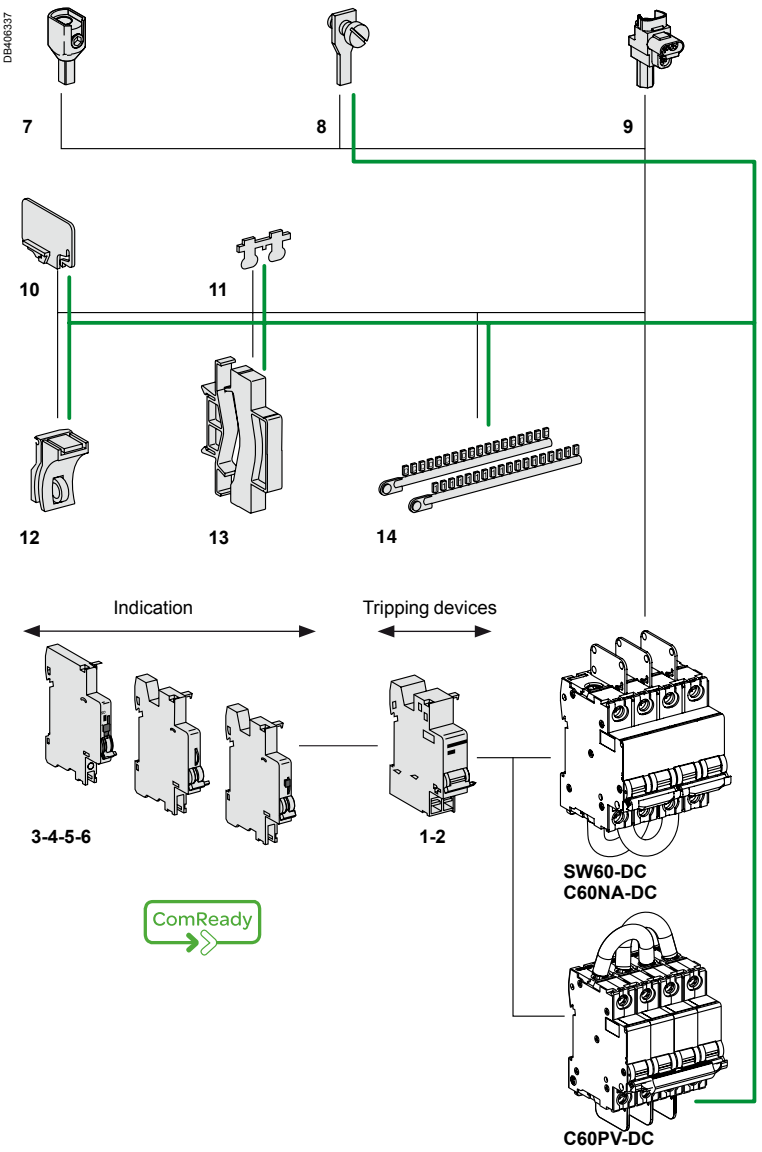
10	Inter-pole barrier		**27001**
11	Screw shield		**26981**
12	Padlocking accessory (to be locked in the "open" position)		**26970**
13	Spacer		**A9N27062**
14	Marker strip	**See module**	**CA907012**

Electrical auxiliaries

See module CA907008

Indication			
3	SD fault indicating switch		**A9N26927**
4	OF+SD24 auxiliary contact		**A9N26899**
5	OF open/closed contact		**A9N26924**
6	OF+SD/OF auxiliary contact (OF+SD or OF+OF combination switch)		**A9N26929**

Tripping			
1	MN, MNx, MNS undervoltage release	**See module**	**CA907008**
2	MX, MX + OF shunt release	**See module**	**CA907008**



Tripping devices must be installed first.
If two tripping devices are used: the MN must be installed first
Indication auxiliaries: respect specified position for SD functions.

Assembly rule

The mounting order and the number for the various auxiliaries must be complied with.
The tripping auxiliaries MN, MX...) should be mounted first 1 as close as possible to the main device.
Then at the left, the indicating auxiliaries (OF, SD) should be mounted 2 then 3 complying with the following association table.

Indicating auxiliaries		Indicating auxiliaries	Device
3	+2	+1	
1 (OF+SD/OF or OF+SD24)	1 OF+SD/OF	1 (MN, MNx, MNS or MX, MX+OF)	**SW60-DC, C60NA-DC, C60PV-DC**
1 OF	1 (OF+SD/OF or SD or OF)	2 (MN, MNx, MNS or MX, MX+OF)	
–	1 OF+SD24	2 (MN, MNx, MNS or MX, MX+OF)	

Accessories and auxiliaries for NG125 devices

Connection

6	Comb busbar		see cat. no.	**CA907026, CA907027**
7	Splitter blocks	Linergy DX 125 A	see cat. no.	**LIN003**
8	70 mm² Al terminal			**19095**
9	Multi-cable terminal		4 parts	**19091**
			3 parts	**19096**
10	Screw-on connection for ring	125 A	(pack of 4)	**19093**
11	Small ring terminal		(pack of 4)	**19094**

Mounting accessories

12	Sealable terminal shield (upstream/downstream)		1P	**19080**
			2P	**19081**
			3P	**19082**
			4P	**19083**
13	Residual current device terminal shield (upstream of circuit breaker / downstream of Vigi device)	63 A	2P	**19074**
			3P	**19075**
			3P adjustable	**19077**
			4P	**19076**
			4P adjustable	**19078**
		125 A	3P	**19077**
			4P	**19078**
14	Circuit breaker screw shield		1P (pack of 10)	**19084**
			2P	**19085**
			3P	**19086**
			4P	**19087**
15	Rotary handle			
	Extended standard	Black		**19088**
	Extended safety	Red handle, yellow		**19089**
	Direct standard	Black		**19092**
	Direct safety	Red handle, yellow background		**19097**
16	Padlocking device		(pack of 10)	**19090**
17	White toggle		(pack of 10)	**19099**

Electrical auxiliaries

Indication

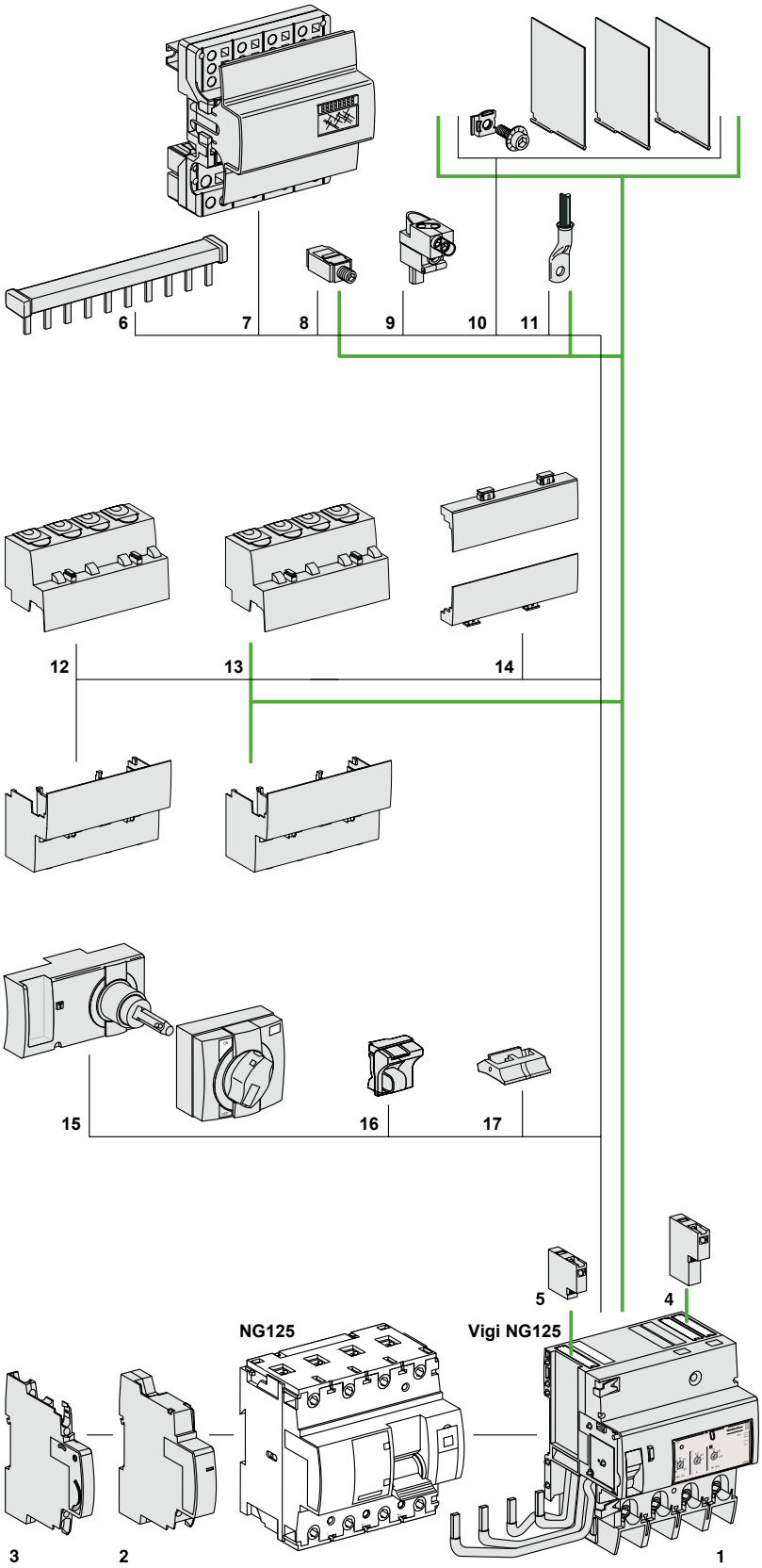
3	Fault indicating auxiliary contact OF+SD		**19072**
	Open/closed auxiliary contact OF+OF		**19071**

Tripping devices

2	Undervoltage release MN or undervoltage release with external power supply MNx	see cat. no.	**CM907005**
	Shunt release MX+OF	see cat. no.	**CM907005**

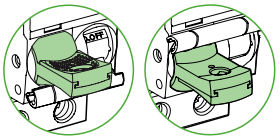
Vigi NG125

1	Vigi NG125 add-on residual current device	see cat. no.	**CM902008**
4	MXV	see cat. no.	**CM907005**
5	SDV	see cat. no.	**CM907005**



Accessories for iC60, iID, iC40, iCV40, iID40, iSW-NA, Reflex iC60, RCA, iSW

Mounting

Accessories	Rotary handle				Plug-in base	Padlocking device
						Front
	PB104609-35 		PB106297_10 		PB104608-35 	PB104492-15  DB123599 
Function						
	Front or side-mounted control ■ Degree of protection: IP55 rotary handle ■ Installation: □ the control mechanism is mounted on the device □ the rotary handle is fixed to the front or side of the enclosure ■ Front-mounted (on door or faceplate) ■ Prevents the door from opening when the device is in the ON position (can be deactivated) ■ Can be padlocked when the device is in the "open" position (can be padlocked with the device in the "closed" position subject to adaptation) ■ Can be locked by padlock of (dia. 5 to 8 mm), not supplied with the device ■ Pushbutton: iID test available in the front face of the rotary handle			■ The Laser Square tool brings the accurency to align the breaker and the rotary handle	**Allows a breaker to be removed or replaced quickly, without handling the connections** ■ Degree of protection: IP20 ■ Consists of: □ a base to be fastened on a rail (or panel) □ 2 "blades" to be fastened in the device's terminals ■ Connection: tunnel terminals for cable up to 35 mm^2 rigid, 25 mm^2 flexible, ■ Installation: □ in universal enclosure □ on horizontal rail ■ Height: 178 mm ■ Not compatible with Vigi iC60 and auxiliaries ■ Can be locked by padlock of (dia. 6 mm), not supplied with the device	**Used to padlock a breaker in open or closed position** ■ Padlock diameter: 3 to 6 mm ■ Sealable (max. diameter: 1.2 mm) ■ Locking in ON position does not prevent tripping of the breaker in the event of faults ■ Suitable for IEC/EN 60947-2 compliant disconnection
Catalogue numbers	**A9A27005**	**A9A27006**	**A9A27008**	**GVAPL01**	**A9A27003** **(1 per pole)**	**A9A26970**
	Operating sub-assembly					
	+	**+**				
	Black handle	Red handle	No handle			
Set of	**1**	**1**	**1**	**1**	**1**	**10**
Suitability						
iC60	■ 2P, 3P, 4P				■	■
iSW	■ 2P, 3P, 4P				■	■
iC60 + Vigi iC60	■ 2P, 3P, 4P				–	■
iID	■				■ ≤ 63 A	■
iC40, iC40 XA	–				–	■
iCV40, iCV40 XA	–				–	■
iDPN Vigi	–				–	■
iID40	–				–	■
Reflex iC60 or RCA+iC60 or ARA+iC60	–				–	■
ARA+iID	–				–	■
iSW-NA	■				■ ≤ 63 A	■

Accessories for iC60, iID, iC40, iCV40, iID40, iSW-NA, Reflex iC60, RCA, iSW (cont.)

				Spare part		
	Side		Wall mounting	Locking clips	Flap	
					2P	4P
	A9A26380-40 / A9A26381-40		PB104492-15	A9A27052-25	A9A27056-15	A9A27057-15
						
	Can be used to padlock a breaker in open position ■ Attached directly to the circuit breaker, it cannot be lost ■ Padlock diameter: 6 mm		**Can be used for wall mounted installation of any 18 mm DIN rail devices** ■ Degree of protection: IP40 ■ Sealable: (max. diameter: 1.5 mm)	**Top and bottom locking clips for monoconnect product**	**Indication flap of connection direction**	
	A9A26380 Left-hand mounting	**A9A26381** Right-hand mounting	**15359**	**A9A27052**	**A9A27056**	**A9A27057**
	1	**1**	**1**	**10**	**1**	**1**
	■	■	■ All products up to 18 mm ■ Except iCT	■	–	–
	–	–		–	–	–
	–	–		–	–	–
	■	–		–	–	–
	■	■ (1)		■	–	–
	■	–		■	–	–
	–	–		–	–	–
	■	–		■	■	■
	–	–		–	–	–
	–	–		–	–	–
	–	–		–	–	–

(1) iC40 XA compatible only with bottom screw connections.

Accessories for iC60, iID, iC40, iCV40, iID40, iDPN Vigi, iSW-NA, Reflex iC60, RCA, ARA, iSW (cont.)

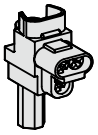
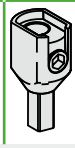
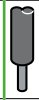
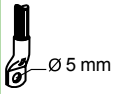
Security

Accessories	Screw shield		Terminal shield		Inter-pole barrier	Spacer
	PB104489-14 	PB104488-14 	PB104502-35 	PB104503-35 	PB104484-30 	PB104483-35 
Function						
	Prevents any contact with the connecting screws ■ Upgrades degree of protection to IP20D ■ Sealable, max. diameter 1.2 mm		**Prevents any contact with the terminals** ■ Upgrades degree of protection to IP20D ■ Sealable, max. diameter 1.2 mm ■ Set of two, for power supply and output terminals ■ For 3 poles: **A9A26975** + **A9A26976** ■ For 4 poles: 2 X **A9A26976**		**Enhances insulation between connections: cables, terminals, lugs, etc**	■ Used to: □ complete rows □ separate devices. ■ Width: 1 x 9 mm module ■ Allows cable routing from one row to another, (above and below), up to 6 mm²
Catalogue numbers	**A9A26982**	**A9A26981**	**A9A26975**	**A9A26976**	**A9A27001**	**A9A27062**
Set of	**12 x 1 pole**	**20 x 4 poles (splittable)**	**2 x 1 pole**	**2 x 2 poles**	**10**	**5**
Suitability						
iC60	–	■	■	■	■	■
iSW	–	–	■	■	■	■
Vigi iC60	■	–	–	–	–	■
Vigi iC40, Vigi iCG40	–	–	–	–	–	■
iID	–	■	–	■	■	■
iC40, iC40 XA	–	–	–	–	–	■
iCV40, iCV40 XA	–	–	–	–	–	■
iDPN Vigi	–	–	–	–	–	■
iID40	–	■ (2)	–	■ (2)	■ only on power supply terminals (bottom)	■
Reflex iC60 or RCA+iC60 or ARA+iC60	–	■	■	■	■	■
ARA+iID	–	■	–	■	■	■
iSW-NA	–	■	–	■	■	■

(2) compatible only with power supply terminals (bottom), having removed the indication flap of connection direction.

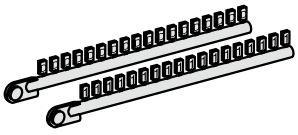
Accessories for iC60, iID, iC40, iCV40, iID40, iSW-NA, Reflex iC60, RCA, iSW (cont.)

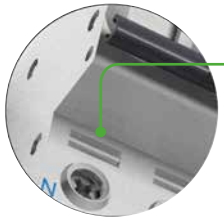
Connection

Accessories	Multi-cable terminal		50 mm² Al terminal	Screw-on connection for ring terminal
	DB118780 		DB118781 	DB118783 
Function				
	For 3 copper cables: ■ Rigid up to 16 mm² ■ Flexible up to 10 mm²		**For aluminium cables from 16 to 50 mm²**	**For lug tipped cables, front or rear mounting**
	DB118787 		DB122935 	DB118789 
Catalogue numbers	**19091**	**19096**	**27060**	**27053**
Set of	**4**	**3**	**1**	**8**
Suitability				
iC60 ≤ 25 A Reflex iC60 ≤ 25 A	–	–	–	■
iC60 >25 A Reflex iC60 40 A, iSW	■	■	■	■
Vigi iC60	–	–	–	–
iID	■	■	■	■
iC40, iC40 XA	–	–	–	■ (3)
iCV40, iCV40 XA	–	–	–	■ (4)
iDPN Vigi	–	–	–	■
iID40	■ only on power supply terminals (bottom)	■ only on power supply terminals (bottom)	■ only on power supply terminals (bottom)	■
iSW-NA	■	■	■	■
Tightening torque	2 N.m		10 N.m	2 N.m
Lenght stripping	11 mm		13 mm	–
Tools to use	Dia. 5 mm or PZ2		Hc 1/5" or 5 mm	Dia. 5mm

(3) only with screw connections.
(4) only with screw connections on MCB side and on Vigi side for iCV40 1P+N.

Marking

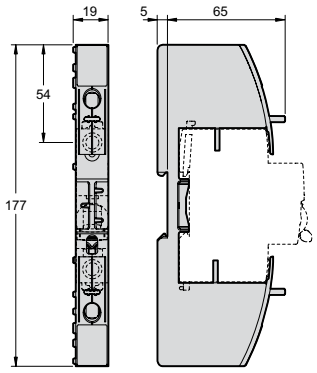
Accessories	Clip-on terminal markers					
	DB118785 					
	Used for connection identificatio					
Catalogue numbers	0 : **AB1-R0** 1 : **AB1-R1** 2 : **AB1-R2** 3 : **AB1-R3** 4 : **AB1-R4**	5 : **AB1-R5** 6 : **AB1-R6** 7 : **AB1-R7** 8 : **AB1-R8** 9 : **AB1-R9**	A : **AB1-GA** B : **AB1-GB** C : **AB1-GC** D : **AB1-GD** E : **AB1-GE** F : **AB1-GF** G : **AB1-GG** H : **AB1-GH** I : **AB1-GI**	J : **AB1-GJ** K : **AB1-GK** L : **AB1-GL** M : **AB1-GM** N : **AB1-GN** O : **AB1-GO** P : **AB1-GP** Q : **AB1-GQ** R : **AB1-GR**	S : **AB1-GS** T : **AB1-GT** U : **AB1-GU** V : **AB1-GV** W : **AB1-GW** X : **AB1-GX** Y : **AB1-GY** Z : **AB1-GZ**	+ : **AB1-R12** - : **AB1-R13** Blank: **AB1-RV**
Set of	**250**					



Accessories for iC60, iID, iC40, iCV40, iID40, iSW-NA, Reflex iC60, RCA, iSW (cont.)

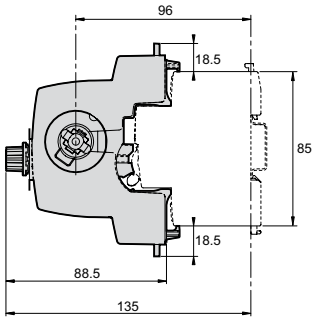
Dimensions (mm)

DB124149

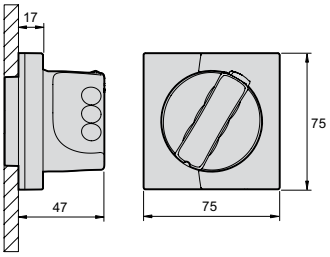


Plug-in base

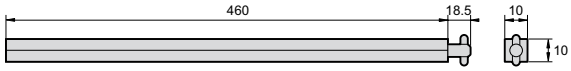
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Control mechanism

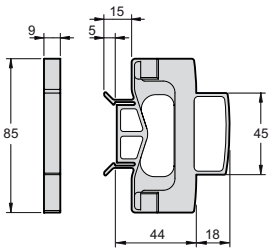


Handle



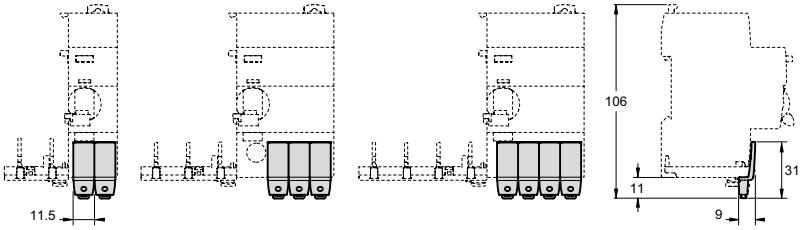
Rotary handle

DB124150



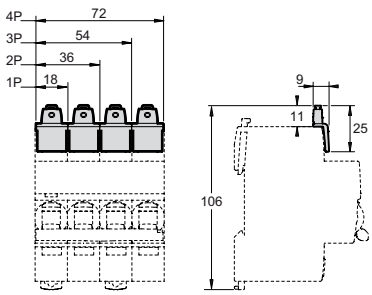
Spacer

DB124146



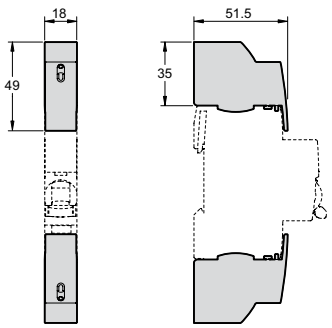
Screw shield 1P (A9A26982)

DB124147



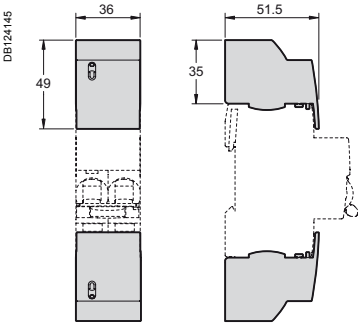
Screw shield 4P (A9A26981)

DB124144



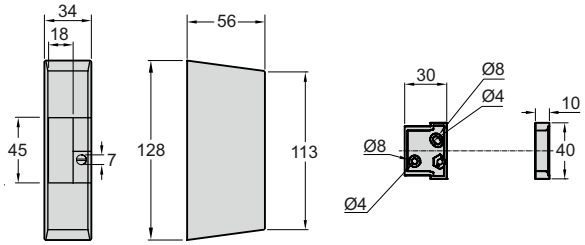
Terminal shield 1P

DB124145



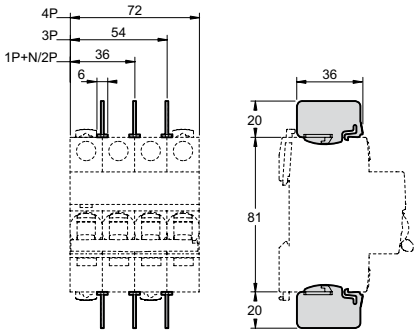
Terminal shield 2P

DB405964



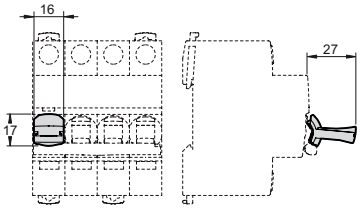
Wall mounted

DB124148



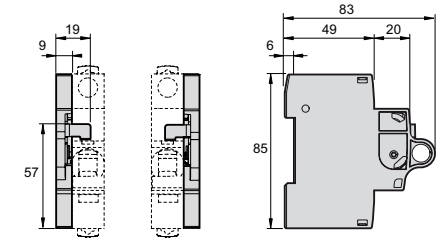
Inter-pole barrier

DB124143



Front padlocking device

DB407756

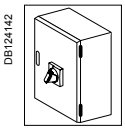


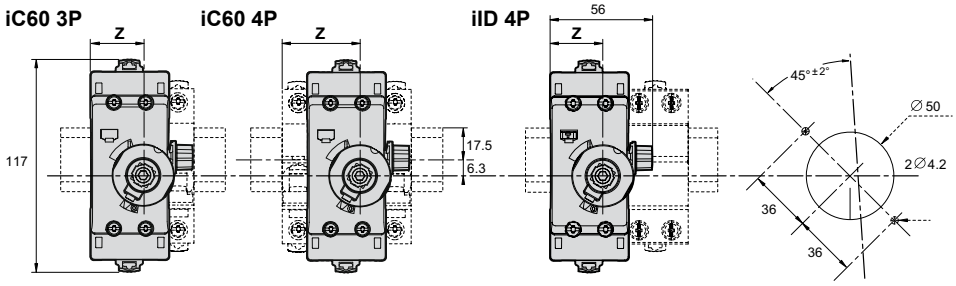
Side padlocking device

Accessories for iC60, iID, iC40, iCV40, iID40, iSW-NA, Reflex iC60, RCA, iSW (cont.)

Rotary handle installation

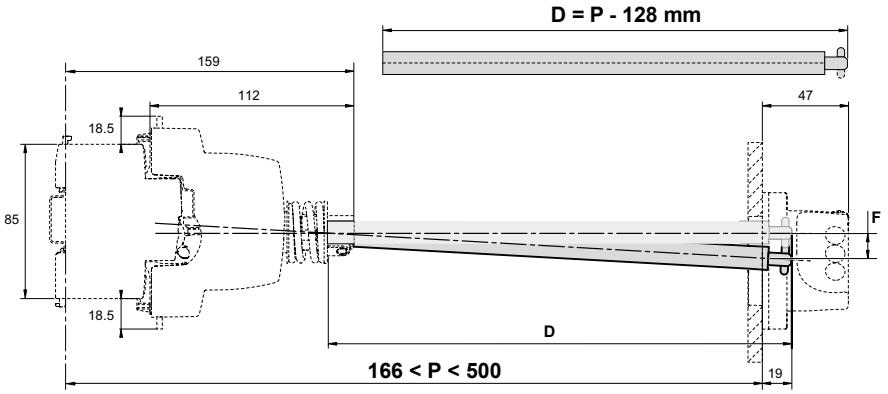
Dimensions (mm)

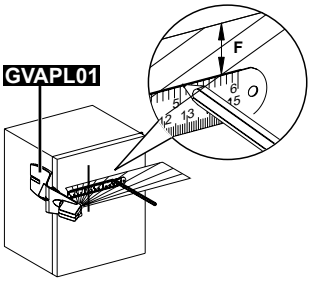




iC60	Z (mm)
2P	25.3
2P + Vigi	25.3
3P	25.3
3P + Vigi	43
4P	43
4P + Vigi	43

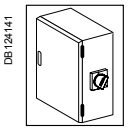
iID	Z (mm)
2P	25.3
4P	25.3

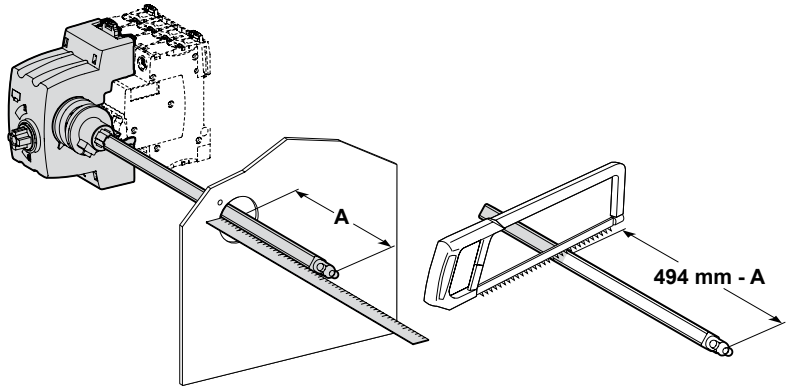


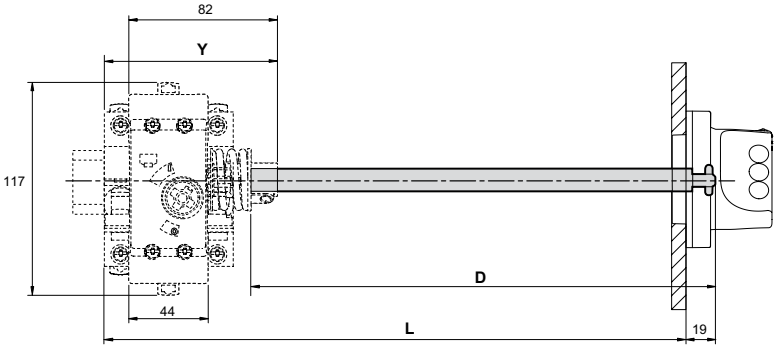


P (mm)	F (mm)
300	5
500	11

Rotary handle: front mounted control

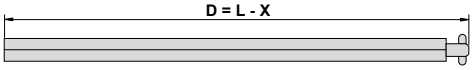






iC60	X (mm)	Y (mm)
2P	44.5	76.8
2P + Vigi	44.5	76.8
3P	44.5	76.8
3P + Vigi	62	94.5
4P	62	94.5
4P + Vigi	62	94.5

iID/iSW-NA	X (mm)	Y (mm)
2P	44.5	76.8
4P	44.5	76.8



Rotary handle: side mounted control

Accessories for C60, C120, C60H-DC, SW60-DC, C60NA-DC, C60PV-DC, ID, iSW devices

Installation

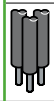
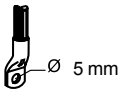
Accessories	Rotary handle			Plug-in base		Padlocking device	
	PB100137_SE-24 PB100138_SE-24 			PB111764-40 	056888_SE		057209J_SE-20 
Function							
	Front or side control of 2, 3 and 4-pole circuit breakers ■ Degree of protection: IP40 ■ A complete rotary handle consists of: □ a circuit-breaker operating sub-assembly, cat. no. **27046**, □ a handle cat. no. **27047** or a handle cat. no. **27048** ■ Installation: □ the circuit-breaker operating sub-assembly cat. no. **27046** is fixed to the circuit breaker □ the removable handle cat. no. **27047** is mounted on the removable front panel or on the enclosure door □ the fixed handle cat. no. **27048** is fixed to the front or side panel of the enclosure			**Allows a circuit breaker to be quickly removed or replaced, without touching the connections** ■ Degree of protection: IP20 ■ It consists of: □ a base to be fixed to a rail (or panel) □ 2 “blades” to be fixed in the device terminals ■ Connection: tunnel terminals for cables up to 50 mm² (rigid) or 35 mm² (flexible) ■ Installation: □ on backplate □ on a horizontal rail ■ Centreline between two rows: 200 mm ■ Only on the circuit breaker, without a Vigi device or auxiliary ■ Padlocking option (8 mm dia. padlock not supplied)		**Used to padlock a circuit breaker in the "open" or "closed" position** ■ Diameter of the padlock: 8 mm max. ■ Locking in the ON position does not prevent the circuit breaker from tripping in the event of a fault ■ Isolation: in conformity with IEC/EN 60947-2.	
Cat. numbers	**27047** Removable extended handle	**27048** Fixed handle	**27046** Operating sub-assembly	**26996** (1 per pole)	**26997** (1 per pole)	**27145**	**26970**
Set of	**1**	**1**	**1**	**1**	**1**	**4**	**2**
Suitable for the following devices:							
C60	■ 2P, 3P, 4P			■	–	–	■
C120, C120NA-DC	■ 2P, 3P, 4P			–	■ ⩽ 63 A	■	–
C120 + Vigi C120	■ 2P, 3P, 4P			–	–	■	–
DPN, DPN Vigi	■ 3P, 4P			–	–	–	■
C60H-DC	■ 2P			■	–	–	■
SW60-DC, C60NA-DC, C60PV-DC	–			–	–	–	■
ID	–			■ ⩽ 63 A	–	–	■
iSW	■ iSW ⩾ at 4 modules of 9 mm			■ iSW 40 to 63 A	–	–	■

Accessories for C60, C120, C60H-DC, SW60-DC, C60NA-DC, C60PV-DC, ID, iSW devices (cont.)

	Safety						
Accessories	**Screw shield**		**Terminal shield**			**Interpole barrier**	**Spacer**
	 056870_SE-33	 PB124114	 056869_SE-38		 DB123898	 PB104483-35	
Function							
	Prevents all contact with the fixing screws ■ The degree of protection becomes IP40 ■ Sealable, max. diameter 1.2 mm ■ Dividable		**Prevents all contact with the terminals** ■ Degree of protection becomes IP40 ■ Sealable, max. diameter 1.2 mm			**Improves the insulation between the connections: cables, terminals, lugs, etc.**	■ Used to: □ complete the rows □ separate the devices ■ Width: 1 x 9 mm module ■ Allows that 2 cables are routed from one row to another (above and below), up to 6 mm²
			■ 1P	■ 1P	■ 2P		
				■ 3P: 1 x 26975 + 1 x 26976 ■ 4P: 2 x 26976			
Cat. numbers	**18527**	**26981**	**18526**	**26975**	**26976**	**27001**	**A9N27062**
Set of	**2 (4P dividable)**		**2 (for upstream/downstream terminal)**			**10**	**1**
Suitable for the following devices:							
C60	–	■	–	■	■	■	■
C120, C120NA-DC	■	–	■	–	–	■	■
Vigi C120	–	–	–	–	–	–	■
DPN, DPN Vigi	–	–	–	–	–	–	■
C60H-DC	–	■	–	■	■	■	■
SW60-DC, C60NA-DC, C60PV-DC	–	■	–	–	–	■	■
ID	–	■	–	■	■	■	■
iSW	–	■ iSW 40 to 125 A	–	■ iSW 40 to 125 A		■ iSW 40 to 125 A	■

Accessories for C60, C120, C60H-DC, SW60-DC, C60NA-DC, C60PV-DC, ID, iSW devices (cont.)

Connection

Accessories	Multi-cable terminal		50 mm² Al terminal	Screw-on connection for ring terminal	Connection kit for ring terminals	Terminal for rear connector
	DB118780 		DB118782 	DB123897 	058967N-23 	DB118784 
Function						
	For 3 copper cables: ■ Rigid up to 16 mm² ■ Flexible up to 10 mm²		**For 16 to 50 mm² aluminium cables**	**For lug tipped cables, front or rear mounting**	**For terminal up to 63 A, front or rear access (screw Ø 5 mm)** ■ It incorporates a "conductive" part and an "insulating" part which ensures the phase-to-phase clearance	**For cable up to 50 mm² or by terminal** ■ Supplied with a 1P terminal shield
	DB118787 		DB122935  Al	DB118789  Ø 5 mm		
Cat. numbers	**19091**	**19096**	**27060**	**27053**	**17400**	**18528**
Set of	**4**	**3**	**1**	**8**	**2**	**2**
Suitable for the following devices:						
C60 ⩽ 25 A	–	–	–	■	■	–
C60 > 25 A	■	■	■	■	■	–
C120, C120NA-DC	■	■	■	■	–	■
Vigi C120	■	■	■	–	–	–
DPN, DPN Vigi	–	–	–	■	–	–
C60H-DC, ID iSW 40 to 125 A	■	■	■	■	■	–
SW60-DC, C60NA-DC	■	■	■	■	–	–
C60PV-DC	–	–	–	■	–	–
Tightening torque	2 N.m		10 N.m	2 N.m	–	–
Stripping length	11 mm		13 mm	–	–	–
Tools to be used	Diameter 5 mm or PZ2		Hc 1/5" or 5 mm	Diameter 5 mm	Diameter 5 mm	13 mm spanner

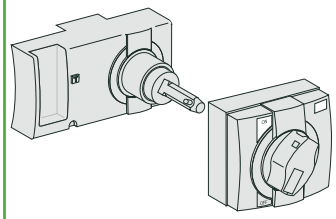
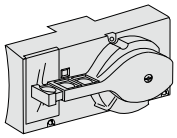
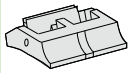
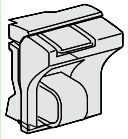
Identification

Accessories	Clip-on terminal marker strip			
	0312040_SE-23 			
Function	**For connection identificatio**			
Cat. numbers	0: **AB1-R0**	A: **AB1-GA**	K: **AB1-GK**	U: **AB1-GU**
	1: **AB1-R1**	B: **AB1-GB**	L: **AB1-GL**	V: **AB1-GV**
	2: **AB1-R2**	C: **AB1-GC**	M: **AB1-GM**	W: **AB1-GW**
	3: **AB1-R3**	D: **AB1-GD**	N: **AB1-GN**	X: **AB1-GX**
	4: **AB1-R4**	E: **AB1-GE**	O: **AB1-GO**	Y: **AB1-GY**
	5: **AB1-R5**	F: **AB1-GF**	P: **AB1-GP**	Z: **AB1-GZ**
	6: **AB1-R6**	G: **AB1-GG**	Q: **AB1-GQ**	+: **AB1-R12**
	7: **AB1-R7**	H: **AB1-GH**	R: **AB1-GR**	-: **AB1-R13**
	8: **AB1-R8**	I: **AB1-GI**	S: **AB1-GS**	Blank : **AB1-RV**
	9: **AB1-R9**	J: **AB1-GJ**	T: **AB1-GT**	
Set of	**250**			
Suitable for the following devices:				
C60, ID	■ 4 markers max. per pole			
C120, C120NA-DC	■ 4 markers max. per pole			
Vigi C120	■ 4 markers max. per device			
DPN, DPN Vigi	■ 4 markers max. per pole			
C60H-DC, SW60-DC, C60NA-DC, C60PV-DC	■ 4 markers max. per pole			

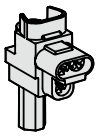
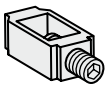
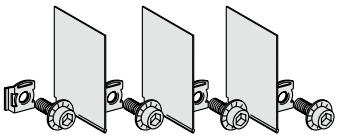
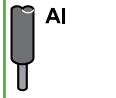
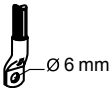
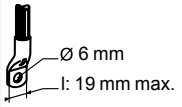


Accessories for NG125 devices

Mounting

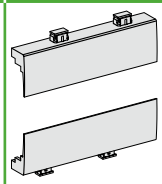
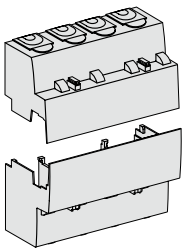
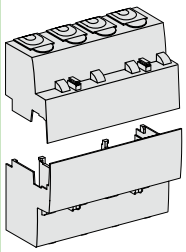
Accessories	Rotary handle				Toggle	Padlocking device
	DB123603 		DB123604 		DB123498 	DB123605 
Function						
	Extended rotary handle ■ Degree of protection: rotary button IP55 ■ Front installation: ■ Prevents door opening when the circuit breaker is in position O ■ Keeps disconnection ■ Padlocking possible when the device is in position O ■ Padlock diameter: 3 to 6 mm		**Direct rotary handle** ■ Front installation ■ Keeps disconnection ■ Padlocking possible when the device is in position O ■ Padlock diameter: 3 to 6 mm ■ Two versions: □ standard black □ red handle and yellow front plate for machine tool control		**White toggle** ■ Allows visual distinction of a switchboard incoming device	**Allows padlocking:** ■ In position I or O of NG125 1P or 2P circuit breakers ■ In position I of NG125 3P or 4P circuit breakers or switches ■ Padlock: dia. 5 to 8 mm (not supplied) Note: NG125 3P/4P circuit breakers and switches are provided with padlocking in position O (disconnected) as original equipment.
Catalogue numbers	**19088** **Extended standard black**	**19089** **Extended safety**	**19092** **Direct standard black**	**19097** **Direct safety red handle yellow background**	**19099** **White toggle**	**19090**
Pack of	**1**		**1**	**1**	**10**	**1**
Suitable for the following devices:						
NG125	■ 3P, 4P		■		■ 3P, 4P	■
Vigi NG125	–		–		–	–

Connection

Accessories	Multi-cable terminal		70 mm² Al terminal	Screw-on connection for ring terminal	Small ring terminal
	DB118780 		DB123426 	DB123427 	DB123428 
Function					
	For 3 copper cables: ■ Rigid up to 16 mm² ■ Flexible up to 10 mm²		**For single rigid aluminium cables from** 25 to 70 mm²	**Installation:** ■ Upstream or downstream ■ Connection ratings 80 to 125 A: □ copper terminal: - flexible cable up to 35 mm² - rigid cable up to 50 mm² □ bars: 16 x 3 mm, 15 x 4 mm, 16 x 4 mm □ small ring terminal ■ Phase-to-phase insulation voltage: Ui = 1000 V	**Connection ratings 80 to 125 A:** ■ Flexible copper cable: 50 mm² ■ Rigid copper cable: 70 mm²
	DB118787 		DB122935 	DB118789 	DB123497 
Cat. nos.	**19091**	**19096**	**19095**	**19093**	**19094**
Pack of	**4**	**3**	**4**	**4**	**4**
NG125	■	■	■ 3P, 3P+N, 4P: 80, 100, 125 A	■ 80, 100, 125 A	■ 80, 100, 125 A
Vigi NG125	–	–	■ 125 A	■ 125 A	■ 125 A
Tightening torque	2 N.m		6 N.m	6 N.m	6 N.m
Stripping length	11 mm		–	–	–
Tools to be used	Diameter 5 mm or PZ2		Hc 4 mm	Hc 4 mm	–

Protection
Circuit protection
Earth leakage protection
Accessories for NG125 devices (cont.)

Safety

Accessories	Screw shield				Circuit breaker terminal shield				RCD terminal shield						
	DB123606 				DB123607 				DB123607 						
Function															
	■ Prevents any contact with the connection screws ■ Protection against direct contact: □ IP40: on front panel □ IP20: at the connection level ■ Class II in steel or plastic enclosures ■ Sealing possible (max. diameter: 1.2 mm).				■ Prevents any contact with the terminals ■ Installation: mounted upstream and downstream of circuit breaker ■ Phase-to-phase insulation voltage Ui = 1000 V ■ Protection against direct contact IP40 ■ Class II in steel or plastic enclosures (up to 440 V) ■ Sealing possible (max. diameter: 1.2 mm)				■ Installation: is mounted upstream of the circuit breaker and downstream of the Vigi device ■ Phase-to-phase insulation voltage Ui = 1000 V ■ Protection against direct contact: IP40 ■ Class II in steel or plastic enclosures (up to 440 V) ■ Sealing possible (max. diameter: 1.2 mm)					
									63 A					**125 A**	
	1P	2P	3P	4P	1P	2P	3P	4P	2P	3P	3P adjustable	4P	4P adjustable	3P	4P
Catalogue numbers	**19084**	**19085**	**19086**	**19087**	**19080**	**19081**	**19082**	**19083**	**19074**	**19075**	**19077**	**19076**	**19078**	**19077**	**19078**
Pack of	**10**				**Set of 1 upstream / 1 downstream**				**Set of 1 upstream / 1 downstream**						
Suitable for the following devices:															
NG125	■				■				■					■	
Vigi NG125	–				–				■					■	

Acti9 VDIS vertical distribution blocks 125 A



A9XPK707



A9XPK714

IEC/EN 60947-7-1
IEC/EN 61439-2

As per the above standards:

Description

- 4P distribution blocks with quick connections.
- Designed for both rigid cables and flexible cables with or without ferrules.
- Push-in technology.
- Optimised installation in Pragma 24 (surface mounting), Resi9 24 (surface mounting), Prisma G and Prisma Pack.
- Only two versions to cover all configurations.

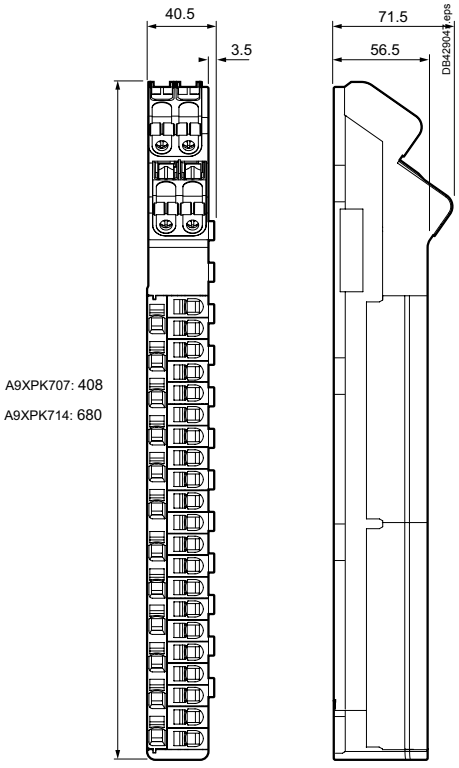
Technical data

Number of poles		4P	4P
Operating current at 40°C	(Ie)	125 A	125 A
Operating voltage	(Ue)	250/440 V AC	250/440 V AC
Operating frequency		50/60 Hz	50/60 Hz
Rated insulation voltage	(Ui)	500 V AC	500 V AC
Rated impulse withstand voltage	(Uimp)	6 kV	6 kV
Rated peak withstand current at 20 ms	(Ipk)	20 kÂ	20 kÂ
Rated conditional short-circuit current withstand	(Isc)	Up to breaking capacity of Schneider Electric outgoing circuit breakers, Acti9 iC60 and Acti9 iC40, even when reinforced by cascading implementation	
Pollution degree		3	3
Degree of protection		IPxxB	IPxxB
Total connection capacity at outgoing terminals		7 for each phase 12 for neutral	14 for each phase 24 for neutral
Weight (g)		1140	2040
Catalog numbers		**A9XPK707**	**A9XPK714**

Accessories

Type	Accessory	Spare parts
		
Designation	Prisma vertical mounting accessories	Locking clips for Pragma installation
Set of	4	10
Catalog numbers	**A9XPKV04**	**A9XPKL10**

Dimensions (mm)



Selection Guide

Mounting type	A9XPK707		A9XPK714	
	Direct	with A9XPKV04 accessory	Direct	with A9XPKV04 accessory
Pragma 24, surface mounted enclosures				
1, 2, 3 rows	-	-	-	-
4, 5 rows	■	-	-	-
6 rows	■	-	■	-
Resi9 24, surface mounted enclosures				
3 rows	-	-	-	-
4, 5 rows	■	-	-	-
6 rows	■	-	■	-
Prisma G				
< 12 modules	-	-	-	-
⩾ 12 and <18 modules	-	■	-	-
⩾ 18 modules	-	■	-	■
Prisma Pack				
< 4 rows	-	-	-	-
⩾ 4 and < 6 rows	-	■	-	-
⩾ 6 rows	-	■	-	■

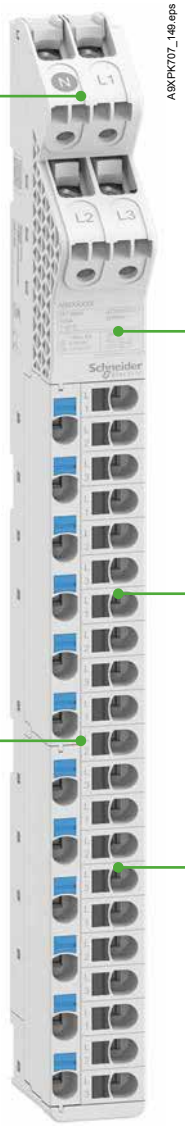
Acti9 VDIS vertical distribution blocks 125 A

Advantages

- High reliability of cabling thanks to spring terminals.
- Fast and simplified distribution thanks to a direct and frontal access to head of groups and groups of devices.
- Space release on Din Rail thanks to side installation.
- Time saving thanks to screwless and push-in technology.
- Easy phase balancing.
- Easy extensions and modifications.
- Numerous Ph+N load connections.

Power supply

- Four-poles tunnel terminals with screw clamping
- Cable per connection point:
  - flexible from 10 to 35 mm²
  - flexible with insulated ferrule from 10 to 35 mm²
  - stranded from 10 to 35 mm²

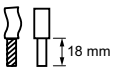


Installation

- Clip-on directly in Pragma supports, locking clips included
- Clip-on in Prisma vertical mounting accessories A9XPKV04

Stripping length

- Rigid or flexible



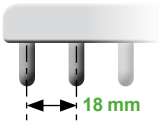
Distribution connections

- Connection to spring terminals through the front
- A single cable per connection point:
  - rigid from 1.5 to 10 mm²
  - stranded from 4 to 16 mm²
  - flexible from 1.5 to 16 mm²
  - flexible with ferrule from 1.5 to 16 mm²
- Push-in spring for toolless connection for both rigid and flexible cables with ferrules
- Maintenance free
- Connections:
  - A9XPK707: 7 per phase, 12 neutral
  - A9XPK714: 14 per phase, 24 neutral

Flexible with ferrule



Horizontal comb busbars 18 mm modules for Acti9: iC60





IEC 60947-7-1, IEC 61439-2









Acti9 iC60, iK60	18 mm poles, cuttable				
Number of poles	**1P**	**1P+N**	**3P**	**4P**	**3 (N+P)**
					
Type	L1, …	NL, …	L1L2L3, ...	NL1L2L3, …	NL1NL2NL3, …
Set of	1	1	1	1	1
Catalogue numbers					
6 modules of 18 mm	**A9XPH106**	**A9XPH206 (*)**	**A9XPH306**	**-**	**-**
8 modules of 18 mm	**-**	**A9XPH208 (*)**	**-**	**A9XPH408**	**-**
9 modules of 18 mm	**-**	**-**	**A9XPH309**	**-**	**-**
10 modules of 18 mm	**-**	**A9XPH210 (*)**	**-**	**-**	**-**
12 modules of 18 mm	**A9XPH112**	**A9XPH212 (*)**	**A9XPH312**	**A9XPH412**	**A9XPH512**
16 modules of 18 mm	**-**	**-**	**A9XPH316**	**A9XPH416**	-
18 modules of 18 mm	**-**	**A9XPH218 (*)**	**A9XPH318**	**-**	**A9XPH518**
20 modules of 18 mm	**-**	**-**	**A9XPH320**	**-**	**-**
24 modules of 18 mm	**A9XPH124**	**A9XPH224 (*)**	**A9XPH324**	**A9XPH424**	**A9XPH524**
57 modules of 18 mm	**A9XPH157**	**A9XPH257 (*)**	**A9XPH357**	**A9XPH457**	**A9XPH557**

(*)

⚠ CAUTION

INCOMPATIBILITY BETWEEN TWO-POLE COMB BUSBARS AND FOUR-POLE DEVICES
- Never connect a two-pole comb busbar to a four-pole device, as this will result in a multi-phase bolted short circuit.
- Always check that the head of group circuit breaker is in good working condition before connecting a comb busbar.

Failure to follow these instructions can result in injury or equipment damage.

Technical data

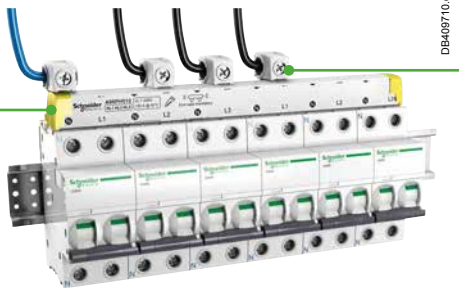
Operating current (Ie) at 40°C	100 A
Short circuit current (Isc)	Compatible with the breaking capacity of Schneider Electric circuit breakers
Rated insulation voltage (Ui)	500 V AC
Operating voltage (Ue)	415 V AC
Pollution degree	3
Fire resistance IEC 60695-2-1	Self-extinguishing at 960°C 30 secondes
Color	RAL9003

Horizontal comb busbars 18 mm modules for Acti9: iC60



Cuttable comb busbars, 18 mm modules, with 9 mm auxiliary

	Aux+1P	Aux+2P	Aux+3P	Aux+4P	3 (Aux+1P)	3 (Aux+N+1P)
						
	AuxL1, ...	AuxL1L2, ...	AuxL1L2L3, ...	AuxNL1L2L3, ...	AuxL1AuxL2AuxL3, ...	AuxNL1AuxNL2AuxNL3, ...
	1	1	1	1	1	1
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	A9XAH157	**A9XAH257**	**A9XAH357**	**A9XAH457**	**A9XAH657**	**A9XAH557**



Connectors
- facilitate comb busbar power supply

End-pieces
- insulate end of comb busbar

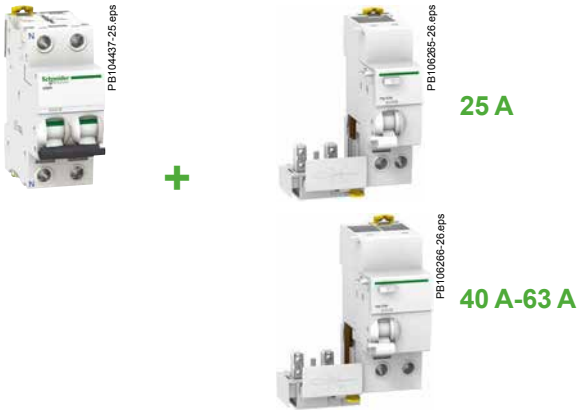
Accessories

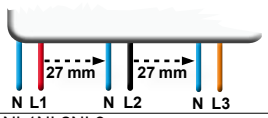
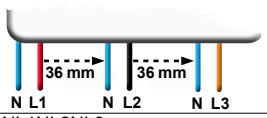
Number of poles	1P Aux+1P	1P+N Aux+2P	3P Aux+3P 3 (Aux+1P)	4P/3 (N+P) Aux+4P 3 (Aux+N+1P)	-	-
						
	End-pieces				**Tooth covers**	**Connectors** **Monoconnect**
	Lateral end-pieces providing IP20 protection				Insulate teeth that have been left free	Comb busbar power supply. Horizontal incomer on each side. For 35 mm² cable. Tightening torque 4 N.m
Set of	10	10	10	10	20	4
Catalogue numbers	**A9XPE110**	**A9XPE210**	**A9XPE310**	**A9XPE410**	**A9XPT920**	**A9XPCM04**

Horizontal comb busbars 18 mm modules for Acti9: iC60 + Vigi iC60



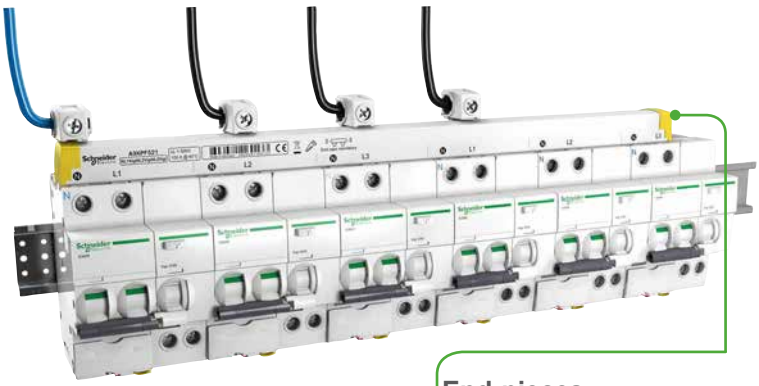
IEC 60947-7-1, IEC 61439-2



Acti9 Vigi iC60 1P+N	18 mm poles, cuttable	
Number of poles	**3 (N+P)**	
		
Type	NL1NL2NL3, …	NL1NL2NL3, …
Set of	1	1
Rating of Vigi	25 A	40 A - 63 A
Catalogue numbers		
21 modules of 18 mm	**A9XPF521**	-
24 modules of 18 mm	-	**A9XPF524**

Technical data

Operating current at 40°C (Ie)	100 A
Short circuit current (Isc)	Compatible with the breaking capacity of Schneider Electric circuit breakers
Rated insulation voltage (Ui)	500 V AC
Operating voltage (Ue)	415 V AC
Pollution degree	3
Fire resistance IEC 60 695-2-1	Self-extinguishing at 960°C 30 secondes
Color	RAL9003

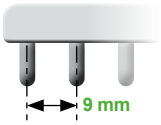


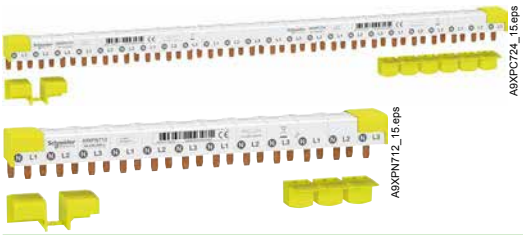
End-pieces
- insulate end of comb busbar

Accessories

Number of poles	**3 (N+P)**	-	-
			
	End-pieces	**Tooth covers**	**Connectors** **Monoconnect**
	Lateral end-pieces providing IP20 protection	Insulate teeth that have been left free	Comb busbar power supply. Horizontal incomer on each side. For 35 mm² cable. Tightening torque 4 N.m
Set of	10	20	4
Catalogue numbers	**A9XPE410**	**A9XPT920**	**A9XPCM04**

Horizontal comb busbars 9 mm modules for Acti9: iC40, iCV40, Vigi iC40





IEC 61439-1



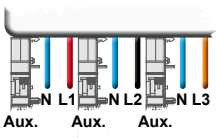
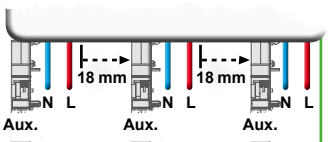
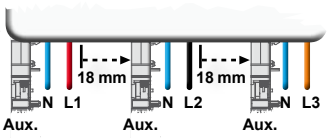
Acti9 iC40, iC40 XA, iCV40, iCV40 XA, iDPN, iDPN Vigi, Vigi iC40, Vigi iCG40		9 mm poles, cuttable					
Number of poles		**1P+N**			**3 (N+P)**		
							
Number of 18 mm modules		12	24	48	12	24	48
Supplied accessories	Tooth covers (for 3 modules of 18 mm)	1	2	-	1	2	-
	End-pieces	4	4	-	4	4	-
Catalogue numbers		**A9XPC612 (*)**	**A9XPC624 (*)**	**A9XPC648 (*)**	**A9XPC712**	**A9XPC724**	**A9XPC748**

(*)

⚠ CAUTION

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- Always check that the head of group circuit breaker is in good working condition before connecting a comb busbar.

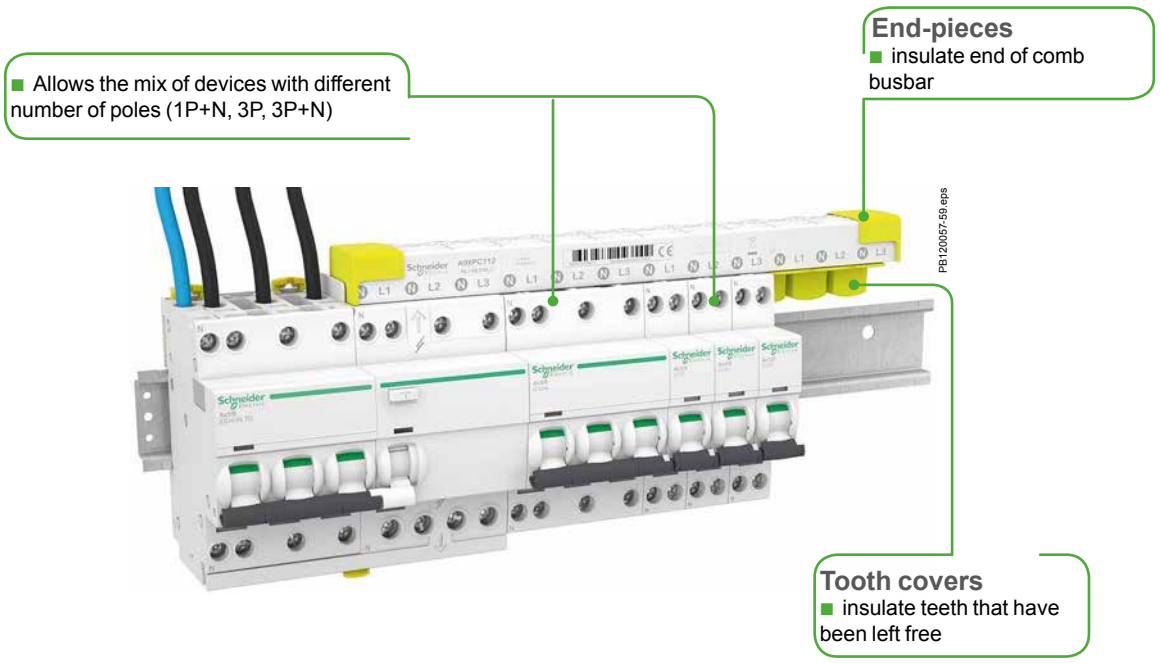
Failure to follow these instructions can result in injury or equipment damage.

Acti9 iC40, iC40 XA, iCV40, iCV40 XA, iDPN, iDPN Vigi, Vigi iC40, Vigi iCG40	With 9 mm auxiliary			
Number of poles	**Aux+N+1P**	**3 (Aux+N+1P)**	**Aux+N+1P+Vigi**	**3 (Aux+N+1P+Vigi)**
				
Number of 18 mm modules	48	48	48	48
Catalogue numbers	**A9XPA648**	**A9XPA748**	**A9XPV648**	**A9XPV748**

Technical data

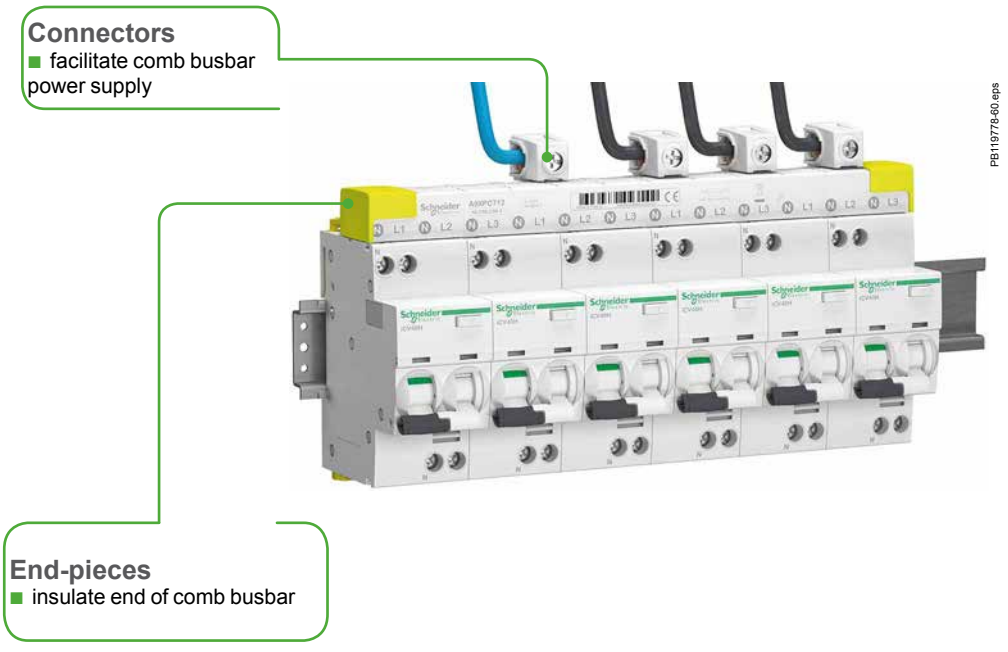
Operating current at 40°C	(Ie)	80 A
Short circuit current	(Isc)	Compatible with the breaking capacity of Acti9 Schneider Electric circuit breakers
Rated insulation voltage	(Ui)	400 V AC (Ph/N) - 440 V AC (Ph/Ph)
Operating voltage	(Ue)	230 V AC (Ph/N) - 400 V AC (Ph/Ph)
Degree of protection		IP20
Pollution degree		3
Fire resistance IEC 60695-2-1		Self-extinguishing at 960°C 30 secondes
Color		RAL 9003

Horizontal comb busbars 9 mm modules for Acti9: iC40, iCV40, Vigi iC40 (cont.)



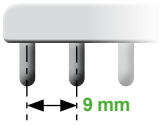
Accessories

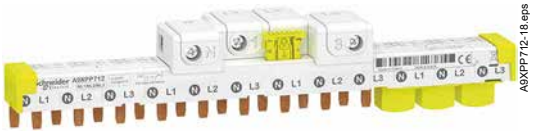
Number of poles	1P+N	3 (N+P)		
				
	End-pieces		**Tooth covers (3 x 18 mm modules)**	**Connectors**
Set of	40	40	12	4
Catalogue numbers	**A9X21094**	**A9X21095**	**A9X21096**	**A9XPCM04**



Horizontal comb busbars with integrated connectors, 9 mm modules for Acti9: iC40, iCV40

IEC 61439-1



















Acti9 iC40, iC40 XA, iCV40, iCV40 XA		9 mm poles, cuttable				
Number of poles		**1P+N**			**3 (N+P)**	
		 N L			 N L1 N L2 N L3	
Number of 18 mm modules		6	12	24	12	24
Supplied accessories	Tooth covers (for 3 modules of 18 mm)	-	1	2	1	2
	End-pieces	4	4	4	4	4
Catalogue numbers		**A9XPP606 (*)**	**A9XPP612 (*)**	**A9XPP624 (*)**	**A9XPP712**	**A9XPP724**

(*)

⚠ CAUTION

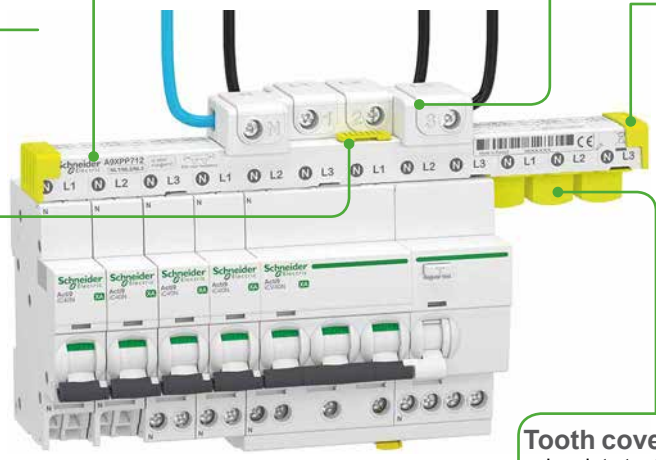
INCOMPATIBILITY BETWEEN TWO-POLE COMB BUSBARS AND FOUR-POLE DEVICES
- Never connect a two-pole comb busbar to a four-pole device, as this will result in a multi-phase bolted short circuit.
- Always check that the head of group circuit breaker is in good working condition before connecting a comb busbar.

Failure to follow these instructions can result in injury or equipment damage.

Technical data

Operating current at 40°C	(Ie)	63 A
Short circuit current	(Isc)	Compatible with the breaking capacity of Acti9 Schneider Electric circuit breakers
Rated insulation voltage	(Ui)	400 V AC (Ph/N) - 440 V AC (Ph/Ph)
Operating voltage	(Ue)	230 V AC (Ph/N) - 400 V AC (Ph/Ph)
Degree of protection		IP20
Pollution degree		3
Fire resistance IEC 60695-2-1		Self-extinguishing at 960°C 30 secondes
Color		RAL 9003

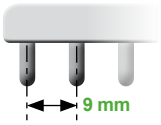
Horizontal comb busbars with integrated connectors, 9 mm modules for Acti9: iC40, iCV40 (cont.)



Accessories

Number of poles	1P+N	3 (N+P)	
			
	End-pieces		**Tooth covers (3 x 18 mm modules)**
Set of	40	40	12
Catalogue numbers	**A9X21094**	**A9X21095**	**A9X21096**

Horizontal comb busbars 9 mm modules for Acti9: iCT





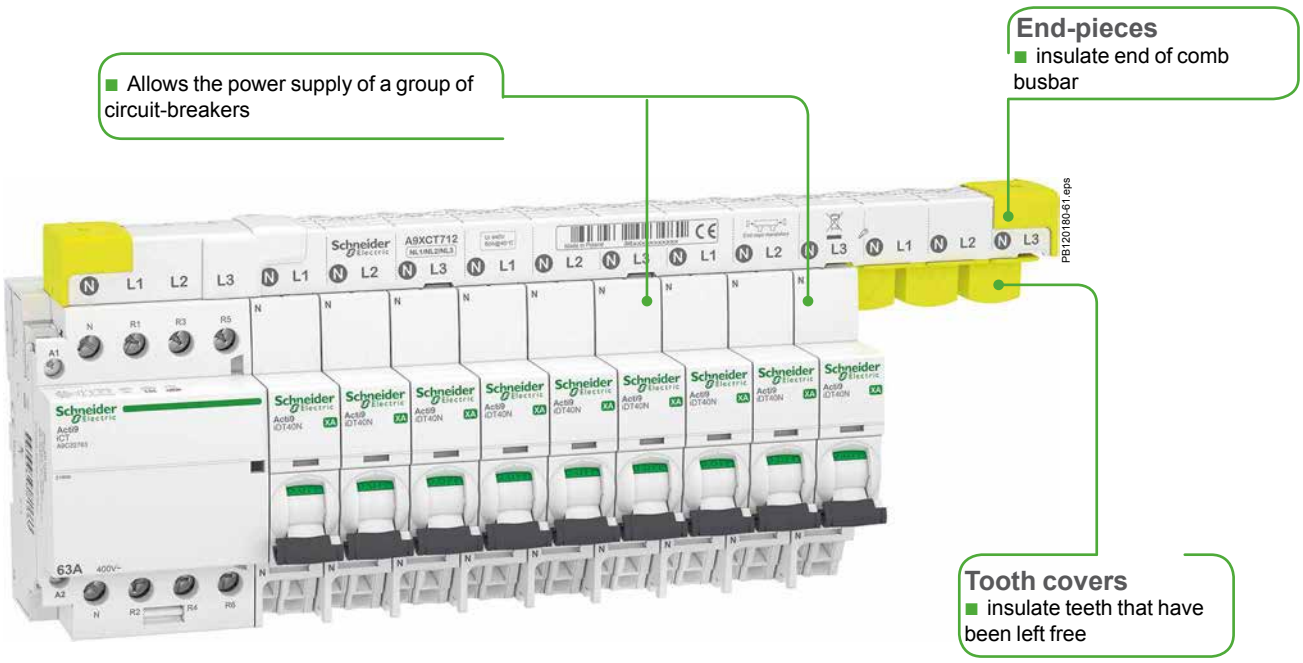
IEC 61439-1



Acti9 iCT		9 mm poles, cuttable
Number of poles		**Head of group 4P + 3 (N+P)**
		 N L1 L2 L3 N L1 N L2 N L3
Number of 18 mm modules		12
Supplied accessories	Tooth covers (for 3 modules of 18 mm)	1
	End-pieces	4
Catalogue numbers		**A9XCT712**

Technical data		
Operating current at 40°C	(Ie)	80 A
Short circuit current	(Isc)	Compatible with the breaking capacity of Acti9 Schneider Electric circuit breakers
Rated insulation voltage	(Ui)	400 V AC (Ph/N) - 440 V AC (Ph/Ph)
Operating voltage	(Ue)	230 V AC (Ph/N) - 400 V AC (Ph/Ph)
Degree of protection		IP20
Pollution degree		3
Fire resistance IEC 60695-2-1		Self-extinguishing at 960°C 30 secondes
Color		RAL 9003

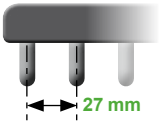
Horizontal comb busbars 9 mm modules for Acti9: iCT (cont.)

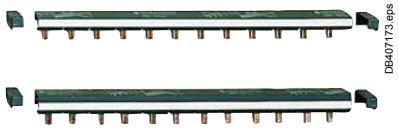


Accessories		
Number of poles	**3 (N+P)**	
		
	End-pieces	**Tooth covers (3 x 18 mm modules)**
Set of	40	12
Catalogue numbers	**A9X21095**	**A9X21096**

Complementary technical information

Horizontal comb busbars 27 mm modules for C120, NG125





IEC 60664-1



C120, NG125	27 mm poles, cuttable			
Number of poles	**1P**	**2P**	**3P**	**4P**
				
Number of 27 mm modules	16	16	15	16
Set of	1			
Catalogue numbers	**14811**	**14812**	**14813**	**14814**

Technical data

Operating current at 40°C	(Ie)	125 A
Short circuit current	(Isc)	Compatible with the breaking capacity of Schneider Electric circuit breakers
Rated insulation voltage	(Ui)	620 V AC
Operating voltage	(Ue)	500 V AC
Pollution degree		3
Fire resistance IEC 60695-2-1		Self-extinguishing at 960°C 30 secondes
Color		RAL 7016 (anthracite grey)

Power supply
- directly in the circuit breaker terminals



End-pieces
- insulate end of comb busbar

Tooth covers
- insulate teeth that have been left free

Accessories

Number of poles	**1P, 2P, 3P, 4P**
	
	Tooth covers
	Insulate teeth that have been left free
Set of	20
Catalogue numbers	**14818**

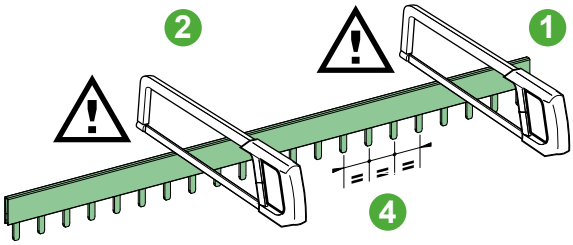
Comb busbar assembly recommendation
Acti9



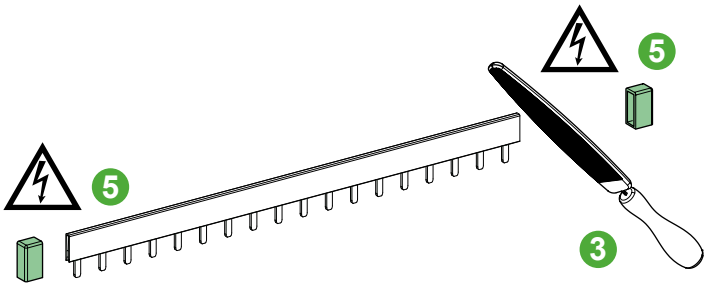


Cutting to length

DB406700



DB406701

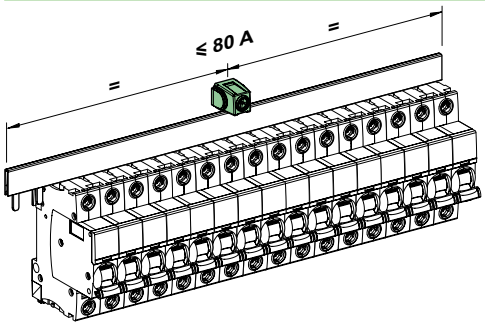


1- Cut perpendicularly (no angle > 10°) to the desired length using a circular miter saw for cutting metals.
2- Maintain the direction of cutting from left to right.
If this recommendation is not complied with, the copper busbar holding system is no longer active.

3- It is recommended to deburr after cutting.
4- Check the regularity of the teeth spacing. Do not extract the copper terminals.
5- **Mandatory end-pieces after cutting the comb busbar.**

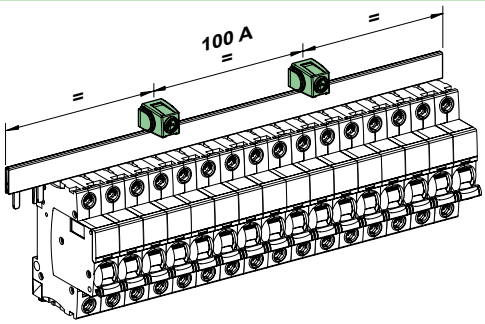
Direct power supply

DB406702



- Power supply ≤ 80 A by 1 connection point.
- Preferably choose the center of the comb busbar.

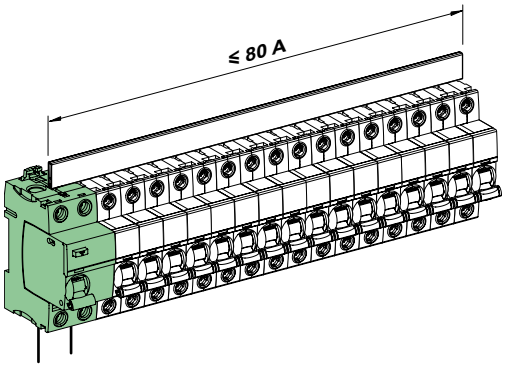
DB406703



- 100 A power supply by 2 connection points mandatory.

Power supply by iID "group feeder" ≤ 80 A

DB409159

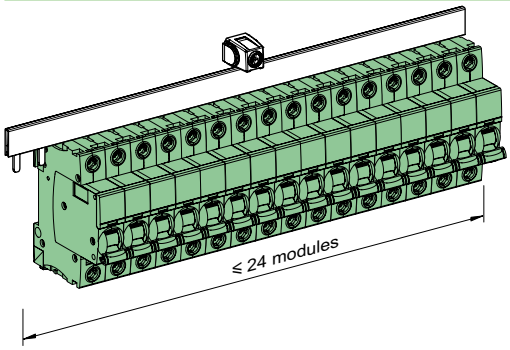


- RCCB "group feeder" ≤ 80 A: direct power supply by the RCCB.

Comb busbar assembly recommendation
Acti9 (cont.)

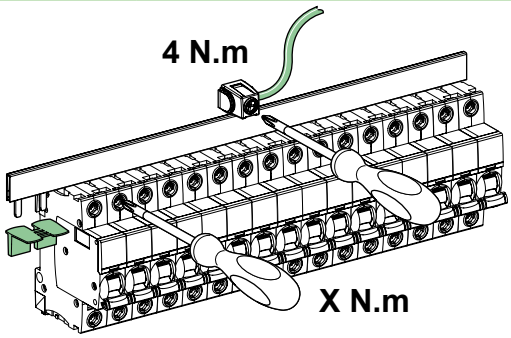
General

DB406704



- The quantity of products is not infinite, after 24 modules it is not possible to guarantee assembly.

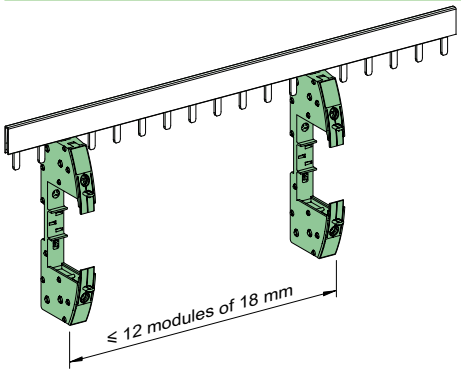
DB406705



- Tightening to the recommended torque.
- Avoid tinning on the cable terminations, since tin has high resistivity.
- The comb teeth left unassigned should be isolated with tooth-cover end-pieces.

Plug-in base

DB409878



- Special case: plug-in base (Cat. no. A9A27003), ≤ 12 x 18 mm modules.

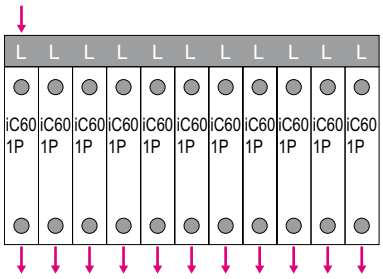
Choice guide

Connection to the top

Circuit breakers iC60: 1P and 3P

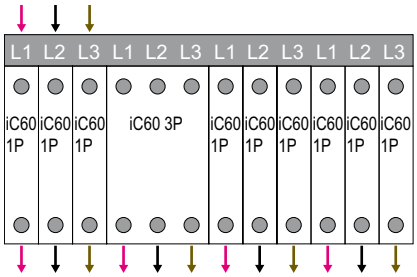


Circuit breakers iC60 1P

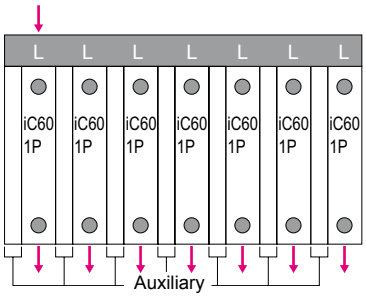
Type: L, ...	Number of 18 mm modules	Cat. no.
	6	A9XPH106
	12	A9XPH112
	24	A9XPH124
	57	A9XPH157

PB117801-48.eps

Circuit breakers iC60 1P or 3P (3 phases)

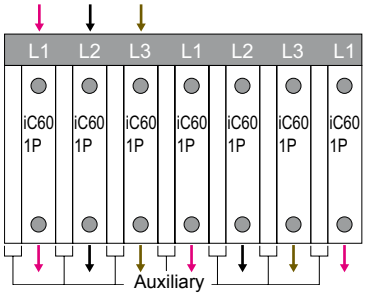
Type: L1L2L3, ...	Number of 18 mm modules	Cat. no.
	6	A9XPH306
	9	A9XPH309
	12	A9XPH312
	16	A9XPH316
	18	A9XPH318
	20	A9XPH320
	24	A9XPH324
	57	A9XPH357

Circuit breakers iC60 1P + Auxiliaries 9 mm

Type: L, ...	Number of 18 mm modules	Cat. no.
	57	A9XAH157



Circuit breakers iC60 1P + Auxiliaries 9 mm

Type: AuxL1AuxL2AuxL3, ...	Number of 18 mm modules	Cat. no.
	57	A9XAH657

PB117802-48.eps

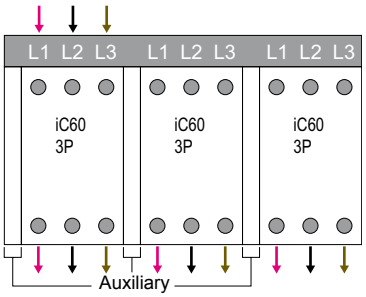
Choice guide

Connection to the top

Circuit breakers iC60: 1P and 3P (cont.)



PB117803-49.eps

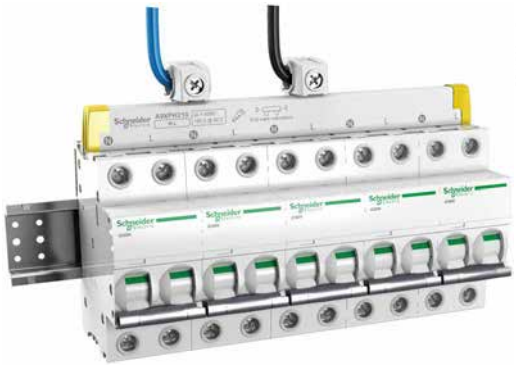


Circuit breakers iC60 3P with Auxiliaries 9 mm		
Type: AuxL1L2L3, ...	**Number of 18 mm modules**	**Cat. no.**
	57	**A9XAH357**

Choice guide

Connection to the top

Circuit breakers iC60: 1P+N, 2P and 4P



PB117804-47.eps

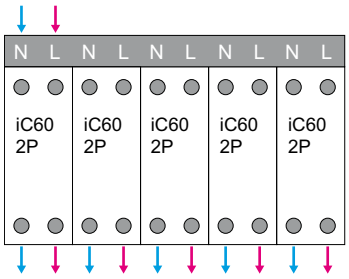
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⚠ CAUTION

INCOMPATIBILITY BETWEEN 1P+N COMB BUSBARS AND 3P+N DEVICES
- Never connect a 1P+N comb busbar to a 3P+N device, as this will result in a multi-phase bolted short circuit.
- Always check that the head of group circuit breaker is in good working condition before connecting a comb busbar.

Failure to follow these instructions can result in injury or equipment damage.

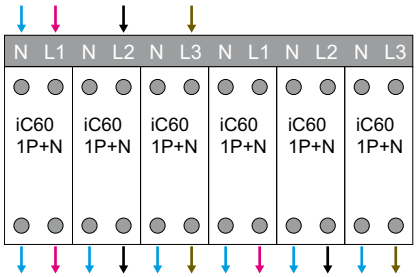
Circuit breakers 1P+N, 2P

Type: NL, ...	Number of 18 mm modules	Cat. no.
	6	A9XPH206 (*)
	8	A9XPH208 (*)
	10	A9XPH210 (*)
	12	A9XPH212 (*)
	18	A9XPH218 (*)
	24	A9XPH224 (*)
	57	A9XPH257 (*)



PB117805-48.eps

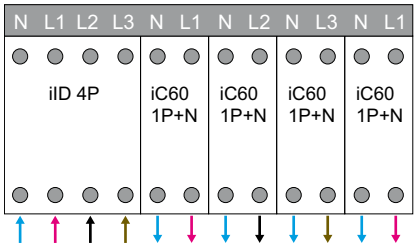
Circuit breakers 1P+N (Neutral + 3 phases)

Type: NL1NL2NL3, ...	Number of 18 mm modules	Cat. no.
	12	A9XPH512
	18	A9XPH518
	24	A9XPH524
	57	A9XPH557



Montage ATHENA 01.jpg

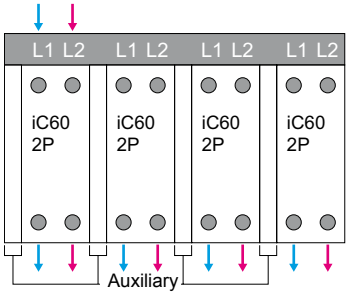
RCCB 3P+N + circuit breakers iC60 1P+N

Type: NL1L2L3NL1NL2NL3, ...	Number of 18 mm modules	Cat. no.
	10	A9XPH810
	12	A9XPH812
	14	A9XPH814
	16	A9XPH816



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Circuit breakers 2P + Auxiliaries 9 mm (Aux + Neutral + Phase)

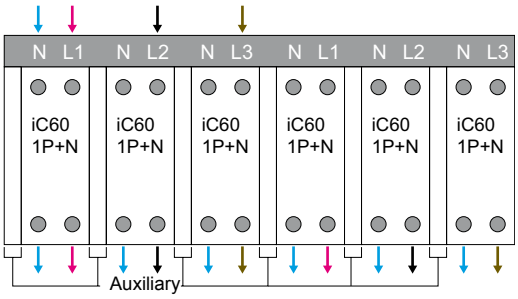
Type: AuxL1L2, ...	Number of 18 mm modules	Cat. no.
	57	A9XAH257

Choice guide

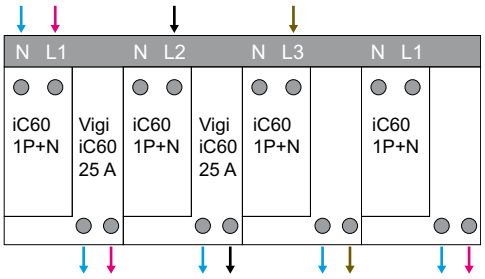
Connection to the top

Circuit breakers iC60: 1P+N, 2P and 4P (cont.)

Circuit breakers 1P+N + Auxiliaries 9 mm (Aux + Neutral + 3 phases)

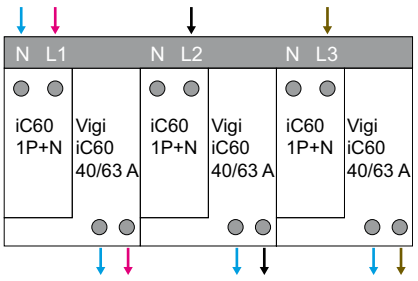
Type: AuxNL1AuxNL2AuxNL3, ...	Number of 18 mm modules	Cat. no.
	57	A9XAH557

Circuit breakers 1P+N + Vigi iC60 25 A

Type: NL1NL2NL3, ...	Number of 18 mm modules	Cat. no.
 	21	A9XPF521

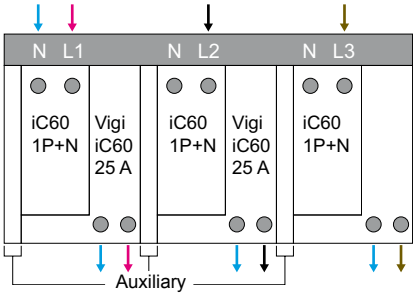
PB117806-37.eps

Circuit breakers 1P+N + Vigi iC60 40 or 63 A

Type: NL1NL2NL3, ...	Number of 18 mm modules	Cat. no.
 	24	A9XPF524

PB117807-30.eps

Circuit breakers 1P+N + Vigi iC60 25 A + Auxiliaries 9 mm

Type: AuxNL1AuxNL2AuxNL3, ...	Number of 18 mm modules	Cat. no.
 	24	A9XPF524

PB117808-29.eps

Choice guide

Connection to the top

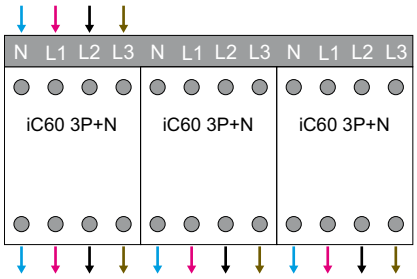
Circuit breakers iC60: 1P+N, 2P and 4P (cont.)



PB117609-42.eps

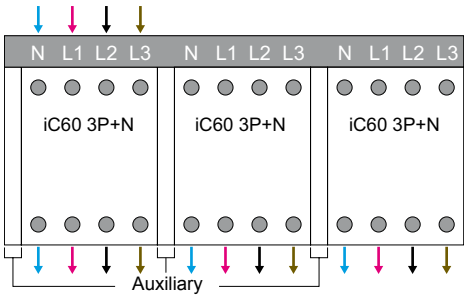
Circuit breakers 3P+N

Type: NL1L2L3, ...	Number of 18 mm modules	Cat. no.
	8	A9XPH408
	12	A9XPH412
	16	A9XPH416
	24	A9XPH424
	57	A9XPH457



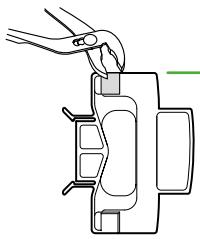
Circuit breakers 3P+N + Auxiliaries 9 mm

Type: AuxNL1L2L3, ...	Number of 18 mm modules	Cat. no.
	57	A9XAH457

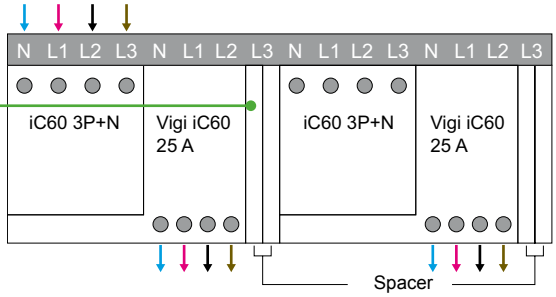


Circuit breakers 3P+N + Vigi iC60 25 A (3 modules) + 2 spacers

Type: NL1L2L3, ...	Number of 18 mm modules	Cat. no.
	12	A9XPH412
	24	A9XPH424
	57	A9XPH457

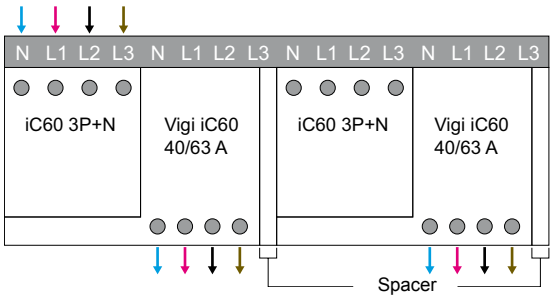


Remove the partition of the spacer of the center



Circuit breakers 3P+N + Vigi iC60 40 or 63 A (3.5 modules) + 1 spacer

Type: NL1L2L3, ...	Number of 18 mm modules	Cat. no.
	12	A9XPH412
	24	A9XPH424
	57	A9XPH457



Choice guide

Connection to the top - Circuit breakers

Acti9 iC40, iCV40, Vigi iC40

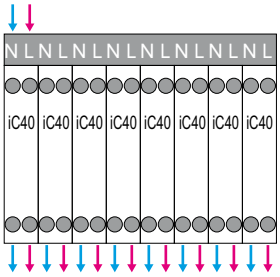
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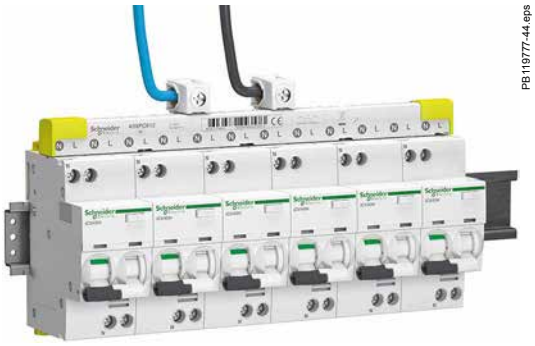
⚠ CAUTION

INCOMPATIBILITY BETWEEN 1P+N COMB BUSBARS AND 3P+N DEVICES
- Never connect a 1P+N comb busbar to a 3P+N device, as this will result in a multi-phase bolted short circuit.
- Always check that the head of group circuit breaker is in good working condition before connecting a comb busbar.

Failure to follow these instructions can result in injury or equipment damage.

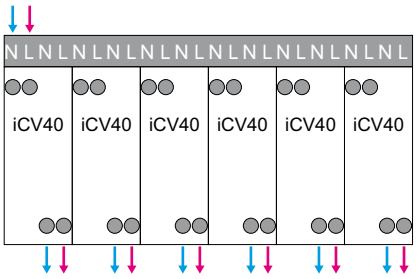
Circuit breakers iC40, iC40 XA, iDPN 1P+N

Type: NL, ...	No. of 18 mm modules	Cat. no.
	12	A9XPC612 (*)
	24	A9XPC624 (*)
	48	A9XPC648 (*)

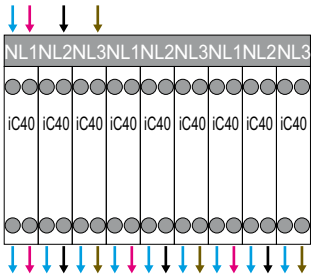


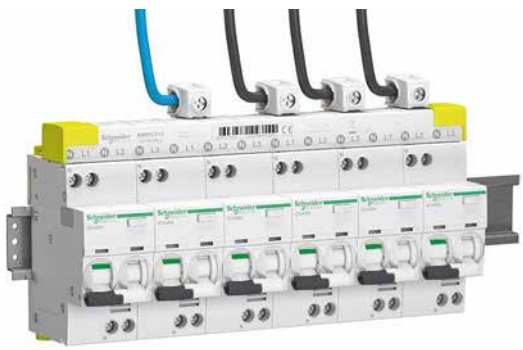
PB119777-44.eps

Circuit breakers iCV40, iCV40 XA, iDPN Vigi, Vigi iC40, Vigi iCG40 1P+N

Type: NL, ...	No. of 18 mm modules	Cat. no.
	12	A9XPC612 (*)
	24	A9XPC624 (*)
	48	A9XPC648 (*)

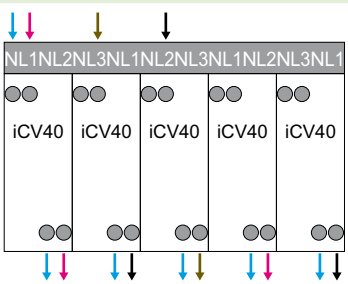
Circuit breakers iC40, iC40 XA, iDPN 1P+N with comb busbar 3P+N

Type: NL1L2L3, ...	No. of 18 mm modules	Cat. no.
	12	A9XPC712
	24	A9XPC724
	48	A9XPC748



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Circuit breakers iCV40, iCV40 XA, iDPN Vigi, Vigi iC40, Vigi iCG40 1P+N with comb busbar 3P+N

Type: NL1L2L3, ...	No. of 18 mm modules	Cat. no.
	12	A9XPC712
	24	A9XPC724
	48	A9XPC748

Choice guide

Connection to the top - Circuit breakers

Acti9 iC40, iCV40

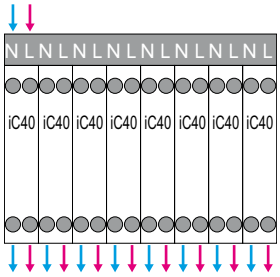
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⚠ CAUTION

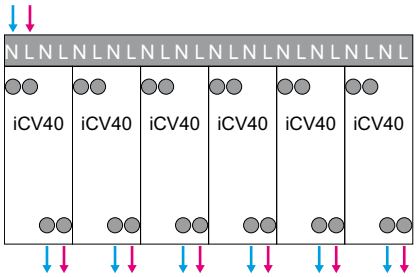
INCOMPATIBILITY BETWEEN 1P+N COMB BUSBARS AND 3P+N DEVICES
- Never connect a 1P+N comb busbar to a 3P+N device, as this will result in a multi-phase bolted short circuit.
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Failure to follow these instructions can result in injury or equipment damage.

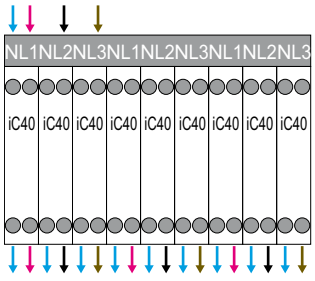
Circuit breakers iC40, iC40 XA, iDPN 1P+N

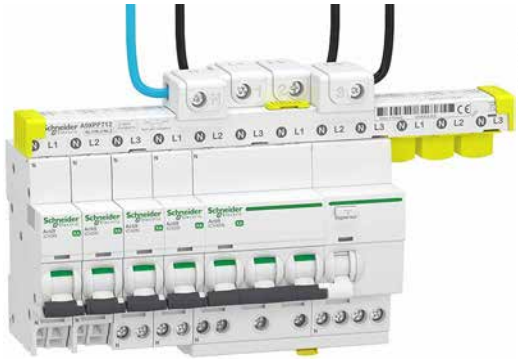
Type: NL, ... with integrated connectors	No. of 18 mm modules	Cat. no.
	6	A9XPP606 (*)
	12	A9XPP612 (*)
	24	A9XPP624 (*)

Circuit breakers iCV40, iCV40 XA, iDPN Vigi, Vigi iC40, Vigi iCG40 1P+N

Type: NL, ... with integrated connectors	No. of 18 mm modules	Cat. no.
	6	A9XPP606 (*)
	12	A9XPP612 (*)
	24	A9XPP624 (*)

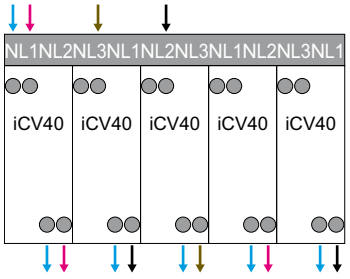
Circuit breakers iC40, iC40 XA, iDPN 1P+N with comb busbar 3P+N

Type: NL1L2L3, ... with integrated connectors	No. of 18 mm modules	Cat. no.
	12	A9XPP712
	24	A9XPP724



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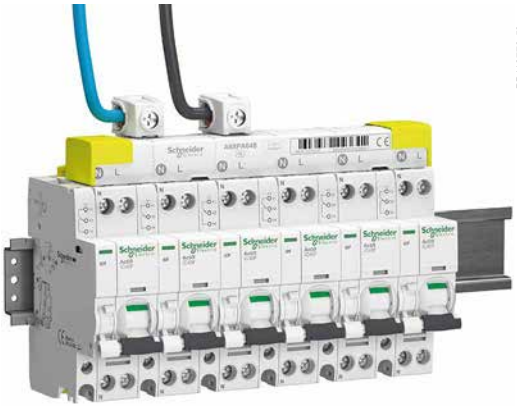
Circuit breakers iCV40, iCV40 XA, iDPN Vigi, Vigi iC40, Vigi iCG40 1P+N with comb busbar 3P+N

Type: NL1L2L3, ... with integrated connectors	No. of 18 mm modules	Cat. no.
	12	A9XPP712
	24	A9XPP724

Choice guide

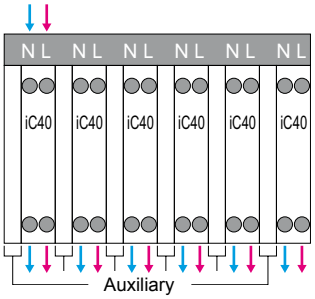
Connection to the top - Circuit breakers

Acti9 iC40, iCV40, Vigi iC40 (cont.)

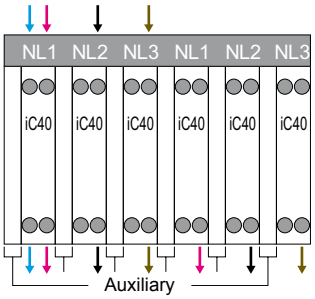


PB119779-53.eps

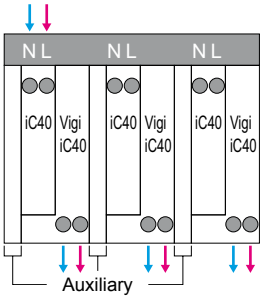
Circuit breakers iC40, iC40 XA, iDPN 1P+N + Auxiliaries 9 mm

Type: AuxNL, ...	No. of 18 mm modules	Cat. no.
	48	A9XPA648

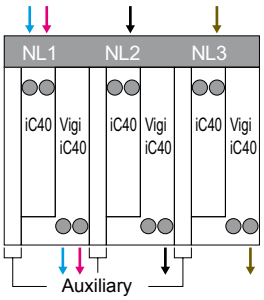
Circuit breakers iC40, iC40 XA, iDPN 1P+N with comb busbar 3P+N + Auxiliaries 9 mm

Type: AuxNL1AuxNL2AuxNL3, ...	No. of 18 mm modules	Cat. no.
	48	A9XPA748

Circuit breakers iCV40, iCV40 XA, (iC40+Vigi), (iC40 XA+Vigi), (iDPN+Vigi), Vigi iC40, Vigi iCG40 1P+N + Auxiliaries 9 mm

Type: AuxNL, ...	No. of 18 mm modules	Cat. no.
	48	A9XPV648

Circuit breakers iCV40, iCV40 XA, (iC40+Vigi), (iC40 XA+Vigi), (iDPN+Vigi), Vigi iC40, Vigi iCG40 1P+N with comb busbar 3P+N + Auxiliaries 9 mm

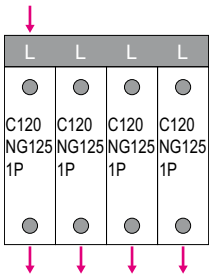
Type: AuxNL1AuxNL2AuxNL3, ...	No. of 18 mm modules	Cat. no.
	48	A9XPV748

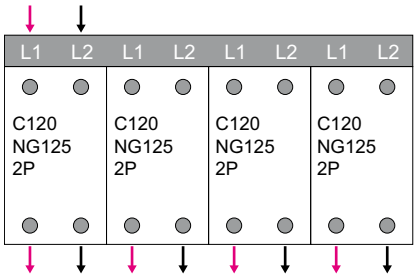
Choice guide

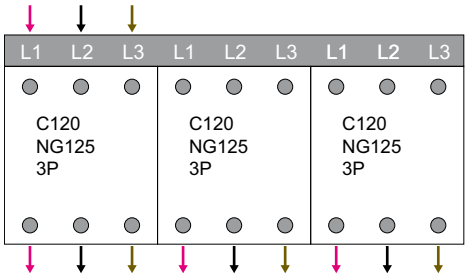
Connection to the top

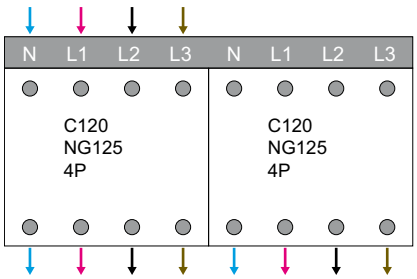
Circuit breakers C120 and NG125



Circuit breakers C120 or NG125 1P		
Type: L, ...	**Number of 27 mm modules**	**Cat. no.**
	16	**14811**

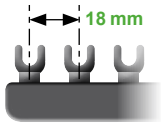
Circuit breakers C120 or NG125 2P		
Type: L1L2, ...	**Number of 27 mm modules**	**Cat. no.**
	16	**14812**

Circuit breakers C120 or NG125 3P		
Type: L1L2L3, ...	**Number of 27 mm modules**	**Cat. no..**
	15	**14813**

Circuit breakers C120 or NG125 4P		
Type: NL1L2L3, ...	**Number of 27 mm modules**	**Cat. no..**
	16	**14814**



Biconnect horizontal comb busbars 18 mm modules





IEC 60664-1



Acti9 K60 biconnect	18 mm poles, cuttable					
Number of poles	**1P**			**2P**		
	L1			L1 L2		
Type	L1,...			L1L2,...		
Set of	1			1		
Number of 18 mm modules	12	18	57	12	18	57
Catalogue numbers	**R9XFH112**	**R9XFH118**	**R9XFH157**	**R9XFH212**	**R9XFH218**	**R9XFH257**

Technical data

Operating current at 40°C	(Ie)	63 A
Cross section		10 mm²
Short circuit current	(Isc)	Compatible with the breaking capacity of Schneider Electric circuit breakers
Rated insulation voltage	(Ui)	500 V AC
Operating voltage	(Ue) L/N	230 V AC
	L/L	400 V AC
Pollution degree		3
Fire resistance IEC 695-2-1		Self-extinguishing at 960°C 30 secondes
Color		RAL 9003



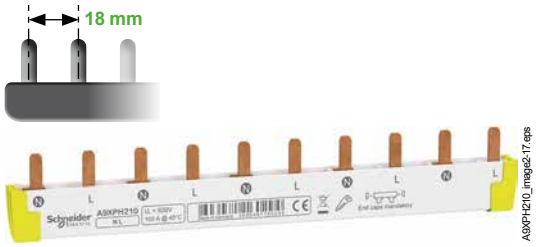
Biconnect horizontal comb busbars 18 mm modules (cont.)

	3P						4P			Head of group + 3 (N+P)	3 (N+P)		
													
	L1L2L3,...						NL1L2L3,...			NL1L2L3 / NL1NL2NL3,...	NL1NL2NL3,...		
	1						1			1	1		
	6	9	11	12	18	57	12	18	57	12	12	18	57
	R9XFH306	**R9XFH309**	**R9XFH311**	**R9XFH312**	**R9XFH318**	**R9XFH357**	**R9XFH412**	**R9XFH418**	**R9XFH457**	**R9XFH518G**	**R9XFH512**	**R9XFH518**	**R9XFH557**

Accessories

Number of poles	1P	2P	3P	4P	
					
	End-pieces				**Tooth covers**
Set of	10				20
Catalogue numbers	**R9XE110**	**R9XE210**	**R9XE310**	**R9XE410**	**R9XT20**

Horizontal comb busbars 18 mm modules for Acti9: iC60



IEC 60947-7-1, IEC 61439-2



Acti9 iC60	18 mm poles, cuttable				
Number of poles	**1P**	**1 (N+P)**	**3P**	**4P**	**3 (N+P)**
	L1	N L1	L1 L2 L3	N L1 L2 L3	N L1 N L2 N L3
Type	L1,...	NL1,...	L1L2L3,...	NL1L2L3,...	NL1NL2NL3,...
Set of	1	1	1	1	1
Catalogue numbers					
6 modules of 18 mm	**A9XPH106**	**A9XPH206**	**A9XPH306**	-	-
8 modules of 18 mm	-	**A9XPH208**	-	**A9XPH408**	-
9 modules of 18 mm	-	-	**A9XPH309**	-	-
10 modules of 18 mm	-	**A9XPH210**	-	-	-
11 modules of 18 mm	-	-	**A9XPH311**	-	-
12 modules of 18 mm	**A9XPH112**	**A9XPH212**	**A9XPH312**	**A9XPH412**	**A9XPH512**
16 modules of 18 mm	-	-	**A9XPH316**	**A9XPH416**	-
18 modules of 18 mm	-	**A9XPH218**	**A9XPH318**	-	**A9XPH518**
20 modules of 18 mm	-	-	**A9XPH320**	-	-
24 modules of 18 mm	**A9XPH124**	**A9XPH224**	**A9XPH324**	**A9XPH424**	**A9XPH524**
57 modules of 18 mm	**A9XPH157**	**A9XPH257**	**A9XPH357**	**A9XPH457**	**A9XPH557**

Technical data

Operating current at 40°C	(Ie)	100 A
Cross section		16 mm²
Short circuit current	(Isc)	Compatible with the breaking capacity of Schneider Electric circuit breakers
Rated insulation voltage	(Ui)	500 V AC
Operating voltage	(Ue)	415 V AC
Pollution degree		3
Fire resistance IEC 695-2-1		Self-extinguishing at 960°C 30 secondes
Color		RAL 9003

End-pieces
- essential to ensure the correctly comb busbars insulation



Tooth covers
- Insulate teeth that have been left free

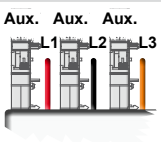
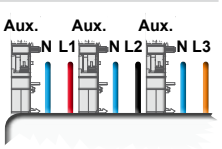
Accessories

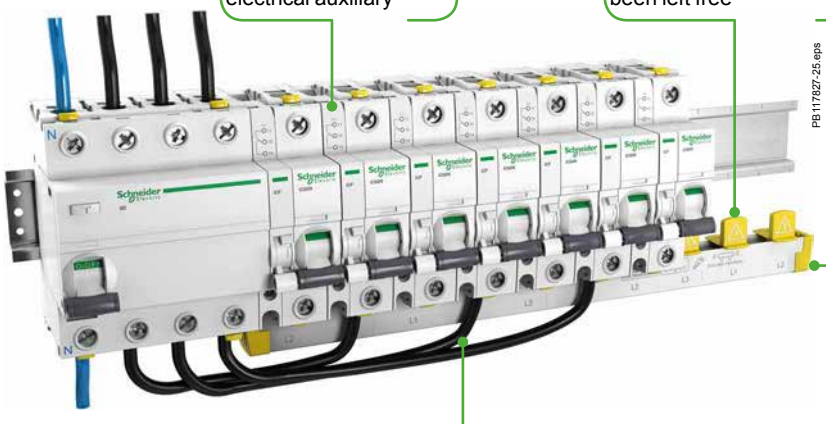
Number of poles	**1P Aux+1P**	**2P Aux+2P**	**3P Aux+3P 3 (Aux+1P)**	**4P Aux+4P 3 (Aux+N+1P)**		
						
	End-pieces				**Tooth covers**	**Connectors**
						Double terminal
	Lateral end-pieces providing IP20 protection				Insulate teeth that have been left free	Comb busbar power supply. Horizontal incomer on each side. For 35 mm² cable. Tightening torque 4 N.m
Set of	10	10	10	10	20	4
Catalogue numbers	**A9XPE110**	**A9XPE210**	**A9XPE310**	**A9XPE410**	**A9XPT920**	**A9XPCD04**

Horizontal comb busbars 18 mm modules for Acti9: iC60 (cont.)

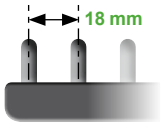


Cuttable comb busbars, 18 mm modules, with 9 mm auxiliary

	Aux+1P	Aux+2P	Aux+3P	Aux+4P	3 (Aux+1P)	3 (Aux+N+1P)
						
	AuxL1,...	AuxL1L2,...	AuxL1L2L3,...	AuxNL1L2L3,...	AuxL1AuxL2AuxL3,...	AuxNL1AuxNL2AuxNL3,...
	1	1	1	1	1	1
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	A9XAH157	A9XAH257	A9XAH357	A9XAH457	A9XAH657	A9XAH557



Horizontal comb busbars 18 mm modules for Acti9: iID





IEC 60947-7-1, IEC 61439-1



Acti9 iID	18 mm poles, iID 4P / iC60 1P+N				
Number of poles	**Head of group + 3 (N+P)**				
					
Type	NL1L2L3 / NL1NL2NL3,...				
Set of	1				
Number of 18 mm modules	10	12	14	16	22
Cat. no.	**A9XPH810**	**A9XPH812**	**A9XPH814**	**A9XPH816**	**A9XPH822**

Technical data

Operating current at 40°C	(Ie)	80 A
Cross section		16 mm²
Short circuit current	(Isc)	Compatible with the breaking capacity of Schneider Electric circuit breakers
Rated insulation voltage	(Ui)	500 V AC
Operating voltage	(Ue)	230 V AC (Ph/N) / 400 V AC (Ph/Ph)
Rated impulse withstand voltage	(Uimp)	6 kV
Degree of protection IEC 60529		IP20
Pollution degree		3
Fire resistance IEC 695-2-1		Self-extinguishing at 960°C 30 secondes
Colour		RAL 9003

End-pieces
- essential to ensure the correctly comb busbars insulation



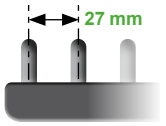
Accessories

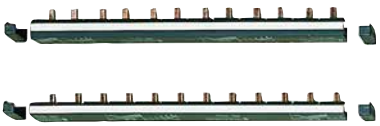




	End-pieces	Tooth covers
Use	Lateral end-pieces providing IP20 protection mounted on each side of the comb busbar	Insulate teeth that have been left free
Set of	10	20
Cat. no.	**A9XPE410**	**A9XPT920**

Horizontal comb busbars 27 mm modules for C120, NG125





IEC 60664-1



C120, NG125	27 mm poles, cuttable			
Number of poles	**1P**	**2P**	**3P**	**4P**
	L1	L1 L2	L1 L2 L3	N L1 L2 L3
Type	L1,…	L1L2,...	L1L2L3,...	NL1L2L3,…
Set of	1			
Number of 27 mm modules	16	16	15	16
Catalogue numbers	**14811**	**14812**	**14813**	**14814**

Technical data

Operating current at 40°C	(Ie)	125 A
Short circuit current	(Isc)	Compatible with the breaking capacity of Schneider Electric circuit breakers
Rated insulation voltage	(Ui)	620 V AC
Operating voltage	(Ue)	500 V AC
Degree of protection		3
Fire resistance IEC 695-2-1		Self-extinguishing at 960°C 30 secondes
Color		RAL 7016 (anthracite grey)



End-pieces
- essential to ensure the correctly comb busbars insulation

Tooth covers
- Insulate teeth that have been left free

Power supply
- directly in the circuit breaker terminals

Accessories

Number of poles	**1P, 2P, 3P, 4P**
	
	Tooth covers
	Insulate teeth that have been left free
Set of	20
Catalogue numbers	**14818**

Linergy DX
Quick distribution blocks





IEC 60947-7-1, IEC 61439-2

Description

- Downstream circuits are connected from the front, to spring terminals.
- Contact pressure automatically adapts to the size of the conductor.
- Contacts are insensitive to vibrations and thermal variations.
- Only one cable (flexible or rigid) can be inserted per terminal.

Quick distribution blocks

Number of poles		4P, incomers from top	4P, incomers from bottom
			
Rated operational current at 40 °C	(Ie)	63 A	63 A
Rated conditional short-circuit current of an assembly	(Isc)	The reinforced breaking capacity due to cascading in circuit breaker combinations is maintained. The worst-case situations have been tested.	The reinforced breaking capacity due to cascading in circuit breaker combinations is maintained. The worst-case situations have been tested.
Rated insulation voltage	(Ui)	500 V AC	500 V AC
Rated operational voltage	(Ue)	440 V AC	440 V AC
Rated impulse withstand voltage	(Uimp)	6 kV	6 kV
Rated short-time withstand current	(Icw)	-	-
Rated operational frequency		50/60 Hz	50/60 Hz
Degree of protection		IPxxB	IPxxB
Incoming terminals		1 tunnel terminal 25²/phase	1 tunnel terminal 25²/phase
Total connection capacity, outgoing terminals		24 connections: 4 x 6²/phase 12 x 6²/neutral	24 connections: 4 x 6²/phase 12 x 6²/neutral
Dimensions (H x W x D)		96.5 x 72 x 62 8 x 9 mm pitch	96.5 x 72 x 62 8 x 9 mm pitch
Installation		Clipped onto a DIN rail	Clipped onto a DIN rail
Other			
Standard for installation inside Prisma		IEC 61439-2	IEC 61439-2
Glow-wire 60695-2-11		960 °C	960 °C
Degree of pollution		3	3
References		**04040**	**04041**

Accessories

References		-	-

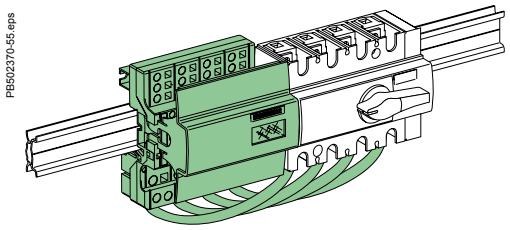
Life Is On Schneider Electric

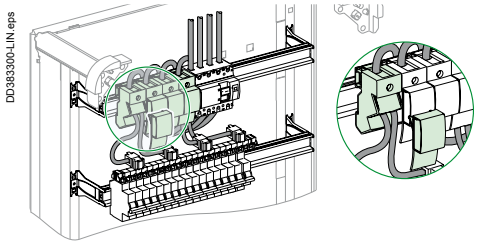
Linergy DX
Quick distribution blocks

Advantages
- A reliable electrical connection, no maintenance required (tightness guaranteed over time).
- Quick connection.
- Easy phase balancing.
- Ease of rewiring if the switchboard is expanded or modified.

	4P		1P
	 PB111415-19_r.eps	 PB111417-15_r.eps	 PB111453-8_r.eps
	125 A	160 A	160 A
	20 kA/60 ms max according to IEC 61439-1	20 kA/60 ms max according to IEC 61439-1	32 kA
	750 V AC	750 V AC	750 V AC
	690 V AC	690 V AC	690 V AC
	8 kV	8 kV	8 kV
	4.5 kA rms/1 s	4.5 kA rms/1 s	
	50/60 Hz	50/60 Hz	50/60 Hz
	IPxxB	IPxxB	IPxxB
	1 tunnel terminal 35²/phase	1 tunnel terminal 35²/phase	1 tunnel terminal 70/phase
	52 connections: 7 x 4²/phase 3 x 6²/phase 2 x 10²/phase 1 x 16²/phase (screw terminal)	52 connections: 7 x 4²/phase 3 x 6²/phase 2 x 10²/phase 1 x 16²/phase (screw terminal)	6 connections: 6 x 16²/phase
	127 x 108 x 48 8 x 9 mm pitch	127 x 108 x 48 8 x 9 mm pitch	95 x 36 x 70 4 x 9 mm pitch
	Screwed to plain or slotted backplate or onto DIN rail	Screwed to plain or slotted backplate or onto DIN rail	Onto DIN rail
	Possible to combine 2 terminal blocks (2nd terminal block supplied from enclosed terminals in the 1st, Imax of 2nd terminal block: 80 A)	Possible to combine 2 terminal blocks (2nd terminal block supplied from enclosed terminals in the 1st, Imax of 2nd terminal block: 80 A)	
	IEC 61439-2	IEC 61439-2	IEC 61439-2
	960 °C	960 °C	960 °C
	3	3	3
	04045	**04046**	**04031**

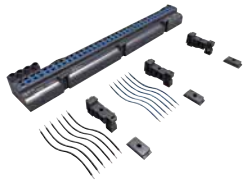
	125 A flexible connectors (4)		Copper spacer (batch of 4)
	04047	-	**04037**


PB502370-55.eps


DD383300-LIN.eps

Linergy FM
Quick device feeders

PB104505-30.eps



IEC 60947-7-1, IEC 61439-2

Description

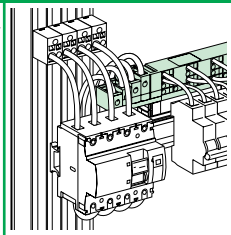
- Distribution over full rows of modular devices.
- The distribution block is generally supplied by busbars in enclosures and cubicles.
- Easy phase balancing.
- Mix of devices and functions in the same row.
- Installation ≥ 160 A: clipped onto the back of a modular rail or screwed onto a solid or pre-slotted plate.

Distribution blocks

Number of poles			4P		4P
			PB502496-31_r.eps 		PB104501-52-r.eps 
			63 A		**80 A**
Rated peak withstand current		(Ipk)	15 kÂ		15 kÂ
Rated conditional short-circuit current of an assembly		(Isc)	The cascading reinforced breaking capacity when combining circuit breakers is maintained. The worst-case scenarios have been tested. The characteristics are exactly right for the connected devices. Circuit breakers and switches still have their temperature derating curves, and their whole performance is maintained.		
Rated insulation voltage		(Ui)	500 V AC		500 V AC
Rated operational voltage		(Ue)	440 V AC		440 V AC
Rated impulse withstand voltage		(Uimp)	6 kV		6 kV
Maximum current		(Imax)	-		-
Rated operational frequency			50/60 Hz		
Degree of protection			IPxxB		IP20
Lenght	In 9 mm modules		24	48	48
	In 18 mm modules		12	24	24
Upstream connection capacity			Tunnel terminals for cables up to 25 mm^2		Tunnel terminals for cables up to 25 mm^2
Downstream connection capacity, cable to be used without ferrules	Max. 4 mm^2	Phase	2	7	-
		Neutral	4	13	
	Max. 6 mm^2	Phase	2	2	-
		Neutral	4	4	
	Max. 10 mm^2	Phasesw	-	-	18
		Neutral			18
Accessories included	Pre-stripped copper connections		10 of 4 mm^2 + 6 of 6 mm^2 (L = 100 mm)		12 blue + 12 black
	Protective cover				
	Screws and nuts				
References			**04008**	**04004**	**04000**

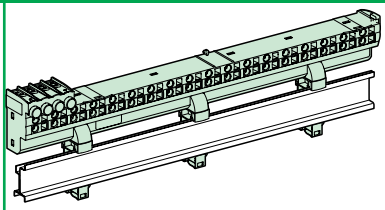
Installation

DD381664-LIN.eps



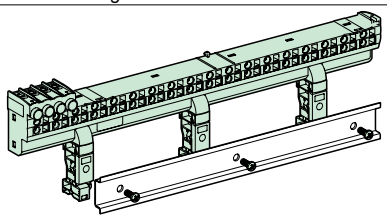
Clipped onto the back of a modular rail, or screw fixing

DB124195-LIN.eps



Clipped onto the back of a modular rail, or screw fixing

DB124196-LIN.eps



Can be mounted in Pragma Evolution enclosures and in Prisma Pack 160

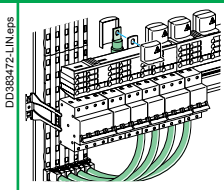
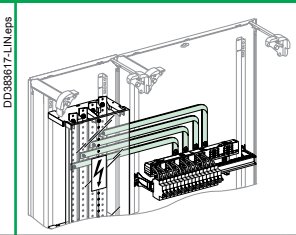
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Linergy FM
Quick device feeders



	4P	**2P**	**3P**	**4P**	**4P**
					
	160 A	**200 A**	**200 A**	**200 A**	**200 A**
	27 kÂ	25 kÂ	25 kÂ	30 kÂ	27 kÂ
	The cascading reinforced breaking capacity when combining circuit breakers is maintained. The worst-case scenarios have been tested.				
	750 V AC	750 V AC	750 V AC		750 V AC
	690 V AC	690 V AC	690 V AC		690 V AC
	8 kV	8 kV	8 kV		8 kV
	50 A for feeder for 10 mm² cable/63 A for feeder for 2 cables of 10 mm²				
	50/60 Hz				
	IPxxB				
	24	48			72
	12	24			36
	Direct on directing pads by 50 mm² cables or by 20 x 3 flexible bar with a prefabricated connection from busbar				
	-	-			
	-	-			
	6	12			
	6	18			
	20 of 4 mm² + 6 of 6 mm² (L = 100 mm)				
	For pads (IPxxB)				
	For pads				
	04018	**04012**	**04013**	**04014**	**04026**

Connections to the distribution block

				
	4P 200 A connection (supplied with fixing accessories)	4P 200 A connection (supplied with fixing accessories)	4P 200 A connection (supplied with fixing accessories)	4P 160 A connection for Linergy FM 1/2 row
Allows power supply from	Linergy BW busbar	Linergy BS sheathed busbar	Linergy BS rear busbar	Switchgear
References	**04021**	**04024**	**04029**	**04030**

Spare parts

	
	4 covers for 160/200 A Linergy FM rows
Reference	**01202**

Linergy DS
Screw distribution blocks

PB111254-30_1.eps



PB111253-30_1.eps



IEC/EN 60947-7-1, IEC/EN 61439-1 & 2

Description

- Single-pole or four-pole distribution block that can be installed on a standard DIN rail or on a mounting plate.
- Compatible with Prisma G and P, Pragma, Mini Pragma and Resbo series switchboards.
- Incomers and feeders are connected to screw terminals that accept rigid or flexible cables with ferrule.
- Optional: additional neutral terminal strip for four-pole distribution block.

Advantages

- Simplified power supply for main incomers.
- Easy phase balancing.
- Easy, effortless cabling due to excellent accessibility.
- Visible cabling.
- Insulation between phases.
- The single-pole distribution blocks are adjacent and bridgeable via the second incoming hole for parallel connection.

Screw distribution blocks

Number of poles	1P			4P
	 PB111250-20_1.eps	 PB111251-20_1.eps	 PB111252-20_1.eps	 PB111243-20_1.eps
Rated operational current	125 A	160 A	250 A	100 A
Total connections capacity	10	13	14	4 x 7
Terminal capacity				
Diameter	2 x Ø 9.5 mm	2 x Ø 12 mm	1 x Ø 15.3 mm	2 x Ø 7.5 mm
	2 x Ø 7.5 mm	3 x Ø 7.5 mm	1 x Ø 10 mm	5 x Ø 5.5 mm
	6 x Ø 5.8 mm	8 x Ø 5.8 mm	4 x Ø 6 mm	-
	-	-	8 x Ø 7.5 mm	-
Rated peak withstand current (Ipk) Ipk/60 ms	25 kÂ	36 kÂ	60 kÂ	14 kÂ
Ipk/6 ms	-	-	-	24 kÂ
Rated short-time withstand current (Icw) (IEC/EN 60947-7-1)	4.2 kA rms/1 s	8.4 kA rms/1 s	14.4 kA rms/1 s	3 kA rms/1 s
Width (number of 9 mm pitches)	3	4	5	8
Dimension (H x W x D)	85 x 27 x 50.5	85 x 36 x 50.5	85 x 45 x 50.5	100 x 71 x 50.5
Weight (g)	125	163	239	210
Neutral terminal strip (optional)	-	-	-	LGYN1007
References	**LGY112510**	**LGY116013**	**LGY125014**	**LGY410028**

Linergy DS
Screw distribution blocks



On LGY412560 and LGY416048 references.
Input cabling facilitated by side terminals.

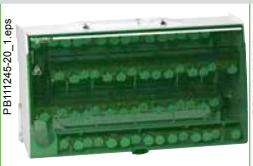
Technical data

Common characteristics

To IEC/EN 60947-7-1 and IEC/EN 61439-1 & 2	
Rated insulation voltage (Ui)	500 V AC
Rated operational voltage (Ue)	230 V AC (Ph/N) 440 V AC (Ph/Ph)
Rated impulse withstand voltage (Uimp)	8 kV
Rated conditional short-circuit current of an assembly	Up to the breaking capacity of Schneider Electric feeder circuit breakers, even in cascading configuration
Network frequency	50/60 Hz
Pollution degree	3
Overvoltage category	III

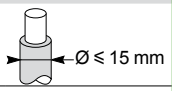
Additional technical characteristics

Reference temperature	40 °C
Operating temperature	-25 °C to 55 °C
Dielectric withstand (IEC/EN 60947-1)	2500 V AC

				Neutral terminal strip		
						
	125 A		160 A	100 A	125 A	
	4 x 12	4 x 15	4 x 12	7	12	15
	1 x Ø 9 mm	1 x Ø 9.5 mm	1 x Ø 12 mm	2 x Ø 7.5 mm	1 x Ø 9 mm	1 x Ø 9.5 mm
	7 x Ø 7.5 mm	3 x Ø 8.5 mm	3 x Ø 9 mm	5 x Ø 5.5 mm	7 x Ø 7.5 mm	3 x Ø 8.5 mm
	4 x Ø 6.5 mm	11 x Ø 6.5 mm	8 x Ø 7.5 mm	-	4 x Ø 6.5 mm	11 x Ø 6.5 mm
	-	-	-	-	-	-
	18 kÂ	18 kÂ	22 kÂ	-	-	-
	26 kÂ	28 kÂ	36 kÂ	-	-	-
	4.2 kA rms/1 s	4.2 kA rms/1 s	8.4 kA rms/1 s	-	-	-
	14	20	18	7	14	17
	100 x 126 x 50.5	100 x 162 x 50.5	100 x 174 x 50.5	20 x 70 x 35	20 x 125 x 35	20 x 155 x 35
	390	559	567	63	111	149
	LGYN12512	LGYN12515	LGYN12512	-	-	-
	LGY412548	**LGY412560**	**LGY416048**	**LGYN1007**	**LGYN12512**	**LGYN12515**

Terminal technical data

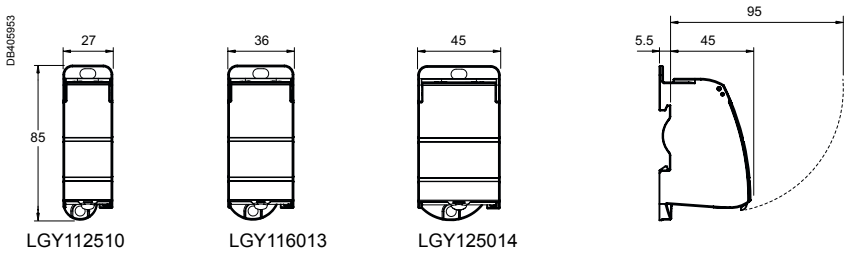
Type	**PZ2 screw**							
Diameter	Ø 5.5 mm	Ø 5.8 mm	Ø 6 mm	Ø 6.5 mm	Ø 7.5 mm	Ø 8.5 mm	Ø 9 mm	Ø 9.5 mm
Section rigid cable	1.5 to 16 mm²	1.5 to 16 mm²	1.5 to 16 mm²	1.5 to 16 mm²	2.5 to 25 mm²	6 to 35 mm²	10 to 35 mm²	10 to 35 mm²
Section flexible cable or with ferrule	1.5 to 10 mm²	1.5 to 10 mm²	1.5 to 10 mm²	1.5 to 10 mm²	1.5 to 16 mm²	4 to 25 mm²	4 to 25 mm²	6 to 35 mm²
Tightening torque	2 N.m	2 N.m	2 N.m	2 N.m	2 N.m	2 N.m	2.5 N.m	2.5 N.m

Type	**Hc screw**				
Diameter	Ø 9.5 mm	Ø 10 mm	Ø 12 mm		Ø 15.3 mm
Section rigid cable	10 to 35 mm²	1.5 to 50 mm²	25 to 70 mm²	 Ø ≤ 15 mm	35 to 120 mm²
Section flexible cable or with ferrule	6 to 35 mm²	1.5 to 35 mm²	16 to 50 mm²		25 to 95 mm²
Tightening torque	8 N.m	4 N.m	1P: 9 N.m	4P: 5 N.m	14 N.m

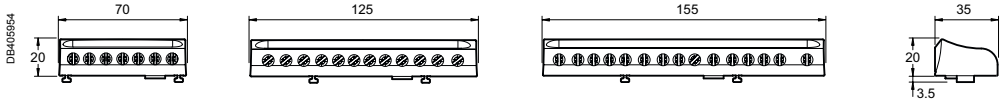
Linergy DS

Dimensions

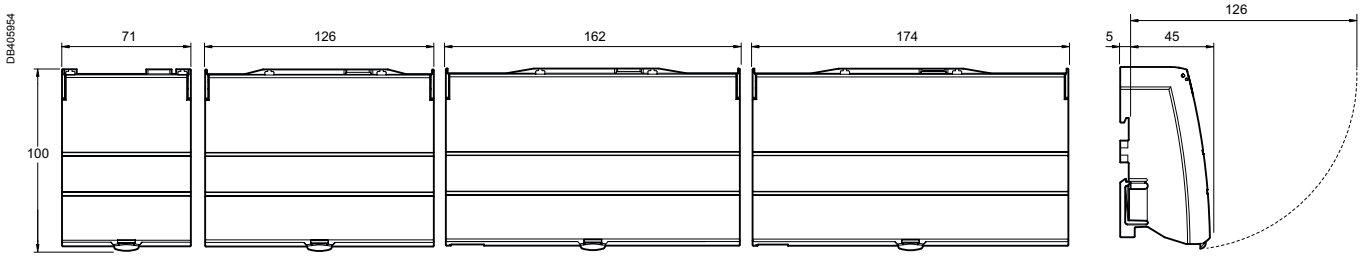
Dimensions (mm)



LGY112510 LGY116013 LGY125014



LGYN1007 LGYN12512 LGYN12515



LGY410028 LGY412548 LGY412560 LGY416048

Acti9 PowerTag Link

Country approval pictograms



A9XMWD20



Ethernet connection concentrator (Modbus TCP/IP) for wireless devices with data display web pages.
The associated PowerTag energy sensors allow alarms to be managed via email for terminal loads, and energy, power, current and voltage to be measured accurately in real time.
The associated PowerTag Control modules are designed to monitor a circuit and notify wirelessly to the concentrator the information status of a contact (OF, SD, CT or TL position indication...).
The entire system can easily be installed in existing LV equipments using Multi9/Acti9/Compact NSX type circuit breakers.

Data transmitted:
- Total and partial energy.
- Active power, apparent power, phase-to-phase and phase-to-neutral voltage.
- Currents I1, I2, I3.
- Power factor (cos phi).
- Voltage loss and overload information.
- Control order to a circuit.
- Information status of a contact.

Functions

Acti9 PowerTag Link permits:
- Concentration of PowerTag (covered ranges Acti9 iC40/iC60, Multi9 and Compact NSX) wireless energy sensor data.
- Ethernet connection via the RJ45 port.
- Load monitoring:
  - alarm sent by the energy sensor in the event of a voltage loss,
  - pre-alarms on predefined thresholds (50 %, 80 %) or customized thresholds (thresholds on currents, power, voltages and cumulative energies),
  - load running time counter,
  - power synthesis (kW).
- Alarm management on current/voltage/load level thresholds by e-mail.
- Send control orders to PowerTag Control output to operate a load remotely.
- Collect status of contact from PowerTag Control input.
- Display of alarms and pre-alarms on Acti9 PowerTag Link embedded web pages.
- Easy integration into system with Com'X 200, Com'X 510 and other Schneider Electric software and third-party Building Management Systems (BMS) thanks to EcoStruxure Power Commission report in pdf format. This report provides dynamically all the Modbus registers and associated meanings for an easy integration into the system.
- Remote metering capability using the Acti9 PowerTag Link monitoring page.

Installation

- On DIN rail (width 54 mm).
- 230 V AC power supply.

Testing and start-up

- Pairing of wireless devices must be performed via the EcoStruxure Power Commission software, freely available by downloading.
- The software makes it possible, in particular, to attribute to each circuit a name, a use and the current rating (useful for alarms).

Catalog numbers

Acti9 PowerTag Link

Type		Width in 9-mm modules
Ethernet concentrator (Modbus TCP/IP) up to 20 wireless devices	**A9XMWD20**	6
Ethernet concentrator (Modbus TCP/IP) up to 100 wireless devices	**A9XMWD100**	

DB405140

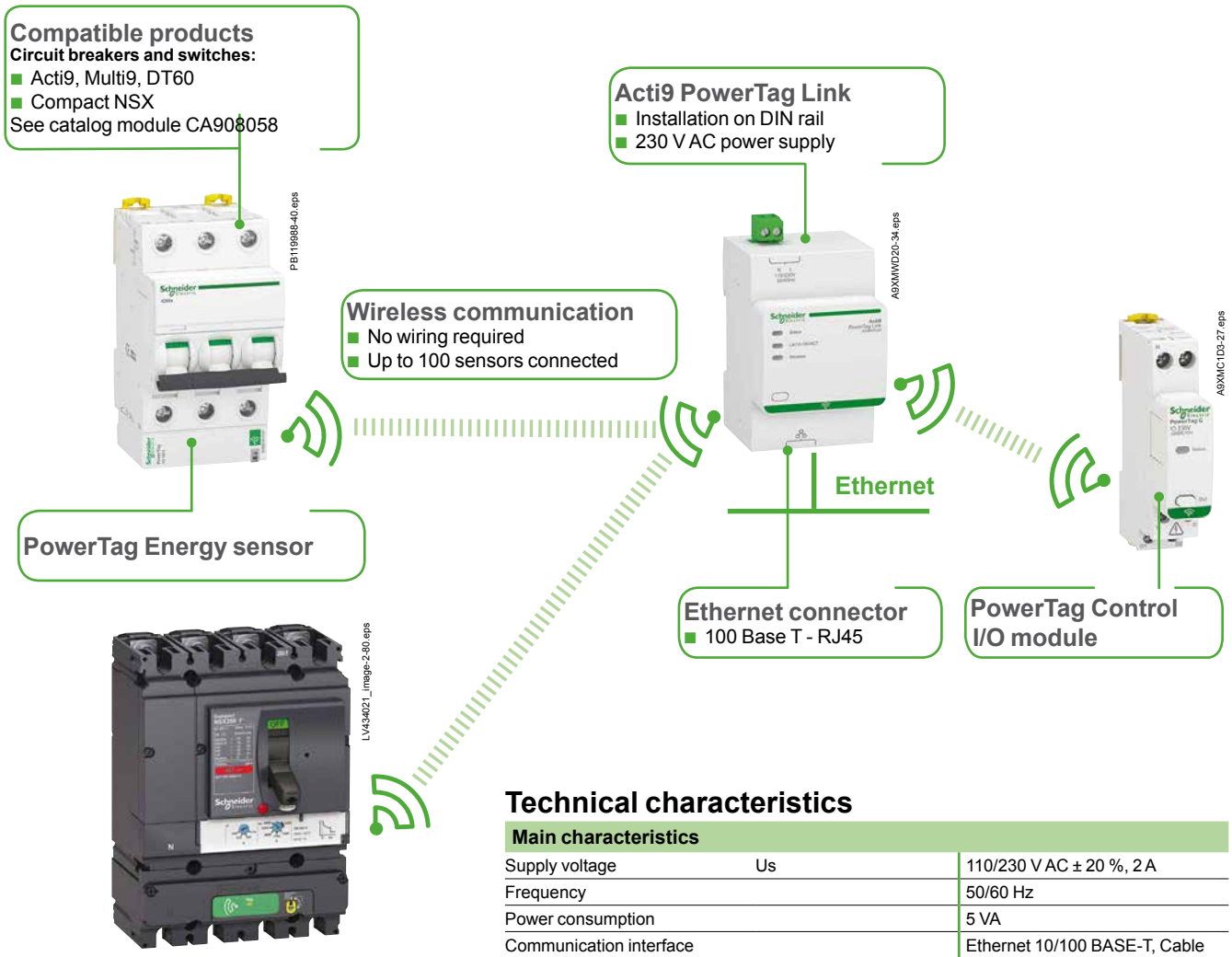
Commissioning software: EcoStruxure Power Commission (*)

- Configuration and communication test of wireless devices
- Editing of a complete test report (pdf) with the Modbus communication registers for easy integration into a supervision system
- Windows XP, Windows 7, Windows 8 and Windows 10 compatible
- Downloadable from: https://www.schneider-electric.com/ww/en/download/document/Ecoreach_Installer

(*): new name of Ecoreach software

Acti9 PowerTag Link (cont.)

Acti9 PowerTag Link



Technical characteristics

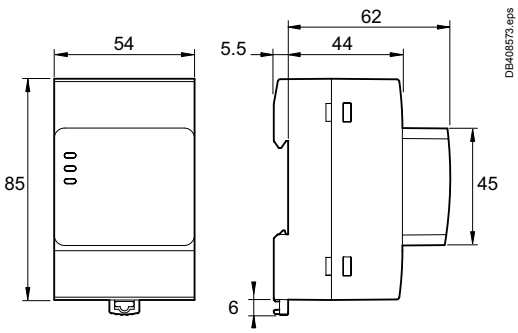
Main characteristics		
Supply voltage	Us	110/230 V AC ± 20 %, 2 A
Frequency		50/60 Hz
Power consumption		5 VA
Communication interface		Ethernet 10/100 BASE-T, Cable length ≤ 100 m Cat.6 STP
Wireless communication		Up to 100 PowerTag sensors
Integrated connection type		DHCP client (Ethernet port)
Local indication	Product state	Green, orange and red LED
	Ethernet state (LAN ST)	Green, orange and red LED
Overvoltage category		III
Radio-frequency communication	ISM band 2.4 GHz	2.4 GHz to 2.4835 GHz
Degree of protection (IEC 60068-2-30)	Device only	IP20
	Device in modular enclosure	IP40 Insulation class II
Fire resistance		650°C, 30 s
Environment		In compliance with the RoHS directive REACH Regulations

Additional characteristics		
Operating temperature		-25°C to +60°C
Storage temperature		-40°C to +85°C
Pollution degree		2
Tropicalization (IEC 60068-2-30)		Treatment 2 (relative humidity of 93 % at 40°C)
Operating altitude		0 to 2000 m
Electromagnetic compatibility	Reference standards	
	Immunity	EN 55035
	Emissions	EN 55032
	Electromagnetic compatibility and Radio spectrum Matters (ERM)	EN 300328 EN 301489-1 EN 301489-17

Weight (g)

Acti9 PowerTag Link	
Type	
Acti9 PowerTag Link	133

Dimensions (mm)



Acti9 PowerTag Link

Acti9 PowerTag Link C

CE

Country approval pictograms



Acti9 PowerTag Link C

Functions

Acti9 PowerTag Link C is a concentrator that connects the switchboard to the Facility Expert SB smartphone app. It permits:

- Load monitoring with PowerTag wireless energy sensors:
  - load state monitoring,
  - energy measurement.
- Temperature monitoring with PowerTag Ambient for Temperature.
- Sending of control orders to PowerTag Control output to operate a load remotely.
- Collection of status of contact from PowerTag Control input.
- Maximum of 20 wireless devices connected.

Configuration, testing and setup

- Connected devices are configured and communication is tested via the "mySchneider Electrician eSetup" app.

Catalog numbers

Acti9 PowerTag Link C

Type	Set of	
Acti9 PowerTag Link C	1	**A9XELC10**



PowerTag A9 M63 1P+W (A9MEM1520)



PowerTag A9 M63 3P (A9MEM1540)



PowerTag A9 F63 3P+N (A9MEM1570)



PowerTag A9 P63 1P+N (A9MEM1562)



PowerTag C IO 230V (A9XMC1D3)



PowerTag Ambient for Temperature (A9XST114)



PowerTag NSX (LV434020)



PowerTag NSX (LV434023)

Connectable devices

PowerTag A9 M63, P63, F63

Type	Mounting	Cat. no.		
		M63 for Acti9 and Multi9 Monoconnect	P63 for Acti 9 and Multi9 Phase/Neutral	F63 for other products
1P+wire	Top or bottom	**A9MEM1520**	-	-
1P+N	Top	**A9MEM1521**	**A9MEM1561**	-
	Bottom	**A9MEM1522**	**A9MEM1562**	-
	Top or bottom	-	-	**A9MEM1560**
1P+N RCBO	Bottom	-	**A9MEM1563**	-
3P	Top or Bottom	**A9MEM1540**	-	-
		A9MEM1543	-	-
3P+N	Top	**A9MEM1541**	**A9MEM1571**	-
	Bottom	**A9MEM1542**	**A9MEM1572**	-
	Top or bottom	-	-	**A9MEM1570**

PowerTag Control

Type	Cat. no.
IO 230V	**A9XMC1D3**

PowerTag Ambient for Temperature

Type	Cat. no.
Temperature	**A9XST114**

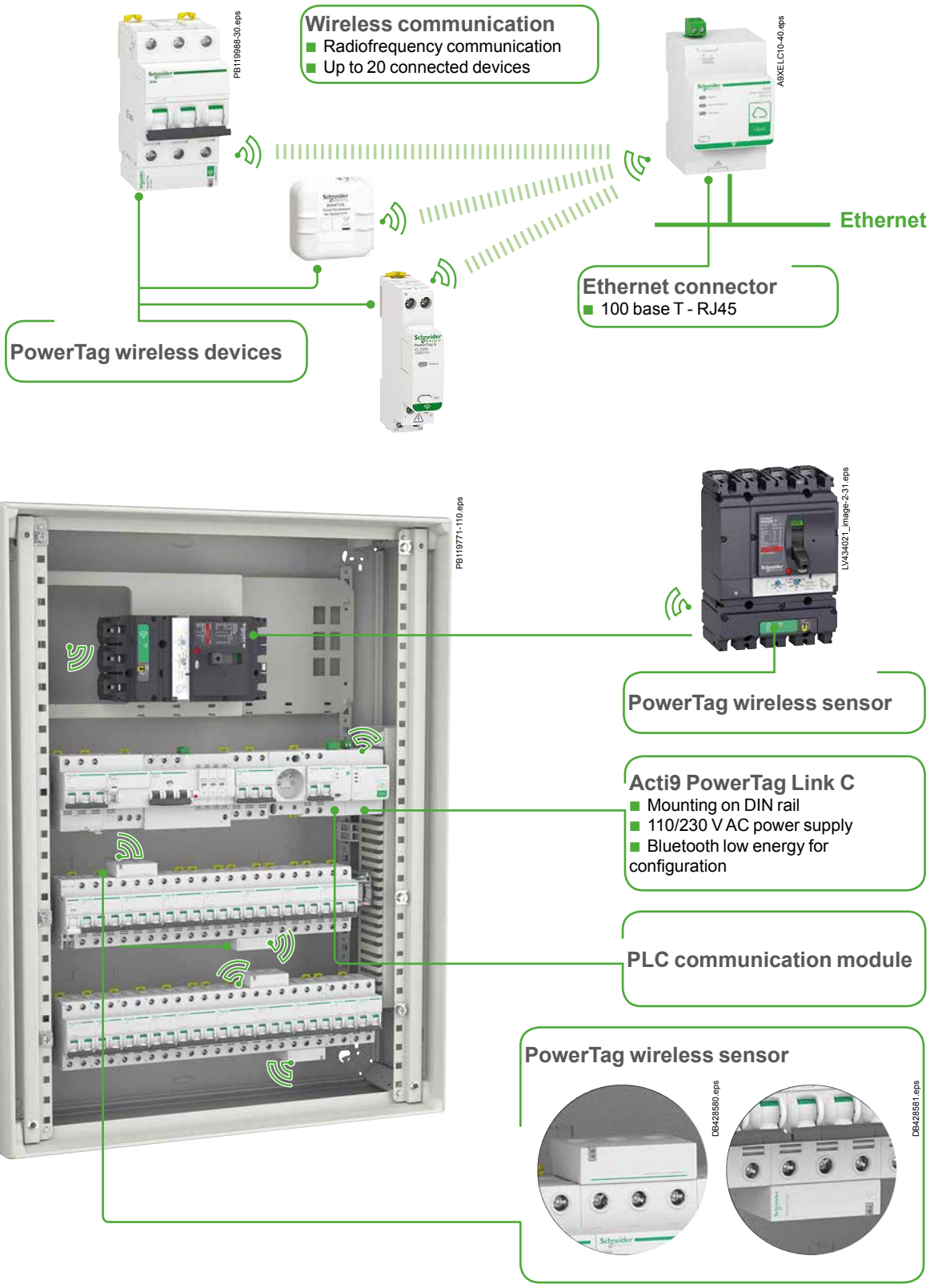
PowerTag NSX

Type	Description	Cat. no.
		For NSX
3P	250 A	**LV434020**
	630 A	**LV434022**
3P+N	250 A	**LV434021**
	630 A	**LV434023**

Note: for additional information and list of Schneider Electric compatible devices, refer to the selection guide CA908058E.

Acti9 PowerTag Link C (continued)

Example of an installation with PowerTag compatible A9XELC10



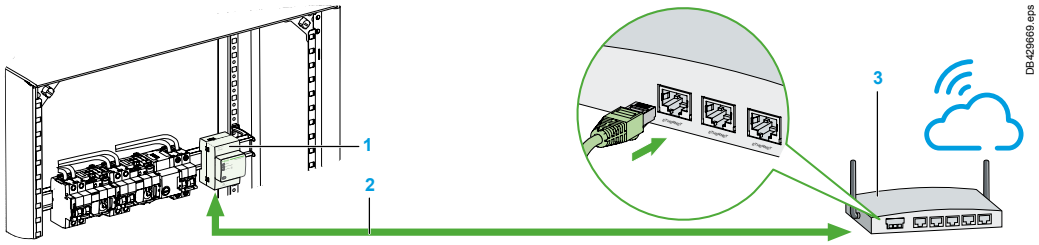
Acti9 PowerTag Link C (continued)

3 options for connecting Acti9 PowerTag Link C to an Internet router

Direct RJ45

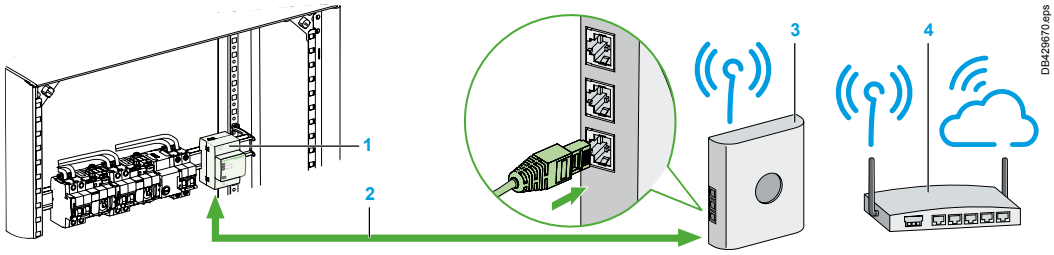
Ethernet cable

1 Acti9 PowerTag Link C
2 Ethernet cable
3 Internet router



Wifi router

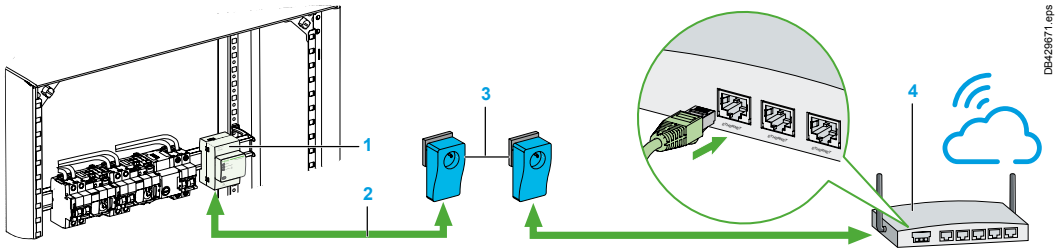
1 Acti9 PowerTag Link C
2 Ethernet cable
3 Wifi router
4 Internet router



Power Line Carrier (PLC)

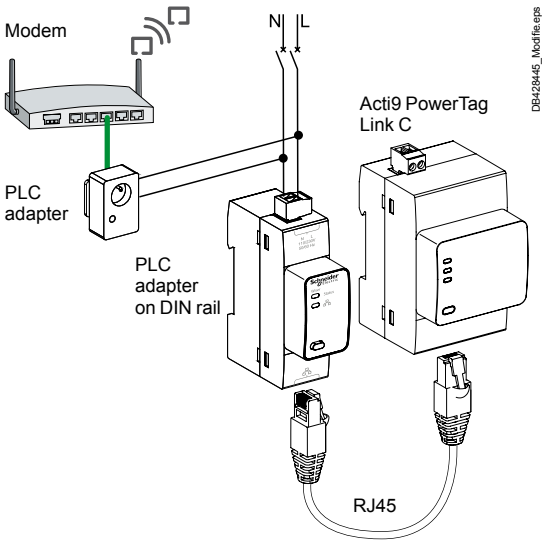
PLC with 2 PLC plugs

1 Acti9 PowerTag Link C
2 Ethernet cable
3 PLC adapter
4 Internet router



PLC with 1 PLC DIN rail adapter and 1 PLC plug





Type	Cat. no.
PLC adapter on DIN rail	**EER31710**

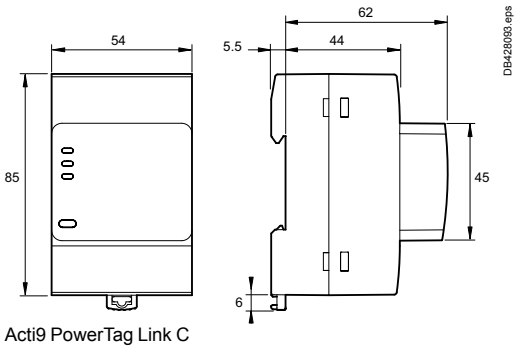
Acti9 PowerTag Link C (continued)

Technical characteristics

Power supply		
Rated		■ 110/230 V AC ± 15% ■ Non-isolated with protection against voltage reversals to -28.8 V⎓
Maximum input current		1.5 A
Voltage limit		19.2...28.8 V⎓ with ripple
Maximum inrush current		3 A
Overvoltage category		OVC III
No-load consumption		100 mA
Environmental characteristics		
Temperature	Operating (horizontal)	-25°C...+60°C
	Storage	-40°C...+85°C
Tropicalization		Treatment 2 (relative humidity: 93 % at 40°C)
Resistance to voltage dips		10 ms, class 3 as per IEC 61000-4-29
Degree of protection	Front panel	IP40
	Box	IP20
Degree of pollution		2
Compliance with SELV specifications		Yes
Altitude	Operating	0...2000 m
	Storage	0...3000 m
Vibration resistance	As per IEC 60068-2-6	1 g / ± 3.5 mm - 5 Hz to 300 Hz - 10 cycles
Shock resistance	As per IEC 60068-2-27	15 g / 11 ms
Immunity to electrostatic discharge	As per IEC 61000-4-2	■ Air: 8 kV ■ Contact: 4 kV
Immunity to radiated magnetic fields	As per IEC 61000-4-3	10 V/m - 80 MHz to 3 GHz
Immunity to fast transients	As per IEC 61000-4-4	■ 1 kV for Ethernet communication ■ 2 kV for 24 V⎓ power supply - 5 kHz - 100 kHz
Immunity to conducted magnetic fields	As per IEC 61000-4-6	10 V from 150 kHz to 80 MHz
Immunity to magnetic fields at mains frequency	As per IEC 61000-4-8	■ 30 A/m continuous ■ 100 A/m pulsed
Resistance to corrosive atmospheres	As per IEC 60721-3-3	Level 3C2 on H_2S / SO_2/ NO_2 / Cl_2
Fire resistance	For live parts	At 960°C 30 s / 30 s as per IEC 60 695-2-10 and IEC 60 695-2-11
	For other parts	At 650°C 30 s / 30 s as per IEC 60 695-2-10 and IEC 60 695-2-11
Salt spray mist	As per IEC 60068-2-52	Severity 2
Environment		In compliance with RoHS directives
Overvoltage	As per IEC 61000-4-5	■ Power supply: 0.5 kV ■ Ethernet: 1 kV
Conducted emissions	IEC 61131-2, CISPR	Class A: (0.15 to 30 MHz)
Radiated emissions	IEC 61131-2, CISPR	Class A: (30 to 1000 MHz)
Mean time between failures		More than 1 M hours
Additional characteristics		
Mounting position		Horizontal or vertical
Ethernet characteristics		
Type of interface module		Ethernet
Transmission	Ethernet	■ Transfer rate: 10/100 Mbit/s ■ Medium: straight shielded cable, STP or S/FTP, Cat 5e or 6, RJ45 connector
Turnaround time		1 ms
Maximum cable length		100 m
Type of bus connector		RJ45 (shielded)
Number of Ethernet ports		1
Radiofrequency characteristics		
Radio communication ISM band		2.4 to 2.4835 GHz
Number of channels		11 to 26 (IEEE 802.15.4)
Equivalent isotropically radiated power (EIRP)		0 dBm
Number of radiofrequency devices		Up to 20 PowerTag energy sensors
RF standard		ETSI / EN 300328 v2.1.1
		ETSI / EN 301489-17 v3.2.0

Acti9 PowerTag Link C (continued)

Dimensions (mm)

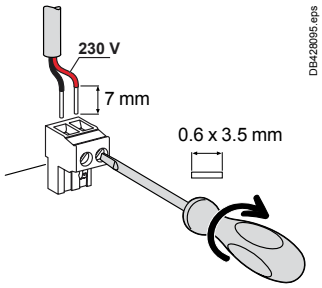


Acti9 PowerTag Link C

Weight (g)

Smartlink	
Type	
Acti9 PowerTag Link C	133

Connection



Terminal	Tightening torque	Copper cables		
		Rigid	Flexible	Flexible with ferrule
				
Power supply connector	0.8 Nm	0.2 to 1.5 mm^2	0.2 to 1.5 mm^2	0.2 to 1.5 mm^2

Installation

- On DIN rail (width 54 mm).
- 230 V AC power supply.

Acti9 Smartlink EL B

CE

Country approval pictograms



Acti9 Smartlink EL B

PB113286-modifie-66.eps



PB107797-44.eps

Functions

Acti9 Smartlink EL B is a gateway that connects the switchboard to the Facility Expert SB smartphone app.

- ■ Circuit breakers, residual current circuit breakers, residual current devices:
  - □ open/closed state,
  - □ tripped state.
- ■ Contactors, impulse relays:
  - □ opening control,
  - □ closing control,
  - □ open/closed state.
- ■ RCA remote control:
  - □ reset control after tripping,
  - □ open/closed state,
  - □ tripped state.
- ■ Pulse power meters:
  - □ number of pulses recorded,
  - □ pulse value setting (e.g. kWh).
- ■ Analogue sensors:
  - □ temperature sensor,
  - □ humidity sensor,
  - □ CO_2 detector,
  - □ etc.

When Acti9 Smartlink EL B is switched on and the Internet connection is available, communication automatically adjusts to Ethernet (Cloud) communication parameters.



DB428865-70.eps

Configuration, testing and setup

■ Connected devices are configured and communication and cabling are tested via the "mySchneider Electrician eSetup" app.

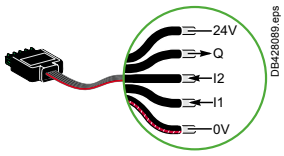
Acti9 Smartlink EL B (continued)



Acti9 Smartlink EL B



Wifer



A9XCAU06



24 V DC power supply

Catalog numbers

Smartlink			
Type		**Set of**	
Acti9 Smartlink EL B		1	**A9XELC08**
Supplied with	Connector for 4-pin analogue input	1	
	24 V DC power supply connector	1	
Mounting kit	DIN rail (4 feet, 4 straps, 4 adapters)	1	**A9XMFA04**
	Back panel (2 angle brackets)	1	**A9XMBP02**
	Pragma and Kaedra mounting (see table below)	1	**A9XMVA01**
Accessories			
Wifer, wifi adapter for setup if no wifi available		1	**TCSEGWB13FA0**
Prefabricated cables			
With 2 connectors	100 mm	6	**A9XCAS06**
	160 mm	6	**A9XCAM06**
	450 mm	6	**A9XCAH06**
	870 mm	6	**A9XCAL06**
With 1 connector	870 mm	6	**A9XCAU06**
	4000 mm	1	**A9XCAC01**
Connectors	5-pin connectors (Ti24)	12	**A9XC2412**
			
24 V DC power supply	With iATL, iACT or RCA	1	**ABL8MEM24012**
	Without iATL, iACT or RCA	1	**ABL8MEM24003**

Connectable devices

With Ti24 interface		
Type	**Cat. no.**	**Description**
iACT24	A9C15924	Low-level control and indication auxiliary for iCT contactors
iATL24	A9C15424	Low-level control and indication auxiliary for iTL impulse relays
iOF+SD24	A9A26897 A9A26898	Low-level indication auxiliary for iC60, iID, ARA, RCA, iSW-NA
	A9N26899	Low-level indication auxiliary for C60, C120, DPN, RCCB/ID, C60H-DC
RCA	See module CA904011	Remote control with Ti24 interface



iACT24



iATL24



iOF+SD24



RCA

Without Ti24 interface
Power meters with pulse output e.g. iEM2000T
Impulse meters complying with the IEC 62053-21 standard

With analogue outputs
Temperature and humidity sensors with 0-10 V or 4-20 mA output
CO_2 detectors with 0-10 V or 4-20 mA output



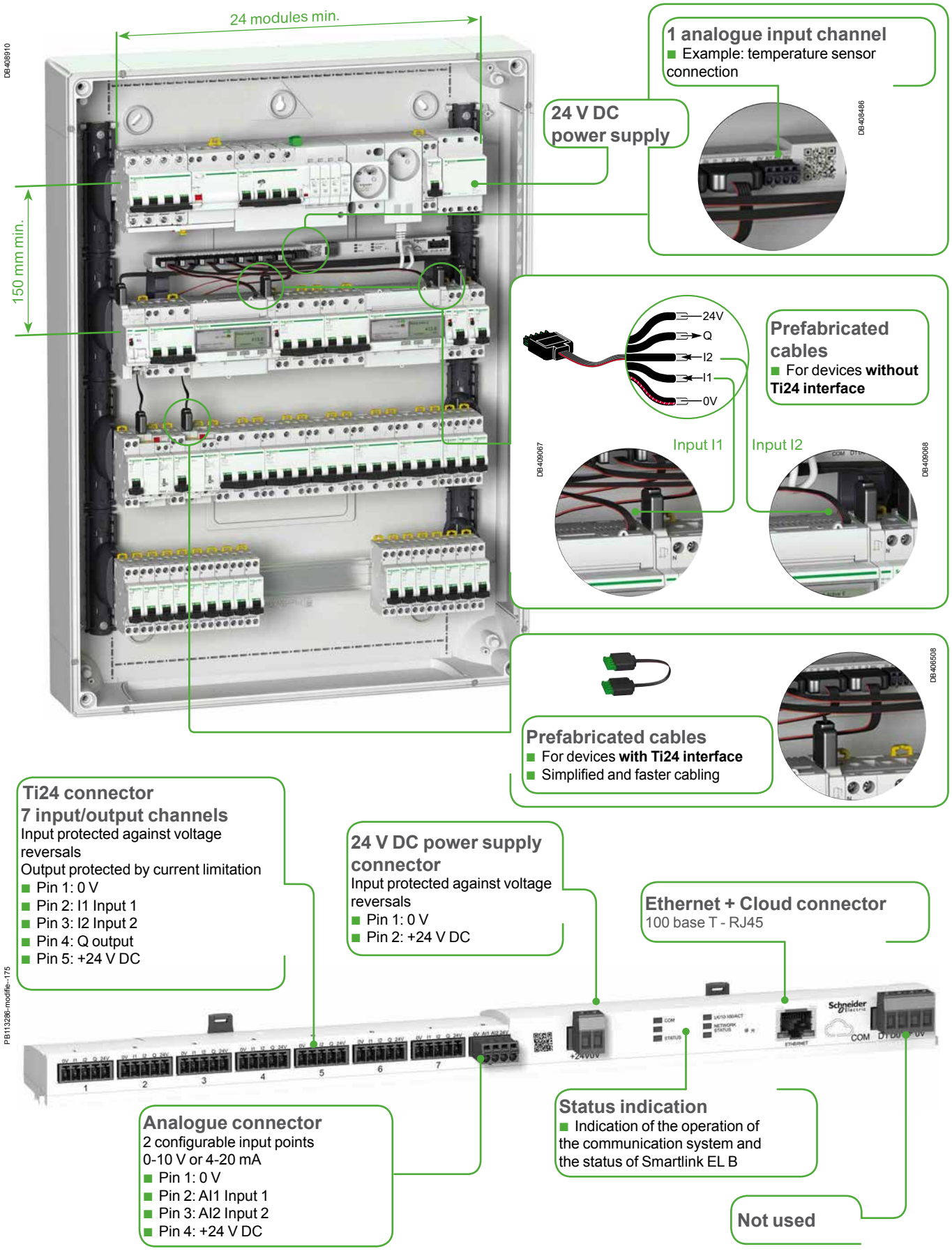
iEM3110



iEM2000T

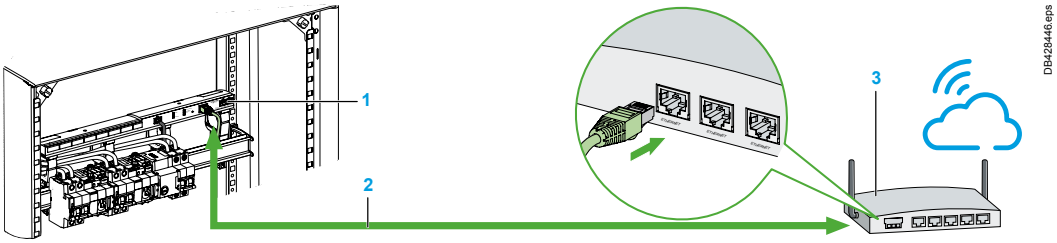
Acti9 Smartlink EL B (continued)

Example of an installation



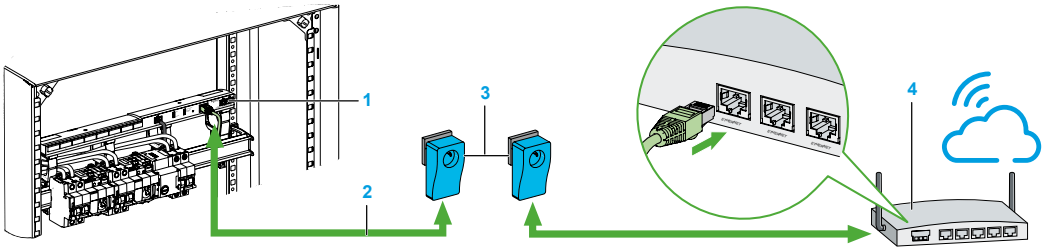
Acti9 Smartlink EL B (continued)

Options for connecting Acti9 Smartlink EL B to an Internet router



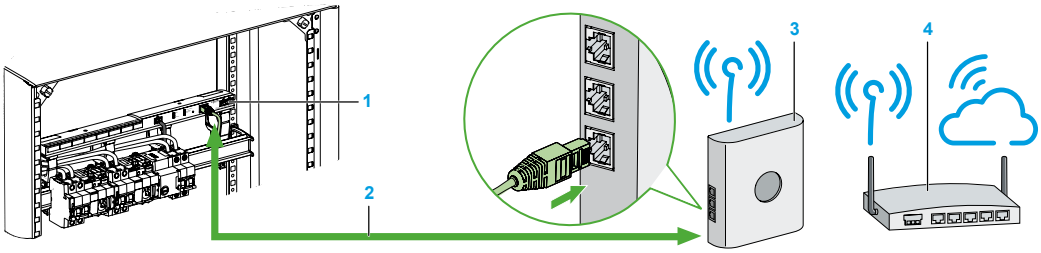
RJ45 Ethernet cable

1 Acti9 Smartlink EL B
2 Ethernet cable
3 Internet router



PLC

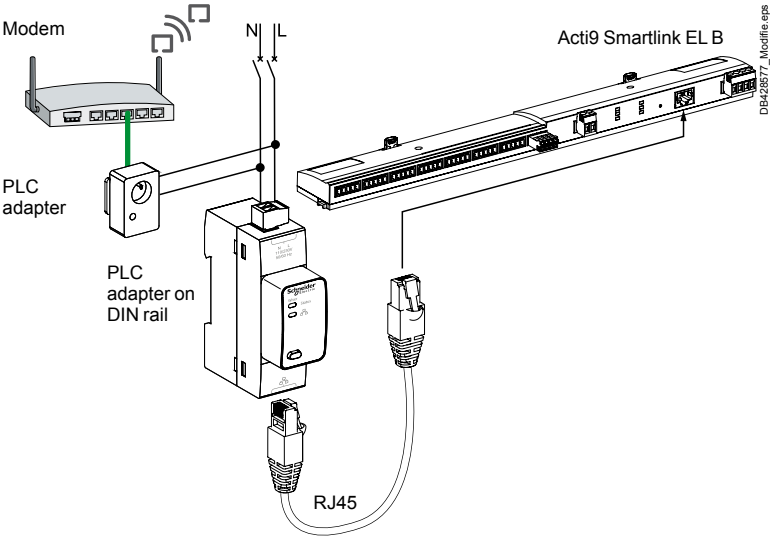
1 Acti9 Smartlink EL B
2 Ethernet cable
3 PLC adapter
4 Internet router



Wifi router

1 Acti9 Smartlink EL B
2 Ethernet cable
3 Wifi router
4 Internet router

Option for connecting a PLC module to a switchboard using a DIN adapter





Type	Cat. no.
PLC adapter on DIN rail	**EER31710**

Acti9 Smartlink EL B (continued)

Technical characteristics

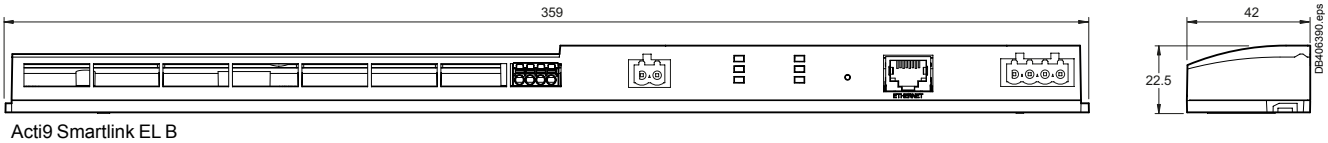
Power supply		
Rated		24 V DC ± 20%
Maximum input current		1.5 A
Maximum inrush current		3 A
Overvoltage category		OVC II
No-load consumption		110 mA
Meter		
Capacity		2^{32} pulses per input
Digital input characteristics		
Number of channels		7 x 2-input channels **Device with Ti24 interface:** 1 channel, 2 inputs used **Device without TI 24 interface:** (power meter, impulse meter) 1 input used
Type of input		Current collector Type 1, IEC 61131-2
Maximum cable length		500 m
Rated voltage		24 V DC
Voltage limits		24 V DC ± 20%
Rated current		2.5 mA
Maximum current		5 mA
Filtering time	State 1	2 ms
	State 0	2 ms
Isolation		No isolation between channels
Voltage reversal protection		Yes
Analogue input characteristics		
Number		2
Type		Separate configuration for each input: 0-10 V or 4-20 mA
Measuring accuracy		1/100 full scale
Resolution		12 bits
Acquisition time		500 ms
Isolation		No isolation between channels
Power supply		0-24 V DC
Type of cable		Shielded twisted pair
Maximum cable length		30 m
Protection		Short-circuit protection
Output characteristics		
Number of output channels		7
Type of output		24 V DC - 0.1 A current source
Maximum cable length		500 m
Rated voltage	Voltage	24 V DC
	Maximum current	100 mA
Filtering time	State 1	2 ms
	State 0	2 ms
Voltage drop (voltage at state 1)		1 V max
Maximum inrush current		500 mA
Leakage current		0.1 mA
Overvoltage protection		33 V DC

Acti9 Smartlink EL B (continued)

Technical characteristics (continued)

Environmental characteristics		
Temperature	Operating	-25°C...+60°C (if vertical mounting, limited to 50°C)
	Storage	-40°C...+80°C
Tropicalization		Treatment 2 (relative humidity: 93 % at 40°C)
Resistance to voltage dips		10 ms, class 3 as per IEC 61000-4-29
Degree of protection		IP20
Degree of pollution		3
Altitude	Operating	0...2000 m
Vibration resistance	As per IEC 60068-2-6	1 g / ± 3.5 mm - 5 Hz to 300 Hz - 10 cycles
Shock resistance	As per IEC 60068-2-2-7	15 g / 11 ms
Immunity to electrostatic discharge	As per IEC 61000-4-2	■ Air: 8 kV ■ Contact: 4 kV
Immunity to radiated magnetic fields	As per IEC 61000-4-3	10 V/m - 80 MHz to 3 GHz
Immunity to fast transients	As per IEC 61000-4-4	■ 1 kV for inputs/outputs ■ 1 kV for the communication bus ■ 2 kV for 24 V DC power supply - 5 kHz - 100 kHz
Immunity to conducted magnetic fields	As per IEC 61000-4-6	10 V from 150 kHz to 80 MHz
Immunity to magnetic fields at mains frequency	As per IEC 61000-4-8	30 A/m
Resistance to corrosive atmospheres	As per IEC 60721-3-3	Level 3C2 on H_2S / SO_2/ NO_2 / Cl_2
Fire resistance	For live parts	At 960°C 30 s / 30 s as per IEC 60 695-2-10
	For other parts	At 650°C 30 s / 30 s as per IEC 60 695-2-10
Salt spray mist	As per IEC 60068-2-52	Severity 2
Environment		In compliance with RoHS directives
Additional characteristics		
Memory backup period		10 years
Prefabricated cable characteristics		
Dielectric strength		1 kV / 5 min
Minimum draw-out resistance		20 N
Ethernet characteristics		
Link		10/100 Mbit/s Ethernet
Turnaround time		1 ms
Maximum cable length		100 m
Type of bus connector		RJ45 (shielded)
Number of Ethernet ports		1

Dimensions (mm)



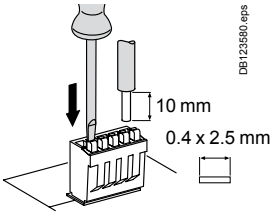
Acti9 Smartlink EL B

Weight (g)

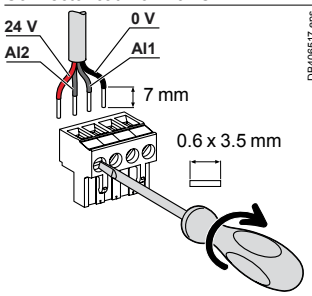
Smartlink	
Type	
Acti9 Smartlink EL B	180

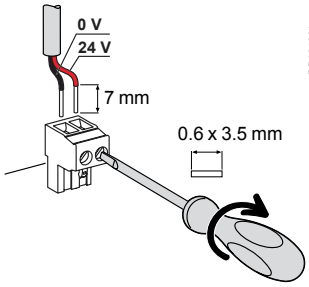
Acti9 Smartlink EL B (continued)

Connection

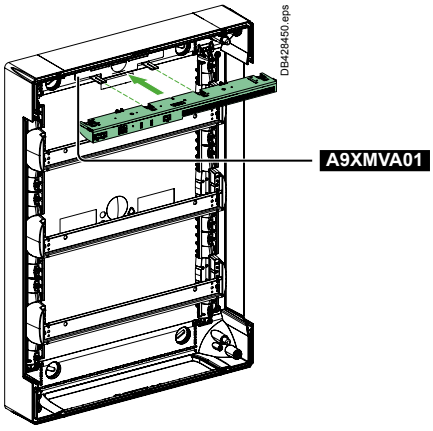


Connector cat. no.: A9XC2412

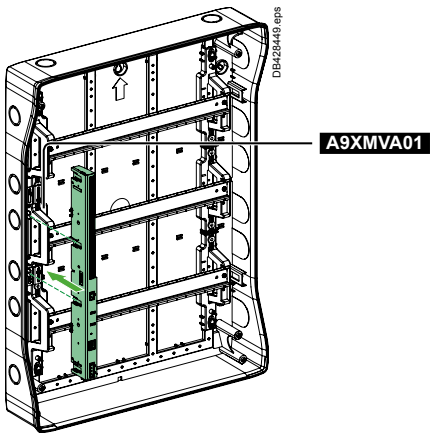




Terminal	Tightening torque	Copper cables		
		Rigid	Flexible	Flexible with ferrule
				
Ti24 interface	Spring-loaded terminals	0.5 to 1.5 mm²	0.5 to 1.5 mm²	-
Analogue connector	0.8 Nm	0.1 to 1.5 mm²	0.1 to 1.5 mm²	0.1 to 1.5 mm²
Power supply connector	0.8 Nm	0.2 to 1.5 mm²	0.2 to 1.5 mm²	0.2 to 1.5 mm²



Pragma enclosure horizontal mounting



Kaedra enclosure vertical mounting

Installation

- Horizontal mounting in switchboards by fitting behind the DIN rail using mounting kit **A9XMFA04:**
  - width 24 modules per row,
  - minimum spacing between rails 150 mm.
- Mounting in Pragma and Kaedra enclosures with mounting kit **A9XMVA01** (see table below).

Installation in Kaedra and Pragma enclosures	Kit A9XMVA01 Vertical	Horizontal
Kaedra		
13M 3R	☑	
18M 3R		
18M 1R, 2R, 3R, 4R		☑
Pragma		
13M 3R,4R	☑	
18M 3R,4R		
18M 1R, 2R, 3R, 4R		☑
24M 1R, 2R		
24M 3R, 4R, 5R, 6R	☑	☑

Acti9 Smartlink SI B

Country approval pictograms

PB107797-47



DB404502

ComReady

IEC/EN 61131-2

The Acti9 Smartlink SI B is an open system that remotely measures, balances, monitors and controls final distribution.

It is designed to fit into tertiary building projects and integrates perfectly in a Building Management System or an Energy Management System.

It consists of:
- a Modbus Slave version (Acti9 Smartlink Modbus)
- a Modbus Master version (Acti9 Smartlink SI B) with the following functions: radio hub, Modbus gateway and embedded web server: this provides web pages for configuring the system, and real-time monitoring of values (status of circuit breakers, energy meters, alarms and monitoring and control).

These modules transmit data to a PLC or monitoring system.

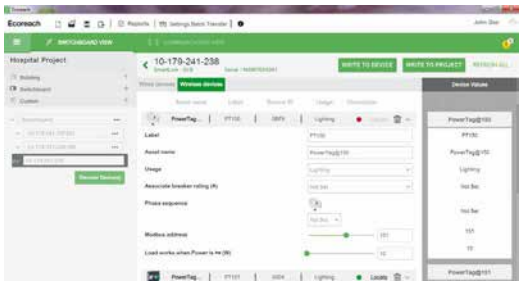
The system supports
- Alarm monitoring on current, voltage, power factor, tripping, power, consumption thresholds and their transmission by email.
- Monitoring and control via web pages of loads, energy and power by zone and by usage.
- Single access point for a full analysis of the status of switchboard power distribution (measurements, protection status, temperature, consumption, alarms, control and monitoring).

Functions

Transmission of data collected by Acti9 switchgear assemblies
- Circuit breakers, residual current circuit breakers and residual current devices:
  - open/closed state, tripped state,
  - number of opening/closing cycles,
  - number of tripping actions.
- Contactors, impulse relays, Reflex iC60:
  - opening and closing control,
  - open/closed state,
  - number of opening/closing cycles,
  - total period of operation of the load (device closed).
- Remote controlled circuit breaker/Reflex iC60:
  - opening control ,
  - closing control ,
  - contactor open/closed state,
  - circuit breaker open/closed state,
  - number of opening/closing cycles,
  - total period of operation of the load.
- Pulse meters (energy, water, gas, etc.):
  - number of pulses recorded,
  - pulse value setting (default: 10 Wh),
  - total consumption recorded,
  - possibility of resetting energy meters.
- Digital inputs/outputs.

Acti9 Smartlink SI B

DB429005



Functions (cont.)

Transmission of additional data collected by Acti9 Smartlink SI B

- Power meters (Modbus slaves).
- Analog sensors:
  - CO_2 sensor,
  - light sensor,
  - humidity sensor,
  - temperature sensor,
  - any 0..10 V or 4..20 mA compatible sensor.
- PowerTag wireless-communication energy sensors (Compact NSX, Acti9 iC60, iC40, DT60, DT40 ranges):
  - total and partial energy,
  - active power, phase-to-phase voltage, phase-to-neutral,
  - currents I1, I2, I3,
  - power factor,
  - voltage loss and overload information.
- Load monitoring:
  - alarm sent by the sensor in the event of a voltage loss,
  - pre-alarms on predefined thresholds (50 %, 80 %) or customized thresholds (thresholds on currents, power, voltages and cumulative energies),
  - load running time counter.
- Alarm management on current/voltage/load level thresholds by e-mail.
- Display of alarms and pre-alarms on Acti9 Smartlink SI B embedded web pages.
- Easy integration into any upper system using Com'X 210, Com'X 510 and other Schneider Electric software and third-party Building Management Systems (BMS's) thanks to the EcoStruxure Power Commission report in pdf format. A report provides dynamically all the Modbus registers and associated meanings for an easy integration into the system.
- Remote metering capability using the Acti9 Smartlink SI B monitoring page.

All the data are stored in memory: number of cycles, consumption, period of operation, even in the event of a power interruption.

Acti9 Smartlink can also exchange data with any device having 24 V DC digital inputs/outputs (e.g. low-level contacts 29452 for position of the Compact NSX). No configuration of the products connected to the Ti24 channels is required.

At power up, Acti9 Smartlink Modbus adapts automatically to the communication parameters of the Modbus master (PLC, supervisor, etc.).

Installation

- Assembly in switchboards:
  - width 24 modules per row,
  - minimum spacing between rails 150 mm.
- Mounting on:
  - DIN rail with mounting kit **A9XMFA04**,
  - Linergy FM 80 A, with bolts provided,
  - Linergy FM 200 A, with mounting kit **A9XM2B04**,
  - back of enclosure with mounting kit **A9XMBP02**,
- Installation in Pragma and Kaedra enclosures with mounting kit **A9XMVA01.**

Test

- The communication and cabling test on the connected devices can be performed using the EcoStruxure Power Commission software.

DB405140

Commissioning software: EcoStruxure Power Commission (*)

- Configuration and communication test of wired and wireless devices
- Editing of a complete test report (pdf) with the Modbus communication registers for easy integration into a supervision system
- Windows XP, Windows 7, Windows 8 and Windows 10 compatible
- Downloadable from: https://www.schneider-electric.com/ww/en/download/document/Ecoreach_Installer

(*): new name of Ecoreach software

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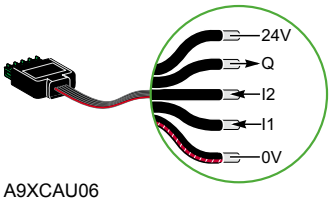
Acti9 Smartlink SI B

PB107753-68



Acti9 Smartlink Modbus

DB404941



A9XCAU06

Catalogue numbers

Acti9 Smartlink

Type		Set of	
Acti9 Smartlink SI B		1	**A9XMZA08**
Supplied with	4-pin connector for analog inputs	1	
	Modbus connector	1	
	24 V DC power supply connector	1	
	Bolts for mounting on Linergy FM 80	2	
Acti9 Smartlink Modbus		1	**A9XMSB11**
Supplied with	Modbus connector	1	
	24 V DC power supply connector	1	
	Bolts for mounting on Linergy FM 80	2	
Accessories			
USB/Modbus connecting cables for Acti9 Smartlink test		1	**A9XCATM1**
Prefabricated cables			
With 2 connectors	100 mm	6	**A9XCAS06**
	160 mm	6	**A9XCAM06**
	450 mm	6	**A9XCAH06**
	870 mm	6	**A9XCAL06**
With 1 connector	870 mm	6	**A9XCAU06**
	4000 mm	1	**A9XCAC01**
Connectors	5-pin connectors (Ti24)	12	**A9XC2412**
Mounting kit	DIN rail (4 feet, 4 earthing straps, 4 adapters)	1	**A9XMFA04**
	Linergy FM 200 A (4 adapters)	1	**A9XM2B04**
	Back of enclosure (2 brackets)	1	**A9XMBP02**
	Vertical for Kaedra enclosures	1	**A9XMVA01**
	Vertical or horizontal for Pragma enclosures		
Spare parts	Bolts for Linergy FM 80 A (2 bolts)	1	**A9XMLA02**

PB107754-12



PB107755-5



PB107756-7



PB107804-43



Connectable devices

With Ti24 interface

Type	Reference	Description
iACT24	A9C15924	Low-level control and indication auxiliary for iCT contactors
iATL24	A9C15424	Low-level control and indication auxiliary for iTL impulse relays
iOF+SD24	A9A26897 A9A26898	Low-level indication auxiliary for iC60, iID, ARA, RCA, iSW-NA
OF+SD24	A9N26899	Low-level indication auxiliary for C60, C120, DPN, RCCB/ID, C60H-DC
RCA iC60	See module CA904011	Remote control with Ti24 interface
Reflex iC60	See module CA904012	Reflex iC60 with Ti24 interface

Without Ti24 interface

Power meters with pulse output, e.g. iEM2000T

Pulse meters complying with the IEC 62053-21 standard

24 V DC indicator lamps, Harmony range type XVL

All loads not exceeding 100 mA, 24 V DC

Timers, thermostats, time switches, load shedding devices

All 24 V DC auxiliary contacts, IEC 61131-2 type 1

With Modbus connector systems

Power meters: iEM3150, iEM3250, iEM3350, iEM3155, iEM3255, iEM3355, all Modbus slave RS485 equipment

With wireless-communication systems

PowerTag energy sensors *. See catalog module CA907029E

With analog outputs

Any 0...10 V and 4...20 mA compatible sensor (temperature, humidity, luminosity, etc.)

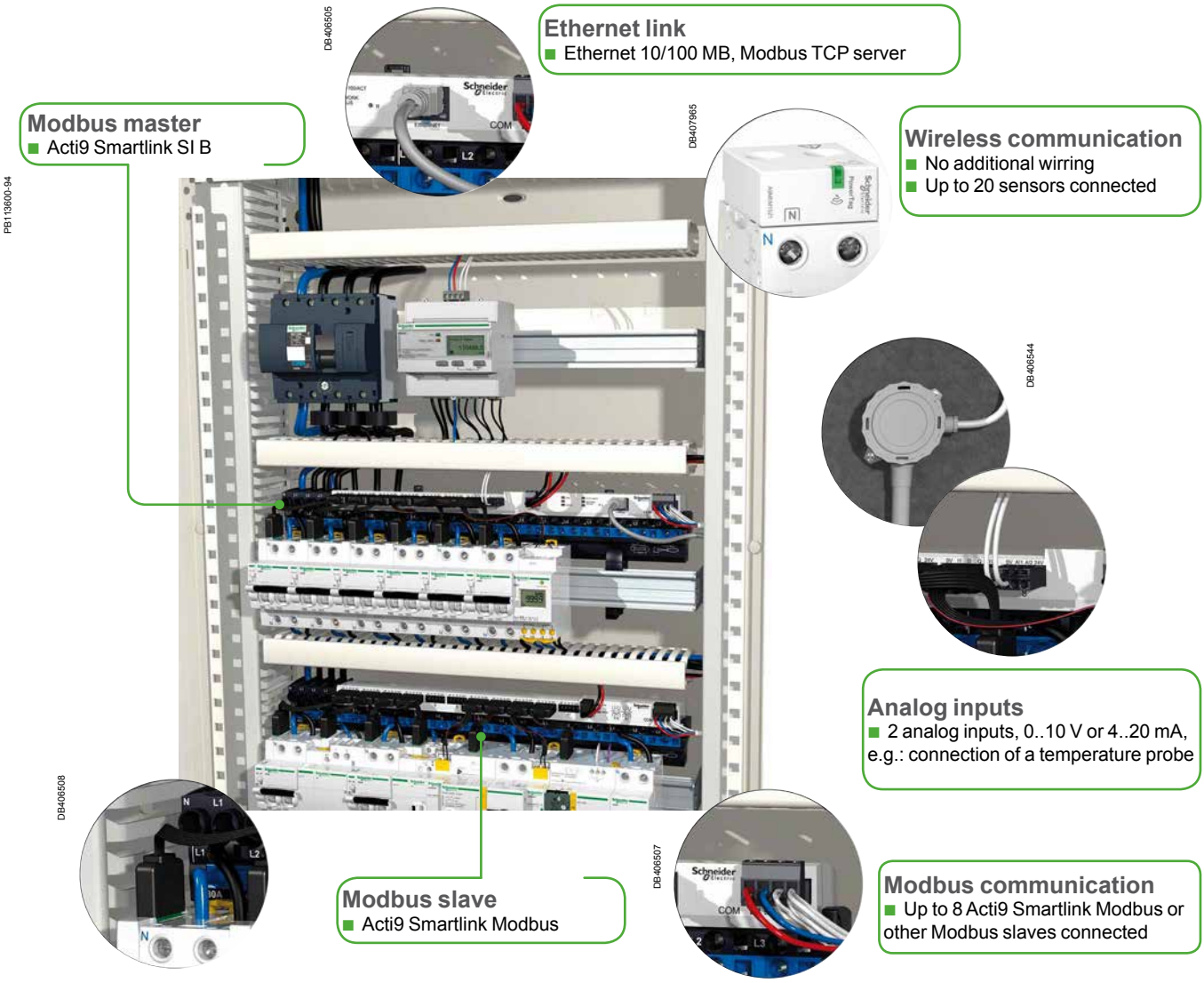
(*) for additional information and a list of Schneider Electric compatible devices, refer to the selection guide CA908058E.

PB115448-40



Acti9 Smartlink SI B (cont.)

Example of an installation



Ethernet network connection

Acti9 Smartlink SI B has an embedded Web server used to display data showing the state of circuit breakers, energy meters, power data, phase unbalance and current alarms.
Manual control is also possible via the Web page.



■ The Web server sets the parameters of the connection to the network servers (SNTP, SMTP), as well as the parameters of user emails and of the connection to the Facility Hero.com service

Acti9 Smartlink SI B (cont.)

Acti9 Smartlink SI B (A9XMZA08)

Ti24 connector
7 input/output channels
Input protected against voltage reversals
Output protected by current limiting
- Pin 1: 0 V
- Pin 2: I1 Input 1
- Pin 3: I2 Input 2
- Pin 4: Q Output
- Pin 5: +24 V DC

24 V DC power supply connector
Input protected against voltage reversals
- Pin1: 0 V
- Pin2:+24 V DC

Ethernet connector
100 Base T - RJ45

PB113286-175



Indication
- Indication of operation of the communication system and the state of the Acti9 Smartlink SI B

Analog connector
2 configurable input points, either 0-10 V or 4-20 mA
- Pin 1: 0 V
- Pin 2: AI1 Input 1
- Pin 3: AI2 Input 2
- Pin 4: +24 V DC

Serial port connector
Modbus (Master) RS485
- Pin 1: D1 Modbus
- Pin 2: D0 Modbus
- Pin 3: shielding
- Pin 4: common/0 V



20 PowerTag energy sensors
Radio-frequency communication
- ISM band 2.4 GHz (2.4 GHz to 2.4835 GHz)
- Channels 11 to 16 as per IEEE 802.15.4

Note: Acti9 Smartlink SI B and the PowerTag must be installed in the same switchboard

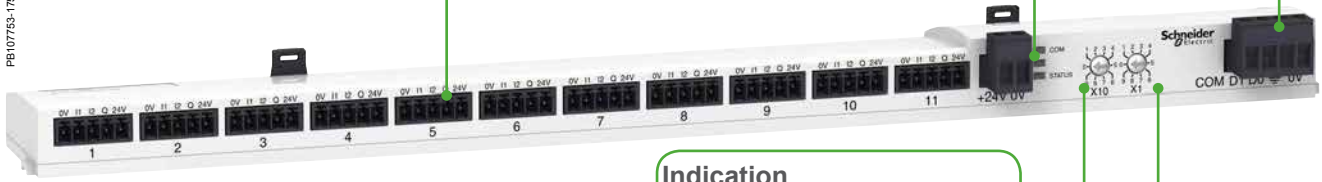
Acti9 Smartlink Modbus (A9XMSB11)

Ti24 connector
11 input/output channels
Input protected against voltage reversals
Output protected by current limiting
- Pin 1: 0 V
- Pin 2: I1 Input 1
- Pin 3: I2 Input 2
- Pin 4: Q Output
- Pin 5: +24 V DC

Serial port connector
Modbus (Master) RS485
- Pin 1: D1 Modbus
- Pin 2: D0 Modbus
- Pin 3: shielding
- Pin 4: common/0 V

24 V DC power supply connector
Input protected against voltage reversals
- Pin1: 0 V
- Pin2:+24 V DC

PB107753-175



Indication
- indication of operation of the communication system and the state of the Acti9 Smartlink Modbus

Thumbwheels
- Definition of the address in the Modbus network

Acti9 Smartlink SI B (cont.)

Common technical characteristics

Power supply		
Nominal		24 V DC ± 20 %
Maximum input current		1.5 A
Maximum inrush current		3 A
Meter		
Capacity		2^{32} pulses per input
Input characteristics		
Number of channels	Acti9 Smartlink Modbus (A9XMSB11)	11 2-input channels
	Acti9 Smartlink SI B (A9XMZA08)	7 2-input channels
Type of input		Current collector Type 1 IEC 61131-2
Maximum cable length		500 m
Rated voltage		24 V DC
Voltage limits		24 V DC ± 20 %
Rated current		2.5 mA
Maximum current		5 mA
Filtering time	A l'état 1	2 ms
	A l'état 0	2 ms
Isolation		No isolation between channels
Negative sequence voltage protection		Yes
Output characteristics		
Number of output channels	Acti9 Smartlink Modbus (A9XMSB11)	11
	Acti9 Smartlink SI B (A9XMZA08)	7
Type of output		24 V DC - 0.1 A current source
Maximum cable length		500 m
Rated voltage	Voltage	24 V DC
	Maximum current	100 mA
Filtering time	In state 1	2 ms
	In state 0	2 ms
Voltage drop (voltage in state 1)		1 V max
Maximum inrush current		500 mA
Leakage current		0.1 mA
Overvoltage protection		33 V DC
Environmental characteristics		
Temperature	Operating	-25°C ... +60°C (if vertical mounting, limited to 50°C)
	Storage	-40°C ... +80°C
Tropicalization		Treatment 2 (relative humidity of 93 % at 40°C)
Resistance to voltage dips		10 ms, class 3 as per IEC 61000-4-29
Degree of protection		IP20
Pollution degree		3
Altitude	Operating	0 … 2000 m
Vibration resistance	As per IEC 60068.2.6	1 g / ± 3.5 mm - 5 Hz to 300 Hz - 10 cycles
Shock resistance	As per IEC 60068.2.27	15 g / 11 ms
Immunity to electrostatic discharge	As per IEC 61000-4-2	Air: 8 kV Contact: 4 kV
Immunity to radiated magnetic fields	As per IEC 61000-4-3	10 V/m - 80 MHz to 3 GHz
Immunity to fast transients	As per IEC 61000-4-4	1 kV for inputs/outputs and Modbus communication. 2 kV for 24 V DC power supply - 5 kHz - 100 kHz
Immunity to conducted magnetic fields	As per IEC 61000-4-6	10 V from 150 kHz to 80 MHz
Immunity to magnetic fields at mains frequency	As per IEC 61000-4-8	30 A/m
Resistance to corrosive atmospheres	As per IEC 60721-3-3	Level 3C2 on H_2S / SO_2/ NO_2 / Cl_2
Fire resistance	For live parts	At 960°C 30 s / 30 s as per IEC 60 695-2-10 and IEC 60 695-2-11
	For other parts	At 650°C 30 s / 30 s as per IEC 60 695-2-10 and IEC 60 695-2-11
Salt spray test	As per IEC 60068.2.52	Severity 2
Environment		In compliance with the RoHS directive
Prefabricated cable characteristics		
Dielectric strength		1 kV / 5 min
Minimum draw-out resistance		20 N
Electromagnetic compatibility		
Reference standards	Immunity	EN 55024
	Emissions	EN 55022
	Electromagnetic compatibility and Radio spectrum Matters (ERM)	EN 300328 EN 301489-1 EN 301489-17

Acti9 Smartlink SI B (cont.)

Acti9 Smartlink Modbus (A9XMSB11) technical characteristics

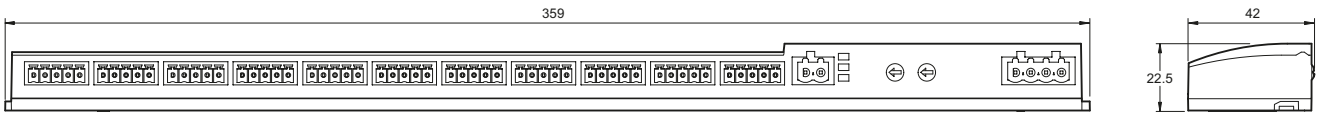
Characteristics of the Modbus link		
Link		Modbus, RTU, RS485 serial connection
Transmission	Transfer rate	9600 baud ... 19200 baud, self-adaptable
	Medium	Shielded cable, double twisted pair
Protocol		Master/Slave
Type of device		Slave
Modbus addressing range		1 to 99
Maximum length of the bus		1000 m
Type of bus connector		4-pin connector

Acti9 Smartlink SI B (A9XMZA08) technical characteristics

Characteristics of the Ethernet link		
Link		Ethernet 10/100 MB
Protocol		Modbus TCP server
		http (web pages)
Addressing mode		Static and dynamic (supplied, by default, in dynamic mode)
Gateway characteristics		
Protocol		Modbus TCP/IP -> Modbus SL
Number of Modbus slaves		8
Modbus addressing range		1 to 247
Characteristics of the Modbus Master link		
Link		Modbus, RTU, RS485 serial connection
Transmission	Transfer rate	9600 bauds ... 19200 bauds
	Medium	Shielded cable, double twisted pair
Maximum length of the bus		1000 m
Type of bus connector		4-pin connector
Characteristics of analog inputs		
Number		2
Type		Independent settings for each input, either 0-10 V or 4-20 mA
Measuring accuracy		1/100 full scale
Resolution		12 bits
Acquisition time		500 ms
Isolation		No isolation between channels
Power supply		0-24 V DC
Cable type		Shielded cable, twisted pair
Maximum cable length		30 m
Protection		Short-circuit protection
Characteristics of the wireless-communication link		
Compatible devices		PowerTag energy sensors
Maximum number of sensors		20
Radio-frequency communication		2.4 GHz to 2.4835 GHz at 0 dBm

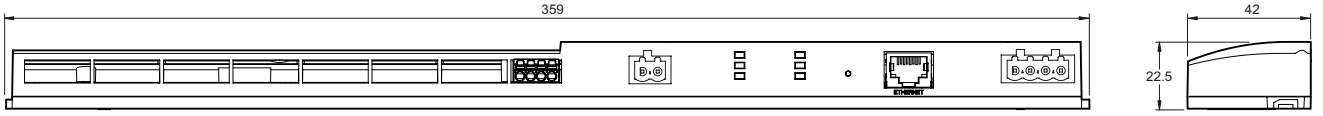
Dimensions (mm)

DB124330



Acti9 Smartlink Modbus (A9XMSB11)

DB406390



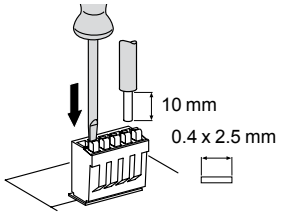
Acti9 Smartlink SI B (A9XMZA08)

Weight (g)

Acti9 Smartlink	
Type	
Acti9 Smartlink Modbus (A9XMSB11)	195
Acti9 Smartlink SI B (A9XMZA08)	180

Connection

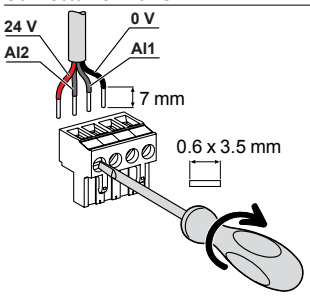
DB123580



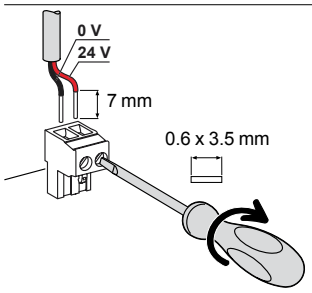
Connector ref: A9XC2412

Terminal	Tightening torque	Copper cables		
		Rigid	Flexible	Flexible with ferrule
	DB122945	DB123553	DB123554	
Ti24 interface	Spring-loaded terminals	0.5 to 1.5 mm²	0.5 to 1.5 mm²	-
Analog connector	0.8 N.m	0.1 to 1.5 mm²	0.1 to 1.5 mm²	0.1 to 1.5 mm²
Power supply connector	0.8 N.m	0.2 to 1.5 mm²	0.2 to 1.5 mm²	0.2 to 1.5 mm²
Modbus connector	0.8 N.m	0.25 mm²	0.25 mm²	0.25 mm²

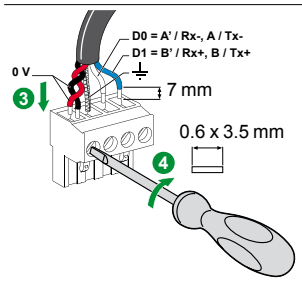
DB406517



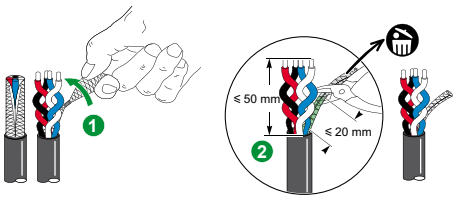
DB124331



DB405141



DB405142



PowerTag Acti9 63 A



A9MEM1522



A9MEM1572

IEC 61557-12 PMD/DD/K55/1

PowerTag is a wireless-communication energy sensor
PowerTag energy sensor is designed specifically for Energy Management, Load Monitoring and Power Availability applications.

With its compact design and innovative concept, PowerTag fits directly on the protective device and as a result has no impact on DIN rail occupancy and switchboard size.
Voltage and current are therefore measured directly at the same point on the circuit to be monitored, providing accurate measurement and relevant information such as voltage loss.
PowerTag energy sensor incorporates every feature required to perform accurate real-time measurements (U, V, I, P and PF) and metering values (Ea). Used together with a concentrator to collect and process the data, it provides circuit monitoring and diagnosis down to load level.

- Wireless-communication technology simplifies switchboard wiring and commissioning operations: no wiring is required for the PowerTag to communicate with the concentrator.
- System scalability: PowerTag energy sensor can be quickly and easily installed in new or existing panels at any time.
- Different designs of the PowerTag energy sensor are available to ensure it fits the protective device on which it is mounted.
- PowerTag Acti9 63 A is compatible with the Acti9 and Multi9 ranges as per the selection guide CA908058.



A9MEM1570

Functions

PowerTag energy sensor measures the following values in accordance with the IEC 61557-12 standard
- Active energy (class 1), total and partial (kWh), delivered and received.
- Real-time measurement values:
  - phase-to-neutral and phase-to-phase voltages (V),
  - current per phase (A),
  - active power, total and per phase (W),
  - apparent power total (VA),
  - power factor.
- Voltage loss alarms:
  - PowerTag energy sensor sends a "voltage loss" alarm and the current-per-phase value before being de-energized,
  - at "voltage loss", PowerTag adds an overload alarm if the current is higher than the rated current of the associated protective device.

Note: Functions listed above depends on concentrator.



Main associated concentrators (*)

For Commercial & Building applications

Acti9 PowerTag Link	Acti9 PowerTag Link HD	Acti9 Smartlink SI B
		
A9XMWD20 (1)	**A9XMWD100**	**A9XMZA08**

(1) Replace Smartlink SI D (A9XMWA20)

For Small Business applications

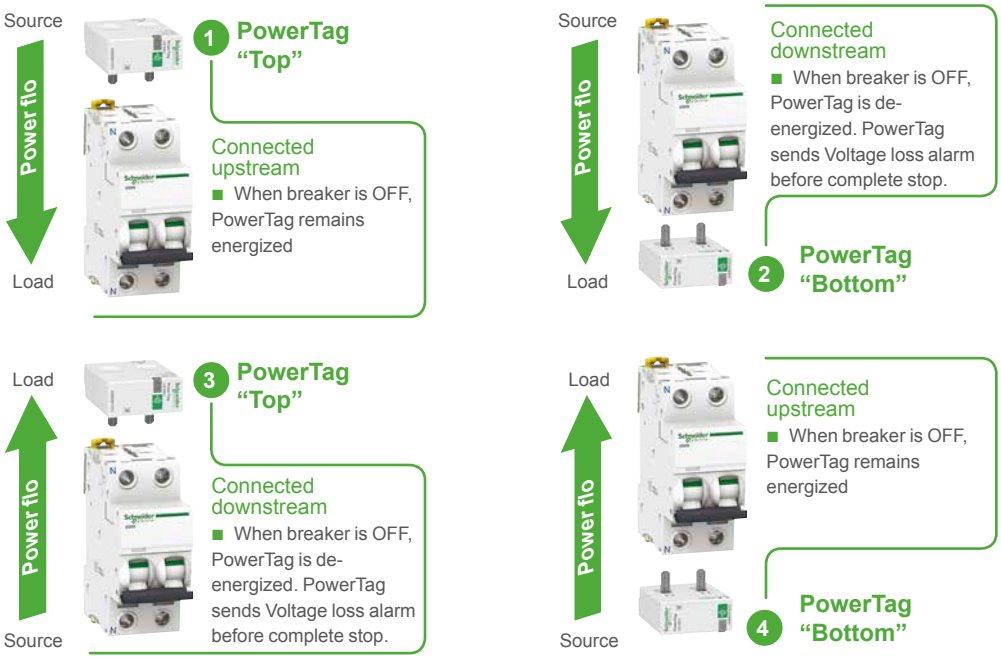
Acti9 PowerTag Link C

A9XELC10

(*) Refer to Selection Guide for complete compatibility (CA908058)
Refer to the concentrator catalogs for more information (CA907030, CA907032, CA907035).

PowerTag Acti9 63 A (cont.)

Mounting positions



Note:
- In association with a contactor, a Variable Speed Drive or a motor starter: PowerTag can ONLY be installed UPSTREAM these devices.
- Some PowerTag can be installed either on the TOP or on the BOTTOM of the protective devices.
- Check the possible mounting position as indicated in the "Catalog numbers" chapter.

Connection		Features
Upstream	1 4	■ Energy management: consumption in kWh ■ Load monitoring: real-time measurements
Downstream Preferred installation to take full benefit of voltage loss in diagnosing the load	2 3	■ Energy management: consumption in kWh ■ Load monitoring: real-time measurements ■ Power availability: voltage loss

PowerTag Acti9 63 A (cont.)


A9MEM1520


A9MEM1521


A9MEM1540


A9MEM1522


A9MEM1543


A9MEM1541


A9MEM1542

Catalog numbers

PowerTag A9 M63

PowerTag for Acti9 and Multi9 **Monoconnect** offers: "Single-terminal" circuit breakers, RCDs and switches with **18 mm pitch between phase and neutral**, rating less than or equal to 63 A.

PowerTag A9 M63

Type	Mounting	Short description	Cat. no.
1P+wire	Top or bottom	PowerTag A9 M63 1PW	**A9MEM1520**
1P+N	Top	PowerTag A9 M63 1PN T	**A9MEM1521**
	Bottom	PowerTag A9 M63 1PN B	**A9MEM1522**
3P	Top or bottom	PowerTag A9 M63 3P	**A9MEM1540**
		PowerTag A9 M63 3P 230V LL	**A9MEM1543 (1)**
3P+N	Top	PowerTag A9 M63 3PN T	**A9MEM1541**
	Bottom	PowerTag A9 M63 3PN B	**A9MEM1542**

Designed to fit the following devices: iC60, Reflex iC60, DT60, iID.
For additional information and the list of Schneider Electric compatible devices and concentrators, refer to the selection guide CA908058.

(1) Not compatible with Acti9 Smartlink SI D (A9XMWA20) and Acti9 Smartlink SI B (A9XMZA08)


A9MEM1561


A9MEM1562


A9MEM1563


A9MEM1571


A9MEM1572

PowerTag A9 P63

PowerTag for Acti9 and Multi9 **PhaseNeutral** offers: "Single-terminal" circuit breakers, RCDs and switches at **pitch of 9 mm between phase and neutral**, rating less than or equal to 63 A.

PowerTag A9 P63

Type	Mounting	Short description	Cat. no.
1P+N	Top	PowerTag A9 P63 1PN T	**A9MEM1561**
1P+N	Bottom	PowerTag A9 P63 1PN B	**A9MEM1562**
1P+N RCBO	Bottom	PowerTag A9 P63 1PN B for RCBO	**A9MEM1563**
3P+N	Top	PowerTag A9 P63 3PN T	**A9MEM1571**
3P+N	Bottom	PowerTag A9 P63 3PN B	**A9MEM1572**

Designed to fit the following devices: DT40, iDPN, C40, *i* DPN Vigi.
For additional information and the list of Schneider Electric compatible devices and concentrators, refer to the selection guide CA908058.


A9MEM1560


A9MEM1573


A9MEM1570

PowerTag A9 F63

PowerTag **Flex** for other devices and specific installations, rating less than or equal to 63 A.

PowerTag A9 F63

Type	Mounting	Short description	Cat. no.
1P+N	Top or bottom	PowerTag A9 F63 1PN	**A9MEM1560**
3P	Top or bottom	PowerTag A9 F63 3P	**A9MEM1573 (2)**
3P+N	Top or bottom	PowerTag A9 F63 3PN	**A9MEM1570**

Designed to fit the following devices: Vigi iDT40, Vigi iC40, Vigi iC60, iC60 double terminal, iID double terminal.
For additional information and the list of Schneider Electric compatible devices and concentrators, refer to the selection guide CA908058.

(2) Not compatible with Acti9 PowerTag Link C (A9XELC10), Acti9 Smartlink SI D (A9XMWA20) and Acti9 Smartlink SI B (A9XMZA08)

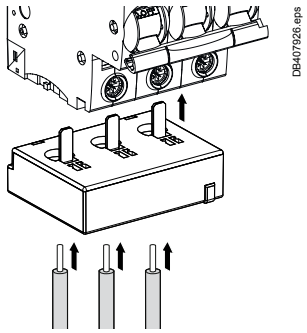
PowerTag Acti9 63 A (cont.)

Technical characteristics

Main characteristics			
Rated voltage	Un	Phase-to-neutral	230 V AC ± 20 %
		Phase-to-phase	400 V AC ± 20 %
		Phase-to-phase (A9MEM1543)	230 V AC ± 20 %
Frequency			50/60 Hz
Maximum current	Imax		63 A
Base current	Ib		10 A
Saturation current			130 A
Maximum consumption		1P+N	≤ 1 VA
		3P/3P+N	≤ 2 VA
Starting current	Ist		40 mA
Additional characteristics			
Operating temperature			-25°C to +60°C
Storage temperature			-40°C to +85°C
Overvoltage category		As per IEC 61010-1	Cat. III
Measuring category		As per IEC 61010-2-30	Cat. III
Pollution degree			3
Altitude			≤ 2000 m
Degree of protection		Device only	IP20
		IK	05
Radio-frequency communication			
ISM band 2.4 GHz			2.4 GHz to 2.4835 GHz
Channels		As per IEEE 802.15.4	11 to 26
Isotropic Radiated Power		Equivalent (EIRP)	0 dBm
Maximum transmission time			< 5 ms
Channel occupancy		Messages sent every	5 seconds minimum
Characteristics of measuring functions			
Function		**Performance category as per IEC 61557-12**	**Measuring range**
Active power	P	1	9 W to 63 kW
Active energy	Ea	1	Total and partial 0 to 99999999.9 kWh
Current	I	1	2 A to 63 A
Voltage	U	0.5	Un ± 20 %
Power factor	PFA	1	0 to 1

PowerTag Acti9 63 A (cont.)

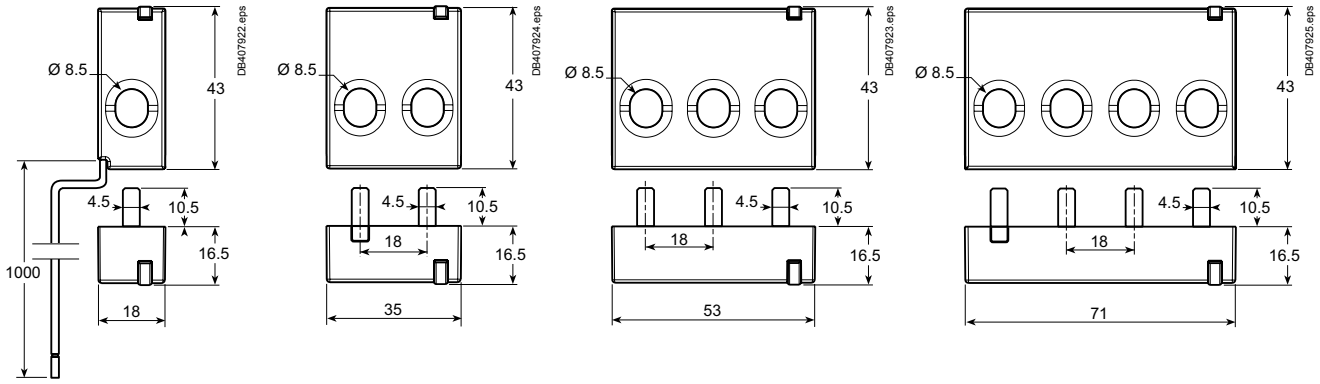
Connection of PowerTag A9 M63



Stripping length	Copper cables					
	Rigid		Flexible		Flexible with ferrule	
						
18 mm	1.5 to 16 mm² AWG: 16...6	2 x 1.5 to 2.5 mm² AWG: 16...14	1.5 to 16 mm² AWG: 16...6	2 x 1.5 to 2.5 mm² AWG: 16...14	-	-
18 mm	-	-	-	-	1.5 to 16 mm² AWG: 16...6	2 x 1.5 to 2.5 mm² AWG: 16...14

■ Mounting with 18 mm ferrule recommended.

Dimensions (mm)



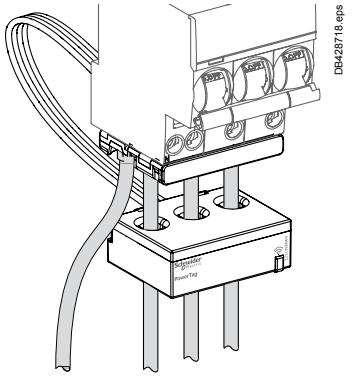
1P+wire 1P+N 3P 3P+N

Weight (g)

PowerTag A9 M63	
Type	
1P+wire	16.4
1P+N	17.5
3P	28
3P+N	35

PowerTag Acti9 63 A (cont.)

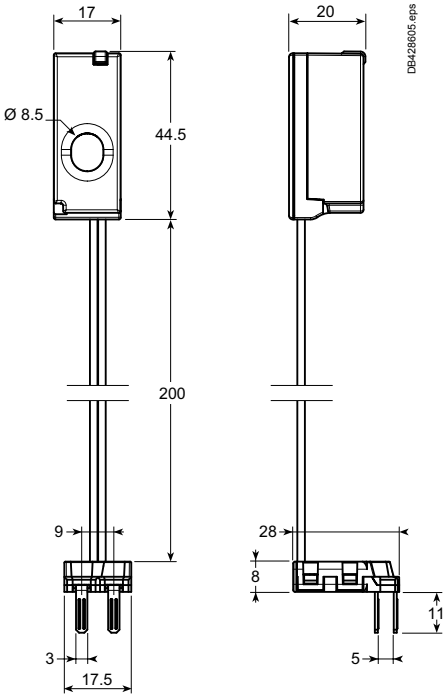
Connection of PowerTag A9 P63



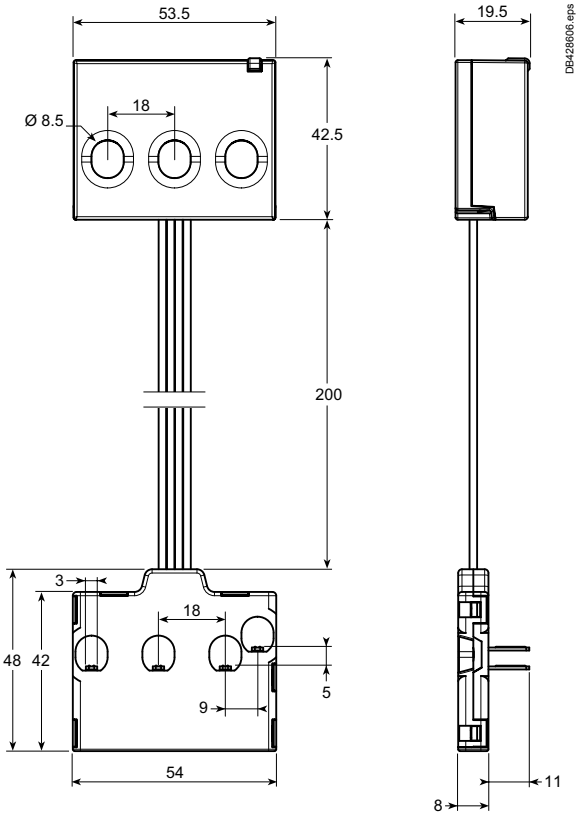
Copper cables					
Rigid		Flexible		Flexible with ferrule	
					
1.5 to 16 mm² AWG: 16...6	2 x 1.5 to 2.5 mm² AWG: 16...14	1.5 to 16 mm² AWG: 16...6	2 x 1.5 to 2.5 mm² AWG: 16...14	-	-
-	-	-	-	1.5 to 16 mm² AWG: 16...6	2 x 1.5 to 2.5 mm² AWG: 16...14

■ Stripping length: respect the stripping length stated on the device the PowerTag is associated with.

Dimensions (mm)



1P+N



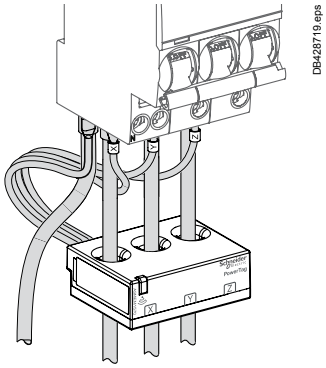
3P+N

Weight (g)

PowerTag A9 P63	
Type	
1P+N	42
3P+N	71

PowerTag Acti9 63 A (cont.)

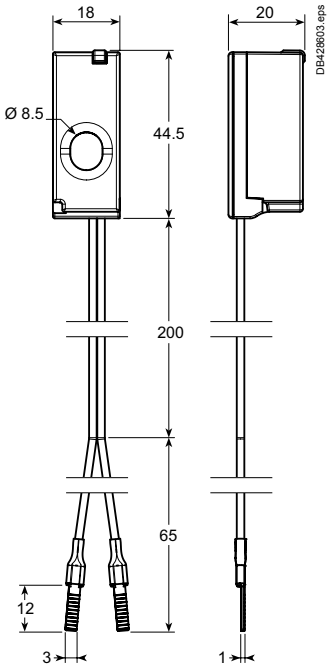
Connection of PowerTag A9 F63



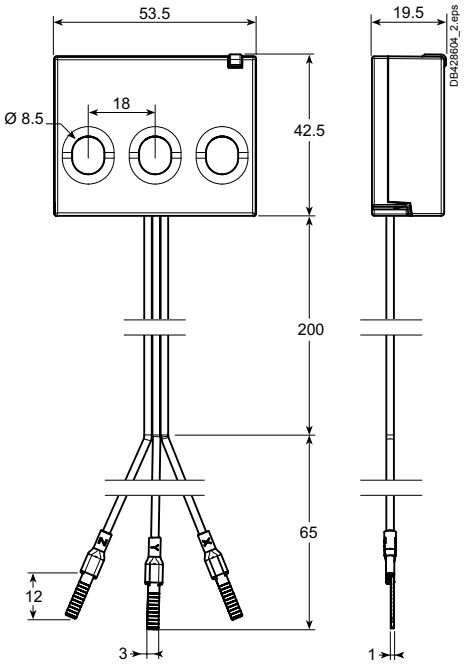
Copper cables					
Rigid		Flexible		Flexible with ferrule	
					
1.5 to 16 mm² AWG: 16...6	2 x 1.5 to 2.5 mm² AWG: 16...14	1.5 to 16 mm² AWG: 16...6	2 x 1.5 to 2.5 mm² AWG: 16...14	-	-
-	-	-	-	1.5 to 16 mm² AWG: 16...6	2 x 1.5 to 2.5 mm² AWG: 16...14

■ Stripping length: respect the stripping length stated on the device the PowerTag is associated with.

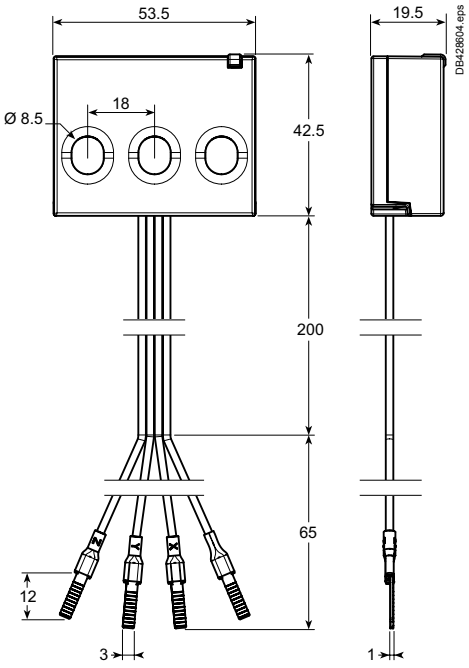
Dimensions (mm)



1P+N



3P



3P+N

Weight (g)

PowerTag A9 F63	
Type	
1P+N	46
3P	63
3P+N	65

PowerTag Control



PowerTag C IO 230V



PowerTag C 2DI 230V

PowerTag Control are wireless-communication modules designed specifically for Control and Monitoring applications. They are part of PowerTag System and Wiser System, allowing to turn easily a distribution board into a connected panel.

PowerTag Control is designed to monitor a circuit, notifying wirelessly to the concentrator the information status of a contact (OF, SD, CT or TL position indication...).

Depending on its functionalities, PowerTag Control can operate a load remotely through a contactor, an impulse relay... thanks to wireless control orders from the concentrator.
Refer to the selection guide to select the right module as per the application required.

- Wireless-communication technology simplifies cabling and commissioning operations: no wiring is required for the PowerTag Control modules to communicate with the concentrator.
- System scalability: PowerTag Control modules can be easily installed in new or existing panels at any time with simple commissioning operation.
- PowerTag Control modules are DIN rail mounted.



PowerTag C IO 230V



Acti9 PowerTag Link C

Associated concentrators

For Residential applications

Wiser IP Module



EER31800

For Commercial & Building applications

PowerTag Link



A9XMWD20

PowerTag Link HD



A9XMWD100

For Small Business applications

Acti9 PowerTag Link C



A9XELC10

Refer to the concentrators catalog for more information.

PowerTag Control (cont.)

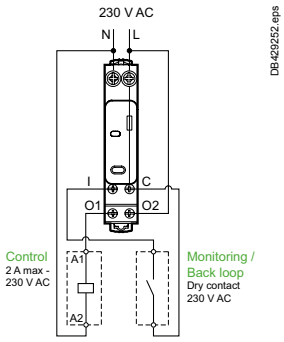
Selection guide

	PowerTag C IO 230V		PowerTag C 2DI 230V	
Application	**Control** (1)	**Monitoring / Back loop** (2)	**Control** (1)	**Monitoring** (2)
	■	■	-	■
Digital input 230 V AC	-	1	-	2
Digital output 230 V AC	1	-	-	-
Compatible with	Circuit 2 A Max - 230 V AC: - Contactors 230 V AC - Impulse relays 230 V AC - RCA (cat no A9C7011x) ...	Dry contact 230 V AC: - iACTs - iATLs ...	-	Dry contact 230 V AC: - OF 230 V AC - SD 230 V AC - OF/SD 230 V AC ...
Width in 9-mm modules	2		2	
Catalog numbers	**A9XMC1D3**		**A9XMC2D3**	

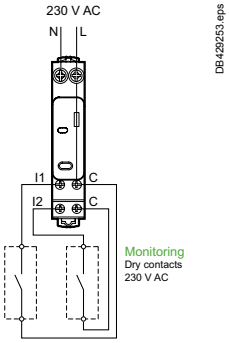
(1) To operate a circuit remotely (2) To notify a status remotely

Principle diagrams

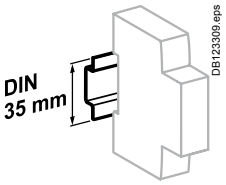
PowerTag C IO 230V



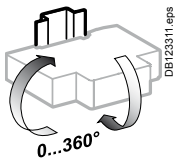
PowerTag C 2DI 230V



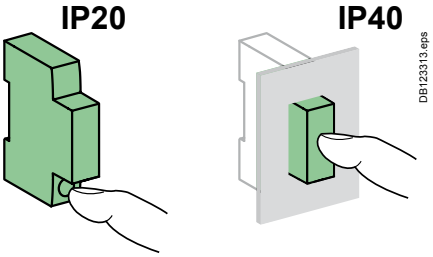
PowerTag Control (cont.)



Clip on DIN rail 35 mm.



Indifferent position of installation.

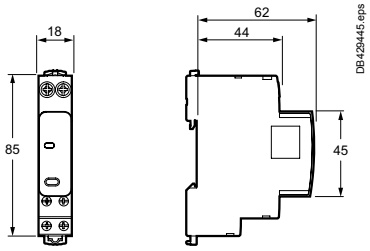


Technical characteristics

Main characteristics		
Power supply		230 V AC ± 20%
Frequency		50/60 Hz
Maximum consumption	IO	≤ 2 VA
	2DI	≤ 3 VA
Operating temperature		-25°C to +60°C
Storage temperature		-40°C to +85°C
Relative humidity (60068-2-78)		93 % at 40°C
Overvoltage category	As per IEC 61010-1	Cat. III
Altitude		≤ 2000 m
Pollution degree		3
Degree of protection according to IEC 60529	Front face	IP40
	Casing	IP20
	IK	05
Characteristics of inputs and outputs		
Digital input		
Type		230 V AC, dry contact
Digital output		
Type		230 V AC, dry contact
Relay type		Normally open or normally closed (3)
Applicable voltage on output		230 V AC ± 20%
Minimum/maximum current on output		10 mA / 2 A
Type of output order		Pulse or latch (3)
Pulse length in control mode with impulse relay		Nominal: 300 ms
Radio-frequency communication		
ISM band 2.4 GHz		2.4 GHz to 2.4835 GHz
Channels	As per IEEE 802.15.4	11 to 26
Isotropic Radiated Power	Equivalent (EIRP)	0 dBm
Channel occupancy	Messages sent	■ On event ■ Periodically (5s nominal)

(3) Setting adjustable

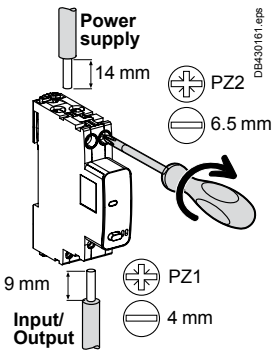
Dimensions (mm)



Weight (g)

PowerTag C	
PowerTag C IO 230 V	80
PowerTag C 2DI 230 V	75

Connection

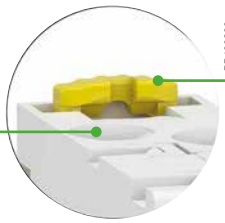


Terminals	Tightening torque	Copper cables		
		Rigid	Flexible	Flexible with ferrule
				
Power supply (Top)	2 N.m	1 to 16 mm² (AWG: 18...6)	0.5 to 10 mm² (AWG: 21...8)	-
Input/Output (Bottom)	1 N.m	1x: 1 to 6 mm² (AWG: 18...10) 2x: 1.5 to 2.5 mm² (AWG: 16...14)	1x: 0.5 to 4 mm² (AWG: 21...12) 2x: 1.5 to 2.5 mm² (AWG: 16...14)	1x: 0.5 to 4 mm² (AWG: 21...12) 2x: -

PowerTag Control (cont.)

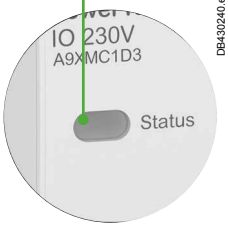
PowerTag C IO module

- Compatible with horizontal comb busbars 9 mm modules
- Automatic cable guiding in the correct position: terminals with guard



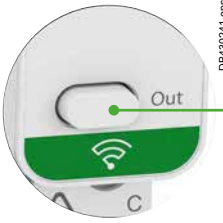
- Assembly and disassembly by operating toggle latches at the top and bottom of the products

Status LED
- Provide information about PowerTag C status



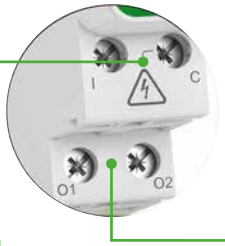


- Insulated terminals IP20



Logo
- Wireless communication device

Push button
- Local output control
- Decommissioning



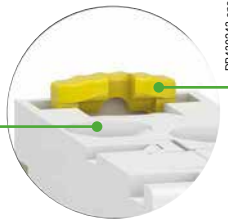
Monitoring / Back loop circuit
- "I" digital input terminal
- "C" common powered terminal 230 V AC

Control circuit
- Logical output relay
- "O" output terminals 230 V AC - 2 A max.

PowerTag Control (cont.)

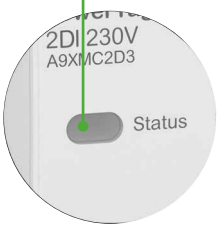
PowerTag C 2DI module

- Compatible with horizontal comb busbars 9 mm modules
- Automatic cable guiding in the correct position: terminals with guard



- Assembly and disassembly by operating toggle latches at the top and bottom of the products

Status LED
- Provide information about PowerTag C status





- Insulated terminals IP20



Logo
- Wireless communication device

Flush mounted push button
- Decommissioning



Monitoring circuits
- "I" digital input terminals
- "C" common powered terminals 230 V AC

PowerTag Ambient for Temperature



PowerTag Ambient
for Temperature



ZBRA1 relay antenna



PowerTag Ambient
for Temperature

Acti9 PowerTag Link C

IEC 60950, EN 61000-6-1, EN 61000-6-3, EN 61326-1, EN 62311:2007, ETSI EN 301 489-1, ETSI EN 301 489-17, ETSI EN 300 328

As per the above standard:
PowerTag Ambient for Temperature are wireless-communication modules designed specifically to collect temperatures measures for Monitoring applications. They are part of PowerTag System, thanks to wireless-communication to the PowerTag Link C concentrator.

The PowerTag Ambient for Temperature is to be placed directly in the targeted location (cold room/ fridge…) to monitor.
The sensor transmits information to the concentrator every 2 minutes.
The sensor also stores 1 measure per hour in order to enable the generation of HACCP compliant automated temperature reports.

- Wireless-communication technology simplifies cabling and commissioning operations: no wiring is required for the PowerTag Ambient for Temperature modules to communicate with the concentrator, up to 100 m open field.
- System scalability: PowerTag Ambient for Temperature modules can be easily installed at any time with simple commissioning operation.
- PowerTag Ambient for Temperature modules work on battery and can be installed with double-side tape, clamp or screw.
- Depending on the setup of the electrical panel where the PowerTag Link C is located, the quality of the signal can be improved by a repeater.

Accessory

- Relay antenna (signal repeater)

Catalog number

PowerTag Ambient for Temperature

PowerTag Ambient for Temperature (set of 4)	**A9XST114**

Accessory

Relay antenna, AC/DC, 5m cable output	**ZBRA1**

Associated concentrator

For Small Business applications

Acti9 PowerTag Link C



A9XELC10

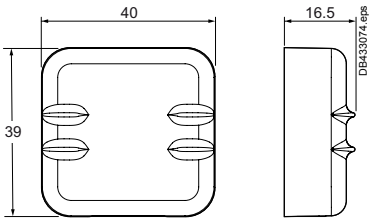
Refer to the concentrator catalog for more information.

PowerTag Ambient for Temperature (cont.)

Technical characteristics

Main characteristics		
Measurement range		-30°C to +55°C ± 1°C
Battery duration		2 years
Operating temperature		-30°C to +55°C
Storage temperature		-30°C to +55°C
Operating/storage humidity		0...95 % Relative Humidity
Degree of protection		IP65
Radio-frequency communication		
Operating frequency		2.405 GHz
Maximum output power		4 dBM
Channel occupancy	Messages sent	every 2 minutes

Dimensions (mm)



Weight (g)

PowerTag Ambient for Temperature (set of 4)	60

PowerTag

Selection guide for product compatibility*

(Compatibility for terminal not equipped with comb busbar)

		PowerTag Acti9			
					
Products (AC network)	**Mounting position**	**A9 M63**	**A9 P63**	**A9 P63 RCBO**	**A9 F63**
Acti9/Multi9					
Circuit breakers					
iC60/iK60/DT60	Top	☑	-	-	-
	Bottom	☑	-	-	-
iC60 (double terminal)	Top	-	-	-	☑
	Bottom	-	-	-	☑
iC40	Top	-	☑	-	-
	Bottom	-	☑	-	-
DT40/iDPN/C40	Top	-	☑	-	-
	Bottom	-	☑	-	-
C120 ⩽ 63 A **NG125 ⩽ 63 A**	Top	-	-	-	☑ (1)
	Bottom	-	-	-	☑ (1)
iC65N-K (China) **iC65** (China)	Top	☑	-	-	-
	Bottom	☑	-	-	-
Reflex iC60	Top	☑	-	-	-
	Bottom	☑	-	-	-
C32/C45/C60/C65/K60/T60/ **C60**-OEM	Top	☑	-	-	-
	Bottom	☑	-	-	-
Circuit breakers equipped with Vigi module					
iC60 with Vigi module	Top	☑ (CB)	-	-	-
	Bottom	-	-	-	☑ (Vigi) (1)
iC40 with Vigi iCG40	Top CB	-	☑ (CB)	-	-
	Top (Vigi)	-	☑ (Vigi 1P+N) (2)	-	-
	Bottom (Vigi)	-	-	-	☑ (Vigi 3P+N)
iC40 with "outgoer" Vigi module	Top	-	☑ (CB)	-	-
	Bottom	-	-	-	☑ (Vigi)
DT40/DPN/C40 with "group feeder" Vigi module	Top CB	-	☑ (CB)	-	-
	Top Vigi	-	☑ (Vigi 1P+N)	-	☑ (Vigi 3P+N)
DT40/DPN/C40 with "outgoer" Vigi module	Top	-	☑ (CB)	-	-
	Bottom	-	-	-	☑ (Vigi)
DT60 with Vigi TG60	Top CB	☑ (CB) only A9MEM1541	-	-	-
	Top Vigi	-	-	-	☑ (Vigi) (1)

(1) You may need to change the voltage measurement cable terminals of the PowerTag F63 by other cable ends (wire AWG22/0.33 mm²) for a more suitable connection to this product.
(2) Product usually associated with a comb busbar

(*) Refer to the product catalogue for technical characteristics

PowerTag

Selection guide for product compatibility* (cont.)

(Compatibility for terminal not equipped with comb busbar)

		PowerTag Acti9			
					
Products (AC network)	**Mounting position**	**A9 M63**	**A9 P63**	**A9 P63 RCBO**	**A9 F63**
Acti9/Multi9					
Residual current devices					
iID/iID K	Top	☑	-	-	-
	Bottom	☑	-	-	-
iID (double terminal)	Top	-	-	-	☑
	Bottom	-	-	-	☑
iID40	Top	-	☑ 1P+N (2)	-	☑ 3P+N (2)
	Bottom	☑	-	-	-
iDPN Vigi "outgoer" 1P+N	Top	-	☑	-	-
	Bottom	-	☑	-	-
iC60 RCBO	Top	☑	-	-	-
	Bottom	☑	-	-	-
iCV40 "outgoer" 1P+N	Top	-	☑	-	-
	Bottom	-	☑	-	-
iCV40 "outgoer" 3P+N	Top	-	☑	-	-
	Bottom	-	-	-	☑
DPN Vigi/DT40 Vigi/C40 Vigi "outgoer" 1P+N	Top	-	☑	-	-
	Bottom	-	☑	-	-
DPN Vigi/DT40 Vigi/C40 Vigi/ iDPN Vigi "outgoer" 3P+N	Top	-	☑	-	-
	Bottom	-	-	-	☑
DPN Vigi K	Top	-	-	-	☑ (1)
	Bottom	-	-	-	☑ (1)
iDc/ITG40/C40	Top Left	-	☑	-	-
	Top Right	-	☑	-	-
DCP Vigi	Top	☑	-	-	-
	Bottom	☑	-	-	-
C60H RCBO (Multi9)	Top	NA (fishbone)	-	-	-
	Bottom	-	-	☑	-
ID ⩽ 63 A/ID K biconnect/ ID Type B ⩽ 63 A	Top	☑	-	-	-
	Bottom	☑	-	-	-
RED/REDs/REDTest	Top	-	-	-	☑ (1)
	Bottom	-	-	-	☑ (1)

(1) You may need to change the voltage measurement cable terminals of the PowerTag F63 by other cable ends (wire AWG22/0.33 mm^2) for a more suitable connection to this product.
(2) Product usually associated with a comb busbar

(*) Refer to the product catalogue for technical characteristics

PowerTag

Selection guide for product compatibility* (cont.)

(Compatibility for terminal not equipped with comb busbar)

		PowerTag Acti9			
					
Products (AC network)	**Mounting position**	**A9 M63**	**A9 P63**	**A9 P63 RCBO**	**A9 F63**
Acti9/Multi9					
Switches					
iSW ⩽ 63 A	Top	☑	-	-	-
	Bottom	☑	-	-	-
iSW-NA ⩽ 63 A	Top	☑	-	-	-
	Bottom	☑	-	-	-
iSW 20/32 A	Top	-	-	-	☑
	Bottom	-	-	-	☑
i-NA ⩽ 63 A	Top	☑	-	-	-
	Bottom	☑	-	-	-
NG125 NA ⩽ 63 A	Top	-	-	-	☑ (1)
	Bottom	-	-	-	☑ (1)
Fuse disconnectors					
STI	Top	-	☑	-	-
	Bottom	-	☑	-	-
SBI 14x51/SBI 22x58 ⩽ 63 A	Top	-	-	-	☑ (1)
	Bottom	-	-	-	☑ (1)
D01/D02	Top	-	-	-	☑ (1)
	Bottom	-	-	-	☑ (1)
TeSys					
Circuit breakers					
GV2	Top	-	-	-	☑ (1) (2)
	Bottom	-	-	-	☑ (1) (2)
GV3 ⩽ 63 A	Top	-	-	-	☑ (1) (2)
	Bottom	-	-	-	☑ (1) (2)
Contactors					
LC1D ⩽ 63 A	Top	-	-	-	☑ Upstream only (1)
	Bottom	-	-	-	

(1) You may need to change the voltage measurement cable terminals of the PowerTag F63 by other cable ends (wire AWG22/0.33 mm²) for a more suitable connection to this product.
(2) PowerTag Energy sensors withstand motor starting in-rush currents. Environmental mission profile : Buildings as per 60721-3-3.

(*) Refer to the product catalogue for technical characteristics

PowerTag

Selection guide for product compatibility* (cont.)

			PowerTag NSX			
						
Products (AC network)		**Mounting position**	**250 3P**	**250 3P+N**	**630 3P**	**630 3P+N**
Compact						
Circuit breakers						
NSX100/160/250 B/F/N/H/S/L/R Fixed	3P	Bottom	☑	-	-	-
	4P	Bottom	-	☑	-	-
NSX400/630 F/N/H/S/L/R Fixed	3P	Bottom	-	-	☑	-
	4P	Bottom	-	-	-	☑
NSX100/160/250 B/F/N/H/S/L/R Plug-In (mounted on the base)	3P	Top / Bottom	☑	-	-	-
	4P	Top / Bottom	-	☑ (3)	-	-
NSX400/630 F/N/H/S/L/R Plug-In (mounted on the base)	3P	Top / Bottom	-	-	☑ (4)	-
	4P	Top / Bottom	-	-	-	☑ (3) (4)
NS100/160/250 N/ SX/H/L Fixed	3P	Bottom	☑	-	-	-
	4P	Bottom	-	☑	-	-
NS400/630 N/H/L Fixed	3P	Bottom	-	-	☑	-
	4P	Bottom	-	-	-	☑
NS100/160/250 N/ SX/H/L Plug-In (mounted on the base)	3P	Top / Bottom	☑	-	-	-
	4P	Top / Bottom	-	☑ (3)	-	-
NS400/630 N/H/L Plug-In (mounted on the base)	3P	Top / Bottom	-	-	☑ (4)	-
	4P	Top / Bottom	-	-	-	☑ (3) (4)
Circuit breakers equipped with Vigi block						
NSX100/160/250 B/F/N/H/S/L/R Fixed	3P	Bottom	☑	-	-	-
	4P	Bottom	-	☑	-	-
NSX400/630 F/N/H/S/L/R Fixed	3P	Bottom	-	-	☑	-
	4P	Bottom	-	-	-	☑
NSX100/160/250 B/F/N/H/S/L/R Plug-In (mounted on the base)	3P	Top	☑	-	-	-
NSX400/630 F/N/H/S/L/R Plug-In (mounted on the base)	3P	Top	-	-	☑ (4)	-
Switches						
INS250/INV - 100/160/200/250	3P	Bottom	-	☑	-	-
	4P	Top / Bottom	-	☑ (3)	-	-
INS/INV - 320/400/500/630	3P	Bottom	-	-	-	☑
	4P	Top / Bottom	-	-	-	☑ (3)

(3) neutral on the right when mounted on top side
(4) when plate mounted, need to add a 4 mm intercalary under the PowerTag module (see Compact NSX catalog)

(*) Refer to the product catalogue for technical characteristics

PowerTag

Selection guide for concentrator compatibility*

		Concentrators				
						
		Acti9 PowerTag Link C A9XELC10	**Acti9 Smartlink SI B A9XMZA08**	**Acti9 Smartlink SI D A9XMWA20**	**Acti9 PowerTag Link A9XMWD20**	**Acti9 PowerTag Link HD A9XMWD100**
PowerTag Acti9 M63						
	**A9MEM1520**	☑	☑	☑	☑	☑
	A9MEM1521	☑	☑	☑	☑	☑
	A9MEM1522	☑	☑	☑	☑	☑
	A9MEM1540	☑	☑	☑	☑	☑
	A9MEM1541	☑	☑	☑	☑	☑
	A9MEM1542	☑	☑	☑	☑	☑
	A9MEM1543	☑	-	-	☑	☑
PowerTag Acti9 P63						
	**A9MEM1561**	☑	☑	☑	☑	☑
	A9MEM1562	☑	☑	☑	☑	☑
	A9MEM1563	☑	☑	☑	☑	☑
	A9MEM1571	☑	☑	☑	☑	☑
	A9MEM1572	☑	☑	☑	☑	☑
PowerTag Acti9 F63						
	**A9MEM1560**	☑	☑	☑	☑	☑
	A9MEM1573	-	-	-	☑	☑
	A9MEM1570	☑	☑	☑	☑	☑
PowerTag NSX						
	**LV434020**	☑	☑	☑	☑	☑
	LV434021	☑	☑	☑	☑	☑
	LV434022	☑	☑	☑	☑	☑
	LV434023	☑	☑	☑	☑	☑

(*) Refer to the product catalogue for technical characteristics

Electrical auxiliaries for iC60, iID, iC40, iCV40, iID40, iSW-NA

■ The electrical auxiliaries are combined with iC60, iC40, iC40 XA, iCV40, iCV40 XA, iDPN Vigi circuit breakers, iID, iID40 residual current circuit breakers, remote tripping switch disconnector iSW-NA; they enable tripping or remote indication of their position (open/closed/tripped) upon a fault.
■ They are fastened by clips (without tools) to the left side of the breaker.
■ The iOF/SD+OF auxiliary is a 2-in-1 product: via a mechanical selector switch, it provides two contacts, OF+SD or OF+OF.
■ The iOF+SD24 auxiliary can report open/closed (OF) status information and intentional or fault tripping of the associated device (SD) to the Acti9 Smartlink or a programmable logic controller via the TI24 interface (24 V DC).

Tripping auxiliaries:

IEC/EN 60947-1
- iMN: undervoltage release
- iMNs: delayed undervoltage release
- iMNx: undervoltage release, independant from supply voltage
- iMX: shunt release
- iMX+OF: shunt release with open/close contact.

EN 50550
- iMSU: overvoltage release.

Indication auxiliaries:

IEC/EN 60947-5-1
- iOF: open/close contact
- iSD: fault indicating contact
- iOF/SD+OF: open/close contact and switchable OF or SD contact
- iOF+SD24: open/close contact OF and default indicating contact SD with Ti24 interface.

IEC/EN 60947-5-4
- iOF+SD24: open/close contact OF and default indicating contact SD with Ti24 interface.

DB404939



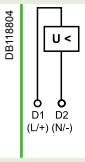
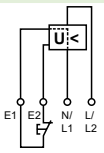
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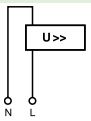
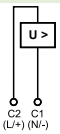
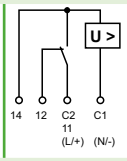
Electrical auxiliaries for iC60, iID, iC40, iCV40, iID40, iSW-NA (cont.)

Tripping

Auxiliaries	iMN				iMNs	iMNx	
Type	**Undervoltage release**						
	Instantaneous				Delayed	Independent of the supply voltage	
	PB104477-35 				PB104478-35 	PB104480-35 	
Function							
	■ Trips the device with which it is combined when its input voltage decreases (between 70 % and 35 % Un). ■ Prevents device closing again until its input voltage is restored					■ Tripping of the associated device by opening of the control circuit (e.g. push-button, dry contact)	
					■ Not tripping on transient voltage dip (up to 0.2 s)	■ A drop in the supply voltage does not trip the associated device ■ A locking push-button control allows the circuit protected (e.g. machine control) to be placed in safety configuration	
Wiring diagrams							
	DB118804 					DB406947 	
Use							
	■ Emergency stoppage by normally closed push button ■ Improve the safety of power supply circuits for several machines by preventing "uncontrolled" restarting					■ Emergency stoppage with fail-safe principle ■ Insensitive to control circuit voltage variation to increase service continuity **Important: Before any servicing operation switch off the mains power supply (voltage presence at terminals E1/E2)**	
Catalogue numbers	**A9A26960**	**A9A27108**	**A9A26961**	**A9A26959**	**A9A26963**	**A9A26969**	**A9A26971**
iC60, iID, iID40, iDPN Vigi, iSW-NA	■	■	■	■	■	■	■
iC40, iCV40	■	■	■	■	■	■	■
iC40 XA, iCV40 XA	■	■	■	■	■	■	■
iC60, iID double terminals	■	■	■	■	■	■	■
iC60 RCBO, iKQE RCBO	■	■	■	■	■	■	■
Technical specification							
Rated voltage (Ue)	220…240 V AC	24 V AC	48 V AC	115 V AC	220…240 V AC	220…240 V AC	380…415 V AC
	–	24 V DC	48 V CC		–	–	
Standardised operating and non-response to voltage times (Ua)*	–	–	–	–	–	–	–
Maximum operating time	–	–	–	–	–	–	–
Minimum non-response time	–	–	–	–	–	–	–
Operating frequency	50/60 Hz			400 Hz	50/60 Hz	50/60 Hz	
Red mechanical indicator	On front face				On front face	On front face	
Test function	–				–	–	
Width in 9 mm modules	2				2	2	
Operating current	–				–	–	
Number of contacts	–				–	–	
Operating temperature	-35…+70°C				-35…+70°C	-35…+70°C	
Storage temperature	-40…+85°C				-40…+85°C	-40…+85°C	

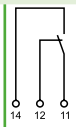
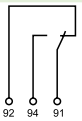
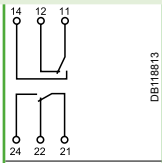
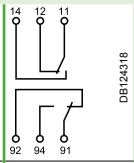
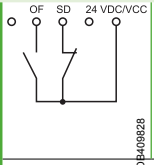
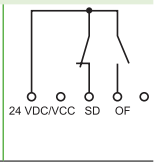
*(Ua)
Voltages measured between the phase and the neutral conductor, at which the iMSU device must control the associated protective device.

Electrical auxiliaries for iC60, iID, iC40, iCV40, iID40, iSW-NA (cont.)

	iMSU	iMX	iMX+OF
	Overvoltage release	**Shunt release**	
			With Open/Close auxiliary contact
	PB104479-35 	PB104496-35 	PB104481-35 
	■ Switches off the power supply by opening the breaker with which it is combined, in the event that the phase/neutral voltage is exceeded (loss of neutral). For a four-phase network, use three iMSU tripping auxiliaries.	■ Trips the associated device when it is powered on	
			■ Includes an open/close contact (OF) to indicate the "open" or "closed" position of the device
	DB118806 	DB123012 	DB406929 
	■ Protection of equipment against overvoltages on the electrical network (neutral conductor break) ■ Voltage monitoring between phase and neutral conductors	■ Emergency stoppage by normally open push button	■ Emergency stoppage by normally open push button ■ Remote indication of the position of the associated device
	A9A26500	**A9A26476** / **A9A26477** / **A9A26478**	**A9A26946** / **A9A26947** / **A9A26948**
	■	■ / ■ / ■	■ / ■ / ■
	■	■ / ■ / ■	■ / ■ / ■
	■	■ / ■ / ■	■ / ■ / ■
	■	■ / ■ / ■	■ / ■ / ■
	■	■ / ■ / ■	■ / ■ / ■
	230 V AC	100…415 V AC / 48 V AC / 12…24 V AC	100…415 V AC / 48 V AC / 12…24 V AC
	–	110…130 V DC / 48 V DC / 12…24 V DC	110…130 V DC / 48 V DC / 12…24 V DC
	255 V AC / 275 V AC / 300 V AC / 350 V AC / 400 V AC	– / – / –	– / – / –
	No tripping / 15 s / 5 s / 0.75 s / 0.20 s	– / – / –	– / – / –
	3 s / 1 s / 0.25 s / 0.07 s	– / – / –	– / – / –
	50/60 Hz	50/60 Hz	50/60 Hz
	On front face	On front face	On front face
	–	–	–
	2	2	2
	–	–	10 mA mini, 6 A maxi ≤ 24 V DC: 6 A 48 V DC: 2 A ≤ 130 V DC: 1 A ≤ 240 V AC: 6 A 415 V AC: 3 A
	–	–	1 NO/NC
	-35…+70°C	-35…+70°C	-35…+70°C
	-40…+85°C	-40…+85°C	-40…+85°C

Electrical auxiliaries for iC60, iID, iC40, iCV40, iID40, iSW-NA (cont.)

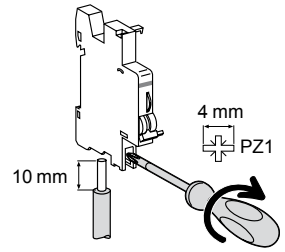
Indication

Auxiliaries	iOF		iSD		iOF/SD+OF	iOF+SD24	
Type	**Open/close auxiliary contact**		**Fault indicating contact**		**Double open/close or fault indicating contact**	**Double open/close and fault indicating contact**	
						Compatible with **downstream** comb busbar	Compatible with **upstream** comb busbar
	PB104474-35 		PB104476-35 		PB104475-35 	PB107750-35 	A9A26898-35 
Function							
	■ Changeover contact indicates "open" or "closed" position of the device		■ Changeover contact indicates position of the device; upon: □ electrical fault □ action on tripping auxiliary ■ Same indication as VISI-TRIP		■ The iOF/SD+OF auxiliary is a 2-in-1 product: via a mechanical selector switch, it provides two contacts, OF+SD or OF+OF	■ 2 contacts (1 NO + 1 NC) can report the signalling information of the associated device to the Acti9 Smartlink or a programmable logic controller: □ electrical fault □ actuation of the tripping auxiliary □ "Open" or "Closed" position of the associated device	
Wiring diagrams							
	DB118810 		DB118811 		DB118812  OF position DB118813  SD position	DB124318  DB409828 	
Use							
	■ Remote indication of the position of the associated device		■ Remote indication of tripping upon a fault of the associated device		■ Remote indication of position and/or tripping upon a fault of the associated device	■ Remote indication of position and tripping upon a fault of the associated device	
Catalogue numbers	**A9A26924**	**A9A26869**	**A9A26927**	**A9A26855**	**A9A26929**	**A9A26897**	**A9A26898**
iC60, iID, iID40, iDPN Vigi, iSW-NA	■	–	■	–	■	■	■
iC40, iCV40	■	–	■	–	■ if no comb busbar	■	■
iC40 XA, iCV40 XA	■	–	■	–	–	–	■
iC60, iID double terminals	–	■	–	■	■	■	–
iC60 RCBO, iKQE RCBO	■	–	■	–	–	–	–
Technical specification							
Rated voltage (Ue)	24…415 V AC		24…415 V AC		24…415 V AC	-	
	24…130 V DC		24…130 V DC		24…130 V DC	24 V DC	
Operating frequency	50/60 Hz		50/60 Hz		50/60 Hz	-	
Red mechanical indicator	–		On front face		On front face	On front face	
Test function	On toggle		On toggle		On toggle	On toggle	
Width in 9 mm modules	1		1		1	1	
Operating current	10 mA mini, 6 A maxi					2 mA mini, 100 mA maxi	
	24 V DC	6 A					
	48 V DC	2 A				-	
	60 V DC	1,5 A				-	
	130 V DC	1 A				-	
	24...240 V AC	6 A				-	
	415 V AC	3 A				-	
Number of contacts	1 NO/NC		1 NO/NC		1 NO/NC + 1 NO/NC	1 NO/NC	
Operating temperature	-35…+70°C		-35…+70°C		-35…+70°C	-25…+70°C	
Storage temperature	-40…+85°C		-40…+85°C		-40…+85°C	-40…+85°C	

Electrical auxiliaries for iC60, iID, iC40, iCV40, iID40, iSW-NA (cont.)

Connection

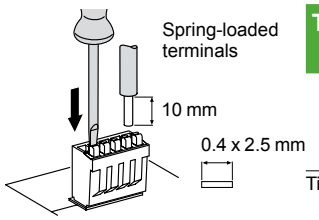
DB123061



Type	Tightening torque	Copper cables		Multi-cables	
		Rigid	Flexible	Rigid	Cables with ferrule
		DB122945 DB123007	DB123011	DB123008	
Indication auxiliaries	1 N.m	1 to 4 mm²	0.5 to 2,5 mm²	2 x 2.5 mm²	2 x 1.5 mm²
Tripping auxiliaries	1 N.m	1 to 6 mm²	0.5 to 4 mm²	2 x .2.5 mm²	2 x 2.5 mm²

Ti24 connector connection

DB123580



Type	Catalogue numbers	Copper cables	
		Rigid	Flexible
		DB122945	DB123553
Ti24 interface	**A9XC2412**	1 x 0.5 to 1.5 mm²	1 x 0.5 to 1.5 mm²

Ti24 prefabricated cables connection

PB107754-10



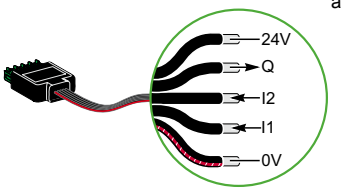
Type	Catalogue numbers	Length
Connection for Acti9 Smartlink		
6 prefabricated	**A9XCAS06**	100 mm
	A9XCAM06	160 mm
	A9XCAH06	450 mm
	A9XCAL06	870 mm

PB107755-14



Connection for PLC type terminals		
6 long prefabricated on a single side	**A9XCAU06**	870 mm
1 long prefabricated on a single side	**A9XCAC01**	4000 mm

DB404941



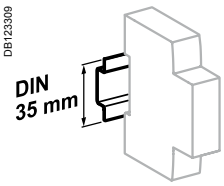
PB107756-7



12 connectors, 5-pins (Ti24)	**A9XC2412**	-

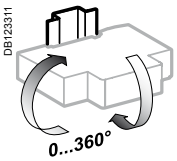
Electrical auxiliaries for iC60, iID, iC40, iCV40, iID40, iSW-NA (cont.)

DB123309



Clip on DIN rail 35 mm.

DB123311



Indifferent position of installation.

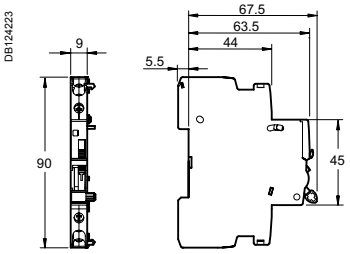
Technical data

Weight (g)

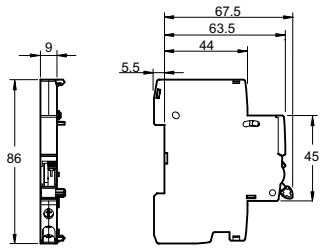
Electrical auxiliaries	
Type	
iMN	69
iMNs	72
iMNx	79
iMSU	68
iMX	64
iMX+OF	68
iOF	32
iSD	33
iOF/SD+OF	43
iOF+SD24	25

Dimensions (mm)

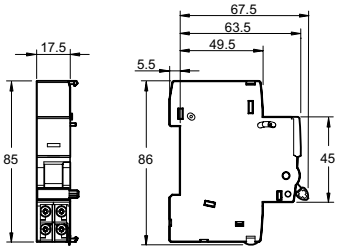
DB124223



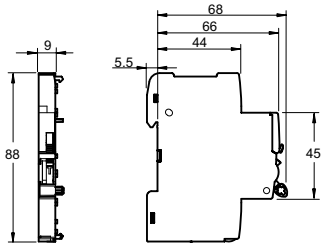
iOF/SD+OF



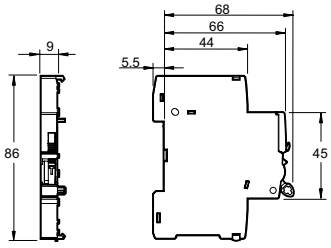
iOF, iSD



iMN, iMNs, iMNx, iMSU, iMX, iMX+OF



iOF+SD24 (A9A26897)



iOF+SD24 (A9A26898)

iMDU electrical auxiliary for Reflex iC60 or RCA iC60



A9C18195

The voltage matching module allows safety voltages of 24 and 48 V AC/DC to be used on the control inputs.

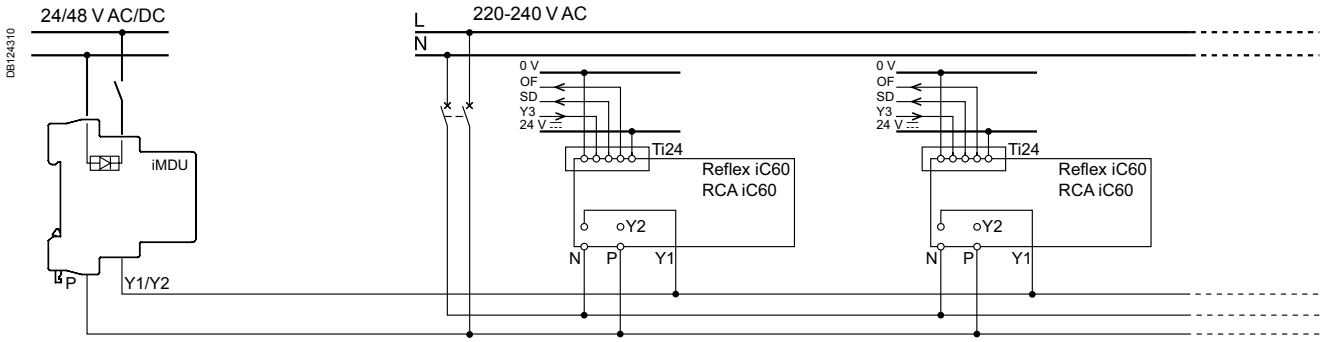
- Only connects to the Reflex iC60 circuit breakers remote controlled by a 220-240 V control voltage
- Galvanic isolation 6000 V
- Maximum combined power between terminals P and Y1/Y2: 100 mA at 230 V and 25°C.

Catalogue numbers

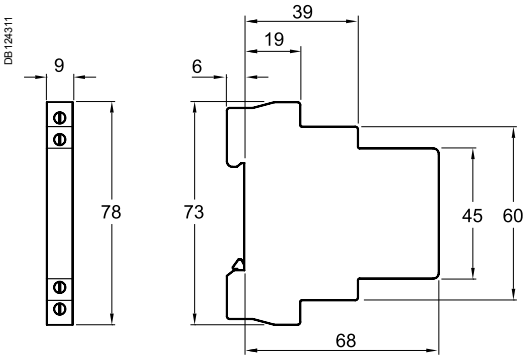
Auxiliary iMDU		
Type		**Width in 9 mm modules**
iMDU	**A9C18195**	1

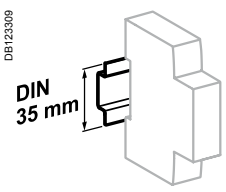
Diagram

An iMDU electrical auxiliary allows up to a maximum of five Reflex iC60 to be controlled simultaneously at the same input Y1 or Y2.

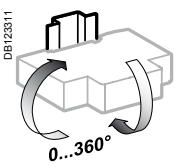


Dimensions (mm)



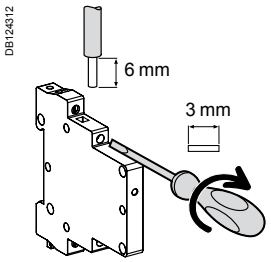


Clip on DIN rail 35 mm.



Indifferent position of installation.

Connection



Type	Tightening torque	Copper cables	
		Rigid	Flexible or with ferrule
		DB122945	DB122946
iMDU	1 N.m	1.5 mm²	1.5 mm²

Technical data

Main characteristics		
Control circuit voltage		24…48 V AC/DC
Insulation voltage (Ui)		500 V
Additional characteristics		
Degree of protection (IEC 60529)	Device only	IP20
	Device in modular enclosure	IP40 Insulation class II
Operating temperature		-20°C to +60°C
Storage temperature		-40°C to +80°C
Tropicalization		Treatment 2 (relative humidity 95 % at 55°C)
Weight		53 g

Electrical auxiliaries for C60, C120, ID, C60H-DC, SW60-DC, C60PV-DC, C60NA-DC, C120NA-DC

■ The electrical auxiliaries provide the remote tripping or position (open/closed/tripped) indication functions of these devices in the event of a fault.
■ They clip on (no tool required) to the left-hand side of the associated device.
■ The OF+SD/OF auxiliary is a two-in-one product: a mechanical selector switch is used to select one of two contacts: OF+SD or OF+OF.
■ The OF+SD24 auxiliary can report open/closed (OF) status information and intentional or fault tripping of the associated device (SD) to the Acti 9 Smartlink or a programmable logic controller via the TI24 interface (24 V DC).

⚠
■ The electrical auxiliaries are not compatible with ID residual current circuit breakers of type B.

Tripping auxiliaries:

IEC/EN 60947-1
■ MN: undervoltage release
■ MNS: delayed undervoltage release
■ MNx: undervoltage release, independent of the supply voltage
■ MX: shunt release
■ MX+OF: shunt release with open/closed contact.

EN 50550
■ MSU: overvoltage release.

Indication auxiliaries:

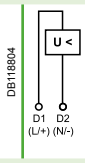
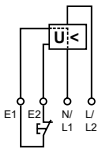
IEC/EN 60947-5-1
■ OF.S: open/closed contact for ID
■ OF: open/closed contact
■ SD: fault indicating contact
■ OF+SD/OF: choice of open/closed contact and OF or SD contact via the selector switch
■ OF+SD24: open/close contact OF and cfault indicating contact SD with Ti24 interface.

IEC/EN 60947-5-4
■ OF+SD24: open/close contact OF and cfault indicating contact SD with Ti24 interface.



Electrical auxiliaries for C60, C120, ID, C60H-DC, SW60-DC, C60PV-DC, C60NA-DC, C120NA-DC (cont.)

Tripping

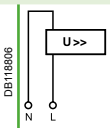
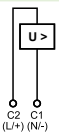
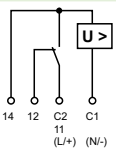
Auxiliaries	MN	MNⓈ	MNx
Type	**Undervoltage release**		
	Instantaneous	Delayed	Independent of the supply voltage
	 PB107151-30	 PB107152-30	 PB107149-30
Function			
	■ Causes the device with which it is associated to trip when its input voltage decreases (between 70 % and 35 % of Un). Prevents the device from closing until its input voltage has been restored		■ Tripping of the associated device by opening of the control circuit (e.g. push-button, dry contact)
		■ No tripping in the event of transient voltage dips (up to 0.2 s)	■ A drop in the supply voltage does not trip the associated device ■ A locking push-button control allows the circuit protected (e.g. machine control) to be placed in safety configuration
Wiring diagrams			
	 DB118804 U < D1 D2 (L/+) (N/-)		 DB406947 U E1 E2 N/L1 L/L2
Utilization			
	■ Emergency stop via a normally-closed pushbutton ■ Ensures the safety of the power supply circuits of several machines by preventing accidental startups		■ Fail-safe emergency stop ■ Insensitive to the variation in the control circuit voltage to improve continuity of service **Important: Before any servicing operation switch off the mains power supply (voltage presence at terminals E1/E2)**

Catalogue numbers	A9N26960	A9N26961	A9N26959	A9N26963	A9N26969	A9N26971
C60, C120, DPN, DPN Vigi, ID	■	■	■	■	■	■
C60H-DC, SW60-DC, C60PV-DC, C60NA-DC, C120NA-DC	■	■	■	■	■	■

Technical specification							
Rated voltage (Ue)	V AC	220…240	48	115	220…240	230	400
	V DC	–	48	–	–	–	
Standardised operating and non-response to voltage times (Ua)*		–	–	–	–	–	–
Maximum operating time		–	–	–	–	–	–
Minimum non-response time		–	–	–	–	–	–
Operating frequency	Hz	50/60		400	50/60	50/60	
Mechanical state indicator light, red		On front face			On front face	On front face	
Test function		–			–	–	
Width in 9 mm modules		2			2	2	
Operating current		–			–	–	
Number of contacts		–			–	–	
Operating temperature	°C	-25…+50			-25…+50	-25…+50	
Storage temperature	°C	-40…+85			-40…+85	-40…+85	
Standards							
IEC/EN 60947-1		■			■	■	
IEC/EN 60947-5-1		–			–	–	
EN 60947-2		■			■	–	
EN 62019-2(1)		–			–	–	

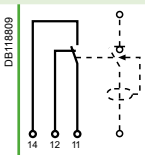
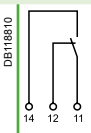
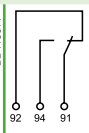
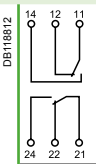
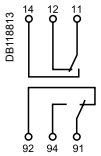
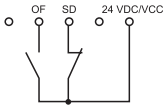
(1) For C120, DPN.
*(Ua): Voltages measured between the phase and the neutral conductor, at which the MSU device must control the associated protective device.

Electrical auxiliaries for C60, C120, ID, C60H-DC, SW60-DC, C60PV-DC, C60NA-DC, C120NA-DC (cont.)

	MSU	MX			MX+OF		
	Voltage threshold release	**Shunt release**					
					With Open/Close auxiliary contact		
	PB107153-30 	PB107150-30 			PB107148-30 		
	■ Cuts off the power supply by opening the device with which it is associated when the phase/neutral voltage is exceeded (loss of neutral). For a four-phase network, use three MSU tripping auxiliaries	■ Trips the associated device when it is powered on					
					■ Includes an open/close contact (OF) to indicate the "open" or "closed" position of the breaker		
	DB118806 	DB123012 			DB406929 		
	■ Protection of the devices against overvoltages on the electrical network (break in the neutral conductor) ■ Monitoring the voltage between the phase conductor and the neutral conductor	■ Emergency stop via a normally-open pushbutton.			■ Emergency stop via a normally-open pushbutton ■ Remote indication of the position of the associated device		
	A9N26500	**A9N26476**	**A9N26477**	**A9N26478**	**A9N26946**	**A9N26947**	**A9N26948**
	■	■	■	■	■	■	■
	–	■	■	■	■	■	■
	230	100…415	48	12…24	100…415	48	12…24
	–	110…130	48	12…24	110…130	48	12…24
	255 V AC / 275 V AC / 300 V AC / 350 V AC / 400 V AC	–	–	–	–	–	–
	No tripping / 15 s / 5 s / 0.75 s / 0.20 s	–	–	–	–	–	–
	3 s / 1 s / 0.25 s / 0.07 s	–	–	–	–	–	–
	50/60	50/60			50/60		
	On front face	On front face			On front face		
	–	–			–		
	2	2			2		
	–	–			10 mA mini, 6 A maxi ≤ 24 V DC 6 A 48 V DC 2 A ≤ 130 V DC 1 A ≤ 240 V AC 6 A 415 V AC 3 A		
	–	–			1 NO/NC		
	-25…+50	-25…+50			-25…+50		
	-40…+85	-40…+85			-40…+85		
	■	■			■		
	–	–			–		
	–	–			–		
	–	–			–		

Electrical auxiliaries for C60, C120, ID, C60H-DC, SW60-DC, C60PV-DC, C60NA-DC, C120NA-DC (cont.)

Indication

Auxiliaries	OF.S	OF	SD	OF+SD/OF	OF+SD24
Type	**Open/closed auxiliary contact**	**Open/closed auxiliary contact**	**Fault indicating contact**	**Double open/closed or fault indicating contact**	**Double open/close and fault indicating contact**
	 PB100628_SE-30-b	 PB107145-30	 PB107146-30	 PB100625_SE-30-b	 PB107760-35 ComReady
Function	■ Changeover contact indicating the "open" or "closed" position of the associated device ⚠ **Compulsory for the addition of tripping or indication auxiliaries on a residual current circuit breaker ID**	■ Changeover contact indicating the "open" or "closed" position of the associated device	■ Changeover contact indicating the position of the associated device in the event of: □ electrical fault □ action on the tripping auxiliary ⚠ **Not compatible with a ID residual current circuit breaker, use an OF+SD/OF in the SD position**	■ The OF+SD/OF auxiliary is a two-in-one product: choice of OF + SD or OF + OF contact via the selector switch	■ 2 contacts (1 NO + 1 NC) can report the signalling information of the associated device to the Acti 9 Smartlink or a programmable logic controller: □ electrical fault □ actuation of the tripping auxiliary □ "Open" or "Closed" position of the associated device
Wiring diagrams	 DB118809	 DB118810	 DB118811	 DB118812  DB118813 OF position SD position	 DB124318
Utilization	■ Remote indication of the position of the associated device	■ Remote indication of the position of the associated device	■ Remote fault tripping indication of the associated device	■ Remote position and/or fault tripping indication of the associated device	■ Remote indication of position and tripping upon a fault of the associated breaker
Catalogue numbers	**A9N26923**	**A9N26924**	**A9N26927**	**A9N26929**	**A9N26899**
ID	■	■	■	■	■
C60, C120, DPN, DPN Vigi, C60H-DC, C60H-DC, SW60-DC, C60PV-DC, C60NA-DC, C120NA-DC	–	■	■	■	■

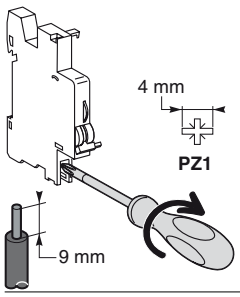
Technical specification						
Rated voltage (Ue)	V AC	24…415	24…415	24…415	24…415	–
	V DC	24…130	24…130	24…130	24…130	24
Operating frequency	Hz	50/60	50/60	50/60	50/60	–
Mechanical state indicator		–	–	On front face	On front face	On front face
Test function		–	On front face	On front face	On front face	On toggle
Width in 9 mm modules		1	1	1	1	1
Operating current		10 mA mini, 6 A maxi				2 mA mini, 100 mA maxi
		24 V DC	6 A			
		48 V DC	2 A			-
		60 V DC	1.5 A			-
		130 V DC	1 A			-
		24...240 V AC	6 A			-
		415 V AC	3 A			-
Number of contacts		1 NO/NC	1 NO/NC	1 NO/NC	1 NO/NC + 1 NO/NC	1 NO + 1 NC
Operating temperature	°C	-25…+50	-25…+50	-25…+50	-25…+50	-25…+70
Storage temperature	°C	-40…+85	-40…+85	-40…+85	-40…+85	-40…+85
Standards						
IEC/EN 60947-1		–	–	–	–	–
IEC/EN 60947-5-1		■	■	■	■	■ IEC 60947-5-4
EN 60947-2		–	–	–	–	–
EN 62019-2(1)		■	■	■	■	–

(1) For C120, DPN.

Electrical auxiliaries for C60, C120, ID, C60H-DC, SW60-DC, C60PV-DC, C60NA-DC, C120NA-DC (cont.)

Connection

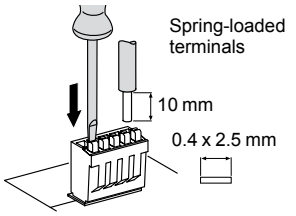
DB1261475



Type	Tightening torque	Copper cables	
		Rigid	Flexible or with ferrule
		DB122945	DB122946
Indication and tripping auxiliaries	1 N.m	0.5 to 2.5 mm²	2 x 1.5 mm²

Ti24 connector connection

DB123580



Type	Catalogue numbers	Copper cables	
		Rigid	Flexible
		DB122945	DB123553
Ti24 interface	**A9XC2412**	1 x 0.5 to 1.5 mm²	1 x 0.5 to 1.5 mm²

Ti24 prefabricated cables connection

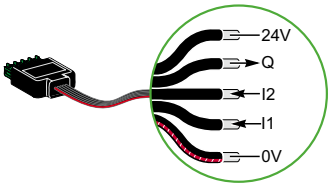
PB107754-10



PB107755-14



DB404941



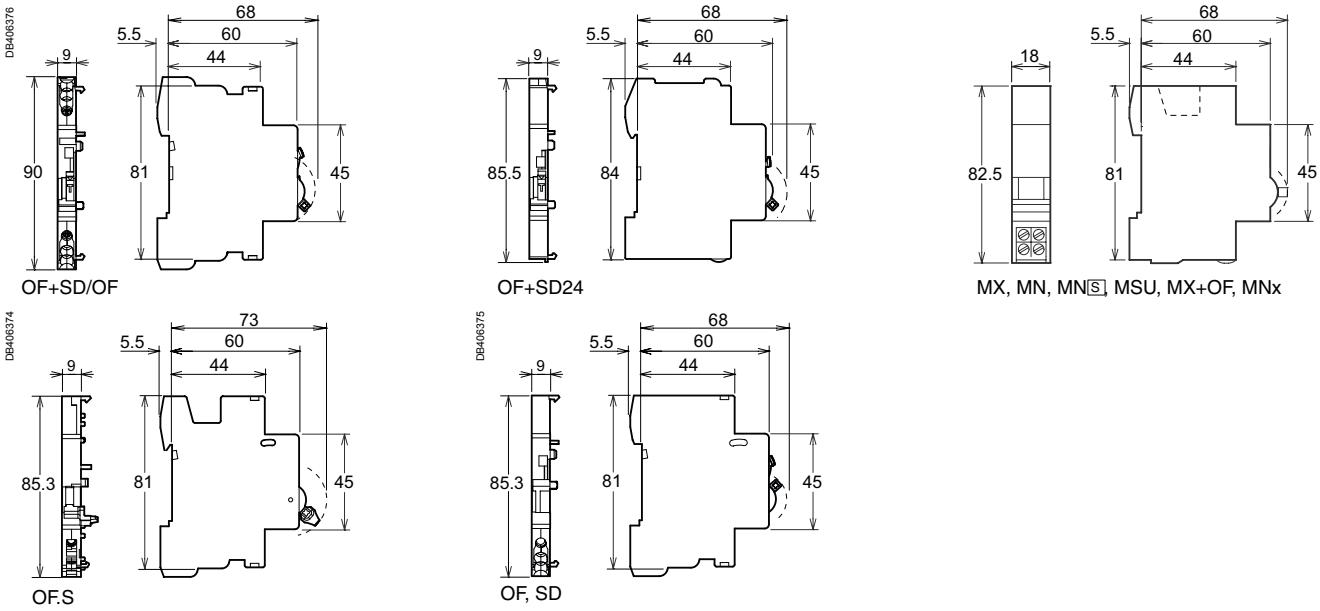
PB107756-7

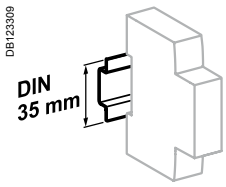


Type	Catalogue numbers	Length
Connection for Acti 9 Smartlink		
6 prefabricated	**A9XCAS06**	100 mm
	A9XCAM06	160 mm
	A9XCAH06	450 mm
	A9XCAL06	870 mm
Connection for PLC type terminals		
6 long prefabricated on a single side	**A9XCAU06**	870 mm
1 long prefabricated on a single side	**A9XCAC01**	4000 mm
12 connectors, 5-pins (Ti24)	**A9XC2412**	-

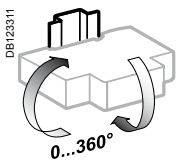
Electrical auxiliaries for C60, C120, ID, C60H-DC, SW60-DC, C60PV-DC, C60NA-DC, C120NA-DC (cont.)

Dimensions





Clip on DIN rail 35 mm.



Indifferent position of installation.

Weight (g)

Electrical auxiliaries	
Type	
MN	66
MNS	66
MNx	73
MSU	66
MX	60
MX+OF	65
OF.S	33
OF	30
SD	30
OF+SD/OF	38
OF+SD24	28

Electrical auxiliaries for NG125 devices

■ The electrical auxiliaries are combined with NG125 circuit breakers and NG125 switch-disconnectors; they provide the remote tripping or position (open/closed/tripped) indication functions of these devices in the event of a fault.
■ They clip on (no tool required) to the left-hand side of the associated device.

IEC/EN 60947-2

■ Tripping auxiliaries:
□ MN: undervoltage release
□ MNx: undervoltage release, independent of the supply voltage
□ **MX**+OF: shunt release with open/closed contact
□ MXV: shunt release for Vigi add-on residual current device.

IEC/EN 60947-5-1

■ Indication contacts:
□ OF+OF: open/closed contact
□ OF+SD: fault indicating contact
□ MX+**OF**: shunt release with open/closed contact.

DB123424

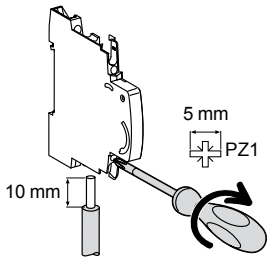


Combination table

Electrical auxiliaries			Device
Indication auxiliaries		**Tripping auxiliaries**	
		Max. quantity	
2 (OF+OF or OF+SD)	+	+ 1 (MX+OF or MN or MNx)	 **NG125**

Connection

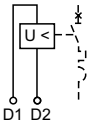
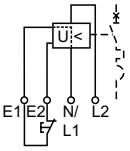
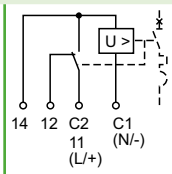
DB123413



Type	Tightening torque	Copper cables		Multi-cable terminal	
		Rigid	Flexible or with ferrule	Flexible or rigid cables	Cables with ferrule
	DB122945	DB123411	DB123011	DB123412	
Indication contacts	1 N.m	0.5 to 2.5 mm²	0.5 to 1.5 mm²	2 x 2.5 mm²	2 x 1.5 mm²
Tripping auxiliaries	1 N.m	0.5 to 2.5 mm²	0.5 to 1.5 mm²	2 x 2.5 mm²	2 x 1.5 mm²

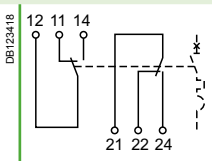
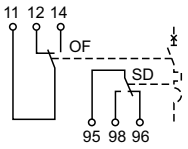
Electrical auxiliaries for NG125 devices and for Vigi NG125 add-on residual current devices (cont.)

Tripping

Auxiliaries	MN			MNx	MX+OF			
Type	**Undervoltage release**				**Shunt release**			
	Instantaneous			Independent of the supply voltage	With open/closed auxiliary contact			
	056367_SE-30 			057084N_SE-30 	056368_SE-35 			
Function								
	■ Causes tripping of the device with which it is combined when its input voltage decreases (between 70% and 35% of Un). Prevents closing of the device until its input voltage has been restored			■ Tripping of the associated device by opening of the control circuit (e.g. push-button, dry contact)	■ Causes tripping of the associated device when powered			
				■ A drop in the supply voltage does not trip the associated device ■ A locking push-button control allows the circuit protected (e.g. machine control) to be placed in safety configuration	■ Includes an open/closed contact (OF) to indicate the "open" or "closed" position of the associated device			
Wiring diagrams								
	DB123415 			DB123416 	DB407165  U >>>>

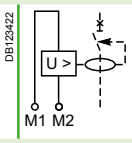
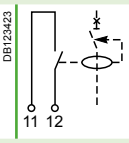
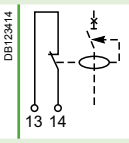
Electrical auxiliaries for NG125 devices and for Vigi NG125 add-on residual current devices (cont.)

Indication

	OF+OF	OF+SD
	Auxiliary contact	**Fault indicating contact**
	056368_SE-30 	056368_SE-30 
	■ Double changeover contact indicating "open" or "closed" position of the associated device	■ Double changeover contact indicating: □ the position of the associated device in the event of: - electrical fault - actuation of the tripping auxiliary □ the "open" or "closed" position of the associated device
	DB123418 	DB123419 
	■ Remote indication of the position of the associated device	■ Remote indication of tripping upon a fault of the associated device
	19071	**19072**
	–	–
	–	–
	50/60	50/60
	–	–
	1	1
	415 V AC 3 A	415 V AC 3 A
	≤ 240 V AC 6 A	≤ 240 V AC 6 A
	130 V DC 1 A	130 V DC 1 A
	≤ 48 V DC 3 A	≤ 48 V DC 3 A
	2 NO/NC	2 NO/NC
	-25…+60	-25…+60
	-40…+85	-40…+85

Electrical auxiliaries for NG125 devices and for Vigi NG125 add-on residual current devices (cont.)

Indication

Auxiliaries	MXV	SDV	
Type	**Shunt release**	**Vigi fault indicating contact**	
			
Function			
	■ At power up, actuates tripping of a circuit breaker or residual current circuit breaker ■ It is provided with a self-interrupting contact	■ Normally-closed or normally-open contact indicating tripping upon an earth fault (including tripped by MXV)	
Wiring diagrams			
			
Utilization			
	■ Adaptable to 125 A Vigi add-on residual current device, all types, and to 63 A Vigi add-on residual current device, adjustable		
	■ Impulse withstand voltage: 6 kV ■ High-impedance input: use an iACTp if the leakage current in the control unit exceeds 1 mA (e.g. illuminated pushbutton)		
Catalogue numbers	**19060**	**19058**	**19059**
Suitable for the following devices:			
NG125	–	–	
Vigi NG125	■	■	

Technical specification				
Rated voltage (Ue)	V AC	110…240	250	
	V DC	110	–	
Operating frequency	Hz	50/60	50/60	
Number of contacts		–	1 NO	1 NC
Current rating		–	0.1 to 1 A (AC14)	
Operating temperature	°C	-25…+60	-25…+60	
Storage temperature	°C	-40…+85	-40…+85	

RCA remote controls
For iC60 circuit breakers

PB106253-40



PB106251-40



The RCA remote control system allows:
- Remote electrical control (opening and closing) of circuit breakers with or without Vigi add-on RCD, with or without auxiliary.
- Circuit-breaker resetting after tripping, in accordance with safety principles and the regulations in force.
- Local control by operating handle.
- Circuit placing in safety configuration by padlocking.

2 choices of operation after tripping:
- A: Enabling of remote circuit-breaker resetting;
- B: Inhibition of remote resetting.

The version with Ti24 interface allows:
- Direct interfacing of remote control with a programmable logic controller (PLC), a supervision system and any other communication device, having inputs/outputs in 24 V DC (control, OF and SD indications).
- Fast, reliable connection of the remote control to the Acti 9 Smartlink thanks to the prefabricated cables.
- Remote indication by "OF" potential-free contact.
- Provision of 2 operating modes, "1 and 3".

The iMDU auxiliary allows RCA control in 24/48 V AC/DC.

Catalogue numbers

RCA remote control			
Type			**Width in 9 mm modules**
For circuit breakers 1P, 1P+N, 2P	**Voltage**		
Without Ti24 interface	230 V AC, 50/60 Hz	**A9C70112**	7
With Ti24 interface	230 V AC, 50/60 Hz	**A9C70122**	7
For 3P, 4P circuit breakers			
Without Ti24 interface	230 V AC, 50/60 Hz	**A9C70114**	7
With Ti24 interface	230 V AC, 50/60 Hz	**A9C70124**	7
Auxiliaries		**See module CA907000 and CA907002**	

DB123813



DB123572



Without Ti24 interface

DB123573



With Ti24 interface

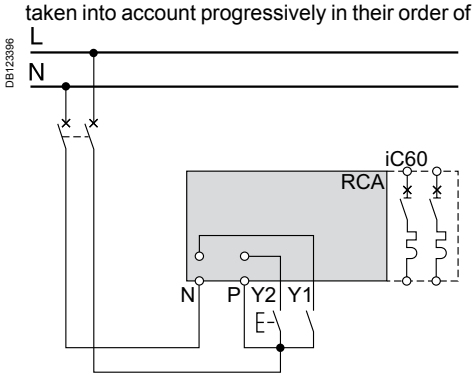
Legend		
Type		**Application**
OFF		All remote control inhibited
auto	**A**	Circuit breaker remote reclosing after tripping allowed
	B	Circuit breaker remote reclosing after tripping inhibited
Green indicator lamp		Remote control possible
Orange indicator lamp		Remote control impossible
1 (Ti24)		Mode 1
3 (Ti24)		Mode 3
Y1		Latched order local control
Y2		Impulse-type or latched order local control (depending on mode)
Y3		Latched order centralized control

RCA remote controls (cont.)

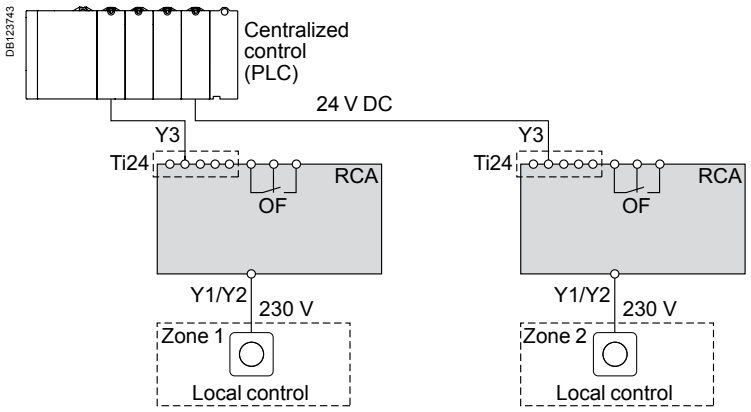
For iC60 circuit breakers

Standard RCA

- The orders received on terminals Y1 and Y2 are taken into account progressively in their order of arrival.



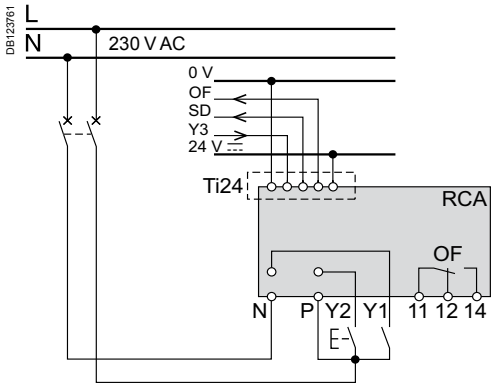
RCA Ti24



RCA Ti24 mode 1

Mode 1: Locally or centrally controlled circuit-breaker opening/closing

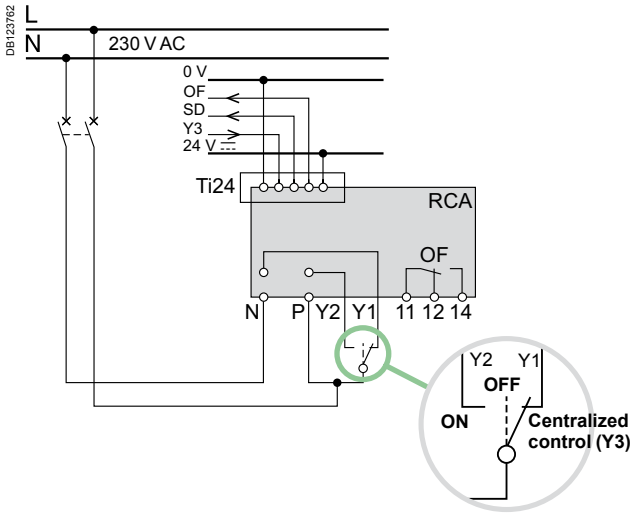
- The orders come from various control points, and they are taken into account in their order of arrival
- Y1: Latched order local control
- Y2: Impulse-type local control
- Y3: Latched order centralized control



RCA Ti24 mode 3

Mode 3: Centrally controlled opening/closing + local override

- 3 positions allowing a choice between override and centralized control:
- Y1: Latched order local control
- Y2: Latched order local control
- Y3: Latched order centralized control

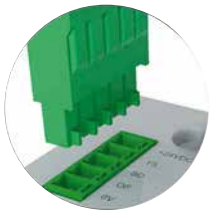


RCA remote controls (cont.)
For iC60 circuit breakers

DB123576



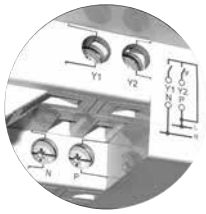
DB123763



DB123578



DB123579



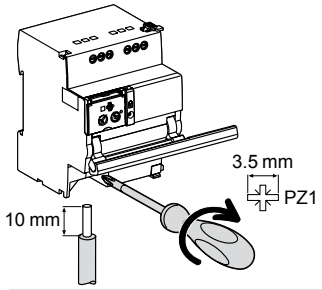
Legend	
Type	**Application**
+24VDC	V DC power supply
Y3	Latched order centralized control
SD	Circuit-breaker tripping information
OF	Control circuit state information (open/closed)
0 V	V DC power supply
Y1	Latched order local control
Y2	Impulse-type or latched order local control (depending on mode)
N	230 V AC power supply
P	
OF  11 12 14	Circuit-breaker state indication contact (open/closed)

RCA remote controls (cont.)

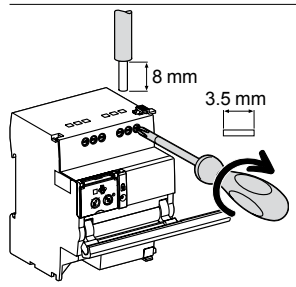
For iC60 circuit breakers

Connection

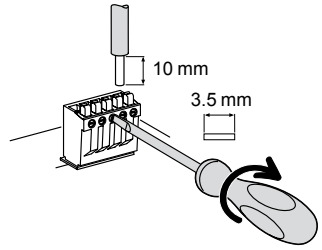
DB123565



DB123568

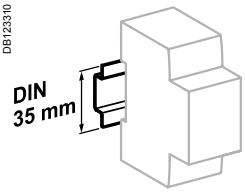


DB123764



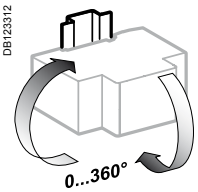
Terminal	Tightening torque	Without accessories — Copper cables		
		Rigid	Flexible	Flexible with ferrule
		DB122945	DB123553	DB123554
Power supply (N/P) Inputs (Y1/Y2)	1 N.m	0.5 to 10 mm² 2 x 0.5 to 2 x 2.5 mm²	0.5 to 6 mm² 2 x 0.5 to 2 x 2.5 mm²	0.5 to 4 mm² 2 x 0.5 to 2 x 2.5 mm²
Outputs (OF)	0.7 N.m	0.5 to 2.5 mm² 2 x 0.5 to 2 x 1.5 mm²	0.5 to 2.5 mm² 2 x 0.5 to 2 x 1.5 mm²	0.5 to 1.5 mm² 2 x 0.5 to 2 x 1.5 mm²
Ti24 interface	Spring-loaded terminals	0.5 to 1.5 mm²	0.5 to 1.5 mm²	-

DB123310



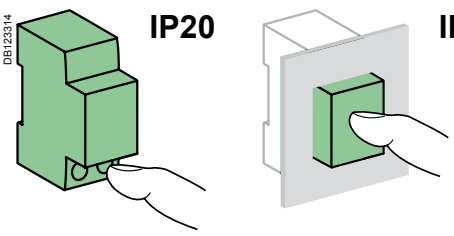
Clip on DIN rail 35 mm.

DB123312



Indifferent position of installation.

DB123314



Technical data

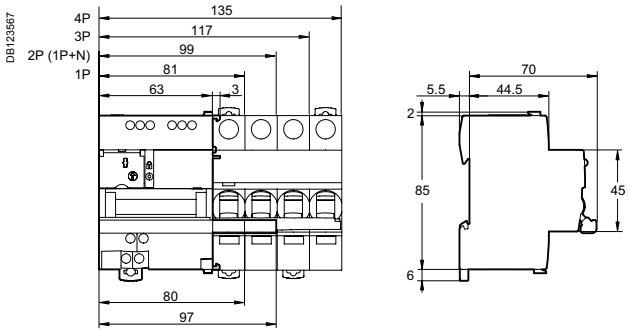
Control circuit		
Supply voltage (Ue) (N/P)		230 V AC, 50/60 Hz
Control voltage (Uc)	Type 1 inputs (Y1/Y2)	230 V AC (as per IEC 61131-2)
Min. duration of control order (Y2)		≥ 200 ms
Response time (Y2)		< 500 ms
Consumption		≤ 1 W
Thermal self-protection with automatic Reset against overheating of the control circuit due to an abnormal number of operations		
Endurance (O-C) (RCA combined with a circuit breaker)		
Electrical/Mechanical		10,000 cycles
Indication / Remote control		
Potential free changeover contact output (OF)	Min.	24 V AC/DC, 10 mA
	Max.	230 V AC ,1 A
Input (Y1/Y2)	230 V AC	5 mA
Ti24 interface (as per IEC 61131)		
Type 1 input (Y3)	24 V DC	5.5 mA
Output (OF and SD)	24 V DC	In max.: 100 mA
Additional characteristics		
Degree of protection (IEC 60529)	Device only	IP20
	Device in a modular enclosure	IP40 Insulation class II
Insulation voltage (Ui)		400 V
Degree of pollution (IEC 60947)		3
Rated impulse withstand voltage (Uimp)		6 kV
Operating temperature		-25°C to +60°C
Storage temperature		-40°C to +70°C
Tropicalization		Treatment 2 (relative humidity of 93 % at +40°C)

RCA remote controls (cont.)
For iC60 circuit breakers

Weight (g)

Remote controls	
Type	**RCA**
For 1P, 1P+N, 2P circuit breakers	400
For 3P, 3P+N, 4P circuit breakers	430

Dimensions (mm)



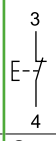
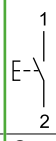
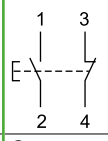
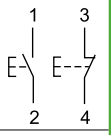
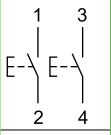
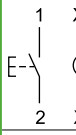
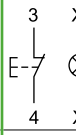
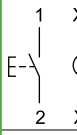
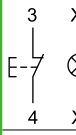
iPB pushbuttons

IEC 60669-1 and IEC 60947-5-1

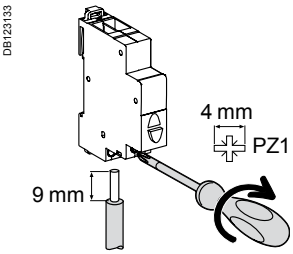
- iPB pushbuttons are used to control electric circuits by means of pulses.

Catalogue numbers

iPB pushbuttons

Type		Single				Double		Single + indicator light			
		PB105259-40 				PB105260-40 		PB105261-40 			
Diagram		1 NC 		1 NO 	1 NO + 1 NC 	1 NO / 1 NC 	1 NO / 1 NO 	1 NO 	1 NC 	1 NO 	1 NC 
Pushbutton	Colour	Grey	Red	Grey	Grey	Green/red	Grey/grey	Grey	Grey	Grey	Grey
Indicator light	Power supply	-	-	-	-	-	-	110…230 V AC		12…48 V AC/DC	
	Colour	-	-	-	-	-	-	Green	Red	Green	Red
Cat. no.		**A9E18030**	**A9E18031**	**A9E18032**	**A9E18033**	**A9E18034**	**A9E18035**	**A9E18036**	**A9E18037**	**A9E18038**	**A9E18039**
Width in 9 mm modules		2				2		2			

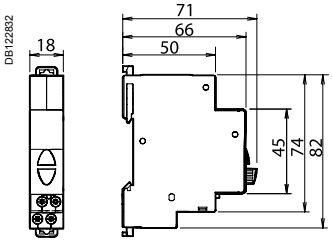
Connection

DB123133 

Tightening torque	Copper cables	
	Rigid	Flexible or with ferrule
	DB122945 	DB122946 
1 N.m	0.5 mm^2 min. 2 x 2.5 mm^2 max.	0.5 mm^2 min. 2 x 2.5 mm^2 max.

- Phase-separated wall that can be divided to allow the teeth of all types of comb busbar to pass through.
- Staggered terminals to simplify connection.

Dimensions (mm)

DB122832 

Technical data

Main characteristics	
Pollution degree	3
Power circuit	
Voltage rating (Ue)	250 V AC
Current rating (Ie)	20 A
Additional characteristics	
Endurance (O-C)	30,000 operations AC22 (cos φ = 0.8)
Operating temperature	-35°C... +70°C
Storage temperature	-40°C... +80°C
Tropicalization	Treatment 2 (relative humidity 95 % at 55°C)
LED indicator light	Consumption: 0.3 W
	Service life: 100,000 hours of constant lighting efficiency
	Maintenance-free indicator light (non-interchangeable LEDs)

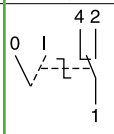
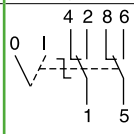
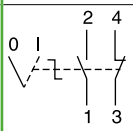
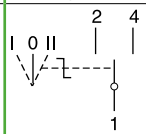
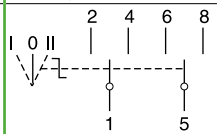
iSSW linear switches

IEC 60669-1 and IEC 60947-5-1

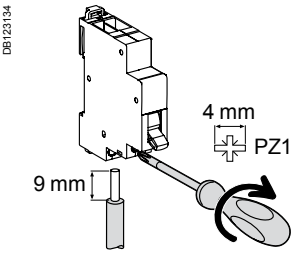
- iSSW linear switches are used for the manual control of electric circuits.

Catalogue numbers

iSSW linear switches

Type	2 positions			3 positions	
	PB105262-40 			PB105263-40 	
Contact	1 changeover switch	2 changeover switches	1 NO + 1NC	1 changeover switch	2 changeover switches
Diagram					
Cat. no.	**A9E18070**	**A9E18071**	**A9E18072**	**A9E18073**	**A9E18074**
Width in 9 mm modules	2	4	2	2	4

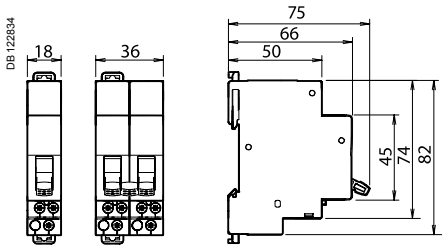
Connection

DB123134 

Tightening torque	Copper cables	
	Rigid	Flexible or with ferrule
	DB122945 	DB122946 
1 N.m	0.5 mm² min. 2 x 2.5 mm² max.	0.5 mm² min. 2 x 2.5 mm² max.

- Phase-separated wall that can be divided to allow the teeth of all types of comb busbar to pass through.
- Staggered terminals to simplify connection.

Dimensions (mm)

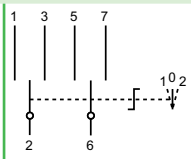
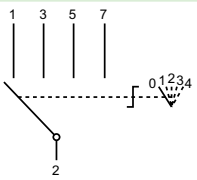
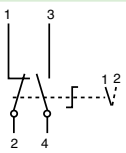
DB122834 

Technical data

Main characteristics	
Pollution degree	3
Power circuit	
Voltage rating (Ue)	250 V AC
Current rating (Ie)	20 A
Additional characteristics	
Endurance (O-C)	30,000 cycles AC22 (cos φ = 0.8)
Operating temperature	-20°C... +50°C
Storage temperature	-40°C... +70°C
Tropicalization	Treatment 2 (relative humidity 95 % at 55°C)

DIN rail selector switches
iCMB, iCMD, iCME, iCMC, iCMV and iCMA

Control

Selector switches	iCMB	iCMD	iCME
Type	**Two-pole with zero setting**	**4-way**	**2-way for electronic circuits**
In compliance with standards	IEC 60947-3 (EN 60947-3) VDE 0660 part. 107 UL	IEC 60947-3 (EN 60947-3) VDE 0660 part. 107 UL	IEC 60947-3 (EN 60947-3) VDE 0660 part. 107 UL
	PB107120-38 	PB107121-38 	PB107122-38 
Function			
	■ This two-pole selector switch with zero setting allows manual control of a circuit with 2-way operation (non-locking) with a stop position	■ This 4-way selector switch allows control of a circuit with operating priorities	■ This 2-way selector switch is used specially for the control of electronic circuits of low voltage and current level
Wiring diagrams			
	DB123860 	DB123861 	DB123862 
Use			
	Example: electrically controlled metal screen: ■ position 1 = raising ■ position 0 = stop ■ position 2 = lowering Zero setting product, positions 1 and 2 must be maintained on the rotative handle by the operator	Example: fan control: ■ position 0 = stop ■ position 1 = override operation, slow speed ■ position 2 = override operation, high speed ■ position 3 = remote control ■ position 4 = automatic operation	■ Voltage range from 30 mV to 600 V AC
Catalogue numbers	**A9E15120**	**A9E15121**	**A9E15122**

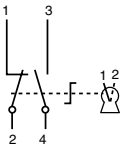
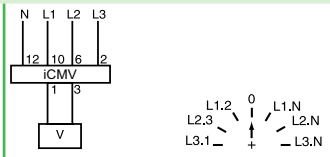
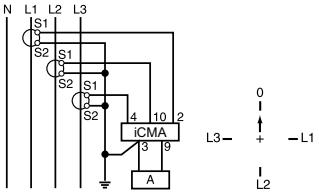
Technical specification

Rated voltage (Ue)	V AC	415	415	See following table
Maximum operating voltage	V	440	440	440
Rating	A	10	10	See following table
Operating frequency	Hz	50/60	50/60	50/60
Width in 9-mm modules		4	4	4
Breaking capacity (resistive load)		–	–	

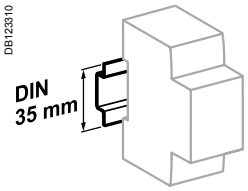
	V AC	V DC
1 V	5 A	3 A
12 V	1.2 A	0.7 A
24 V	0.7 A	0.4 A
48 V	0.45 A	0.25 A
110 V	0.25 A	0.13 A
240 V	0.15 A	0.08 A
300 V	0.13 A	0.07 A
440 V	0.1 A	0.05 A

Operating temperature	°C	-20…+55	-20…+55	-20…+55
Storage temperature	°C	-25…+80	-25…+80	-25…+80

DDIN rail selector switches
iCMB, iCMD, iCME, iCMC, iCMV and iCMA (cont.)

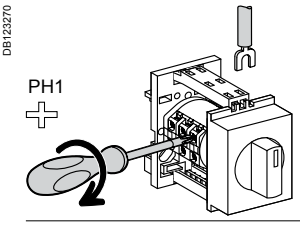
	iCMC	iCMV	iCMA
	2-way key-actuated	**7-position voltmeter**	**4-position ammeter**
	IEC 60947-3 (EN 60947-3) VDE 0660 part. 107 UL	IEC 60947-3 (EN 60947-3) VDE 0660 part. 107 UL	IEC 60947-3 (EN 60947-3) VDE 0660 part. 107 UL
	PB107123-38 	PB107118-38 	PB107119-38 
	■ 2-way key-actuated selector switch (key Ronis 601 type) with locking in one or the other position	■ This 7-position voltmeter selector switch makes it possible, with a single voltmeter, to measure in succession the voltages (phase-to-phase and phase-to-neutral) of a three-phase circuit	■ This 4-position ammeter selector switch makes it possible, with a single ammeter (using current transformers), to measure in succession the currents of a three-phase circuit
	DB123869 	DB123146 	DB123145 
	–	–	–
	A9E15123	**15125**	**15126**
	415	415	415
	440	440	440
	10	10	10
	50/60	50/60	
	4	4	4
	–	–	–
	-20…+55	-20…+55	-20…+55
	-25…+80	-25…+80	-25…+80

DIN rail selector switches
iCMB, iCMD, iCME, iCMC, iCMV and iCMA (cont.)



Clip on DIN rail 35 mm.

Connection



Tightening torque	Copper cables
	Flexible or rigid with ferrule
	
0.35 N.m	< 1.5 mm^2

■ Connection by jumper terminals with captive screws.

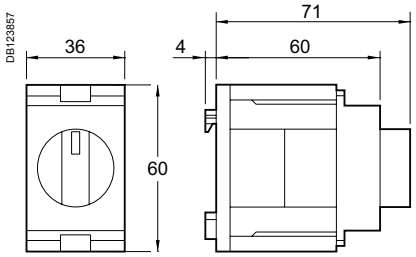
Technical data

Additional characteristics		
Degree of protection	Device only	IP20
Endurance (O-C)	Electrical	1,000,000 switching operations
	Mechanical	2,000,000 switching operations (AC21A-3 x 440 V)

Weight (g)

Selector switches	
Type	
iCMA	58
iCMB	58
iCMC	70
iCMD	58
iCME	44
iCMV	58

Dimensions (mm)



Button holders

They can be attached to a symmetrical 35 mm rail, in modular cabinets or enclosures, for control and indications auxiliaries: push-buttons, emergency stops, switches, light indicators; for tertiary and industrial applications.

PB107183-29



A9A15151

PB107184-29



A9A15152

Catalogue numbers

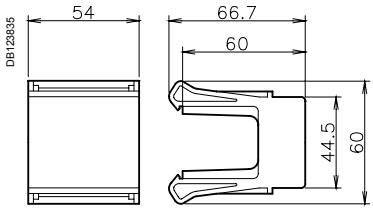
Button holders		
Type		**Width in 9 mm modules**
Ø 22 mm button holder		
	A9A15151	6
Universal support		
	A9A15152	6

Technical data

Main characteristics	Button holder	Universal support
For buttons, switches and indicators with metal or plastic flange Ø 22 of the Schneider Electric XB4 / XB5 type	■	-
For buttons, indicators, light emitting diodes (LED), potentiometers	-	■
Drilling diameter	Ø 22.3 mm	Easy drilling, to be adapted depending on use
Colour	White RAL 9003	
Self-extinguishing insulating material		
Depth under rail 60 mm (same as products)		

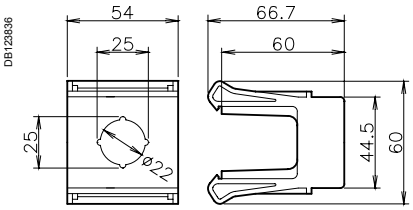
Dimensions (mm)

DB123835



Universal support

DB123836



Ø 22 mm button holder

Acti9 iCT contactors (cont.)

DB123399 DB116619 DB106604 DB122858
DB406142 DB405227

IEC/EN 61095

As per the above standards:

Acti9 iCT contactors are available in two versions:

- Contactors without manual operation
- Contactors with manual operation.

The breadth of the Acti9 iCT contactor range satisfies most application cases.
Acti9 iCT contactors can be combined with auxiliary control, protection and indication functions.

- Acti9 iCT contactors can be used to remote control applications in alternating current:
  - lighting, heating, ventilation, roller blinds, sanitary hot water,
  - mechanical ventilation systems, etc,
  - load-shedding of non-priority circuits.

> Contactors

Acti9 iCT 2P

PB106115-35



manual control

Acti9 iCT 4P

PB106105-35



> Contactor auxiliaries

PB106120-34



Indication Acti9 iACTs

- This auxiliary allows indication of the "open" or "closed" position of the contactor power contacts

PB106124-34



Interference filterin Acti9 iACTp

- This auxiliary is an interference suppressor which limits overvoltages on the control circuit

PB106123-34



Dual control Acti9 iACTc

- Used to control a contactor in impulse-type mode or to combine latched or impulse-type control orders

PB107751-34



Control and indication 24 V DC Acti9 iACT24

- Allows control and indication of a 230 V AC contactor from the Acti9 Smartlink or by a PLC, by 24 V DC signals
- Also allows control by a maintained signal

PB106125-34



Time delay Acti9 iATEt

- This auxiliary is used to time delay for Acti9 iCT and iTL.

According to cabling, there are 5 possible time delay types:

- 1 for iTL
- 4 for iCT

Function type A: late closing
Delay energizing of contactor

Function type B: time delay

- Energize the contactor by closing a push button
- The time delay starts as soon as the control contacts are closed

Function type C: late opening

- Energize the contactor by closing a push button
- The time delay starts when the control contacts are opened

Function type H: fixed time operation

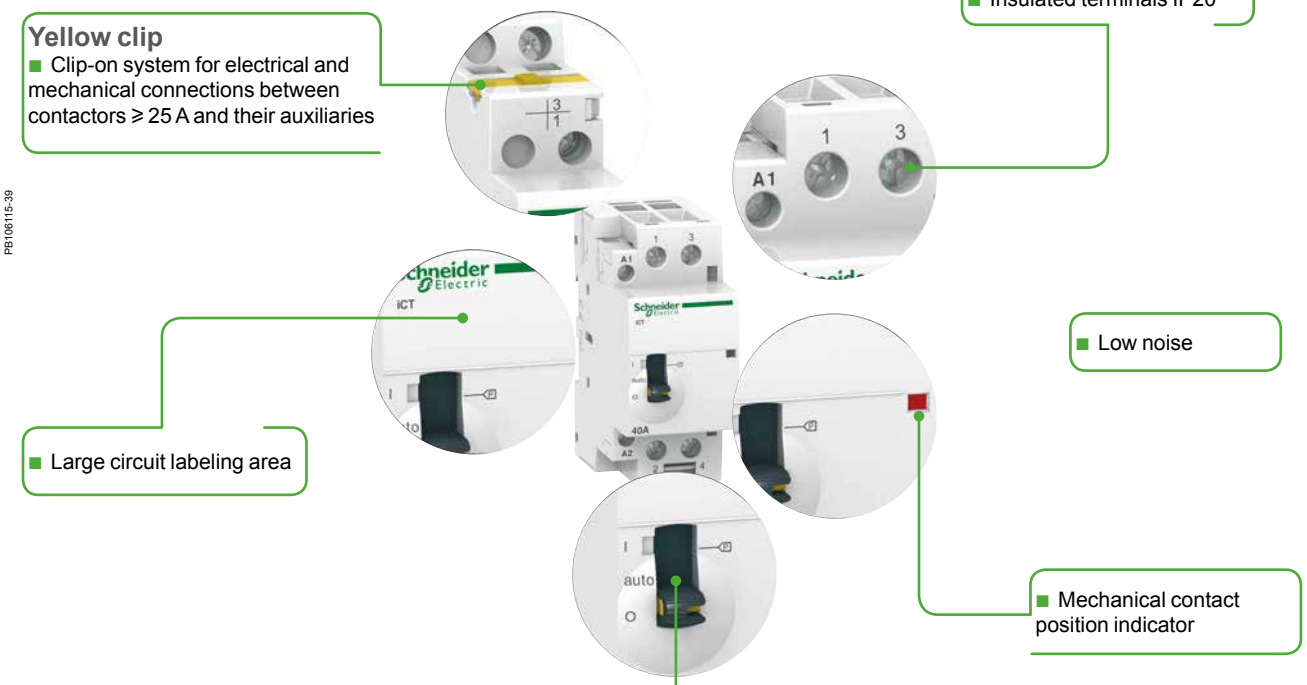
- Operate the contactor for a pre-determined time from the moment of energizing

		Choice of 50 Hz contactors									
Type		**Contactor**						**Manually-operated contactors**			
Rating	A	16	20	25	40	63	100	16	25	40	63
Auxiliaries		**Contactors that can be equipped with auxiliaries**									
iACTs indication auxiliary		Yes	Yes	Yes				Yes			
iACTp protection auxiliary	By yellow clips	No	No	Yes				No	Yes		
iACTc, iATEt control auxiliary	By yellow clips	No	No	Yes				No	Yes		
iACT24 control auxiliary		No	No	Yes (for contactors 230 V - 50 Hz)				No	Yes (for contactors 230 V - 50 Hz)		

Acti9 iCT contactors (cont.)

Yellow clip
■ Clip-on system for electrical and mechanical connections between contactors ≥ 25 A and their auxiliaries

■ Insulated terminals IP20



■ Large circuit labeling area

■ Low noise

■ Mechanical contact position indicator

■ Consistent with the entire Acti9 offer and with all types of lighting

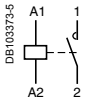
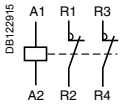
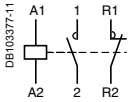
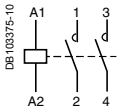
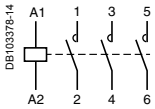
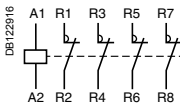
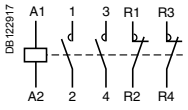
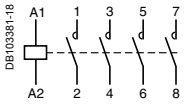
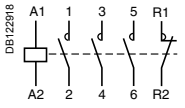
■ Manually-operated contactors have a 4-position selector switch on their front face:
□ automatic operating mode
□ temporary "ON" override
□ permanent "ON" override: used to lock the contactor in the ON position during installation maintenance
□ shutdown

Choice of 60 Hz contactors				
Contactor				**Manually-operated contactors**
16	25	40	63	40
Contactors that can be equipped with auxiliaries				
Yes				Yes
No	Yes			Yes
No	Yes			Yes
No	Yes			No

Acti9 iCT contactors (cont.)

Catalog numbers

Acti9 iCT contactors - 50 Hz

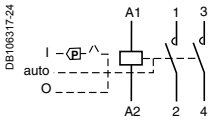
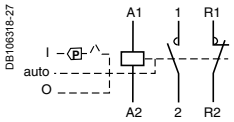
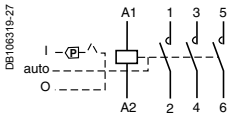
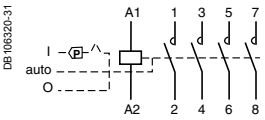
Type						Width in 9 mm modules
1P	**Rating (In)**		**Control voltage (V AC) (50 Hz)**	**Contact**		
	AC7a	**AC7b**				
	16 A	6 A	12	1NO	**A9C22011**	2
			24	1NO	**A9C22111**	2
			48	1NO	**A9C22211**	2
			220	1NO	**A9C22511**	2
			230…240	1NO	**A9C22711**	2
	25 A	8.5 A	220	1NO	**A9C20531**	2
			230…240	1NO	**A9C20731**	2
2P						
	16 A	6 A	12	2NO	**A9C22012**	2
			24	2NO	**A9C22112**	2
			48	2NO	**A9C22212**	2
			220	2NO	**A9C22512**	2
			230...240	2NO	**A9C22712**	2
			12	1NO+1NC	**A9C22015**	2
			24	1NO+1NC	**A9C22115**	2
			220	1NO+1NC	**A9C22515**	2
			230...240	1NO+1NC	**A9C22715**	2
	20 A	-	230...240	2NO	**A9C22722**	2
	25 A	8.5 A	24	2NO	**A9C20132**	2
			48	2NO	**A9C20232**	2
			220	2NO	**A9C20532**	2
			230...240	2NO	**A9C20732**	2
			220	2NC	**A9C20536**	2
			230...240	2NC	**A9C20736**	2
	40 A	15 A	220...240	2NO	**A9C20842**	4
	63 A	20 A	24	2NO	**A9C20162**	4
			220...240	2NO	**A9C20862**	4
	100 A (*)	-	220...240	2NO	**A9C20882**	6
3P						
	16 A	6 A	220…240	3NO	**A9C22813**	4
	25 A	8.5 A	220…240	3NO	**A9C20833**	4
	40 A	15 A	220…240	3NO	**A9C20843**	6
	63 A	20 A	220…240	3NO	**A9C20863**	6
4P						
	16 A	6 A	24	4NO	**A9C22114**	4
			220...240	4NO	**A9C22814**	4
			220...240	2NO+2NC	**A9C22818**	4
	20 A	-	220 ...240	4NO	**A9C22824**	4
	25 A	8.5 A	24	4NO	**A9C20134**	4
			220...240	4NO	**A9C20834**	4
			24	4NC	**A9C20137**	4
			220...240	4NC	**A9C20837**	4
			220...240	2NO+2NC	**A9C20838**	4
	40 A	15 A	220...240	4NO	**A9C20844**	6
			220...240	4NC	**A9C20847**	6
	63 A	20 A	24	4NO	**A9C20164**	6
			220...240	4NO	**A9C20864**	6
			24	4NC	**A9C20167**	6
			220...240	4NC	**A9C20867**	6
			220...240	2NO+2NC	**A9C20868**	6
			220...240	3NO+1NC	**A9C20869**	6
	100 A (*)	-	220...240	4NO	**A9C20884**	12

(*) do not use for lighting applications

Acti9 iCT contactors (cont.)

Catalog numbers

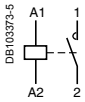
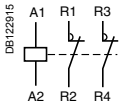
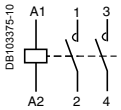
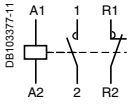
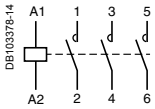
Acti9 iCT manual control contactor 50 Hz

Type						Width in 9 mm modules
2P	**Rating (In)**		**Control voltage (V AC) (50 Hz)**	**Contact**		
	AC7a	**AC7b**				
 DB106317-24	16 A	6 A	220	2NO	**A9C23512**	2
			230...240	2NO	**A9C23712**	2
			220	1NO+1NC	**A9C23515**	2
			230...240	1NO+1NC	**A9C23715**	2
	25 A	8,5 A	24	2NO	**A9C21132**	2
 DB106318-27			220	2NO	**A9C21532**	2
			230...240	2NO	**A9C21732**	2
	40 A	15 A	24	2NO	**A9C21142**	2
			220...240	2NO	**A9C21842**	4
	63 A	20 A	24	2NO	**A9C21162**	4
			220...240	2NO	**A9C21862**	4
3P						
 DB106319-27	25 A	8,5 A	220...240	3NO	**A9C21833**	4
	40 A	15 A	220...240	3NO	**A9C21843**	6
4P						
 DB106320-31	25 A	8,5 A	24	4NO	**A9C21134**	4
			220...240	4NO	**A9C21834**	4
	40 A	15 A	24	4NO	**A9C21144**	6
			220...240	4NO	**A9C21844**	6
	63 A	20 A	24	4NO	**A9C21164**	6
			220...240	4NO	**A9C21864**	6

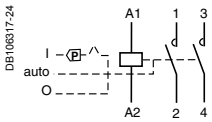
Acti9 iCT contactors (cont.)

Catalog numbers

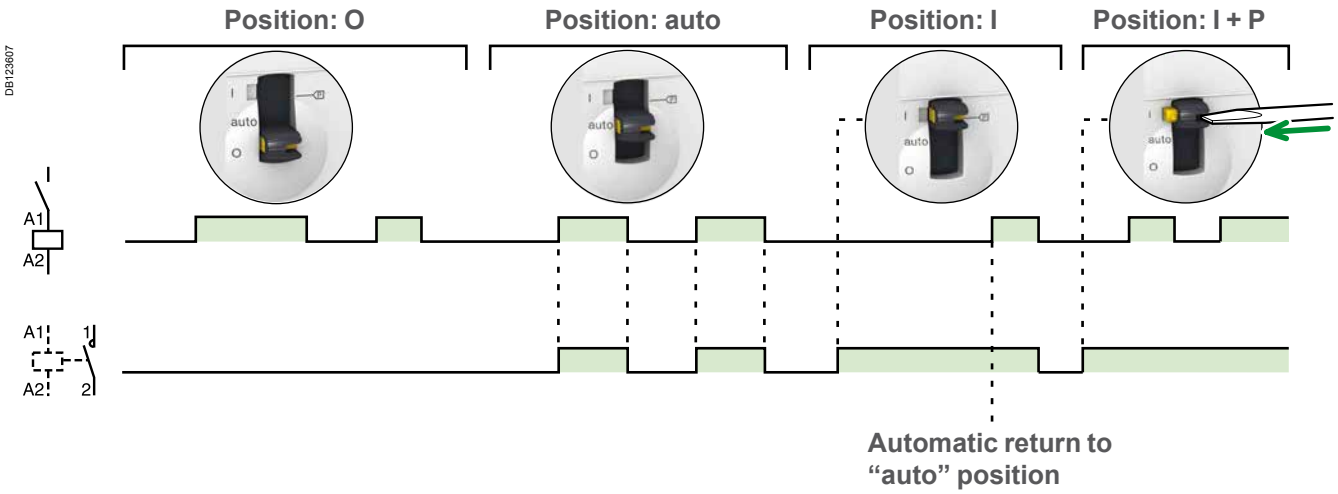
Acti9 iCT contactors - 60 Hz

Type						Width in 9 mm modules
1P	Rating (In) AC7a	Rating (In) AC7b	Control voltage (V AC) (60 Hz)	Contact		
	25 A	8.5 A	127	1NO	**A9C20431**	2
			220 ...240	1NO	**A9C20631**	2
2P						
 	16 A	6 A	127	1NO+1NC	**A9C22415**	2
			220...240	1NO+1NC	**A9C22615**	2
	25 A	8.5 A	127	2NO	**A9C20432**	2
			220...240	2NO	**A9C20632**	2
			127	2NC	**A9C20436**	2
			220...240	2NC	**A9C20636**	2
	40 A	15 A	127	2NO	**A9C20442**	4
			220...240	2NO	**A9C20642**	4
3P						
	25 A	8.5 A	127	3NO	**A9C20433**	4
			220...240	3NO	**A9C20633**	4
	40 A	15 A	127	3NO	**A9C20443**	6
			220...240	3NO	**A9C20643**	6
	63 A	20 A	127	3NO	**A9C20463**	6
			220...240	3NO	**A9C20663**	6

Acti9 iCT manual control contactor 60 Hz

Type						Width in 9 mm modules
2P	Rating (In) AC7a	Rating (In) AC7b	Control voltage (V AC) (60 Hz)	Contact		
	40 A	15 A	127	2NO	**A9C21442**	4
			220...240	2NO	**A9C21642**	4

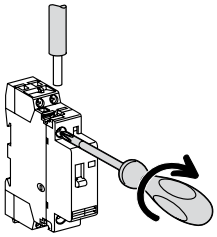
Operation (Manual control contactor)



Acti9 iCT contactors (cont.)

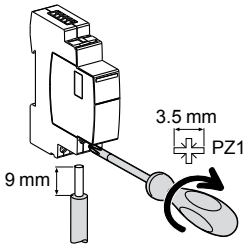
Connection

DB123606



Type		Circuit	Rating	Lenght tripping	Tightening torque	Copper cables	
						Rigid	Flexible or with ferrule
						DB122945 DB122946	
Acti9 iCT	PZ1: 4 mm	Control	16 - 100 A	9 mm	0.8 N.m	1.5 to 2.5 mm: 2 x 1.5 mm²	1.5 to 2.5 mm: 2 x 2.5 mm²
		Power	16 and 25 A			1.5 to 6 mm²	1 to 4 mm²
	PZ2: 6 mm		40 A - 63 A	14 mm	3.5 N.m	6 to 25 mm²	6 to 16 mm²
			100 A			6 to 35 mm²	6 to 35 mm²
iACTs, iACTp, iACTc, iATEt	PZ1: 4 mm	-	-	9 mm	0.8 N.m	1.5 to 2.5 mm: 2 x 1.5 mm²	1.5 to 2.5 mm: 2 x 2.5 mm²

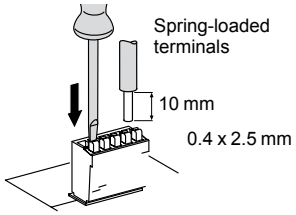
DB124308



Type	Terminals	Tightening torque	Copper cables		
			Rigid	Flexible	Flexible or with ferrule
		DB122945	DB123553	DB123554	
iACT24	Power supply (N/P)	1 N.m	0.5 to 10 mm² 2 x 0.5 to 2 x 2.5 mm²	0.5 to 6 mm² 2 x 0.5 to 2 x 2.5 mm²	0.5 to 4 mm² 2 x 0.5 to 2 x 2.5 mm²
	Input (Y1/Y2)				

Ti24 connector connection

DB123580



Type	Catalog numbers	Copper cables	
		Rigid	Flexible
		DB122945	DB123553
Ti24 Interface	**A9XC2412**	1 x 0.5 to 1.5 mm²	1 x 0.5 to 1.5 mm²

Ti24 prefabricated cables connection

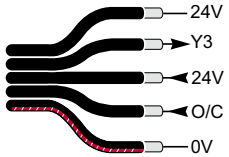
PB107754-10



PB107755-14

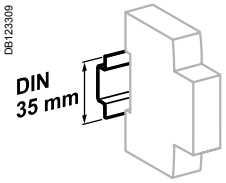


DB404857

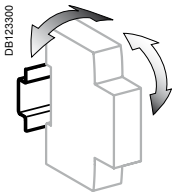


Type	Catalog numbers	Length
Connection for Acti9 Smartlink		
6 short prefabricated	**A9XCAS06**	100 mm
6 medium-sized prefabricated	**A9XCAM06**	160 mm
6 long prefabricated	**A9XCAL06**	870 mm
Connection for PLC type terminals		
6 long prefabricated on a single side	**A9XCAU06**	870 mm

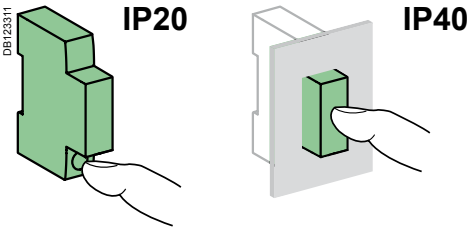
Acti9 iCT contactors (cont.)



Clip on DIN rail 35 mm.



± 30° vertical.



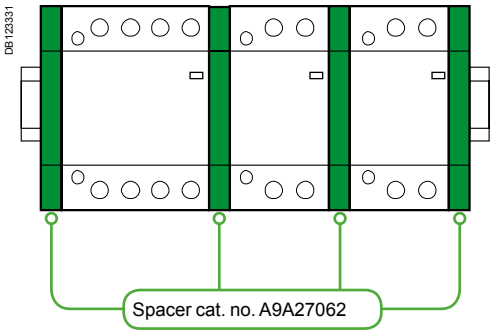
Technical data

Power circuit		
Voltage rating (Ue)	1P, 2P	250 V AC
	3P, 4P	400 V AC
Frequency		50 Hz or 60 Hz
Type of load		See module CA908026
Endurance (O-C)		
Electrical		100,000 cycles
Maximum number of switching operations per day		100
Additional characteristics		
Insulation voltage (Ui)		440 V AC
Pollution degree		2
Rated impulse withstand voltage (Uimp)		2.5 kV (4 kV for 12/24/48 V AC)
Degree of protection (IEC 60529)	Device only	IP20
	Device in modular enclosure	IP40
Operating temperature		-5°C to +60°C
Storage temperature		-40°C to +70°C
Tropicalization (IEC 60068-2-30)		Treatment 2 (relative humidity 95 % at 55°C)
ELSV compliance (Extra Low Safety Voltage) for 12/24/48 V AC versions		
The product control conforms to the SELV (safety extra low voltage) requirements		

Temperature derating table

Acti9 iCT	Ambient temperature (°C)		
Rating (A)	**≤ 40**	**50**	**60**
63	63	59.8	50
40	40	38	32
25	25	23.8	20
16	16	15.2	12.8

If multiple iCTs side by side: install spacer and apply 0.8 cœfficient on upper current values.



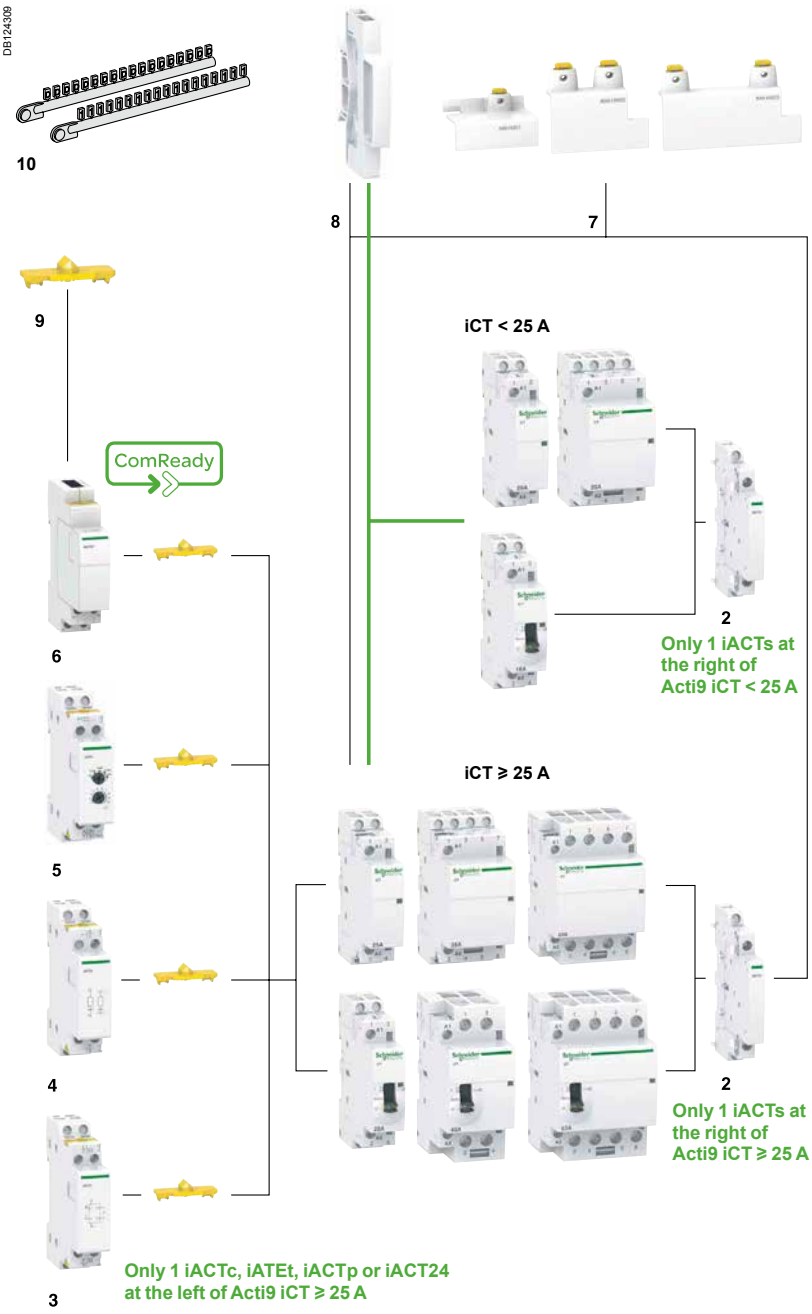
Acti9 iCT contactors (cont.)

Mounting accessories

7	Sealable screw shields for top and bottom	3P, 4P 25 A	**A9A15921**
		2P 40/63 A	**A9A15922**
		3P, 4P 40/63 A	**A9A15923**
8	9 mm spacer		**A9A27062**
9	Yellow clips		**A9C15415**
10	Clip-on terminal markers	see module	**CA907001**

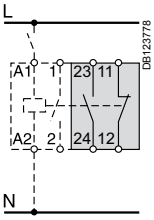
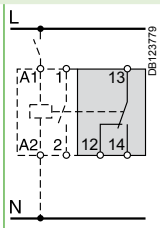
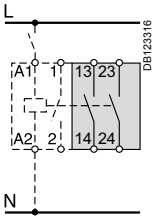
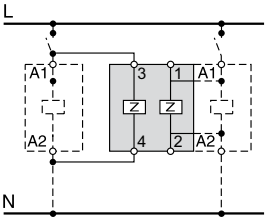
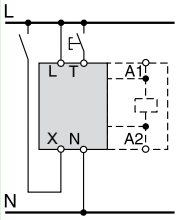
Auxiliaries

Indication			
2	Acti9 iACTs	1NO + 1NC	**A9C15914**
		1CO	**A9C15915**
		2NO	**A9C15916**
Double control inputs			
3	Acti9 iACTc	230 V AC	**A9C18308**
		24 V AC	**A9C18309**
Coil suppression blocs			
4	Acti9 iACTp	12...48 V AC	**A9C15919**
		48...127 V AC	**A9C15918**
		220...240 V AC	**A9C15920**
Time delay			
5	Acti9 iATEt	24...240 V AC	**A9C15419**
Control and indication			
6	Acti9 iACT24	230 V AC	**A9C15924**



Acti9 iCT contactors

Electrical auxiliaries for Acti9 iCT

	Indication			Protection			Control	
Auxiliaries	**Acti9 iACTs**			**Acti9 iACTp**			**Acti9 iACTc**	
Type	**Indication**			**Interference filterin**			**Impulse/latched control**	
	With Open/Close auxiliary contact			2 protection circuits				
	PB106120-34 			PB106124-34 			PB106123-34 	
Function								
	■ This auxiliary allows indication of the "open" or "closed" position of the contactor power contacts			■ This auxiliary is an interference suppressor which limits overvoltages on the control circuit			■ This auxiliary, combined with contactors, enables them to be controlled by 2 order types: □ impulse order for local control (input T) □ latched order for centralised control (input X) □ the last order received takes priority	
Wiring diagrams								
	DB123777 	DB123778 	DB123779 	DB123316 			DB123315 	
Mounting								
	■ Mounted to the right of Acti9 iCT			■ Mounted to the left of Acti9 iCT by yellow clips (1) ■ By wires			■ Mounted to the left of Acti9 iCT by yellow clips (1)	
Use								
				■ The iACTp has 2 separate and identical circuits, allowing it to be combined with 2 different one on the Acti9 iCT the other by wires			■ Mains power outages: □ < 70 ms: keeps its initial status □ > 80 ms: reset □ put back into operation by manual operation on input X or T. ■ Minimum impulse duration: 250 ms	
Catalog numbers	**A9C15914**	**A9C15915**	**A9C15916**	**A9C15918**	**A9C15919**	**A9C15920**	**A9C18308**	**A9C18309**
Technical specifications								
Control voltage (Ue)	V AC	24…240			48 …127	12 …48	220 …240	230…240	24…48
	V DC	24…130			–			–	
Control voltage frequency	Hz	50/60			50/60			50/60	
Width in 9 mm modules		1			2			2	
Auxiliary contact (breaking capacity)		■ Mininimum: 10 mA at 24 V DC/AC ■ Maximum: □ 5 A at 230 V AC, AC12 □ 2 A at 230 V AC, AC15 □ 1 A at 130 V DC, DC13			–			–	
Number of contacts		1NO + 1NC	1CO	2NO	–			–	
Operating temperature	°C	-5°C to +50°C							
Storage temperature	°C	-40°C to +70°C							
Consumption		–			–			OFF load: 3 VA Inrush (2): 2 VA Holding (2): 0.2 VA	

(1) Electrical and mechanical link.
(2) Maximum consumption of all contactors controlled

Acti9 iCT contactors

Electrical auxiliaries for Acti9 iCT (cont.)

Control (cont.)

Acti9 iATEt

Time delay

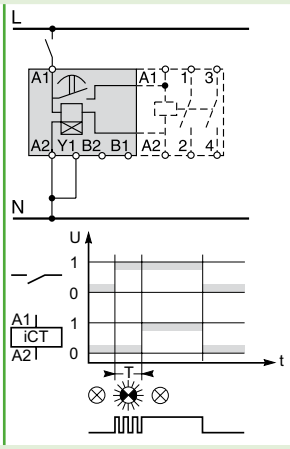
PB106125-34



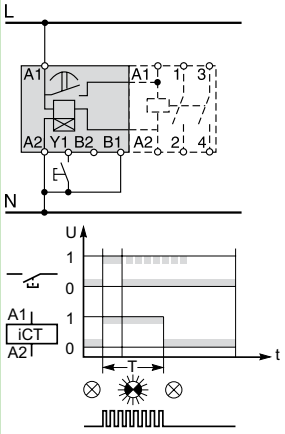
- This auxiliary is used to time delay for Acti9 iCT and iTL. According to cabling, there are 5 possible time delay types:
  - 1 for iTL
  - 4 for iCT.

Function type A: late closing	**Function type B: time delay**	**Function type C: late opening**	**Function type H: fixed time operation**
■ Delay energizing of contactor.	■ Energize the contactor by closing a push button. ■ The time delay starts as soon as the control contacts are closed.	■ Energize the contactor by closing a push button. ■ The time delay starts when the control contacts are opened.	■ Operate the contactor for a pre-determined time from the moment of energizing.

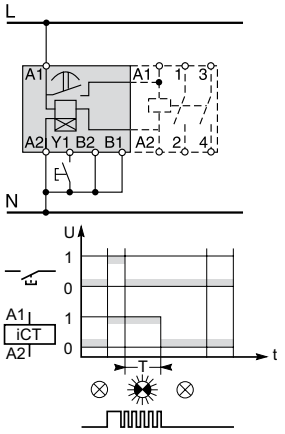
DB123321



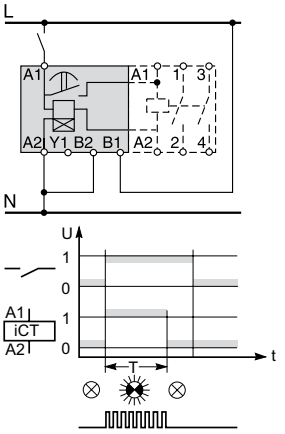
DB124104



DB123323



DB123324



- Mounted to the left of Acti9 iCT by yellow clips [1]

	–
	A9C15419
	24…240
	24…110
	50/60
	2
	–
	–
	-20°C to +50°C
	-40°C to +80°C
	Off-load: 5 VA Inrush [2]: 3 A Holding [2]: 0.2 A

Acti9 iCT contactors
Electrical auxiliaries for Acti9 iCT (cont.)

Control and indication

Auxiliary	Acti9 iACT24
Type	**Control and indication 24 V DC**
	With Ti24 connector

PB107751-34



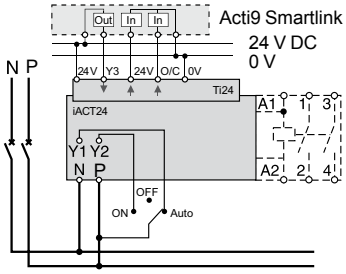
ComReady

Function

- This auxiliary allows a contactor to be interfaced with the Acti9 Smartlink interface or a programmable logic controller (PLC) in 24 V DC (control, O/C indication)
- 230 V AC control

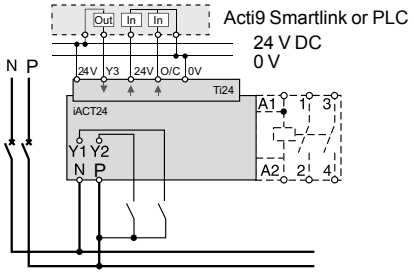
Wiring diagrams

DB124313



Wiring with exclusive selector
230 V AC control (Y1 = 0) / 24 V DC control (Y1 = 1)

DB124441



Wiring for non-exclusive 230 V AC and 24 V DC controls

Mounting

- To the left of the Acti9 iCT contactor using the yellow clips (1).
- When an iACT24 is used, the A1/A2 terminals of the contactors should not be wired. Only the yellow clips integral with the iACT24 should be used for connection to the coil.

Utilization

- 230 V AC interface:
  - Y1: enabling of 24 V DC control (Y1 = 1) or inhibition of 24 V DC control (Y1 = 0).
  - Y2: 230 V pulse control
- "Ti24" 24 V DC interface:
  - Y3: 24 V DC control of Acti9 iCT closing on rising edge and opening on falling edge
  - reading of the contactor status (opened or closed) from the position of the integrated O/C auxiliary contact
  - monitoring of connection of the "Ti24" terminal block by the upstream system (PLC, supervision system) via the 24 V terminal (in the centre of the Ti24 terminal block)

Catalog numbers		**A9C15924**
Technical specification		
Control voltage (Ue)	V AC	230, +10 %, -15 % (Y2)
	V DC	24, ± 20 % (Y3)
Control voltage frequency	Hz	50/60
Insulation voltage (Ui)	V AC	250
Rated impulse withstand voltage (Uimp)	kV	8 (OVC IV)
Pollution degree		3
Degree of protection		IP20B device only
		IP40 device in modular enclosure
Width in 9 mm modules		2
Auxiliary contact (O/C) Ti24		24 V DC protected output, min. 2 mA, max. 100 mA
Contact		1 O/C operating category AC 14
Operating temperature	°C	-25°C to +60°C
Storage temperature	°C	-40°C to +80°C
Consumption		<1 W
Standard		IEC/EN 60947-5-1

(1) Mechanical and electrical link.

Acti9 iCT contactors

Accessories for Acti9 iCT

	Security				
Accessories	**Sealable screw shields**			**Yellow clips**	**Spacer**
	PB104485-15 	PB104486-15 	PB104487-15 	PB106143-10 	PB104483-40 
Function					
	■ Designed to cover terminals to avoid contact with device screws. ■ Allow sealing			■ Ensure the mechanical and/or electrical link between contactors and their auxiliaries.	■ Required to reduce temperature rise of modular devices installed side by side. ■ Recommended to separate electronic devices (thermostat, programmable clock, etc.) from electromechanical devices (relays, contactors).
	■ **For Acti9 iCT: 3P, 4P - 25 A**	■ **For Acti9 iCT: 2P - 40/63 A**	■ **For Acti9 iCT: 3P, 4P - 40/63 A**	■ **For Acti9 iCT: ≥ 25 A**	
Set of	**10 upstream / 10 downstream**			**10**	**5**
Catalog numbers	**A9A15921**	**A9A15922**	**A9A15923**	**A9C15415**	**A9A27062**
Technical specification					
Width in 9 mm modules	4	4	6	–	1
Number of poles	3P, 4P	2P	3P, 4P	–	–

Acti9 iCT contactors

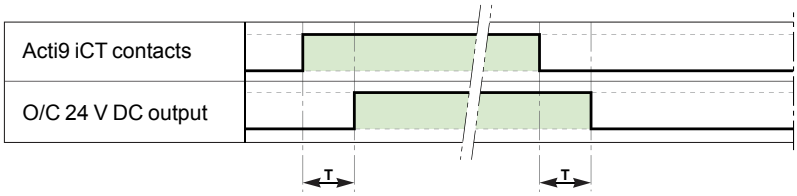
Technical advice for Acti9 iCT (cont.)

ComReady

Operation of the iACT24

O/C 24 V DC output

DB124314

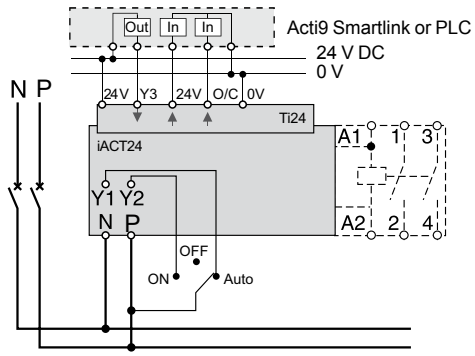


	Parameter	Min	Max
T	Time delay between iACT24 closing and indication	100 ms	200 ms

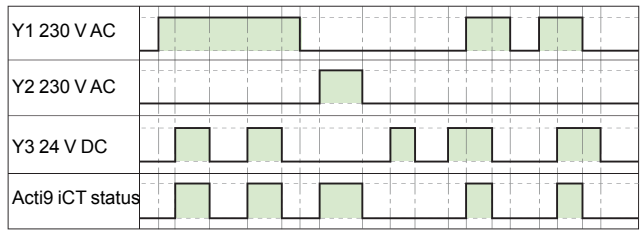
- Minimum duration of 230 V AC pulse (Y2): 200 ms.
- 30 iACT24 closing or opening actuations are authorized per minute: Minimum time delay between 2 actuations on the iACT4 via Y1,Y2, Y3 (closing or opening of the Acti9 iCT coil): 220 ms.
- 10 closing or opening actuations spaced 440 milliseconds apart are authorized following no loading of the iACT24 during a period of 20 seconds.

Wiring with exclusive selector
230 V AC control (Y1 = 0) / 24 V DC control (Y1 = 1)

DB124443

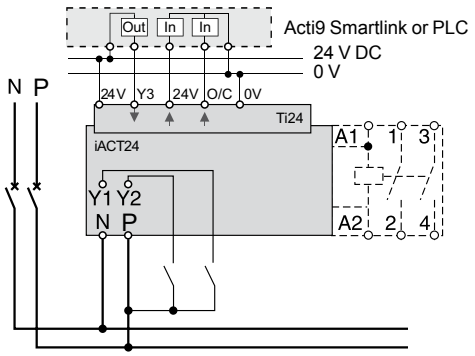


DB124314

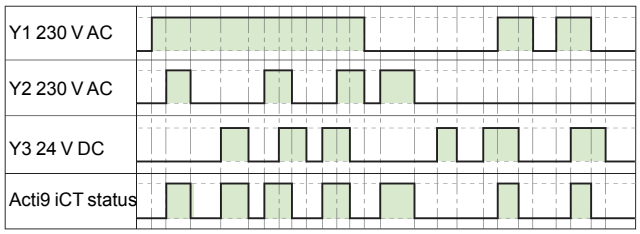


Wiring for non-exclusive 230 V AC and 24 V DC controls

DB124444



DB124442



Acti9 iCT contactors

Technical advice for Acti9 iCT (cont.)

Consumption

Acti9 iCT contactors - 50 Hz

Type	Rating (In)		Control voltage (V AC) (50 Hz)	Consumption		Max. power	
	AC7a	AC7b		Holding	Inrush		
1P							
	16 A	5 A	12	3.8 VA	15 VA	1.3 W	**A9C22011**
			24	3.8 VA	15 VA	1.3 W	**A9C22111**
			48	3.8 VA	15 VA	1.3 W	**A9C22211**
			220	3.8 VA	15 VA	1.3 W	**A9C22511**
			230…240	2.7 VA	9.2 VA	1.2 W	**A9C22711**
	25 A	8.5 A	220	3.8 VA	15 VA	1.3 W	**A9C20531**
			230…240	2.7 VA	9.2 VA	1.2 W	**A9C20731**
2P							
	16 A	5 A	12	3.8 VA	15 VA	1.3 W	**A9C22012**
			24	3.8 VA	15 VA	1.3 W	**A9C22112**
			48	3.8 VA	15 VA	1.3 W	**A9C22212**
			220	3.8 VA	15 VA	1.3 W	**A9C22512**
			230...240	2.7 VA	9.2 VA	1.2 W	**A9C22712**
			12	3.8 VA	15 VA	1.3 W	**A9C22015**
			24	3.8 VA	15 VA	1.3 W	**A9C22115**
			220	3.8 VA	15 VA	1.3 W	**A9C22515**
			230...240	2.7 VA	9.2 VA	1.2 W	**A9C22715**
	20 A	6.4 A	230...240	2.7 VA	9.2 VA	1.2 W	**A9C22722**
	25 A	8.5 A	24	3.8 VA	15 VA	1.3 W	**A9C20132**
			48	3.8 VA	15 VA	1.3 W	**A9C20232**
			220	3.8 VA	15 VA	1.3 W	**A9C20532**
			230...240	2.7 VA	9.2 VA	1.2 W	**A9C20732**
			220	3.8 VA	15 VA	1.3 W	**A9C20536**
			230...240	2.7 VA	9.2 VA	1.2 W	**A9C20736**
	40 A	15 A	220...240	4.6 VA	34 VA	1.6 W	**A9C20842**
	63 A	20 A	24	4.6 VA	34 VA	1.6 W	**A9C20162**
			220...240	4.6 VA	34 VA	1.6 W	**A9C20862**
	100 A (*)	-	220...240	6.5 VA	53 VA	2.1 W	**A9C20882**
3P							
	16 A	5 A	220…240	4.6 VA	34 VA	1.6 W	**A9C22813**
	25 A	8.5 A	220…240	4.6 VA	34 VA	1.6 W	**A9C20833**
	40 A	15 A	220…240	6.5 VA	53 VA	2.1 W	**A9C20843**
	63 A	20 A	220…240	6.5 VA	53 VA	2.1 W	**A9C20863**
4P							
	16 A	5 A	24	4.6 VA	34 VA	1.6 W	**A9C22114**
			220...240	4.6 VA	34 VA	1.6 W	**A9C22814**
			220...240	4.6 VA	34 VA	1.6 W	**A9C22818**
	20 A	6.4 A	220 ...240	4.6 VA	34 VA	1.6 W	**A9C22824**
	25 A	8.5 A	24	4.6 VA	34 VA	1.6 W	**A9C20134**
			220...240	4.6 VA	34 VA	1.6 W	**A9C20834**
			24	4.6 VA	34 VA	1.6 W	**A9C20137**
			220...240	4.6 VA	34 VA	1.6 W	**A9C20837**
			220...240	4.6 VA	34 VA	1.6 W	**A9C20838**
	40 A	15 A	220...240	6.5 VA	53 VA	2.1 W	**A9C20844**
			220...240	6.5 VA	53 VA	2.1 W	**A9C20847**
	63 A	20 A	24	6.5 VA	53 VA	2.1 W	**A9C20164**
			220...240	6.5 VA	53 VA	2.1 W	**A9C20864**
			24	6.5 VA	53 VA	2.1 W	**A9C20167**
			220...240	6.5 VA	53 VA	2.1 W	**A9C20867**
			220...240	6.5 VA	53 VA	2.1 W	**A9C20868**
			220...240	6.5 VA	53 VA	2.1 W	**A9C20869**
	100 A (*)	-	220...240	13 VA	106 VA	4.2 W	**A9C20884**

(*) do not use for lighting applications

Acti9 iCT contactors

Technical advice for Acti9 iCT (cont.)

Consumption

Acti9 iCT manual control contactor 50 Hz

Type	Rating (In)		Control voltage (V AC) (50 Hz)	Consumption		Max. power	
	AC7a	AC7b		Holding	Inrush		
2P							
	16 A	5 A	220	2.7 VA	9.2 VA	1.2 W	**A9C23512**
			230...240	2.7 VA	9.2 VA	1.2 W	**A9C23712**
			220	3.8 VA	15 VA	1.3 W	**A9C23515**
			230...240	2.7 VA	9.2 VA	1.2 W	**A9C23715**
	25 A	8.5 A	24	3.8 VA	15 VA	1.3 W	**A9C21132**
			220	2.7 VA	9.2 VA	1.2 W	**A9C21532**
			230...240	2.7 VA	9.2 VA	1.2 W	**A9C21732**
	40 A	15 A	24	4.6 VA	34 VA	1.6 W	**A9C21142**
			220...240	4.6 VA	34 VA	1.6 W	**A9C21842**
	63 A	20 A	24	4.6 VA	34 VA	1.6 W	**A9C21162**
			220...240	4.6 VA	34 VA	1.6 W	**A9C21862**
3P							
	25 A	8.5 A	220...240	4.6 VA	34 VA	1.6 W	**A9C21833**
	40 A	15 A	220...240	6.5 VA	53 VA	2.1 W	**A9C21843**
4P							
	25 A	8.5 A	24	4.6 VA	34 VA	1.6 W	**A9C21134**
			220...240	4.6 VA	34 VA	1.6 W	**A9C21834**
	40 A	15 A	24	6.5 VA	53 VA	2.1 W	**A9C21144**
			220...240	6.5 VA	53 VA	2.1 W	**A9C21844**
	63 A	20 A	24	6.5 VA	53 VA	2.1 W	**A9C21164**
			220...240	6.5 VA	53 VA	2.1 W	**A9C21864**

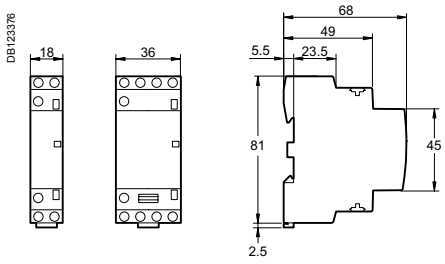
Acti9 iCT contactors - 60 Hz

Type	Rating (In)		Control voltage (V AC) (60 Hz)	Consumption		Max. power	
	AC7a	AC7b		Holding	Inrush		
1P							
	25 A	8.5 A	127	3.8 VA	15 VA	1.3 W	**A9C20431**
			220 ...240	2.7 VA	9.2 VA	0.9 W	**A9C20631**
2P							
	16 A	5 A	127	3.8 VA	15 VA	1.3 W	**A9C22415**
			220...240	2.7 VA	9.2 VA	0.9 W	**A9C22615**
	25 A	8.5 A	127	3.8 VA	15 VA	1.3 W	**A9C20432**
			220...240	2.7 VA	9.2 VA	0.9 W	**A9C20632**
			127	3.8 VA	15 VA	1.3 W	**A9C20436**
			220...240	2.7 VA	9.2 VA	0.9 W	**A9C20636**
	40 A	15 A	127	4.6 VA	34 VA	1.6 W	**A9C20442**
			220...240	4.6 VA	34 VA	1.6 W	**A9C20642**
3P							
	25 A	8.5 A	127	4.6 VA	34 VA	1.6 W	**A9C20433**
			220...240	4.6 VA	34 VA	1.6 W	**A9C20633**
	40 A	15 A	127	6.5 VA	53 VA	2.1 W	**A9C20443**
			220...240	6.5 VA	53 VA	2.1 W	**A9C20643**
	63 A	20 A	127	6.5 VA	53 VA	2.1 W	**A9C20463**
			220...240	6.5 VA	53 VA	2.1 W	**A9C20663**

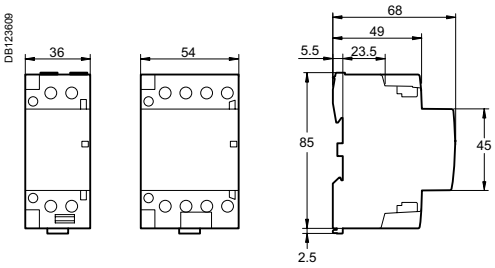
Acti9 iCT contactors

Dimensions for Acti9 iCT

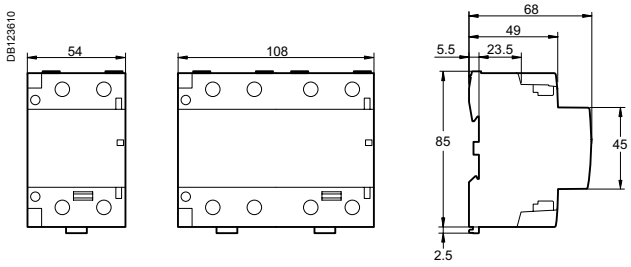
Dimensions (mm)



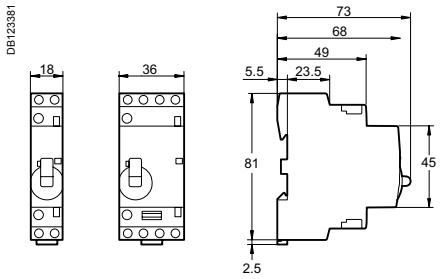
Acti9 iCT 16/25 A



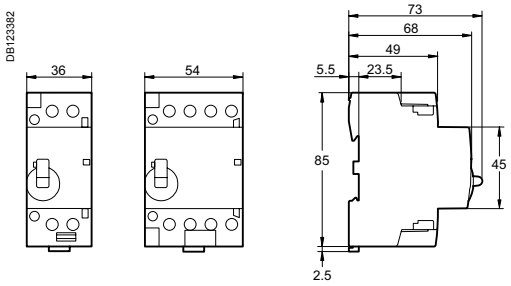
Acti9 iCT 40/63 A



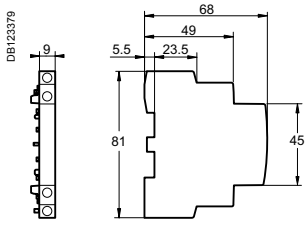
Acti9 iCT 100 A



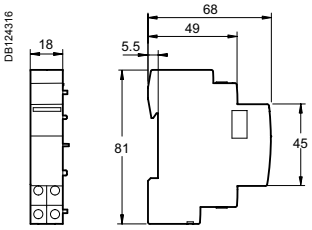
Acti9 iCT manual control contactor 16/25 A



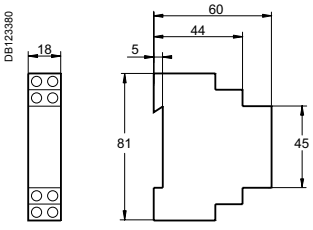
Acti9 iCT manual control contactor 40/63 A



iACTs



iACT24



iATEt
iACTp
iACTc

iTL impulse relays

DB123399 DB116619

iTL, iTLI, iTLs, iTLc, iTLm

Country approval pictograms

IEC/EN 60669-2-2
iTLs: IEC/EN 60947-5-1

Impulse relays

PB106126-34



PB106128-34



iTL

■ The impulse relays are used to control, by means of pushbuttons, lighting circuits consisting of:
□ incandescent lamps, low-voltage halogen lamps, etc. (resistive loads)
□ fluorescent lamps, discharge lamps, etc. (inductive loads)

Remote indication

PB106133-34



iTLs

■ Allows remote indication of its operating state (open/closed)

PB106139-34



Indication iATLs

■ Allows remote indication of the associated impulse relay

Centralised control

PB106130-34



iTLc

■ Allows centralised control of a group of TLc impulse relays, whilst at the same time retaining local impulse-type control

PB106137-34



Centralised control iATLc

■ Used for centralised control, thanks to a "pilot line", of a group of impulse relays controlling separate circuit, while at the same time maintaining local individual control of each impulse relay

Latched control

PB106132-34



iTLm

■ Operated by latched orders from a changeover contact (switch, time switch, thermostat). Manual control does not work

PB106138-34



Latched control iATLm

■ Controls the associated impulse relay by latched orders from a changeover contact

iTL impulse relays (cont.)

Impulse relays are used:

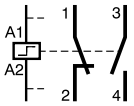
- Closing of the impulse relay pole(s) is triggered by an impulse on the coil.
- Having two stable mechanical positions, the pole(s) will be opened by the next impulse. Each impulse received by the coil reverses the position of the pole(s).
- Can be controlled by an unlimited number of pushbuttons.
- Zero energy consumption.

PB106131-34



Changeover contact iTLi

- This impulse relay has a changeover contact

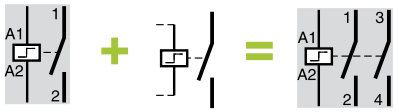


PB106134-34



Extensions iETL

- Used to increase the number of impulse relay poles
- Can be installed on the iTL, iTLi, iTLc, iTLm and iTLs



PB106140-34



Centralised control + indication iATLc+s

- Used for centralised control, thanks to a "pilot line", of a group of impulse relays controlling separate circuit, while at the same time maintaining local individual control of each impulse relay
- Remote indication of the mechanical status of each relay

PB106136-34



Multi-level centralised control iATLc+c

- Allows centralised control of a group of iTLc or “iTL + ATLc” impulse relays

PB107752-34



Control and indication 24 V DC iATL24

- Allows control and indication of a 230 V AC impulse relay from the Acti 9 Smartlink or by a PLC, by 24 V DC signals
- Also allows control by a pulsed signal

PB106125-34



Time delay iATEt

- Combined with an impulse relay, it automatically disconnects the circuit after a preset time

PB106141-34



Control iATLz

- Must be used when installing several illuminated PBs in parallel to control an impulse relay (prevents operating malfunctions)

PB106142-63



Step by step control iATL4

- Allows step-by-step control of two circuits via a single pushbutton

Impulse relays auxiliaries

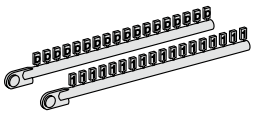
Specific auxiliaries

iTL impulse relays (cont.)

Mounting accessories

11	Yellow clips		**A9C15415**
12	9 mm spacer		**A9A27062**
13	Clip-on terminal markers	see module	**CA907001**

DB123631



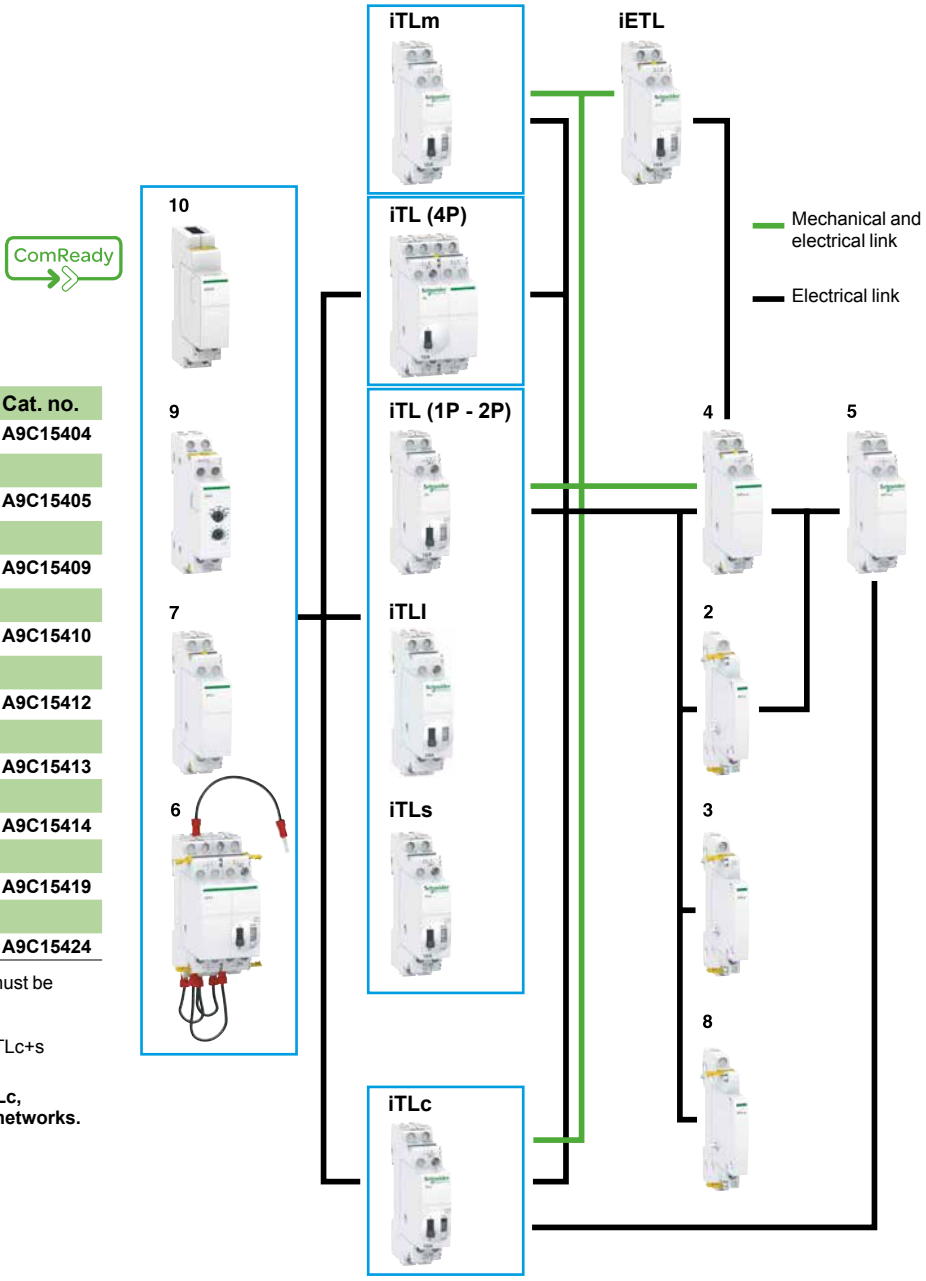
13



12



11



ComReady

Auxiliaries

Centralised control		**Control voltage**	**Cat. no.**
2	iATLc (1), (3)	24...240 V AC	**A9C15404**
Indication			
3	iATLs (1)	-	**A9C15405**
Centralised control + indication			
4	iATLc+s (3)	24...240 V AC	**A9C15409**
Multi-level centralised control			
5	iATLc+c (2), (3)	24...240 V AC	**A9C15410**
Step by step control			
6	iATL4	230 V AC	**A9C15412**
Control by illuminated push-buttons			
7	iATLz	230...240 V AC	**A9C15413**
Latched control			
8	iATLm (1)	12...240 V AC	**A9C15414**
Time delay control			
9	iATEt (4)	24...240 V AC	**A9C15419**
Control and indication			
10	iATL24	230 V AC	**A9C15424**

(1) The iATLc, iATLs and iATLm 9 mm auxiliaries must be mounted to the right of an impulse relay.
(2) Connection by traditional cabling.
The iATLc+c must be mounted to the right of an iATLc+s or an iATLc.

(3) The centralised control functions (iTLc, iATLc, iATLc+s, iATLc+c) only operate on AC voltage networks.

(4) iATEt: control voltage:
24...240 V AC, 24...110 V DC.

iTL impulse relays (cont.)

PB106126-41

Yellow clip
- A simple clip-on system for flexible auxiliaries combination and improved robustness
- For electrical and mechanical connections

- Large circuit labeling area

- Consistent with the entire Acti 9 offer and with all types of lighting



- Insulated terminals IP20

- Disconnection of remote control by selector switch (except for 4P single-piece iTL) for maintenance operation

- Manual controls on front face: direct and priority manual control by O-I toggle
- Mechanical contact position indicator

- Built-in or optional auxiliary function: state indication, centralised control, latched control, control for illuminated pushbutton,
step-by-step control, time delay

iTL impulse relays (cont.)

Auxiliaries choice in V AC and V DC

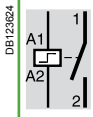
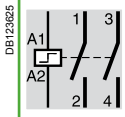
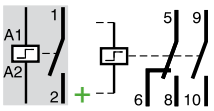
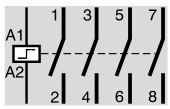
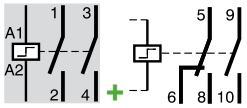
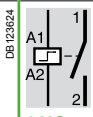
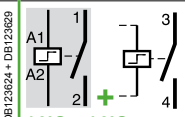
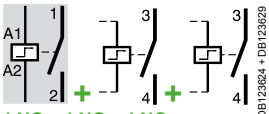
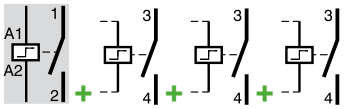
V AC		Choice impulse relays auxiliaries																	
Type		**Standard iTL**						**Changeover iTLI**					**iTLc centralised control**			**iTLm control on latched order**	**iTLs remote indication**		
Rating	A	16					32	16					16			16	16		
Control voltage (Uc)	V AC	230/240	130	48	24	12	230/240	230/240	130	48	24	12	230/240	48	24	230/240	230/240	48	24
Auxiliaries																			
Extension																			
iETL		■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
Centralised control + indication																			
iATLc+s		■	■	■	■	-	■	■	■	■	-	-	-	-	-	-	■	■	■
Centralised control																			
iATLc		■	■	■	■	-	■	■	■	■	-	-	-	-	-	-	■	■	■
Indication																			
iATLs		■	■	■	■	-	■	■	■	■	■	■	■	■	■	■	■	■	■
Multi-level centralised control																			
iATLc+c		■	■	■	■	-	■	■	■	■	-	-	■	■	■	-	■	■	■
Latched control																			
iATLm		■	■	■	■	■	■	■	■	■	■	■	-	-	-	-	■	■	■
Control for illuminated Pushbutton																			
iATLz		■	-	-	-	-	■	■	-	-	-	-	■	-	-	-	■	-	-
Step by step control																			
iATL4		■	-	-	-	-	■	■	-	-	-	-	■	-	-	-	■	-	-
Time delay control																			
iATEt		■	■	■	■	-	■	■	■	■	■	-	-	-	-	-	■	■	■
Control and indication																			
iATL24		■	-	-	-	-	■	■	-	-	-	-	■	-	-	-	■	-	-

V DC		Choice impulse relays auxiliaries																	
Type		**Standard iTL**						**Changeover iTLI**					**iTLc centralised control**			**iTLm control on latched order**	**iTLs remote indication**		
Rating	A	16					32	16					16			16	16		
Control voltage (Uc)	V DC	110	48	24	12	6	110	110	48	24	12	6	-			110	110	24	12
Auxiliaries																			
Extension																			
iETL		■	■	■	■	■	■	■	■	■	■	■	-	-	-	-	■	■	■
Indication																			
iATLs		■	■	■	■	-	■	■	■	■	■	■	-	-	-	-	■	■	■
Time delay control																			
iATEt		■	■	■	-	-	■	■	■	■	-	-	-	-	-	-	■	■	-

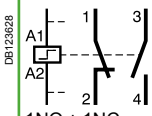
iTL impulse relays (cont.)

Catalogue numbers

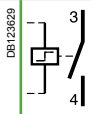
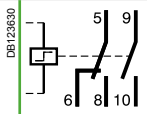
iTL impulse relays

Type			1P	2P	3P	4P
			 1 NO	 2 NO	 1 NO + 1 NO/NC + 1 NO	 4 NO  2 NO + 1 NO/NC + 1 NO
Rating (In)	**Control voltage (Uc)**					
	(V AC) (50/60 Hz)	**(V DC)**				
16 A	12	6	**A9C30011**	**A9C30012**	**A9C30011 + A9C32016**	**A9C30012 + A9C32016**
	24	12	**A9C30111**	**A9C30112**	**A9C30111 + A9C32116**	**A9C30114**
	48	24	**A9C30211**	**A9C30212**	**A9C30211 + A9C32216**	**A9C30212 + A9C32216**
	130	48	**A9C30311**	**A9C30312**	**A9C30311 + A9C32316**	**A9C30312 + A9C32316**
	230...240	110	**A9C30811**	**A9C30812**	**A9C30811 + A9C32816**	**A9C30814**
Width in 9 mm modules			2	2	4	4
			 1 NO	 1 NO + 1 NO	 1 NO + 1 NO + 1 NO	 1 NO + 1 NO + 1 NO + 1 NO
32 A	230...240	110	**A9C30831**	**A9C30831 + A9C32836**	**A9C30831 + 2 x A9C32836**	**A9C30831 + 3 x A9C32836**
Width in 9 mm modules			2	4	6	8

iTLI impulse relays

Type			2P
			 1NO + 1NC
Rating (In)	**Control voltage (Uc)**		
	(V AC) (50/60 Hz)	**(V DC)**	
16 A	12	6	**A9C30015**
	24	12	**A9C30115**
	48	24	**A9C30215**
	130	48	**A9C30315**
	230...240	110	**A9C30815**
Width in 9 mm modules			2

iETL extensions for iTL and iTLI

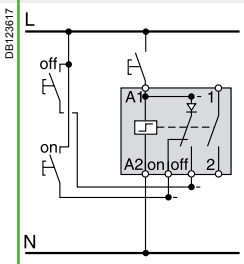
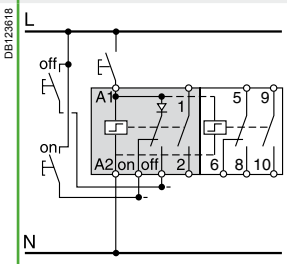
Type			1P	2P
			 1 NO	 1 NO/NC + 1 NO
Rating (In)	**Control voltage (Uc)**			
	(V AC) (50/60 Hz)	**(V DC)**		
16 A	12	6	-	**A9C32016**
	24	12	-	**A9C32116**
	48	24	-	**A9C32216**
	130	48	-	**A9C32316**
	230...240	110	-	**A9C32816**
32 A	230...240	110	**A9C32836**	-
Width in 9 mm modules			2	2

iTL impulse relays (cont.)

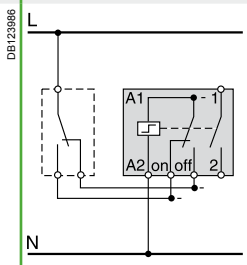
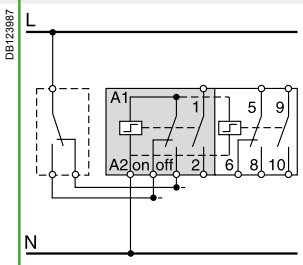
iTLc , iTLm, iTLs with built-in auxiliary function

Catalogue numbers (cont.)

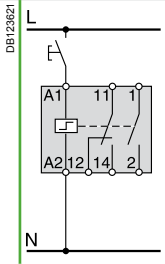
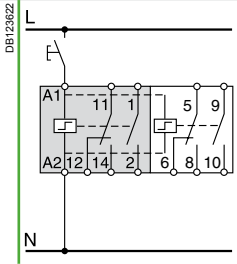
iTLc impulse relay with centralised control

Type		1P	3P
		 1NO	 1 NO + 1 NO/NC + 1 NO
Rating (In)	**Control voltage (Uc) (V AC) (50/60 Hz)**		
16 A	24	**A9C33111**	**A9C33111 + A9C32116**
	48	**A9C33211**	**A9C33211 + A9C32216**
	230...240	**A9C33811**	**A9C33811 + A9C32816**
Width in 9 mm modules		2	4

iTLm impulse relay with latched control

Type		1P	3P
		 1NO	 1 NO + 1 NO/NC + 1 NO
Rating (In)	**Control voltage (Uc) (V AC) (50/60 Hz)**		
16 A	230...240	**A9C34811**	**A9C34811 + A9C32816**
Width in 9 mm modules		2	4

iTLs impulse relay with remote indication*

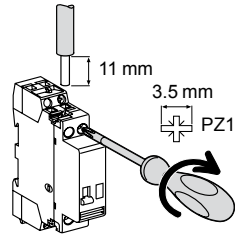
Type			1P	3P
			 1NO	 1 NO + 1 NO/NC + 1 NO
Rating (In)	**Control voltage (Uc)**			
	(V AC) (50/60 Hz)	**(V DC)**		
16 A	24	12	**A9C32111**	**A9C32111 + A9C32116**
	48	24	**A9C32211**	**A9C32211 + A9C32216**
	230...240	110	**A9C32811**	**A9C32811 + A9C32816**
Width in 9 mm modules			2	4

(*) Short circuit protection device for indication contacts : 6 A gG fuse.

iTL impulse relays (cont.)

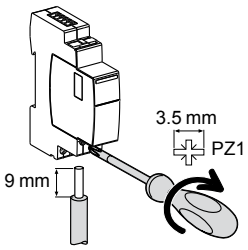
Connection

DB123132



Type	Rating	Circuit	Tightening torque	Copper cables	
				Rigid or with ferrule	Flexible or with ferrule
			DB122945	DB123553	
iTL, iTLi, iTLc, iTLm, iTLs, iETL	16 A	Control	1 N.m	0.5 to 4 mm²	1 to 4 mm²
		Power		1.5 to 4 mm²	1.5 to 4 mm²
iTL, iETL	32 A	Control		0.5 to 4 mm²	1 to 4 mm²
		Power	1.2 N.m	1.5 to 10 mm²	1.5 to 10 mm²
iATLs, iATLc, iATLc+s, iATLc+c, iATLm, iATEt, iATL4, iATLz			1 N.m	0.5 to 4 mm²	1 to 4 mm²

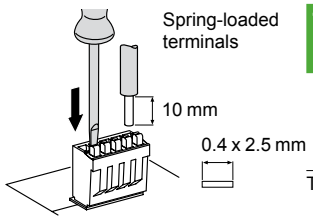
DB124308



Type	Terminals	Tightening torque	Copper cables		
			Rigid	Flexible	Flexible or with ferrule
		DB122945	DB123553	DB123554	
iATL24	Power supply (N/P)	1 N.m	0.5 to 10 mm² 2 x 0.5 to 2 x 2.5 mm²	0.5 to 6 mm² 2 x 0.5 to 2 x 2.5 mm²	0.5 to 4 mm² 2 x 0.5 to 2 x 2.5 mm²
	Input (Y1/Y2)				

Ti24 connector connection

DB123580



Type	Catalogue numbers	Copper cables	
		Rigid	Flexible
	DB122945	DB123553	
Ti24 interface	**A9XC2412**	1 x 0.5 to 1.5 mm²	1 x 0.5 to 1.5 mm²

Ti24 prefabricated cables connection

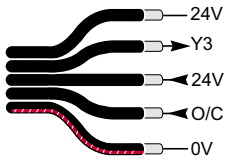
PB107754-10



PB107755-14



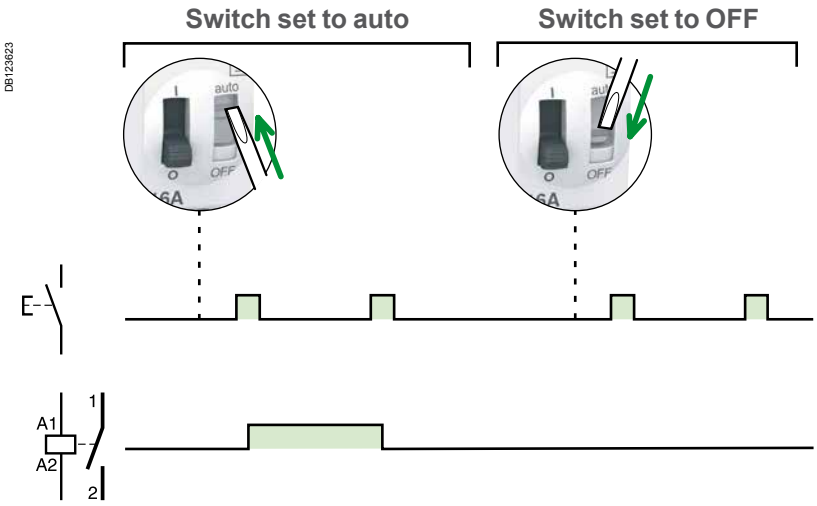
DB404857

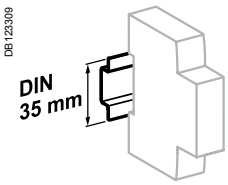


Type	Catalogue numbers	Length
Connection for Acti 9 Smartlink		
6 short prefabricated	**A9XCAS06**	100 mm
6 medium-sized prefabricated	**A9XCAM06**	160 mm
6 long prefabricated	**A9XCAL06**	870 mm
Connection for PLC type terminals		
6 long prefabricated on a single side	**A9XCAU06**	870 mm

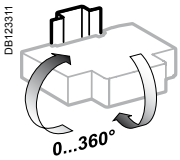
iTL impulse relays (cont.)

Operation

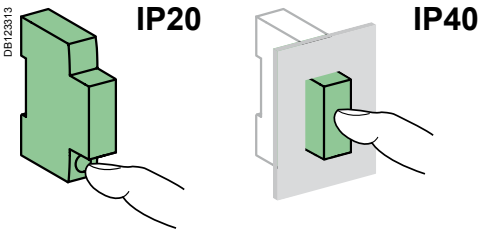




Clip on DIN rail 35 mm.



Indifferent position of installation.



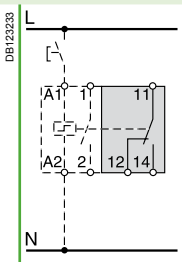
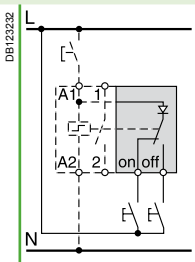
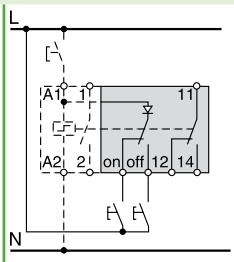
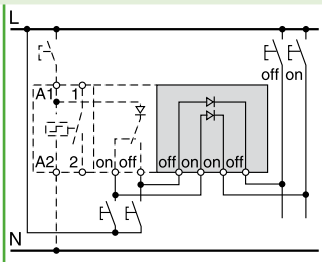
Technical data

Control circuit			
		iTL and iTLI 16 A iTLc, iTLm, iTLs, iETL 16 A	**iTL 32 A, iETL 32 A**
Control voltage (Uc)	Tolerence at 50 Hz	+6 %, -15 %	
	Tolerence at 60 Hz	±6 %,	
	Tolerence V DC	+6 %, -10 %	
Dissipated power (during the impulse)		1, 2, 3P: 19 VA	19 VA
		4P: 38 VA	
Illuminated PB control		Max. current 3 mA (if > use an ATLz)	
Operating threshold		Min. 85 % of Un in conformance with IEC/EN60669-2-2	
Duration of the control order		50 ms to 1 s (200 ms recommended)	
Response time		50 ms	
Power circuit			
Voltage rating (Ue)	1P, 2P	24 ...250 V AC	
	3P, 4P	24....415 V AC	
Frequency		50 Hz or 60 Hz	
Maximum number of operations per minute		5	
Maximum number of switching operation a day		100	
Additional characteristics			
Insulation voltage (Ui)		440 V AC	
Pollution degree		3	
Rated impulse withstand voltage (Uimp)		6 kV	
Overvoltage category		IV	
Endurance (O-C)			
Electrical		200,000 cycles (AC21)	50,000 cycles (AC21)
		100,000 cycles (AC22)	20,000 cycles (AC22)
Other characteristics			
Degree of protection (IEC 60529)	Device only	IP20	
	Device in modular enclosure	IP40 Insulation class II	
Operating temperature		-20°C to +50°C	
Storage temperature		-40°C to +70°C	
Tropicalization (IEC 60068-1)		Treatment 2 (relative humidity 95 % at 55°C)	



iTL impulse relays (cont.)

Electrical auxiliaries for iTL impulse relays

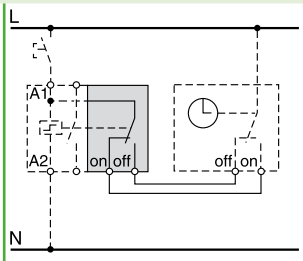
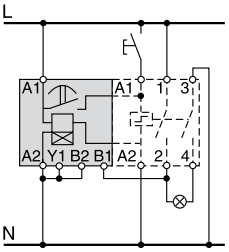
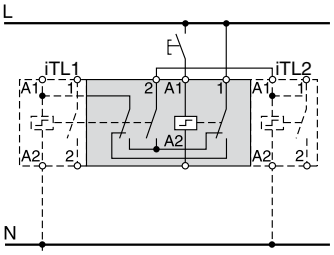
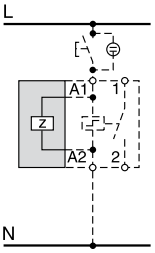
	Indication	Control		
Auxiliaries	**iATLs**	**iATLc**	**iATLc+s**	**iATLc+c**
Type	**Indication**	**Centralised control**	**Centralised control + indication**	**Multi-level centralised control**
	PB106139-34 	PB106137-34 	PB106140-34 	PB106136-34 
Function				
	■ Allows remote indication of the associated impulse relay	■ Used for centralised control, thanks to a "pilot line", of a group of impulse relays controlling separate networks, while at the same time maintaining local individual control of each impulse relay	■ And for remote indication of the mechanical status of each relay	■ Used to control the centralised controls of a number of impulse relay groups, while at the same time maintaining local individual control and centralised control by level
Wiring diagrams				
	DB123233 	DB123232 	DB123231 	DB123235 
	–	–	–	■ Each group, made up of iTLc or (iTL or iTLI or iTLs) + iATLc+s, must only contain a single iATLc+c ■ Maximum number of impulse relays that can be controlled: □ 230 V AC: 24 □ 130 V AC: 12 □ 48 V AC: 5
Mounting				
	■ Mounted to the right of iTL by yellow clips	■ Mounted to the right of iTL by yellow clips	■ Mounted to the right of iTL by yellow clips	■ Without mechanical link with impulse relays and auxiliaries
Catalogue numbers	**A9C15405**	**A9C15404**	**A9C15409**	**A9C15410**

Technical specifications					
Control voltage (Uc)	V AC	–	24…240	24…240	24 …240
	V DC	–	–	–	–
Control voltage frequency	Hz	–	50/60	50/60	50/60
Width in 9 mm modules		1	1	2	2
Auxiliary contact (breaking capacity)		■ Mininimum: 10 mA at 24 V AC/DC ■ Maximum (IEC 60947-5-1): □ 12…240 V AC 6 A □ 12…24 V DC 6 A □ 15…240 V AC 2 A □ 13…24 V DC 2 A	–	■ Mininimum: 10 mA at 24 V AC/DC ■ Maximum (IEC 60947-5-1): □ 12…240 V AC 6 A □ 12…24 V DC 6 A □ 15…240 V AC 2 A □ 13…24 V DC 2 A	–
Number of contacts		–	–	–	–
Operating temperature	°C	-20°C to +50°C			
Storage temperature	°C	-40°C to +70°C			

iTL impulse relays (cont.)

Electrical auxiliaries for iTL impulse relays (cont.)

Control

	iATLm	iATEt	iATL4	iATLz
	Latched control	**Time delay**	**Step by step control**	**Control by illuminated push-buttons**
	PB106138-34 	PB106125-34 	PB106142-63 	PB106141-34 
	■ Combined with an impulse relay, it operates on latched orders	■ Combined with an impulse relay, it automatically disconnects the circuit after a preset time	■ Allows the step by step sequence over 2 circuits	■ Used to control impulse relays by illuminated push-buttons, without operating risks
	DB408601 	DB123237 	DB123562 	DB123230 
	–	■ 5 time setting ranges: □ 1 to 10 s □ 6 to 60 s □ 2 to 10 min □ 6 to 60 min □ 2 to 10 h	■ The cycle is as follows: □ 1st impulse - iTL 1 closed, iTL 2 open □ 2nd impulse - iTL 1 open, iTL 2 closed □ 3rd impulse - iTL 1 and 2 closed □ 4th impulse - iTL 1 and 2 open □ 5th impulse - iTL 1 closed, iTL 2 open, etc	■ Provide an iATLz when the current drawn up by the illuminated push-buttons is higher than 3 mA (this current is sufficient to keep the coils energised). Above this value, fit one extra iATLz per 3 mA. ■ For example: for 7 mA, fit 2 iATLz
	■ Mounted to the right of iTL by yellow clips	■ Mounted to the left of iTL by yellow clips	■ Assembled between 2 impulse relays: according to the auxiliarisation table by yellow clips	■ Mounted to the left of iTL by yellow clips
	A9C15414	**A9C15419**	**A9C15412**	**A9C15413**
	12…240	24…240	230	230…240
	–	24…110	–	–
	50/60	50/60	50/60	50/60
	1	2	4	2
	–	–	–	–
	–	–	–	–
	-20°C to +50°C			
	-40°C to +70°C			

iTL impulse relays (cont.)

Electrical auxiliaries for iTL impulse relays (cont.)

Control and indication

Auxiliaire	iATL24
Type	**Control and indication 24 V DC**
	With Ti24 connector

PB107752-34

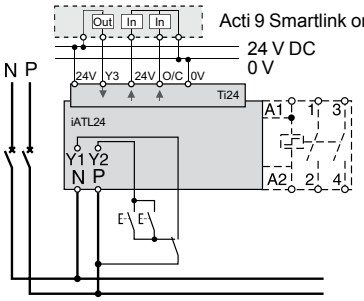


Function

- This auxiliary allows a impulse relay to be interfaced with the Acti 9 Smartlink interface or a programmable logic controller (PLC) in 24 V DC (control, O/C indication)
- 230 V AC control

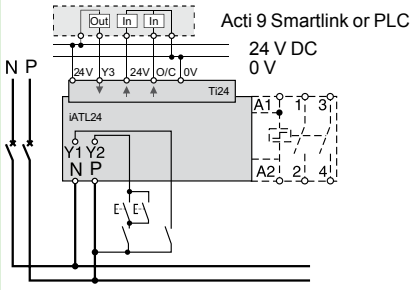
Wiring diagrams

DB124319



Wiring with exclusive selector 230 V AC and 24 V DC controls

DB124445



Wiring for non-exclusive 230 V AC and 24 V DC controls

Mounting

- To the left of the iTL impulse relay using the yellow clips (1).
- When an iATL24 is used, the A1/A2 terminals of the impulse relay should not be wired. Only the yellow clips integral with the iATL24 should be used for connection to the coil.

Utilization

- 230 V AC interface:
  - Y1: enabling of 24 V DC control (Y1 = 1) or inhibition of 24 V DC control (Y1 = 0).
  - Y2: 230 V pulse control
- "TI24" 24 V DC interface:
  - Y3: 24 V DC control of iTL closing on rising edge and opening on falling edge
  - reading of the impulse relay status (opened or closed) from the position of the integrated O/C auxiliary contact
  - monitoring of connection of the "Ti24" terminal block by the upstream system (PLC, supervision system) via the 24 V terminal (in the centre of the Ti24 terminal block)

Catalogue numbers		**A9C15424**
Technical specification		
Control voltage (Uc)	V AC	230, +10 %, -15 % (Y2)
	V DC	24, ± 20 % (Y3)
Control voltage frequency	Hz	50/60
Insulation voltage (Ui)	V AC	250
Rated impulse withstand voltage (Uimp)	kV	8 (OVC IV)
Pollution degree		3
Degree of protection		IP20B device only
		IP40 device in modular enclosure
Width in 9 mm modules		2
Auxiliary contact (O/C) Ti24		24 V DC protected output, min. 2 mA, max. 100 mA
Contact		1 O/C operating category AC 14
Operating temperature	°C	-25°C to +60°C
Storage temperature	°C	-40°C to +80°C
Consumption		<1 W
Standard		IEC/EN 60947-5-1

(1) Mechanical and electrical connection.

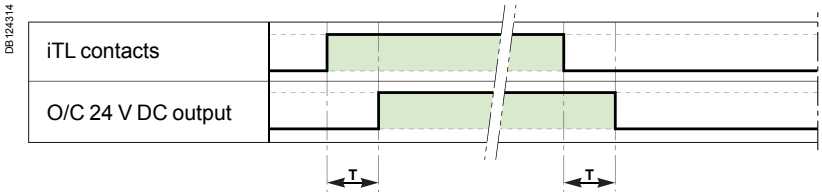
iTL impulse relays (cont.)

Electrical auxiliaries for iTL impulse relays (cont.)

ComReady

Operation of the iATL24

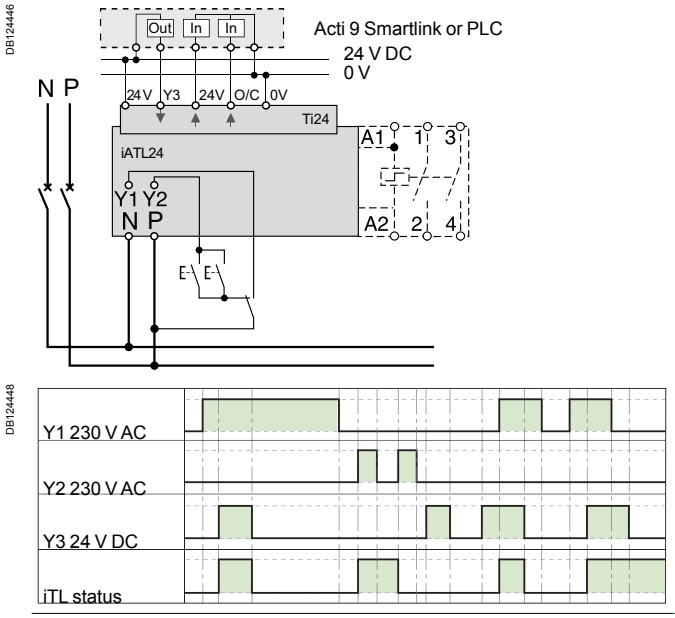
O/C 24 V DC output



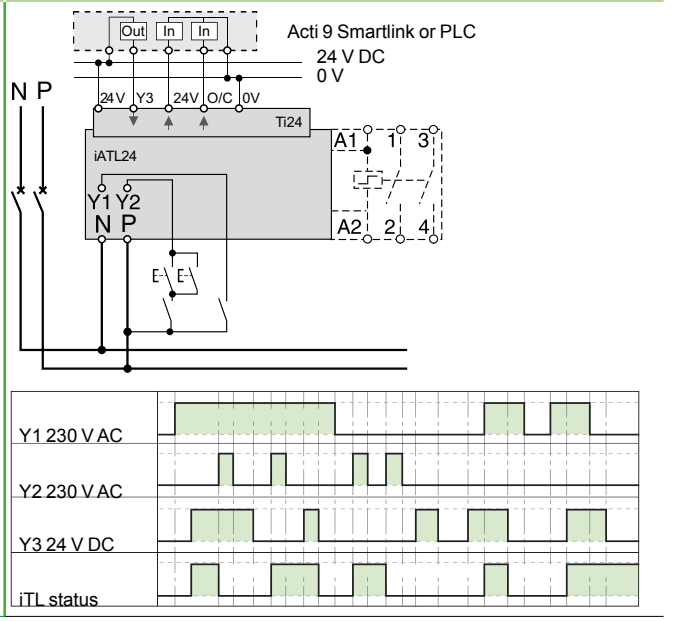
	Parameter	Min	Max
T	Time delay between iATL24 closing and indication	100 ms	200 ms

- Minimum duration of 230 V AC pulse (Y2): 200 ms.
- 30 iATL24 closing or opening actuations are authorized per minute: Minimum time delay between 2 actuations on the iATL24 via Y1,Y2, Y3 (closing or opening of the iTL coil): 440 ms.
- 10 closing or opening actuations spaced 440 milliseconds apart are authorized following no loading of the iATL24 during a period of 20 seconds.

Wiring with exclusive selector 230 V AC and 24 V DC controls



Wiring for non-exclusive 230 V AC and 24 V DC controls



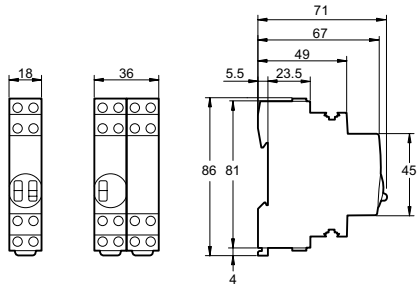
iTL impulse relays (cont.)

Accessories for iTL impulse relays

	Security	
Accessories	**Yellow clips**	**Spacer**
	PB106143-10 	PB104483 
Function		
	■ Ensure the mechanical and/or electrical link between impulse relays and their auxiliaries (set of 10).	■ Required to reduce temperature rise of modular devices installed side by side. ■ Recommended to separate electronic devices (thermostat, programmable clock, etc.) from electromechanical devices (relays, contactors).
Catalogue numbers	**A9C15415**	**A9A27062**
Technical specifications		
Width in 9 mm modules	–	1

Dimensions (mm)

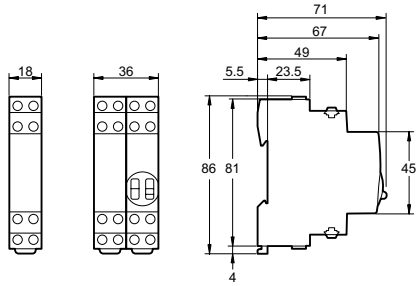
DB123375



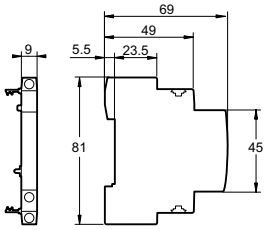
iTL 1P
iTLc
iTLm
iTLs
iTLi
iETL

iTL+iETL
iTL 4P

DB123383

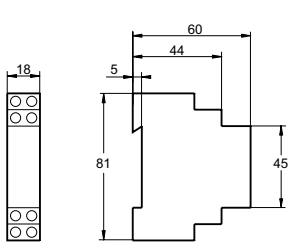


iATLc+s
iATLc+c
iATLz
iATL4



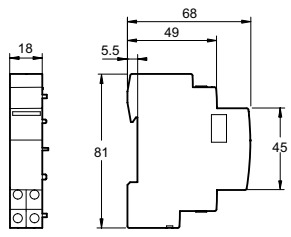
iATLc
iATLs
iATLm

DB123380



iATEt

DB124316



iATL24

iTL+ high-performance impulse relays

DB106604

Country approval pictograms

EN 60669-2-2

The iTL+ high-performance impulse relay allows remote control of single-phase circuits. It is designed for demanding applications.

The iTL+ high-performance impulse relay is used for push-button control of lighting circuits consisting of:
- incandescent lamps, low-voltage halogen lamps, etc. (resistive loads)
- fluorescent tubes, discharge lamps, etc. (inductive loads).

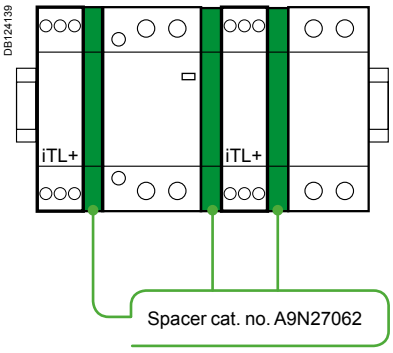
PB107132-35



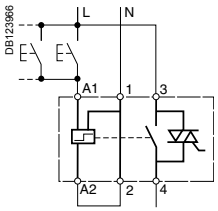
PB104483-35

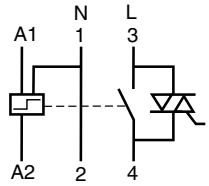


DB124139



DB123966



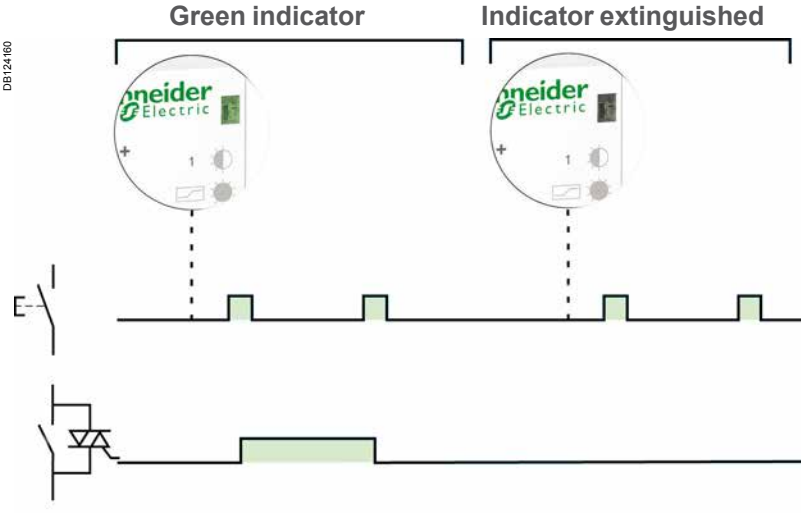
iTL+			
Type	**Rating**		**Width in 9 mm modules**
1P+N			
DB106156 	16 A	**A9C15032**	2+1 (1)

(1) Supplied with a 9 mm spacer (cat. no. **A9N27062**): to be used for mounting the iTL+ alongside a circuit breaker, contactor, impulse relay, etc., in order to maintain optimal operation.

It is compulsory:
- to connect the neutral
- to keep the same control circuit connection "A1: phase", "A2: neutral"
- to use the same phase for connection of the power and control functions.

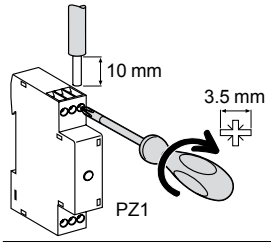
Operation

DB124160



Connection

DB123655

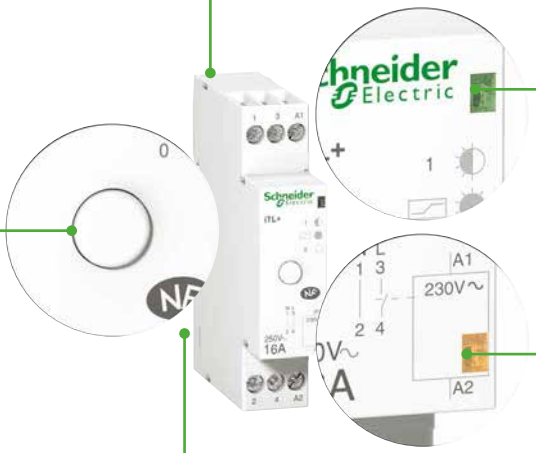


Type	Rating	Tightening torque	Copper cables	
			Rigid or flexible with ferrule	Rigid or flexible without ferrule
			DB123656	DB123657
iTL+	16 A	1 N.m	2 x 1.5 mm²	2 x 2.5 mm² 1 x 4 mm²

iTL+ high-performance impulse relays (cont.)

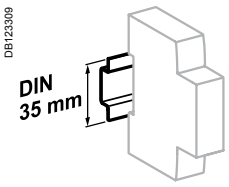
They combine the benefits of static switching and electromechanical technology: small size, little temperature rise.

PB107132-40



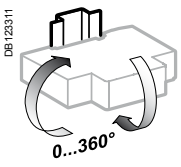
Following a mains failure, the iTL+ returns to 0 position (forced stoppage) irrespective of its initial state.

DB123309



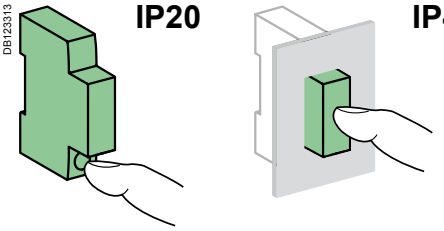
Clip on DIN rail 35 mm.

DB123311



Indifferent position of installation.

DB123313



Technical data

Control circuit		
Coil voltage (Uc)		230 V AC
Frequency		50 Hz
Inrush power		11 VA
Holding power		1.1 VA
Control by luminous push button		Max. current 5 mA
Control order duration		50 ms to 1 s (recommended 200 ms)
Power circuit		
Voltage rating (Ue)		230 V AC
Frequency		50 Hz
Electrical load	Minimum	20 W
	Maximum	3600 W
Max. number of switching operations per minute		6
Other characteristics		
Degree of protection (IEC 60529)	Device only	IP20
	Device in modular enclosure	IP40 Insulation class II
Endurance (O-C)	Electrical	5.000.000 cycles (AC21 - AC22)
Noise level at activation		< 30 dBA
Operating temperature		-5°C to +55°C
Storage temperature		-40°C to +60°C
Tropicalization (IEC 60068-1)		Treatment 2 (relative humidity of 95 % at 55°C)

Weight (g)

High-performance impulse relays	
Type	**iTL+**
1P+N	70

iCT+ high-performance contactors

DB106604

Country approval pictograms

EN 60669-2-2

iCT+ high-performance contactors allow remote control of single-phase circuits. They are designed for demanding applications.

iCT+ high-performance contactors can be used for remote control of applications on AC networks:
- lighting, heating, ventilation, roller blinds, domestic hot water
- mechanical ventilation systems, etc.
- load shedding on non-priority circuits.

PB107130-35



Standard 1P+N

PB107131-35



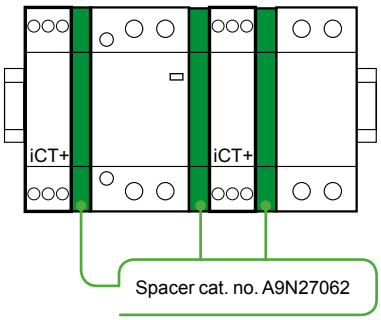
1P+N with manual control

PB104483-35



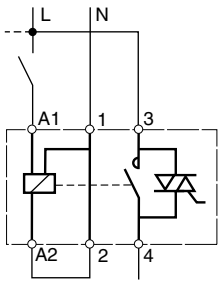
Spacer

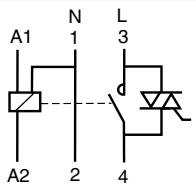
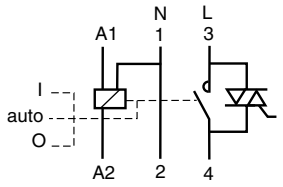
DB124140



Spacer cat. no. A9N27062

DB404607



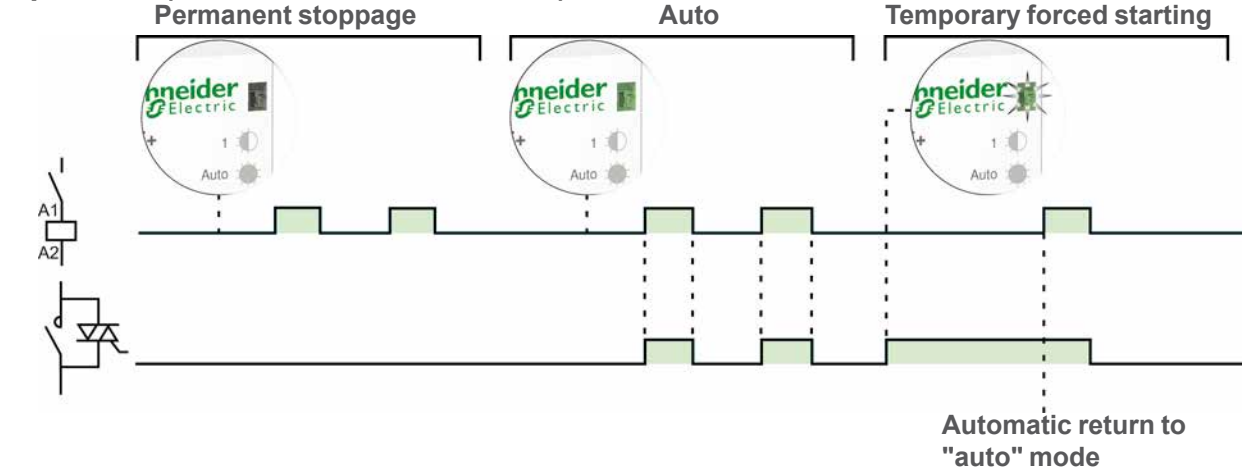
iCT+				
Type	**Rating**	**Contact**		**Width in 9-mm modules**
Standard 1P+N				
E57636 	20 A	1 NO	**A9C15030**	2+1 (1)
1P+N with manual control				
E57646 	20 A	1 NO	**A9C15031**	2+1 (1)

(1) Supplied with a 9 mm spacer (cat. no. **A9N27062**): to be used for mounting the iCT+ alongside a circuit breaker, contactor, impulse relay, etc., in order to maintain optimal operation.

It is compulsory:
- to connect the neutral
- to keep the same control circuit connection "A1: phase", "A2: neutral"
- to use the same phase for connection of the power and control functions.

Operation (manual-control contactor)

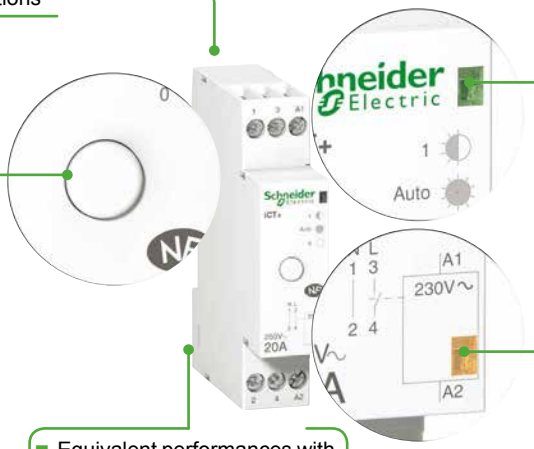
DB124156



iCT+ high-performance contactors (cont.)

They combine the benefits of static switching and electromechanical technology: small size, little temperature rise.

PB137131-40



- Silent
- Large number of switching operations

- Green indicator on the front panel:
  - fixed green: auto operation
  - flashing green: temporary forced starting
  - extinguished: permanent stoppage

- Operating mode selection push button:
  - auto operation
  - temporary forced starting*
  - permanent stoppage

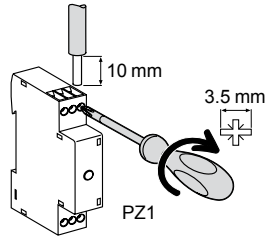
- Equivalent performances with all types of lamps
- No derating

- Orange indicator: output contact closed

Following a mains failure, the iCT+ returns to "auto" operating mode irrespective of its initial state.

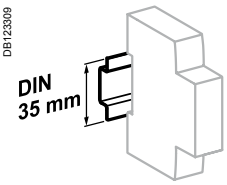
Connection

DB123655



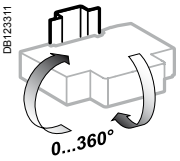
Type	Tightening torque	Copper cables	
		Rigid or flexible with ferrule	Rigid or flexible without ferrule
		DB123656	DB123657
iCT+	1 N.m	2 x 1.5 mm²	2 x 2.5 mm² 1 x 4 mm²

DB123309



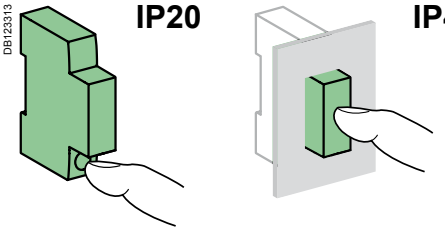
Clip on DIN rail 35 mm.

DB123311



Indifferent position of installation.

DB123313



Technical data

Control circuit		
Coil voltage (Uc)		230 V AC (± 10 %)
Frequency		50 Hz
Inrush power		11 VA
Holding power		1.1 VA
Power circuit		
Voltage rating (Ue)		230 V AC (± 10 %)
Frequency		50 Hz
Electrical load	Minimum	20 W
	Maximum	3600 W
Max. number of switching operations per minute		6
Other characteristics		
Endurance (O-C)	Electrical	5.000.000 cycles
Pollution degree		3
Degree of protection (IEC 60529)	Device only	IP20
	Device in modular enclosure	IP40 Insulation class II
Operating temperature		-5°C to +55°C
Storage temperature		-40°C to +60°C
Tropicalization (IEC 60068-1)		2 (relative humidity of 95 % at 55°C)

Weight (g)

High-performance contactors	
Type	**iCT+**
Standard 1P+N	70
1P+N with manual control	70

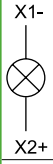
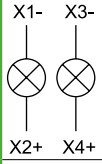
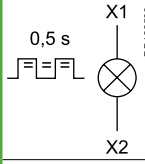
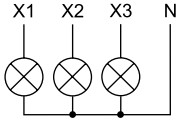
iIL indicator lights

IEC 60947-5-1

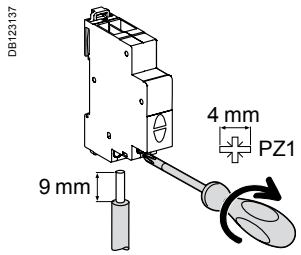
- iIL indicator lights light up to indicate that a voltage is present.

Catalogue numbers

iIL indicator lights

Type	Single					Double		Flashing light	Three-phase voltage presence indicator light
									
Diagram									
Colour	Red	Green	White	Blue	Yellow	Green/red	White/ white	Red	Red/red/red
Cat. no.									
12...48 V AC/DC	**A9E18330**	**A9E18331**	**A9E18332**	**A9E18333**	**A9E18334**	**A9E18335**	-	-	-
110...230 V AC 110...130 V DC	**A9E18320**	**A9E18321**	**A9E18322**	**A9E18323**	**A9E18324**	**A9E18325**	**A9E18328**	-	-
110...230 V AC	-	-	-	-	-	-	-	**A9E18326**	-
230...400 V AC (3 phases)	-	-	-	-	-	-	-	-	**A9E18327**
Width in 9 mm modules	2					2		2	2

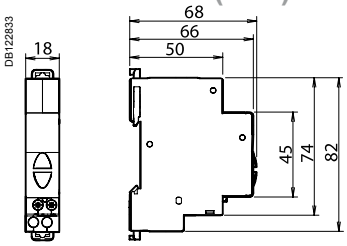
Connection



Tightening torque	Copper cables	
	Rigid	Flexible or with ferrule
		
1 N.m	0.5 mm^2 min.	0.5 mm^2 min.
	2 x 2.5 mm^2 max.	2 x 2.5 mm^2 max.

- Phase-separated wall that can be divided to allow the teeth of all types of comb busbar to pass through.
- Staggered terminals to simplify connection.

Dimensions (mm)



Technical data

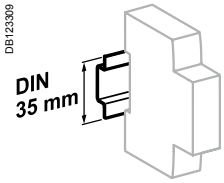
Main characteristics	
Pollution degree	3
Power circuit	
Operating frequency	50...60 Hz
Flashing frequency	2 Hz
Additional characteristics	
Operating temperature	-35°C... +70°C
Storage temperature	-40°C... +80°C
Tropicalization	Treatment 2 (relative humidity 95 % at 55°C)
LED indicator light	Consumption per indicator light: 0.3 W
	Service life: 100,000 hours of constant lighting efficiency
	Maintenance-free indicator light (non-interchangeable LEDs)



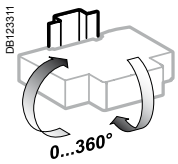
iSO



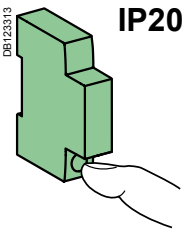
iRO

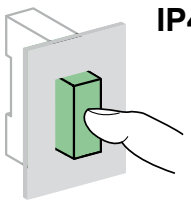


Clip on DIN rail 35 mm.



Indifferent position of installation.



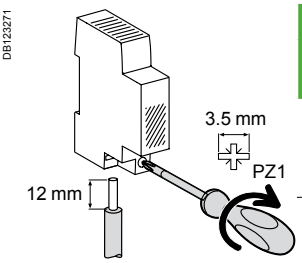


iSO and iRO
Audible indication in housing and the tertiary sector.

Catalogue numbers

Bell and buzzer			
Type			**Width in 9 mm modules**
iSO bell	**Voltage (Ue)**		
	230 V AC	**A9A15320**	2
	8…12 V AC	**A9A15321**	2
iRO buzzer			
	230 V AC	**A9A15322**	2
	8…12 V AC	**A9A15323**	2
Operating frequency	50...60 Hz		

Connection



Tightening torque	Copper cables	
	Rigid	**Flexible or with ferrule**
		
1.3 N.m	< 4 mm²	< 4 mm²

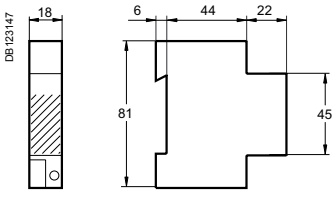
Technical data

Main characteristics		iSO	iRO
Consumption	8…12 V AC	3.6 VA	
	220…240 V AC	5 VA	
Additional characteristics			
Degree of protection (IEC 60529)	Device only	IP40	
	Device in modular enclosure	IP20	
Operating temperature		-10°C to +40°C	
Storage temperature		-25°C to +60°C	
Sound level (at a distance of 60 cm)		80 dBA	70 dBA

Weight (g)

Bell and buzzer	
Type	
iSO	77
iRO	64

Dimensions (mm)



iSO bell and iRO buzzer

DB406142

Country approval pictogram

PB107156-35



PB107158-35



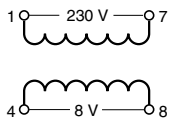
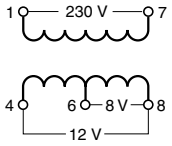
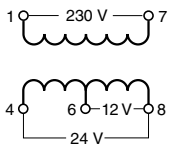
Bell transformers: EN/IEC 61558-2-8.
Safety transformers: EN/IEC 61558-2-6.

Bell transformers and safety transformers allow for a very low voltage (ELV 8 V, 12 V or 24 V) to be obtained from a low voltage network (LV 230 V).

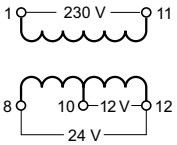
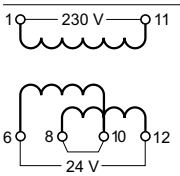
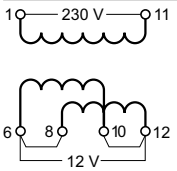
All Schneider Electric transformers are:
- Safe: primary and secondary circuits are perfectly insulated by each other
- Resistant to short-circuit currents thanks to the built-in device
- Class II with terminal shield (optional).

Catalogue numbers

Bell transformer

	Type	Power	Secondary voltage		Width in 9 mm modules
E56759		4 VA	8 V AC	**A9A15214**	4
E56760		4 VA	8-12 V AC	**A9A15213**	4
		8 VA	8-12 V AC	**A9A15216**	4
		16 VA	8-12 V AC	**A9A15212**	4
E56761		25 VA	12-24 V AC	**A9A15215**	6

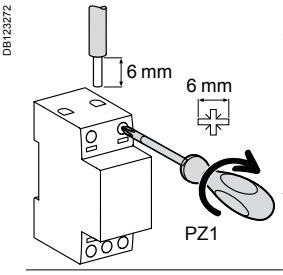
Safety transformer

	Type	Power	Secondary voltage		Width in 9 mm modules
DB124153		16 VA	12-24 V AC	**A9A15218**	10
		25 VA	12-24 V AC	**A9A15219**	10
DB124154		40 VA	12-24 V AC	**A9A15220**	10
		63 VA	12-24 V AC	**A9A15222**	10
DB124155					
Operating frequency		50/60 Hz			

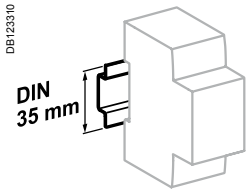
Terminal shield

Type		Width in 9 mm modules
	15228	4
	15229	6

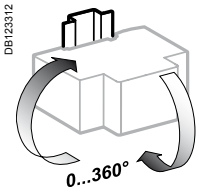
Connection



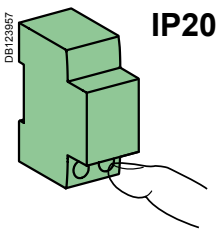
Tightening torque	Copper cables	
	Rigid	Flexible or with ferrule
	 DB122945	 DB122946
0.5 N.m	< 2.5 mm²	< 2.5 mm²



Clip on DIN rail 35 mm.



Bell transformer: indifferent position of installation.
Safety transformer: vertical position.



Technical data

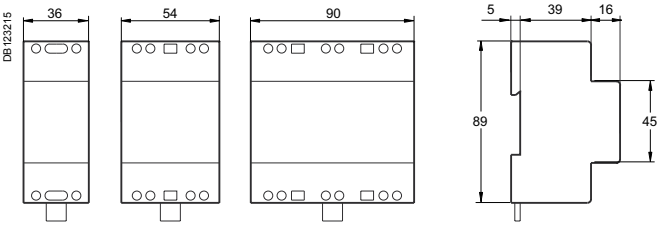
Main characteristics			
Primary voltage		230 V AC ±10 %	
Secondary voltage on load	For bell transformers	8-12-24 V AC ±15 %	
	For safety transformers	12-24 V AC ±5 %	
Transformer catalogue numbers		**Rated secondary voltage**	**Off load voltage**
A9A15214		8 V	12 V
A9A15213		8 V	12 V
		12 V	16 V
A9A15216		8 V	13 V
		12 V	18 V
A9A15212		8 V	13 V
		12 V	18 V
A9A15215		12 V	16 V
		24 V	32 V
A9A15218		12 V	14 V
		24 V	28 V
A9A15219		12 V	14 V
		24 V	28 V
A9A15220		12 V	14 V
		24 V	28 V
A9A15222		12 V	14 V
		24 V	28 V
Additional characteristics			
Degree of protection (IEC 60529)	Device only	IP20 with terminal shield	
Operating temperature		-20°C to +55°C	
Storage temperature		-25°C to +80°C	

Note: Transformers have an off load operating voltage that is higher than the rated voltage. For loads that are sensitive to overloads (electro-magnetic circuits), the transformer must be made to operate at In. After operation of the protection device upon an overload, cut-off the power supply and let the transformer cool down before restart.

Weight (g)

iTR		
Type	**Cat. no.**	**Weight**
Bell	**A9A15212**	384
	A9A15213	240
	A9A15214	237
	A9A15215	633
	A9A15216	275
Safety	**A9A15218**	1082
	A9A15219	1125
	A9A15220	1190
	A9A15222	1309

Dimensions (mm)



A9A15212
A9A15213
A9A15214
A9A15216

A9A15215

A9A15218
A9A15219
A9A15220
A9A15222



Relays

Time delay relays

Time delay relays are used in service sector and industrial buildings for small automatic control systems: ventilation, heating, animation, roller blind servo controls, escalators, pumps, lighting, signalling, monitoring, etc.



iRTA
- Delays energizing of a load



iRTB
- Delays de-energizing of a load upon closing of an auxiliary contact (push button)



iRTC
- Delays de-energizing of a load upon opening of an auxiliary contact (push button)

Time delay

Interface relays

iRBN and iRTBT relays can interface automatic control system inputs/ outputs with low-voltage devices.



iRBN
Low level relay
- Actuation of low-amperage electronic circuits upon receiving an LV electrical order



iRTBT
Extra low voltage relay
- Actuation of LV circuits based on an extra low voltage order

Control

Control relays

Control relays monitor electrical parameters and indicate when they are exceeded



iRCP
Phase control
- Monitors the order and asymmetry of phases and the presence of voltage on the 3 phases of a three-phase circuit (power supply of a motor, etc.)



iRCI
Current control
- Monitors the current flowing in a circuit and indicates any crossing of the set threshold

Monitoring

Relays (cont.)



iRTH
- Applies a time delay to de-energizing of a load



iRTL
- Applies a time delay to energizing and de-energizing of a load during different times, repeatedly (flasher)



iRTMF
- Allows one of the four types of time delay to be selected: A, B, C or H

iRLI and iERL relays are used to relay ON or OFF information to the auxiliary circuits and actuate low-power loads

Changeover relays



iRLI
Changeover



iERL extension

- Relays ON or OFF information to the auxiliary circuits
- Actuates low-power loads

Relaying and control



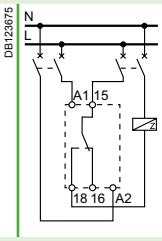
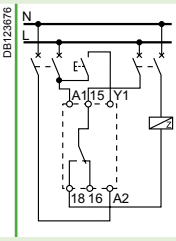
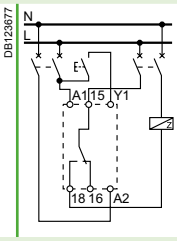
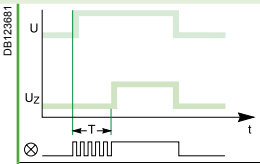
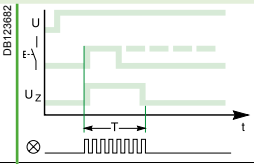
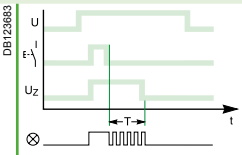
iRCU
Voltage control
- Monitors the potential difference of a circuit and indicates any crossing of the set threshold



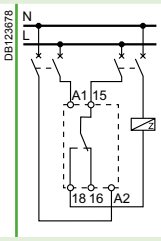
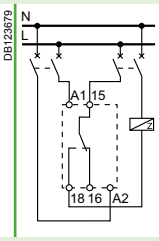
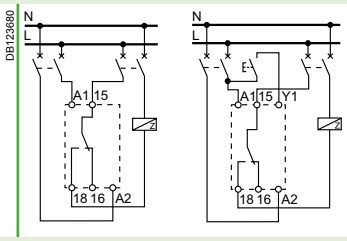
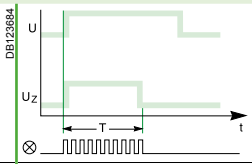
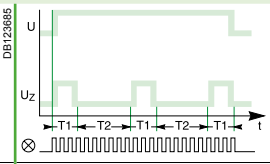
iRCC
Compressor control
- Monitors the compressor power supply and prevents its immediate restarting upon detection of a power cut or voltage dip

Time delay relays
iRTA, iRTB, iRTC, iRTH, iRTL and iRTMF

Time delay relays

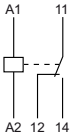
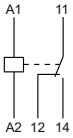
		iRTA	iRTB	iRTC
Type				
		 PB111581-35	 PB111582-35	 PB111583-35
Function				
		■ Delays energizing of a load	■ Delays de-energizing of a load upon closing of an auxiliary contact (push button)	■ Delays de-energizing of a load upon opening of an auxiliary contact (push button)
Wiring diagrams				
		 DB123675	 DB123676	 DB123677
Use				
		 DB123681	 DB123682	 DB123683
		■ The single time delay cycle starts at switching on of the iRTA relay power supply ■ The load is energized at the end of time delay T	■ The single time delay cycle starts at closing of an auxiliary contact (push button) ■ The load is de-energized at the end of time delay T	■ The single time delay cycle starts only upon release of an auxiliary contact (push button) ■ The load is de-energized at the end of time delay T
Catalogue numbers		**A9E16065**	**A9E16066**	**A9E16067**
Technical specification				
Control and power supply voltage (Uc)	V AC	24…240, ±10 %	24…240, ±10 %	24…240, ±10 %
	V DC	24, ±10 %	24, ±10 %	24, ±10 %
Operating frequency	Hz	50/60	50/60	50/60
Time delay range		0.1 s to 100 h	0.1 s to 100 h	0.1 s to 100 h
Precision		±10 % of full scale	±10 % of full scale	±10 % of full scale
Minimum duration of control impulse		100 ms	100 ms	100 ms
Insensitive to brownouts		⩽ 20 ms	⩽ 20 ms	⩽ 20 ms
Max. resetting time per voltage interruption		100 ms	100 ms	100 ms
Accuracy of repetition		±0.5 % at constant parameters	±0.5 % at constant parameters	±0.5 % at constant parameters
Changeover contact (cadmium free)	Mini	Rating 10 mA/5 V DC	Rating 10 mA/5 V DC	Rating 10 mA/5 V DC
	Maxi	Rating 8 A/250 V AC/DC	Rating 8 A/250 V AC/DC	Rating 8 A/250 V AC/DC
Endurance	Mechanical	> 5 x 10^6 switching operations	> 5 x 10^6 switching operations	> 5 x 10^6 switching operations
	Electrical	> 10^5 switching operations (utilization category AC1)	> 10^5 switching operations (utilization category AC1)	> 10^5 switching operations (utilization category AC1)
Display of contact status by green indicator lamp		Flashing during time delay	Flashing during time delay	Flashing during time delay
Degree of protection	Device only	IP20	IP20	IP20
Connection by tunnel terminals	Without ferrule	2 x 2.5 mm² single-strand	2 x 2.5 mm² single-strand	2 x 2.5 mm² single-strand
	With ferrule	2 x 1.5 mm² multi-strand	2 x 1.5 mm² multi-strand	2 x 1.5 mm² multi-strand
Width in 9-mm modules		2	2	2
Operating temperature	°C	-5 … +55	-5 … +55	-5 … +55
Storage temperature	°C	-40 … +70	-40 … +70	-40 … +70

Time delay relays
iRTA, iRTB, iRTC, iRTH, iRTL and iRTMF (cont.)

	iRTH	iRTL	iRTMF
	PB111584-35 	PB111585-35 	PB111586-35 
	■ Applies a time delay to de-energizing of a load	■ Applies a time delay to energizing and de-energizing of a load during different times, repeatedly (flasher)	■ Allows one of the four types of time delay to be selected: A, B, C or H
	DB123678 	DB123679 	DB123680 
	DB123684 	DB123685 	
	■ The single time delay cycle starts at switching on of the iRTH relay power supply ■ The load is de-energized at the end of time delay T	■ The time delay cycle starts at energizing ■ The load is energized during an adjustable time T1 and then de-energized during an adjustable time T2. This cycle is reproduced until de-energizing of the iRTL relay power supply	■ Depending on the choice, the iRTMF generates time delay cycles for the iRTA, iRTB, iRTC or iRTH relays
	A9E16068	**A9E16069**	**A9E16070**
	24…240, ±10 %	24…240, ±10 %	12…240, ±10 %
	24, ±10 %	24, ±10 %	12…240, ±10 %
	50/60	50/60	50/60
	0.1 s to 100 h	0.1 s to 100 h	0.1 s to 100 h
	±10 % of full scale	±10 % of full scale	±10 % of full scale
	100 ms	100 ms	100 ms
	≤ 20 ms	≤ 20 ms	≤ 20 ms
	100 ms	100 ms	100 ms
	±0.5 % at constant parameters	±0.5 % at constant parameters	±0.5 % at constant parameters
	Rating 10 mA/5 V DC	Rating 10 mA/5 V DC	Rating 10 mA/5 V DC
	Rating 8 A/250 V AC/DC	Rating 8 A/250 V AC/DC	Rating 8 A/250 V AC/DC
	> 5 x 10^6 switching operations	> 5 x 10^6 switching operations	> 5 x 10^6 switching operations
	> 10^5 switching operations (utilization category AC1)	> 10^5 switching operations (utilization category AC1)	> 10^5 switching operations (utilization category AC1)
	Flashing during time delay	Flashing during time delay	Flashing during time delay
	IP20	IP20	IP20
	2 x 2.5 mm^2 single-strand	2 x 2.5 mm^2 single-strand	2 x 2.5 mm^2 single-strand
	2 x 1.5 mm^2 multi-strand	2 x 1.5 mm^2 multi-strand	2 x 1.5 mm^2 multi-strand
	2	2	2
	-5 … +55	-5 … +55	-5 … +55
	-40 … +70	-40 … +70	-40 … +70

Interface relays iRBN, iRTBT

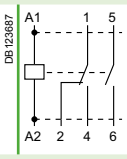
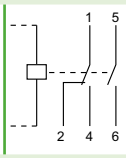
Interface relays

	iRBN	iRTBT
Type	**Low level**	**Extra low voltage**
	PB107144-35 	PB107164-35 
Standard	IEC/EN 61810-1	IEC/EN 61810-1
Function		
	■ Actuation of low-amperage electronic circuits upon receiving an LV electrical order	■ Actuation of LV circuits based on an extra low voltage order
Wiring diagrams		
	DB123686 	DB123686 
Use		
	■ Inputs of programmable logic controllers, of measuring or supervision circuits, etc.	■ ELV orders can be issued by a programmable logic controller (24 V DC static outputs), a central fire detection unit, a regulation system, etc.
Catalogue numbers	**A9A15393**	**A9A15416**

Technical specification			
Input control voltage (Uc)	V AC	230, ±10 %	12...24, -15 to +10 %
	V DC	-	12...24, ±20 %
Output contact rating	Mini	5 mA/5 V DC (DC12) 5 mA/5 V AC	10 mA/10 V DC (DC12) 10 mA/10 V AC
	Maxi	1 A/24 V DC (DC12) 5 A/250 V AC	1 A/24 V DC (DC12) 5 A/250 V AC
Operating frequency	Hz	50/60	0…60
Strengthened insulation between ELV/LV circuits		4 kV	4 kV
Consumption	At inrush	5 VA	0.22 W
	At holding	2.5 VA	0.11 W
Endurance	Electrical	100,000 switching operations	100,000 switching operations
Display of voltage presence on the control circuit		By green indicator lamp	By green indicator lamp
Degree of protection	Device only	IP20	IP20
Connection by tunnel terminals		0.5 x 6 mm^2	0.5 x 6 mm^2
Width in 9-mm modules		2	2
Operating temperature	°C	-5 … +55	-5 … +55
Storage temperature	°C	-40 … +70	-40 … +70

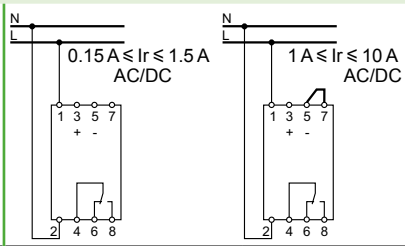
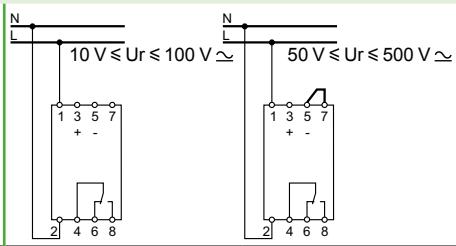
iRLI changeover and iERL extension relays

Changeover and extension relays

	iRLI				iERL			
Type	**Changeover relay**				**Extension for RLI**			
	PB107108-35 				PB107109-35 			
Standard	IEC/EN 61810-1 and NF C 45-250				IEC/EN 61810-1 and NF C 45-250			
Function								
	■ Relaying of ON or OFF information to the auxiliary circuits and actuation of low-power loads				■ Extension allowing additional contacts to be added to the iRLI changeover relays			
Wiring diagrams								
	DB123687 				DB123688 			
Use								
	■ The iRLI relay contains 1 changeover contact (O-C) and 1 normally open contact (N/O)				■ The iERL extension (max. 3 iERLs for 1 iRLI) contains 1 changeover contact (O-C) and 1 normally open contact (N/O) ■ Can be mounted without any tool and without additional cabling using a yellow clip which performs mechanical assembly and electrical connection between the coils			
Catalogue numbers	**A9E15535**	**A9E15536**	**A9E15537**	**A9E15538**	**A9E15539**	**A9E15540**	**A9E15541**	**A9E15542**
Technical specification								
Control voltage (Uc) V AC	230…240	48	24	12	230…240	48	24	12
Voltage rating (Ue) V AC	230				230			
Insulation voltage (Ui) V AC	250				250			
Rating (In) A	10, cos φ = 1				10, cos φ = 1			
Operating frequency Hz	50/60				50/60			
Inrush and holding power	4 VA				iRLI + iERL : 8 VA			
Endurance Electrical	100,000 cycles AC21 (cos φ = 1)				100,000 cycles AC21 (cos φ = 1)			
Direct front face control Power	By push button				By push button			
Coil	By selector switch (disconnection)				By selector switch (disconnection)			
Position indicator	Mechanical indicator				Mechanical indicator			
Marking	Clip-on markers on the front panel				Clip-on markers on the front panel			
Degree of protection Device only	IP20				IP20			
Connection by tunnel terminals	0.5 x 6 mm²				0.5 x 6 mm²			
Width in 9-mm modules	2				2			
Operating temperature °C	-5 … +55				-5 … +55			
Storage temperature °C	-40 … +70				-40 … +70			

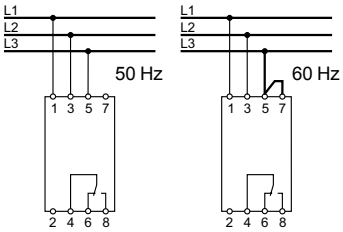
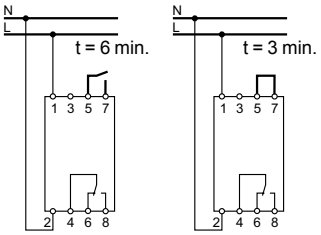
iRCP phase control, iRCI current control, iRCU voltage control and iRCC compressor control relays

Control relays

	iRCI	iRCU
Type	**Current control**	**Voltage control**
	PB107125-35 	PB107126-35 
Function	■ Monitors the current (Ir) flowing in an AC or DC circuit and indicates any crossing of the set threshold	■ Monitors the voltage variation (Ur) of an AC or DC circuit and indicates any crossing of the set threshold
Wiring diagrams	DB405286 	DB405286 
Catalogue numbers	**A9E21181**	**A9E21182**

Common technical specification			
Supply voltage (Uc)	V AC	230, -15 % à +10 %	
Frequency	Hz	50/60	
Parameter setting		■ On the front panel, by direct scale, using a screwdriver	
Precision of display		±10 % of full scale	
Output by changeover contact		8 A under 250 V AC (cos φ = 1)	
Indications by LED	Green	Voltage presence	
	Red	Fault	
Consumption	VA	3	
Dissipated power	W	2	
Degree of protection	Device only	IP20	
Connection by tunnel terminals	Rigid cable	1.5 x 6 mm²	
Width in 9-mm modules		4	
Operating temperature	°C	-5 … +55	
Storage temperature	°C	-40 … +80	
Particular technical specification			
		Threshold adjustable from 10 % to 100 % of Ir	Threshold adjustable from 10 % to 100 % of Ur
		Hysteresis adjustable from 5 % to 50 % of Ir	Hysteresis adjustable from 5 % to 50 % of Ur
		Monitoring of overcurrent and undercurrent (selection by selector switch)	
		Fail-safe contact	
		De-energized Energized with fault 	
		Energized without fault 	
		Time delay on crossing threshold: 0.1 s to 10 s	
		Possibility of memorizing fault with resetting	
		Compatible with current transformers (CTs) of ratio X/5	■ Automatic recognition of AC voltage or DC voltage. ■ 2 measuring ranges selected by cabling: □ 10 V to 50 V □ 50 V to 500 V
		■ Automatic recognition of alternating or direct current. ■ 2 measuring ranges selected by cabling: □ 0.15 A to 1.5 A □ 1 A to 10 A	

iRCP phase control, iRCI current control, iRCU voltage control and iRCC compressor control relays (cont.)

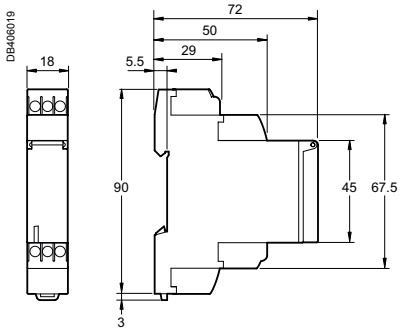
	iRCP	iRCC
	Phase control	**Compressor control**
	PB107124-35 	PB107127-35 
	■ Monitors phases and the presence of voltage on the 3 phases of a three-phase circuit (power supply of a motor, etc.). It indicates any phase loss or inversion	■ Monitors the compressor's power supply and prevents its immediate restarting upon detection of a power cut or voltage dip
	DB405265 	DB405267 
	A9E21180	**A9E21183**
	400, ±15 %	230, -15 % à +10 %
	50/60	
	■ On the front panel, by direct scale, using a screwdriver	
	±10 % of full scale	
	8 A under 250 V AC (cos φ = 1)	
	Voltage presence	
	Fault	
	3	
	3 (total on the 3 phases)	2
	IP20	
	1.5 x 6 mm^2	
	4	
	-5 … +55	
	-40 … +80	
	Setting of phase asymmetry threshold: 5 % to 2 5% of 400 V	Threshold setting: ±5 % to ±15 % of 230 V
	Hysteresis: fixed, 5 % of asymmetry threshold	
	Monitoring of direction of phase rotation	
	Monitoring of presence of the 3 phases	
	Fail-safe contact	Fail-safe contact
	De-energized Energized with fault 	De-energized Energized with fault 
	Energized without fault 	Energized without fault 
	Time delay on tripping: 0.3 s	Time delay on overshoot: 3 or 6 minutes (selection by cabling)

Technical data

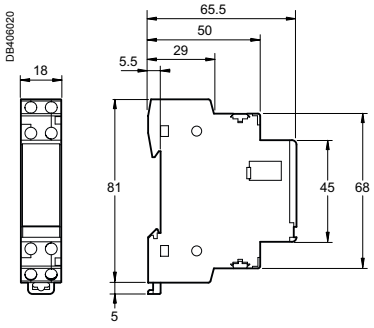
Weight (g)

Relays	
Type	
iRTA, iRTB, iRTC, iRTH, iRBN	65
iRTL	66
iRTMF	68
iRTBT	63
iRLI, iERL	112
iRCP, iRCC	210
iRCI, iRCU	215

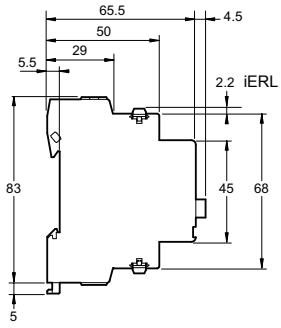
Dimensions (mm)



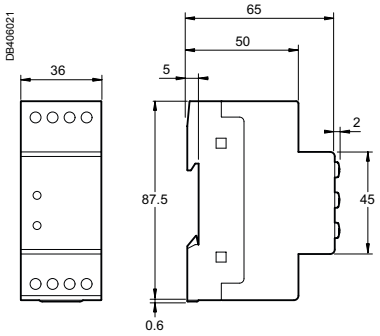
iRTA, iRTB, iRTC, iRTH, iRTL, iRTMF



iRBN, iRTBT



iRLI, iERL



iRCP, iRCI, iRCU, iRCC



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