

TeSys Deca contactor,3P(3NO),AC-3/ AC-3e,<=440V 65A,110V AC 50/60Hz coil

LC1D65AF7

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Range	TeSys TeSys Deca
Range of product	TeSys D TeSys Deca
Product or component type	Contactor
Device short name	LC1D
Contactor application	Resistive load Motor control
Utilisation category	AC-4 AC-1 AC-3 AC-3e
Poles description	3P
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25400 Hz Power circuit: <= 300 V DC
[le] rated operational current	80 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 65 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 65 A (at <60 °C) at <= 440 V AC AC-3e for power circuit
[Uc] control circuit voltage	110 V AC 50/60 Hz

Complementary		
Motor power kW	11 kW at 400 V AC 50/60 Hz (AC-4)	
•	18.5 kW at 220230 V AC 50/60 Hz (AC-3)	
	30 kW at 380400 V AC 50/60 Hz (AC-3)	
	37 kW at 500 V AC 50/60 Hz (AC-3)	
	37 kW at 660690 V AC 50/60 Hz (AC-3)	
	18.5 kW at 220230 V AC 50/60 Hz (AC-3e)	
	30 kW at 380400 V AC 50/60 Hz (AC-3e)	
	37 kW at 500 V AC 50/60 Hz (AC-3e)	
	37 kW at 660690 V AC 50/60 Hz (AC-3e)	
Motor power hp	40 hp at 460/480 V AC 50/60 Hz for 3 phases motors	
•	5 hp at 115 V AC 50/60 Hz for 1 phase motors	
	10 hp at 230/240 V AC 50/60 Hz for 1 phase motors	
	20 hp at 200/208 V AC 50/60 Hz for 3 phases motors	
	20 hp at 230/240 V AC 50/60 Hz for 3 phases motors	
	50 hp at 575/600 V AC 50/60 Hz for 3 phases motors	
Compatibility code	LC1D	
Pole contact composition	3 NO	
Contact compatibility	M2	
Protective cover	With	
[Ith] conventional free air	10 A (at 60 °C) for signalling circuit	

Irms rated making capacity	140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1 1000 A at 440 V for power circuit conforming to IEC 60947	
Rated breaking capacity	1000 A at 440 V for power circuit conforming to IEC 60947	
[Icw] rated short-time withstand current	520 A 40 °C - 10 s for power circuit 900 A 40 °C - 1 s for power circuit 110 A 40 °C - 10 min for power circuit 260 A 40 °C - 1 min for power circuit 100 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit 140 A - 100 ms for signalling circuit	
Associated fuse rating	10 A gG for signalling circuit conforming to IEC 60947-5-1 125 A gG at <= 690 V coordination type 1 for power circuit 125 A gG at <= 690 V coordination type 2 for power circuit	
Average impedance	1.5 mOhm - Ith 80 A 50 Hz for power circuit	
Power dissipation per pole	9.6 W AC-1 6.3 W AC-3 6.3 W AC-3e	
[Ui] rated insulation voltage	Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Signalling circuit: 690 V conforming to IEC 60947-1 Signalling circuit: 600 V CSA certified Signalling circuit: 600 V UL certified Power circuit: 690 V conforming to IEC 60947-4-1	
Overvoltage category	III	
Pollution degree	3	
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947	
Safety reliability level	B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1	
Mechanical durability	6 Mcycles	
Electrical durability	1.4 Mcycles 80 A AC-1 at Ue <= 440 V 1.45 Mcycles 65 A AC-3 at Ue <= 440 V 1.45 Mcycles 65 A AC-3e at Ue <= 440 V	
Control circuit type	AC at 50/60 Hz standard	
Coil technology	Without built-in suppressor module	
Control circuit voltage limits	0.30.6 Uc (-4070 °C):drop-out AC 50/60 Hz 0.81.1 Uc (-4060 °C):operational AC 50 Hz 0.851.1 Uc (-4060 °C):operational AC 60 Hz 11.1 Uc (6070 °C):operational AC 50/60 Hz	
Inrush power in VA	140 VA 60 Hz cos phi 0.75 (at 20 °C) 160 VA 50 Hz cos phi 0.75 (at 20 °C)	
Hold-in power consumption in VA	13 VA 60 Hz cos phi 0.3 (at 20 °C) 15 VA 50 Hz cos phi 0.3 (at 20 °C)	
Heat dissipation	45 W at 50/60 Hz	
Operating time	419 ms opening 1226 ms closing	
Maximum operating rate	3600 cyc/h 60 °C	
Connections - terminals	Control circuit: screw clamp terminals 2 12.5 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 14 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 14 mm² - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 14 mm² - cable stiffness: solid without cable end Power circuit: screw connection 1 135 mm² - cable stiffness: flexible without cable end Power circuit: screw connection 2 125 mm² - cable stiffness: flexible with cable end Power circuit: screw connection 2 125 mm² - cable stiffness: flexible with cable end Power circuit: screw connection 2 125 mm² - cable stiffness: solid without cable end Power circuit: screw connection 1 135 mm² - cable stiffness: solid without cable end Power circuit: screw connection 2 125 mm² - cable stiffness: solid without cable end Power circuit: screw connection 2 125 mm² - cable stiffness: solid without cable end	
Tightening torque	Control circuit: 1.7 N.m - on EverLink BTR screw connectors - with screwdriver flat Ø 6 mm Control circuit: 1.7 N.m - on EverLink BTR screw connectors - with screwdriver Philips No 2 Power circuit: 8 N.m - on EverLink BTR screw connectors - cable 2535 mm² hexagonal screw head 4 mm Power circuit: 5 N.m - on EverLink BTR screw connectors - cable 125 mm² hexagonal screw head 4 mm Control circuit: 1.7 N.m - on EverLink BTR screw connectors - with screwdriver pozidriv No 2	

	Power circuit: 2.5 N.m - on EverLink BTR screw connectors - with screwdriver pozidriv No 2	
Auxiliary contact composition	1 NO + 1 NC	
Auxiliary contacts type	type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1 type mirror contact 1 NC conforming to IEC 60947-4-1	
Signalling circuit frequency	25400 Hz	
Minimum switching voltage	17 V for signalling circuit	
Minimum switching current	5 mA for signalling circuit	
Insulation resistance	> 10 MOhm for signalling circuit	
Non-overlap time	1.5 ms on de-energisation between NC and NO contact 1.5 ms on energisation between NC and NO contact	
Mounting support	Rail Plate	
Environment		
Standards	CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508 IEC 60335-1	
Product certifications	CSA GOST UL CCC	
IP degree of protection	IP20 front face conforming to IEC 60529	
Protective treatment	TH conforming to IEC 60068-2-30	
Climatic withstand	conforming to IACS E10 exposure to damp heat conforming to IEC 60947-1 Annex Q category D exposure to damp heat	
Permissible ambient air temperature around the device	-40…60 °C 60…70 °C with derating	
Operating altitude	03000 m	
Fire resistance	850 °C conforming to IEC 60695-2-1	
Flame retardance	V1 conforming to UL 94	
Mechanical robustness	Vibrations contactor open (2 Gn, 5300 Hz) Vibrations contactor closed (4 Gn, 5300 Hz) Shocks contactor closed (15 Gn for 11 ms) Shocks contactor open (10 Gn for 11 ms)	
Height	122 mm	
Width	55 mm	
Depth	120 mm	
Product weight	0.86 kg	
Packing Units		
Unit Type of Package 1	PCE	
Number of Units in Package 1	1	
Package 1 Height	1.100 cm	
Package 1 Width	1.100 cm	
Package 1 Length	1.100 cm	
Package 1 Weight	1.100 kg	
Offer Sustainability		
Sustainable offer status	Green Premium product	

Green Premium product

Sustainable offer status

REACh Regulation	REACh Declaration	
REACh free of SVHC	Yes	
EU RoHS Directive	Compliant EU RoHS Declaration	
Toxic heavy metal free	Yes	
Mercury free	Yes	
RoHS exemption information	Yes	
China RoHS Regulation	China RoHS declaration Pro-active China RoHS declaration (out of China RoHS legal scope)	
Environmental Disclosure	Product Environmental Profile	
Circularity Profile	End of Life Information	
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins	
PVC free	Yes	
California proposition 65	WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov	
Contractual warranty		

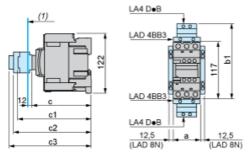
18 months

Product data sheet

LC1D65AF7

Dimensions Drawings

Dimensions

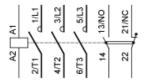


(1) Minimum electrical clearance

LC1		D40AD65A
а		55
b1	with LA4 D●2	-
	with LA4 DB3 or LAD 4BB3	136
	with LA4 DF, DT	157
	with LA4 DM, DW, DL	166
С	without cover or add-on blocks	118
	with cover, without add-on blocks	120
c1	with LAD N (1 contact)	-
	with LAD N or C (2 or 4 contacts)	150
c2	with LA6 DK10, LAD 6DK	163
с3	with LAD T, R, S	171
	with LAD T, R, S and sealing cover	175

Connections and Schema

Wiring



Recommended replacement(s)