Product data sheet
Characteristics

LC2D32E7
TeSys D reversing contactor - 3P(3 NO) - AC-3 - <= 440 V 32 A - 48 V AC coil

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Main

Range of product	TeSys D
Product or component type	Reversing contactor
Device short name	LC2D
Contactor application	Motor control Resistive load
Utilisation category	AC-1 AC-3
Device presentation	Preassembled with reversing power busbar
Poles description	3P
Power pole contact composition	3 NO
[Ue] rated operational voltage	<= 300 V DC for power circuit <= 690 V AC 25...400 Hz for power circuit
[Ie] rated operational current	50 A (<= 60 °C) at <= 440 V AC AC-1 for power circuit 32 A (<= 60 °C) at <= 440 V AC AC-3 for power circuit
Motor power kW	18.5 kW at 660...690 V AC 50/60 Hz 18.5 kW at 500 V AC 50/60 Hz 15 kW at 415...440 V AC 50/60 Hz 15 kW at 380...400 V AC 50/60 Hz 7.5 kW at 220...230 V AC 50/60 Hz
Motor power HP (UL / CSA)	30 hp at 575/600 V AC 50/60 Hz for 3 phases motors 20 hp at 460/480 V AC 50/60 Hz for 3 phases motors 10 hp at 230/240 V AC 50/60 Hz for 3 phases motors 7.5 hp at 200/208 V AC 50/60 Hz for 3 phases motors 5 hp at 230/240 V AC 50/60 Hz for 1 phase motors 2 hp at 115 V AC 50/60 Hz for 1 phase motors
Control circuit type	AC 50/60 Hz
Control circuit voltage	48 V AC 50/60 Hz
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947
Overvoltage category	III
[Ith] conventional free air thermal current	50 A at <= 60 °C for power circuit 10 A at <= 60 °C for signalling circuit
Irms rated making capacity	550 A at 440 V for power circuit conforming to IEC 60947 250 A DC for signalling circuit conforming to IEC 60947-5-1 140 A AC for signalling circuit conforming to IEC 60947-5-1
Rated breaking capacity	550 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	430 A <= 40 °C 1 s power circuit 260 A <= 40 °C 10 s power circuit 138 A <= 40 °C 1 min power circuit 60 A <= 40 °C 10 min power circuit 140 A 100 ms signalling circuit 120 A 500 ms signalling circuit 100 A 1 s signalling circuit
Associated fuse rating	63 A gG at <= 690 V coordination type 2 for power circuit 63 A gG at <= 690 V coordination type 1 for power circuit 10 A gG for signalling circuit conforming to IEC 60947-5-1
Average impedance	2 mOhm at 50 Hz - Ith 50 A for power circuit

[Ui] rated insulation voltage	600 V for signalling circuit certifications UL 600 V for signalling circuit certifications CSA 690 V for signalling circuit conforming to IEC 60947-1 600 V for power circuit certifications UL 600 V for power circuit certifications CSA 690 V for power circuit conforming to IEC 60947-4-1
Electrical durability	1.4 Mcycles 50 A AC-1 at Ue <= 440 V 1.65 Mcycles 32 A AC-3 at Ue <= 440 V
Power dissipation per pole	5 W AC-1 2 W AC-3
Safety cover	With
Interlocking type	Mechanical
Mounting support	Plate Rail
Standards	EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508 CSA C22.2 No 14
Product certifications	BV CCC CSA DNV GL GOST RINA UL LROS
Connections - terminals	Power circuit: screw clamp terminals 2 cable(s) 2.5...10 mm² - cable stiffness: solid - without cable end Power circuit: screw clamp terminals 1 cable(s) 1.5...10 mm² - cable stiffness: solid - without cable end Power circuit: screw clamp terminals 2 cable(s) 1.5...6 mm² - cable stiffness: flexible - with cable end Power circuit: screw clamp terminals 1 cable(s) 1...10 mm² - cable stiffness: flexible - with cable end Power circuit: screw clamp terminals 2 cable(s) 2.5...10 mm² - cable stiffness: flexible - without cable end Power circuit: screw clamp terminals 1 cable(s) 2.5...10 mm² - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 2 cable(s) 1...4 mm² - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm² - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm² - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm² - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 2 cable(s) 1...4 mm² - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 1 cable(s) 1...4 mm² - cable stiffness: flexible - without cable end
Tightening torque	Power circuit: 2.5 N.m - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 2.5 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm
Operating time	4...19 ms opening 12...22 ms closing
Safety reliability level	B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1

Mechanical durability	15 Mcycles
Operating rate	3600 cyc/h at <= 60 °C

Complementary

Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.85...1.1 Uc at 60 °C operational 60 Hz 0.8...1.1 Uc at 60 °C operational 50 Hz 0.3...0.6 Uc at 60 °C drop-out 50/60 Hz
Inrush power in VA	70 VA at 20 °C (cos ϕ 0.75) 50 Hz 70 VA at 20 °C (cos ϕ 0.75) 60 Hz
Hold-in power consumption in VA	7 VA at 20 °C (cos ϕ 0.3) 50 Hz 7.5 VA at 20 °C (cos ϕ 0.3) 60 Hz
Heat dissipation	2...3 W at 50/60 Hz
Auxiliary contacts type	Type mirror contact (1 NC) conforming to IEC 60947-4-1 Type mechanically linked (1 NO + 1 NC) conforming to IEC 60947-5-1
Signalling circuit frequency	25...400 Hz
Minimum switching current	5 mA for signalling circuit
Minimum switching voltage	17 V for signalling circuit
Non-overlap time	1.5 ms on energisation (between NC and NO contact) 1.5 ms on de-energisation (between NC and NO contact)
Insulation resistance	> 10 MOhm for signalling circuit

Environment

IP degree of protection	IP2x front face conforming to IEC 60529
Protective treatment	TH conforming to IEC 60068-2-30
Pollution degree	3
Ambient air temperature for operation	-5...60 °C
Ambient air temperature for storage	-60...80 °C
Permissible ambient air temperature around the device	-40...70 °C at Uc
Operating altitude	3000 m without derating in temperature
Fire resistance	850 °C conforming to IEC 60695-2-1
Flame retardance	V1 conforming to UL 94
Mechanical robustness	Shocks contactor open 8 Gn for 11 ms Shocks contactor closed 15 Gn for 11 ms Vibrations contactor closed 4 Gn, 5...300 Hz Vibrations contactor open 2 Gn, 5...300 Hz
Height	85 mm
Width	90 mm
Depth	92 mm
Product weight	0.797 kg

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS	Compliant - since 0721 - Schneider Electric declaration of conformity
REACh	Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Need no specific recycling operations

Contractual warranty

Period	18 months