

LC2D32MDV

TeSys D reversing contactor - 3P(3 NO) - AC-3 -
≤ 440 V 32 A - 220 V DC coil



ⓘ Discontinued

LC2D32MDV has not been replaced. Please contact your customer care center for more information.

Main

Range	TeSys
Product name	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	AC 25...400 Hz for power circuit DC for power circuit
[Ie] rated operational current	32 A (≤ 60 °C) at ≤ 440 V AC AC-3 for power circuit 50 A (≤ 60 °C) at ≤ 440 V AC AC-1 for power circuit
Motor power kW	15 kW at 380...400 V AC 50 Hz 18.5 kW at 500 V AC 50 Hz 18.5 kW at 660...690 V AC 50 Hz 15 kW at 415...440 V AC 50 Hz 7.5 kW at 220...230 V AC 50 Hz
Motor power HP (UL / CSA)	2 hp at 115 V AC 60 Hz for 1 phase motors 7.5 hp at 200/208 V AC 60 Hz for 3 phases motors 5 hp at 230/240 V AC 60 Hz for 1 phase motors 10 hp at 230/240 V AC 60 Hz for 3 phases motors 20 hp at 460/480 V AC 60 Hz for 3 phases motors 30 hp at 575/600 V AC 60 Hz for 3 phases motors
Control circuit type	DC standard
[Uc] control circuit voltage	220 V DC
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947
Oversvoltage 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 140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1
Rated breaking capacity	550 A at 440 V for power circuit conforming to IEC 60947

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

[Icw] rated short-time withstand current	138 A ≤ 40 °C 1 min power circuit 260 A ≤ 40 °C 10 s power circuit 430 A ≤ 40 °C 1 s power circuit 60 A ≤ 40 °C 10 min power circuit 100 A 1 s signalling circuit 120 A 500 ms signalling circuit 140 A 100 ms signalling circuit
Associated fuse rating	63 A gG at ≤ 690 V coordination type 1 for power circuit 63 A gG at ≤ 690 V coordination type 2 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 power circuit certifications CSA 600 V for power circuit certifications UL 690 V for power circuit conforming to IEC 60947-4-1 690 V for signalling circuit conforming to IEC 60947-1 600 V for signalling circuit certifications CSA 600 V for signalling circuit certifications UL
Electrical durability	1.65 Mcycles 32 A AC-3 at Ue ≤ 440 V 1.4 Mcycles 50 A AC-1 at Ue ≤ 440 V
Power dissipation per pole	2 W AC-3 5 W AC-1
Safety cover	With
Interlocking type	Electrical and mechanical
Mounting support	Plate Rail
Standards	CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508
Product certifications	BV CCC CSA DNV GL GOST LROS (Lloyds register of shipping) RINA UL
Connections - terminals	Control circuit : screw clamp terminals 2 cable(s) 1...2.5 mm ² - cable stiffness: flexible - with cable end Power circuit : screw clamp terminals 1 cable(s) 1.5...10 mm ² - cable stiffness: solid - without cable end Control circuit : screw clamp terminals 1 cable(s) 1...4 mm ² - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 2 cable(s) 1...4 mm ² - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 1 cable(s) 1...4 mm ² - cable stiffness: flexible - with cable end Control circuit : screw clamp terminals 1 cable(s) 1...4 mm ² - cable stiffness: solid - without cable end Control circuit : screw clamp terminals 2 cable(s) 1...4 mm ² - cable stiffness: flexible - without cable end Power circuit : screw clamp terminals 1 cable(s) 2.5...10 mm ² - cable stiffness: flexible - without cable end Power circuit : screw clamp terminals 2 cable(s) 2.5...10 mm ² - cable stiffness: flexible - without cable end Power circuit : screw clamp terminals 1 cable(s) 1...10 mm ² - cable stiffness: flexible - with cable end Power circuit : screw clamp terminals 2 cable(s) 1.5...6 mm ² - cable stiffness: flexible - with cable end Power circuit : screw clamp terminals 2 cable(s) 2.5...10 mm ² - cable stiffness: solid - without cable end
Tightening torque	Control circuit : 1.7 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 Power circuit : 2.5 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Power circuit : 2.5 N.m - on screw clamp terminals - with screwdriver Philips No 2
Operating time	53.55...72.45 ms closing 16...24 ms opening
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	30 Mcycles
Operating rate	≤ 3600 cyc/h at ≤ 60 °C

Complementary

Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.1...0.25 U _c drop-out at 60 °C, DC 0.7...1.25 U _c operational at 60 °C, DC
Time constant	28 ms
Inrush power in W	5.4 W at 20 °C
Hold-in power consumption in W	5.4 W at 20 °C
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	25...400 Hz
Minimum switching current	5 mA for signalling circuit
Minimum switching voltage	17 V 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)
Insulation resistance	> 10 MOhm for signalling circuit

Environment

IP degree of protection	IP20 front face conforming to IEC 60529
Protective treatment	TH conforming to IEC 60068-2-30
Pollution degree	3
Ambient air temperature for operation	-20...60 °C
Ambient air temperature for storage	-60...80 °C
Permissible ambient air temperature around the device	-40...70 °C at U _c
Operating altitude	3000 m without derating
Fire resistance	850 °C conforming to IEC 60695-2-1
Flame retardance	V1 conforming to UL 94
Mechanical robustness	Vibrations contactor open 2 Gn, 5...300 Hz Vibrations contactor closed 4 Gn, 5...300 Hz Shocks contactor closed 15 Gn for 11 ms Shocks contactor open 8 Gn for 11 ms
Height	85 mm
Width	90 mm
Depth	101 mm
Product weight	1.127 kg

Contractual warranty

Warranty period	18 months
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