

LC1D50ABD

contactor TeSys LC1-D - 3 poles - AC-3 440V
50 A - coil 24 V DC

Main

Range of product	TeSys D
Product or component type	Contacteur
Device short name	LC1D
Contacteur application	Motor control Resistive load
Utilisation category	AC-1 AC-2 AC-3 AC-4
Control circuit type	DC
Coil type	Standard
Poles description	3P
Pole contact composition	3 NO
[I _e] rated operational current	50 A ≤ 60 °C AC AC-3 power circuit 80 A ≤ 60 °C AC AC-1 power circuit
Motor power kW	15 kW 220...240 V AC 50/60 Hz 22 kW 380...400 V AC 50/60 Hz 25 kW 415 V AC 50/60 Hz 30 kW 440 V AC 50/60 Hz 30 kW 500 V AC 50/60 Hz 33 kW 660...690 V AC 50/60 Hz
Motor power hp	3 hp 115 V 1P AC 60 Hz UL 3 hp 115 V 1P AC 60 Hz CSA 7,5 hp 230/240 V 1P AC 60 Hz UL 7,5 hp 230/240 V 1P AC 60 Hz CSA 15 hp 230/240 V 3P AC 60 Hz CSA 15 hp 230/240 V 3P AC 60 Hz UL 15 hp 200/208 V 3P AC 60 Hz CSA 15 hp 200/208 V 3P AC 60 Hz UL 40 hp 575/600 V 3P AC 60 Hz CSA 40 hp 575/600 V 3P AC 60 Hz UL 40 hp 460/480 V 3P AC 60 Hz CSA 40 hp 460/480 V 3P AC 60 Hz UL
Control circuit voltage	24 V DC
Connections - terminals	EverLink BTR screw connectors power circuit 2 1...25 mm ² solid without EverLink BTR screw connectors power circuit 2 1...25 mm ² flexible with EverLink BTR screw connectors power circuit 2 1...25 mm ² flexible without EverLink BTR screw connectors power circuit 1 1...35 mm ² solid without EverLink BTR screw connectors power circuit 1 1...35 mm ² flexible with EverLink BTR screw connectors power circuit 1 1...35 mm ² flexible without Screw clamp terminal control circuit 1 1...4 mm ² flexible without Screw clamp terminal control circuit 2 1...4 mm ² flexible without Screw clamp terminal control circuit 1 1...4 mm ² flexible with Screw clamp terminal control circuit 2 1...2,5 mm ² flexible with Screw clamp terminal control circuit 1 1...4 mm ² solid without Screw clamp terminal control circuit 2 1...4 mm ² solid without

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Complementary

Coil technology	Built-in bidirectional peak limiting diode suppressor
Protective cover	With
Auxiliary contacts type	Mechanically linked IEC 60947-5-1 1 NO + 1 NC Mirror contact IEC 60947-4-1 1 NC
Auxiliary contact composition	1 NO + 1 NC
Control circuit voltage limits	0.1...0.3 U _c 60 °C drop-out 0.75...1.25 U _c 60 °C operational
Time constant	34 ms
[U _i] rated insulation voltage	600 V UL power circuit 600 V CSA power circuit 600 V UL control circuit 600 V CSA control circuit 690 V IEC 60947-1 power circuit 690 V IEC 60947-1 control circuit
[U _{imp}] rated impulse withstand voltage	6 kV IEC 60947
Overvoltage category	III
Mounting support	Plate Rail
Flame retardance	V1 UL 94
Tightening torque	1,7 N.m control circuit screw clamp terminal flat Ø 6 mm 1,7 N.m control circuit screw clamp terminal Philips No 2 2 mm 5 N.m power circuit EverLink BTR screw connectors 1...25 mm ² hexagonal 4 mm 8 N.m power circuit EverLink BTR screw connectors 35 mm ² hexagonal 4 mm
[U _e] rated operational voltage	<= 690 V AC 25...400 Hz power circuit
[I _{th}] conventional free air thermal current	10 A ≤ 60 °C control circuit 80 A ≤ 60 °C power circuit
I _{rms} rated making capacity	250 A DC control circuit IEC 60947-5-1 900 A 440 V power circuit IEC 60947
Rated breaking capacity	900 A 440 V power circuit IEC 60947
Permissible short-time rating	84 A ≤ 40 °C 10 min power circuit 100 A 1 s control circuit 120 A 500 ms control circuit 140 A 100 ms control circuit 208 A ≤ 40 °C 1 min power circuit 400 A ≤ 40 °C 10 s power circuit 810 A ≤ 40 °C 1 s power circuit
Associated fuse rating	10 A gG control circuit IEC 60947-5-1 100 A gG <= 690 V type 1 power circuit 100 A gG <= 690 V type 2 power circuit
Average impedance	1,5 mOhm 50 Hz 80 A power circuit
Power dissipation per pole	3,7 W AC-3 9,6 W AC-1
Inrush power in W	19 W 20 °C
Hold-in power consumption in W	7,4 W 20 °C
Operating time	20 ms opening 50 ms closing
Mechanical durability	10000000 cycles
Operating rate	3600 cyc/h ≤ 60 °C
Minimum switching current	5 mA control circuit
Minimum switching voltage	17 V control circuit
Non-overlap time	1,5 ms on energisation between NC and NO contacts 1,5 ms on de-energisation between NC and NO contacts
Insulation resistance	> 10 MOhm control circuit
Rated operational power in W	14 W 24 V DC-13 10000000 cycles control circuit 48 W 24 V DC-13 3000000 cycles control circuit 96 W 24 V DC-13 1000000 cycles control circuit
Height	122 mm
Width	55 mm
Depth	120 mm
Product weight	2,185 kg

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
Product certifications	BV CCC CSA DNV (Det Norske Veritas) GL GOST LROS (pending) RINA UL
IP degree of protection	IP2x VDE 0106 IP2x IEC 60529
Protective treatment	TH IEC 60068 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 U _c
Operating altitude	3000 m without
Fire resistance	850 °C IEC 60695-2-1
Shock resistance	10 gn contactor opened 15 gn contactor closed
Vibration resistance	2 gn contactor opened 5...300 Hz 4 gn contactor closed 5...300 Hz