Produktdatenblatt
Eigenschaften

LC1D25BL
contactor TeSys LC1-D - 3 poles - AC-3 440V 25 A

Main

Range of product	TeSys D
Product or component type	Contactor
Device short name	LC1D
Contactor application	Motor control Resistive load
Utilisation category	AC-1 AC-3
Control circuit type	DC
Coil type	Low consumption
Poles description	3P
Pole contact composition	3 NO
Control circuit voltage	24 V DC

Connections - terminals	Screw clamp terminal control circuit 2 1...4 mm² solid without Screw clamp terminal control circuit 1 1...4 mm² solid without Screw clamp terminal control circuit 2 1...2,5 mm² flexible with Screw clamp terminal control circuit 1 1...4 mm² flexible with Screw clamp terminal control circuit 2 1...4 mm² flexible without Screw clamp terminal control circuit 1 1...4 mm² flexible without Screw clamp terminal power circuit 2 1,5...6 mm² solid without Screw clamp terminal power circuit 1 1,5...6 mm² solid without Screw clamp terminal power circuit 2 1...4 mm² flexible with Screw clamp terminal power circuit 1 1...6 mm² flexible with Screw clamp terminal power circuit 2 1,5...6 mm² flexible without Screw clamp terminal power circuit 1 1,5...10 mm² flexible without

Complementary

Coil technology	Built-in bidirectional peak limiting diode suppressor
Protective cover	With
[Ie] rated operational current	25 A ≤ 60 °C AC AC-3 power circuit 40 A ≤ 60 °C AC AC-1 power circuit
Motor power kW	5,5 kW 220...240 V AC 50/60 Hz 11 kW 380...400 V AC 50/60 Hz 11 kW 415 V AC 50/60 Hz 11 kW 440 V AC 50/60 Hz 15 kW 500 V AC 50/60 Hz 15 kW 660...690 V AC 50/60 Hz
Motor power hp	2 hp 115 V 1P AC 60 Hz UL 2 hp 115 V 1P AC 60 Hz CSA 3 hp 230/240 V 1P AC 60 Hz UL 3 hp 230/240 V 1P AC 60 Hz CSA 7,5 hp 230/240 V 3P AC 60 Hz CSA 7,5 hp 230/240 V 3P AC 60 Hz UL 7,5 hp 200/208 V 3P AC 60 Hz CSA 7,5 hp 200/208 V 3P AC 60 Hz UL 15 hp 460/480 V 3P AC 60 Hz CSA 15 hp 460/480 V 3P AC 60 Hz UL 20 hp 575/600 V 3P AC 60 Hz CSA 20 hp 575/600 V 3P AC 60 Hz UL
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 Uc ≤ 60 °C drop-out 0.8...1.25 Uc ≤ 60 °C operational
Time constant	40 ms
[Ui] 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
[Uimp] 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 Philips No 2 2 mm 1,7 N.m control circuit screw clamp terminal flat Ø 6 mm 2,5 N.m power circuit screw clamp terminal flat Ø 6 mm 2,5 N.m power circuit screw clamp terminal Philips No 2 2 mm
[Ue] rated operational voltage	<= 690 V AC 25...400 Hz power circuit
[Ith] conventional free air thermal current	10 A ≤ 60 °C control circuit 40 A ≤ 60 °C power circuit

Irms rated making capacity	250 A DC control circuit IEC 60947-5-1 450 A 440 V power circuit IEC 60947
Rated breaking capacity	450 A 440 V power circuit IEC 60947
Permissible short-time rating	50 A ≤ 40 °C 10 min power circuit 100 A 1 s control circuit 120 A 500 ms control circuit 120 A ≤ 40 °C 1 min power circuit 140 A 100 ms control circuit 240 A ≤ 40 °C 10 s power circuit 380 A ≤ 40 °C 1 s power circuit
Associated fuse rating	10 A gG control circuit IEC 60947-5-1 40 A gG <= 690 V type 2 power circuit 63 A gG <= 690 V type 1 power circuit
Average impedance	2 mOhm 50 Hz 40 A power circuit
Power dissipation per pole	1,25 W AC-3 3,2 W AC-1
Inrush power in W	2,4 W 20 °C
Hold-in power consumption in W	5,4 W 20 °C
Operating time	25 ms opening 77 ms closing
Safety reliability level	B10d 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d 20000000 cycles contactor with mechanical load EN/ISO 13849-1
Mechanical durability	30000000 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 de-energisation between NC and NO contacts 1,5 ms on 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	85 mm
Width	45 mm
Depth	99 mm 101 mm
Product weight	0,53 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 (Lloyds register of shipping) 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 Uc
Operating altitude	3000 m without
Fire resistance	850 °C IEC 60695-2-1
Shock resistance	8 gn contactor opened 15 gn contactor closed

Vibration resistance	2 gn contactor opened 5...300 Hz 4 gn contactor closed 5...300 Hz
RoHS EUR conformity date	0721
RoHS EUR status	Compliant