

# LC2D25BD

reversing contactor TeSys LC2-D - 3 poles -  
AC-3 440V 25 A - coil 24 V DC



## Main

Range of product	TeSys D
Product or component type	Reversing contactor
Device short name	LC2D
Contactor application	Motor control
Utilisation category	AC-3
Control circuit type	DC
Coil type	Standard
Poles description	3P
Pole contact composition	3 NO
[Ie] rated operational current	25 A ≤ 60 °C AC AC-3 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
Control circuit voltage	24 V DC
Connections - terminals	Screwclamp terminal power circuit 1 1,5...10 mm <sup>2</sup> flexible without Screwclamp terminal power circuit 2 1,5...6 mm <sup>2</sup> flexible without Screwclamp terminal power circuit 1 1...6 mm <sup>2</sup> flexible with Screwclamp terminal power circuit 2 1...4 mm <sup>2</sup> flexible with Screwclamp terminal power circuit 1 1,5...6 mm <sup>2</sup> solid without Screwclamp terminal power circuit 2 1,5...6 mm <sup>2</sup> solid without Screwclamp terminal control circuit 1 1...4 mm <sup>2</sup> flexible without Screwclamp terminal control circuit 2 1...4 mm <sup>2</sup> flexible without Screwclamp terminal control circuit 1 1...4 mm <sup>2</sup> flexible with Screwclamp terminal control circuit 2 1...2,5 mm <sup>2</sup> flexible with Screwclamp terminal control circuit 1 1...4 mm <sup>2</sup> solid without Screwclamp terminal control circuit 2 1...4 mm <sup>2</sup> solid without

## Complementary

Assembly style	Ready assembled
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
Interlocking type	Mechanical
Control circuit voltage limits	0.1...0.25 U <sub>c</sub> 60 °C drop-out 0.7...1.25 U <sub>c</sub> 60 °C operational
Time constant	28 ms

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[Ui] rated insulation voltage	600 V UL control circuit 600 V CSA control circuit 690 V IEC 60947-1 control circuit
[Uimp] rated impulse withstand voltage	6 kV IEC 60947
Mounting support	Plate Rail
Flame retardance	V1 UL 94
Tightening torque	1,7 N.m control circuit screwclamp terminal 1...4 mm <sup>2</sup> Philips No 2 2 mm 1,7 N.m control circuit screwclamp terminal 1...4 mm <sup>2</sup> flat Ø 6 mm 1,7 N.m control circuit screwclamp terminal 1...2,5 mm <sup>2</sup> flat Ø 6 mm 1,7 N.m control circuit screwclamp terminal 1...2,5 mm <sup>2</sup> Philips No 2 2 mm 2,5 N.m power circuit screwclamp terminal 1...4 mm <sup>2</sup> flat Ø 6 mm 2,5 N.m power circuit screwclamp terminal 1...4 mm <sup>2</sup> Philips No 2 2 mm 2,5 N.m power circuit screwclamp terminal 1,5...10 mm <sup>2</sup> flat Ø 6 mm 2,5 N.m power circuit screwclamp terminal 1,5...10 mm <sup>2</sup> Philips No 2 2 mm 2,5 N.m power circuit screwclamp terminal 1...6 mm <sup>2</sup> flat Ø 6 mm 2,5 N.m power circuit screwclamp terminal 1,5...6 mm <sup>2</sup> flat Ø 6 mm 2,5 N.m power circuit screwclamp terminal 1,5...6 mm <sup>2</sup> Philips No 2 2 mm 2,5 N.m power circuit screwclamp terminal 1...6 mm <sup>2</sup> 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 40 A
Inrush power in W	5,4 W 20 °C
Hold-in power consumption in W	5,4 W 20 °C
Operating time	4...19 ms opening 12...22 ms closing
Mechanical durability	15000000 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	99 mm
Width	90 mm
Depth	101 mm
Product weight	1,117 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 RINA UL
IP degree of protection	IP2x VDE 0106 IP2x IEC 60529
Protective treatment	TH IEC 60068-2-30
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 <sub>c</sub>
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
Heat dissipation	2...3 W 50/60 Hz control circuit
RoHS EUR conformity date	2Q2009
RoHS EUR status	Will be compliant