# Product data sheet Characteristics

## LC2D25BDV

TeSys D reversing contactor - 3P(3 NO) - AC-3 - <= 440 V 25 A - 24 V DC coil

Product availability: Non-Stock - Not normally stocked in distribution facility





LC2D25BDV 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-3 AC-1
Device presentation	Preassembled with reversing power busbar
Poles description	3P
Power pole contact composition	3 NO
[Ue] rated operational voltage	Power circuit <= 690 V AC 25400 Hz Power circuit <= 300 V DC
[le] rated operational current	25 A 140 °F (60 °C)) <= 440 V AC AC-3 power circuit 40 A 140 °F (60 °C)) <= 440 V AC AC-1 power circuit
Motor power kW	5.5 kW 220230 V AC 50 Hz 11 kW 380400 V AC 50 Hz 11 kW 415440 V AC 50 Hz 15 kW 500 V AC 50 Hz 15 kW 660690 V AC 50 Hz
Motor power HP (UL / CSA)	3 hp 230/240 V AC 60 Hz 1 phase 5 hp 200/208 V AC 60 Hz 3 phase 2 hp 115 V AC 60 Hz 1 phase 7.5 hp 230/240 V AC 60 Hz 3 phase 15 hp 460/480 V AC 60 Hz 3 phase 20 hp 575/600 V AC 60 Hz 3 phase
Control circuit type	DC standard
[Uc] control circuit voltage	24 V DC
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	6 kV IEC 60947
Overvoltage category	III

[lth] conventional free air thermal current	10 A 140 °F (60 °C) signalling circuit 40 A 140 °F (60 °C) power circuit
Irms rated making capacity	140 A AC signalling circuit IEC 60947-5-1 250 A DC signalling circuit IEC 60947-5-1 450 A 440 V power circuit IEC 60947
Rated breaking capacity	450 A 440 V power circuit IEC 60947
[lcw] rated short-time withstand current	50 A 104 °F (40 °C) - 10 min power circuit 120 A 104 °F (40 °C) - 1 min power circuit 240 A 104 °F (40 °C) - 10 s power circuit 380 A 104 °F (40 °C) - 1 s power circuit 100 A - 1 s signalling circuit 120 A - 500 ms signalling circuit 140 A - 100 ms signalling circuit
Associated fuse rating	10 A gG signalling circuit IEC 60947-5-1 63 A gG <= 690 V type 1 power circuit 40 A gG <= 690 V type 2 power circuit
Average impedance	2 mOhm - Ith 40 A 50 Hz power circuit
[Ui] rated insulation voltage	Power circuit 690 V IEC 60947-4-1 Power circuit 600 V CSA Power circuit 600 V UL Signalling circuit 690 V IEC 60947-1 Signalling circuit 600 V CSA Signalling circuit 600 V UL
Electrical durability	1.65 Mcycles 25 A AC-3 <= 440 V 1.4 Mcycles 40 A AC-1 <= 440 V
Power dissipation per pole	1.25 W AC-3 3.2 W AC-1
Safety cover	With
Interlocking type	Electrical and mechanical
Mounting support	Rail Plate
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	CCC GL LROS (Lloyds register of shipping) GOST UL DNV CSA BV RINA
Connections - terminals	Control circuit screw clamp terminals 1 0.000.01 in² (14 mm²)flexible without cable end Control circuit screw clamp terminals 2 0.000.01 in² (14 mm²)flexible without cable end Control circuit screw clamp terminals 1 0.000.01 in² (14 mm²)flexible with cable end Control circuit screw clamp terminals 2 0.000.00 in² (12.5 mm²)flexible with cable end Control circuit screw clamp terminals 1 0.000.01 in² (14 mm²)solid without cable end Control circuit screw clamp terminals 2 0.000.01 in² (14 mm²)solid without cable end Power circuit screw clamp terminals 1 0.000.02 in² (2.510 mm²)flexible without cable end Power circuit screw clamp terminals 2 0.000.02 in² (2.510 mm²)flexible without cable end Power circuit screw clamp terminals 1 0.000.02 in² (110 mm²)flexible with cable end Power circuit screw clamp terminals 2 0.000.01 in² (1.56 mm²)flexible with cable end Power circuit screw clamp terminals 1 0.000.02 in² (1.510 mm²)solid without cable end Power circuit screw clamp terminals 2 0.000.02 in² (2.510 mm²)solid without cable end Power circuit screw clamp terminals 2 0.000.02 in² (2.510 mm²)solid without cable end
Tightening torque	Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2 Power circuit 22.13 lbf.in (2.5 N.m) screw clamp terminals flat Ø 6 mm Power circuit 22.13 lbf.in (2.5 N.m) screw clamp terminals Philips No 2
Operating time	53.5572.45 ms closing 1624 ms opening
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	30 Mcycles

Maximum operating rate 3600 cyc/h 140 °F (60 °C)
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## Complementary

Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	Drop-out 0.10.25 Uc DC 140 °F (60 °C)) Operational 0.71.25 Uc DC 140 °F (60 °C))
Time constant	28 ms
Inrush power in W	5.4 W 68 °F (20 °C))
Hold-in power consumption in W	5.4 W 68 °F (20 °C)
Auxiliary contacts type	Mechanically linked 1 NO + 1 NC IEC 60947-5-1 Mirror contact 1 NC IEC 60947-4-1
Signalling circuit frequency	25400 Hz
Minimum switching current	5 mA 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 signalling circuit

#### Environment

IP degree of protection	IP20 front face IEC 60529
Protective treatment	TH IEC 60068-2-30
Pollution degree	3
Ambient air temperature for operation	-4140 °F (-2060 °C)
Ambient air temperature for storage	-76176 °F (-6080 °C)
Permissible ambient air temperature around the device	-40158 °F (-4070 °C) at Uc
Operating altitude	9842.52 ft (3000 m) without
Fire resistance	1562 °F (850 °C) IEC 60695-2-1
Flame retardance	V1 UL 94
Mechanical robustness	Vibrations contactor open2 Gn, 5300 Hz Vibrations contactor closed4 Gn, 5300 Hz Shocks contactor closed15 Gn for 11 ms Shocks contactor open8 Gn for 11 ms
Height	3.35 in (85 mm)
Width	3.54 in (90 mm)
Depth	3.98 in (101 mm)
Net weight	2.46 lb(US) (1.117 kg)

## Ordering and shipping details

Category	22355 - CTR,TESYS D,OPEN,9-38A DC
Discount Schedule	l12
GTIN	03389110414226
Returnability	No

#### Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Compliant EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration Product out of China RoHS scope. Substance declaration for your information.
Environmental Disclosure	Product Environmental Profile

Circularity Profile	End of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
Contractual warranty	
Warranty	18 months