

Product data sheet

Specifications



TeSys D reversing contactor - 3P(3 NO) - AC-3 - <= 440 V 9 A - 12 V DC coil

LC2D09JDV

! Discontinued

Main

Range	TeSys
Product Name	TeSys D
Product Or Component Type	Reversing contactor
Device Short Name	LC2D
Contactor Application	Resistive load Motor control
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 25...400 Hz Power circuit <= 300 V DC
[Ie] Rated Operational Current	9 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 25 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit
Motor Power Kw	2.2 kW at 220...230 V AC 50 Hz 4 kW at 380...400 V AC 50 Hz 4 kW at 415...440 V AC 50 Hz 5.5 kW at 500 V AC 50 Hz 5.5 kW at 660...690 V AC 50 Hz
Motor Power Hp (UI / Csa)	0.5 hp at 115 V AC 60 Hz for 1 phase motors 1 hp at 230/240 V AC 60 Hz for 1 phase motors 2 hp at 200/208 V AC 60 Hz for 3 phase motors 2 hp at 230/240 V AC 60 Hz for 3 phase motors 5 hp at 460/480 V AC 60 Hz for 3 phase motors 7.5 hp at 575/600 V AC 60 Hz for 3 phase motors
Control Circuit Type	DC standard
[Uc] Control Circuit Voltage	12 V DC
Auxiliary Contact Composition	1 NO + 1 NC
[Uimp] Rated Impulse Withstand Voltage	6 kV IEC 60947
Overvoltage Category	III
[Ith] Conventional Free Air Thermal Current	10 A (at 140 °F (60 °C)) for signalling circuit 25 A (at 140 °F (60 °C)) for power circuit
Irms Rated Making Capacity	250 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	250 A at 440 V for power circuit conforming to IEC 60947

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

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	30 A 104 °F (40 °C) - 10 min for power circuit 61 A 104 °F (40 °C) - 1 min for power circuit 105 A 104 °F (40 °C) - 10 s for power circuit 210 A 104 °F (40 °C) - 1 s for power circuit 100 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit 140 A - 100 ms for signalling circuit
Associated Fuse Rating	25 A gG at <= 690 V coordination type 1 for power circuit 20 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	2.5 mOhm - lth 25 A 50 Hz for 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	0.6 Mcycles 25 A AC-1 <= 440 V 2 Mcycles 9 A AC-3 <= 440 V
Power Dissipation Per Pole	0.2 W AC-3 1.56 W AC-1
Front 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	GOST DNV CSA UL BV GL CCC LROS (Lloyds register of shipping) RINA
Connections - Terminals	Power circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²)flexible without cable end Power circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²)flexible without cable end Power circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²)flexible with cable end Power circuit screw clamp terminals 2 0.00...0.00 in ² (1...2.5 mm ²)flexible with cable end Power circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²)solid Power circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²)solid Control circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²)flexible without cable end Control circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²)flexible without cable end Control circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²)flexible with cable end Control circuit screw clamp terminals 2 0.00...0.00 in ² (1...2.5 mm ²)flexible with cable end Control circuit screw clamp terminals 1 0.00...0.01 in ² (1...4 mm ²)solid Control circuit screw clamp terminals 2 0.00...0.01 in ² (1...4 mm ²)solid
Tightening Torque	Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm Power circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2 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
Operating Time	53.55...72.45 ms closing 16...24 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)

Complementary

Coil Technology	Built-in bidirectional peak limiting diode suppressor
Control Circuit Voltage Limits	0.1...0.25 Uc -40...158 °F (-40...70 °C) drop-out DC 0.7...1.25 Uc -40...140 °F (-40...60 °C) operational DC 1...1.25 Uc 140...158 °F (60...70 °C) operational DC
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	25...400 Hz
Minimum Switching Current	5 mA for signalling circuit
Minimum Switching Voltage	17 V for 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 IEC 60529
Protective Treatment	TH IEC 60068-2-30
Pollution Degree	3
Ambient Air Temperature For Operation	-40...140 °F (-40...60 °C) 140...158 °F (60...70 °C) with derating
Ambient Air Temperature For Storage	-76...176 °F (-60...80 °C)
Operating Altitude	0...9842.52 ft (0...3000 m)
Fire Resistance	1562 °F (850 °C) IEC 60695-2-1
Flame Retardance	V1 conforming to UL 94
Mechanical Robustness	Vibrations contactor open2 Gn, 5...300 Hz Vibrations contactor closed4 Gn, 5...300 Hz Shocks contactor open10 Gn for 11 ms Shocks contactor closed15 Gn for 11 ms
Height	3.03 in (77 mm)
Width	3.54 in (90 mm)
Depth	3.74 in (95 mm)
Net Weight	2.24 lb(US) (1.017 kg)

Ordering and shipping details

Category	22355-CTR, TESYS D, OPEN, 9-38A DC
Discount Schedule	I12
Gtin	3389110413533
Returnability	No

Contractual warranty

Warranty	18 months
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