

Product data sheet

Specifications



Reversing Contactor, TeSys Deca, 3P(3NO), AC-3, <=440V, 32A, 12V DC coil, screw clamp terminals

LC2D32JL

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	32 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 50 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit
Motor power kW	7.5 kW at 220...230 V AC 50 Hz 15 kW at 380...400 V AC 50 Hz 15 kW at 415...440 V AC 50 Hz 18.5 kW at 500 V AC 50 Hz 18.5 kW at 660...690 V AC 50 Hz
Motor power hp	2 hp at 115 V AC 60 Hz for 1 phase motors 5 hp at 230/240 V AC 60 Hz for 1 phase motors 7.5 hp at 200/208 V AC 60 Hz for 3 phases motors 10 hp at 230/240 V AC 60 Hz for 3 phases motors 20 hp at 460/480 V AC 60 Hz for 3 phases motors 30 hp at 575/600 V AC 60 Hz for 3 phases motors
Control circuit type	DC low consumption
[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 50 A (at 140 °F (60 °C)) for power circuit
Irms rated making capacity	140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1 550 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	550 A at 440 V for power circuit conforming to IEC 60947

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	60 A 104 °F (40 °C) - 10 min for power circuit 138 A 104 °F (40 °C) - 1 min for power circuit 260 A 104 °F (40 °C) - 10 s for power circuit 430 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	10 A gG for signalling circuit conforming to IEC 60947-5-1 63 A gG at <= 690 V coordination type 1 for power circuit 63 A gG at <= 690 V coordination type 2 for power circuit
Average impedance	2 mOhm - lth 50 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	1.65 Mcycles 32 A AC-3 <= 440 V 1.4 Mcycles 50 A AC-1 <= 440 V
Power dissipation per pole	2 W AC-3 5 W AC-1
Front cover	With
Interlocking type	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 60335-2-40:Annex JJ
Product certifications	RINA GOST CCC UL LROS (Lloyds register of shipping) CSA DNV GL BV CB
Connections - terminals	Control circuit screw clamp terminals 1 0.002...0.006 in ² (1...4 mm ²)flexible without cable end Control circuit screw clamp terminals 2 0.002...0.006 in ² (1...4 mm ²)flexible without cable end Control circuit screw clamp terminals 1 0.002...0.006 in ² (1...4 mm ²)flexible with cable end Control circuit screw clamp terminals 2 0.002...0.004 in ² (1...2.5 mm ²)flexible with cable end Control circuit screw clamp terminals 1 0.002...0.006 in ² (1...4 mm ²)solid Control circuit screw clamp terminals 2 0.002...0.006 in ² (1...4 mm ²)solid Power circuit screw clamp terminals 1 0.004...0.02 in ² (2.5...10 mm ²)flexible without cable end Power circuit screw clamp terminals 2 0.004...0.02 in ² (2.5...10 mm ²)flexible without cable end Power circuit screw clamp terminals 1 0.002...0.02 in ² (1...10 mm ²)flexible with cable end Power circuit screw clamp terminals 2 0.002...0.009 in ² (1.5...6 mm ²)flexible with cable end Power circuit screw clamp terminals 1 0.002...0.02 in ² (1.5...10 mm ²)solid Power circuit screw clamp terminals 2 0.004...0.02 in ² (2.5...10 mm ²)solid
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 22.1 lbf.in (2.5 N.m) screw clamp terminals flat Ø 6 mm Power circuit 22.1 lbf.in (2.5 N.m) screw clamp terminals Philips No 2
Operating time	65.45...88.55 ms closing 20...30 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...0.3 Uc (-40...158 °F (-40...70 °C)):drop-out DC 0.8...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	40 ms
Inrush power in W	2.4 W 68 °F (20 °C))
Hold-in power consumption in W	2.4 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
Climatic withstand	IACS E10 IEC 60947-1 Annex Q category D
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...3000 m
Fire resistance	1562 °F (850 °C) IEC 60695-2-1
Flame retardance	V1 UL 94
Mechanical robustness	Vibrations contactor open2 Gn, 5...300 Hz Vibrations contactor closed4 Gn, 5...300 Hz Shocks contactor closed15 Gn for 11 ms Shocks contactor open8 Gn for 11 ms
Height	3.3 in (85 mm)
Width	3.5 in (90 mm)
Depth	4.0 in (101 mm)
Net weight	2.485 lb(US) (1.127 kg)

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1

Package 1 Height	4.500 in (11.430 cm)
Package 1 Width	4.500 in (11.430 cm)
Package 1 Length	5.400 in (13.716 cm)
Package 1 Weight	2.840 lb(US) (1.288 kg)
Unit Type of Package 2	CAR
Number of Units in Package 2	5
Package 2 Height	5.900 in (14.986 cm)
Package 2 Width	11.600 in (29.464 cm)
Package 2 Length	15.600 in (39.624 cm)
Package 2 Weight	14.910 lb(US) (6.763 kg)

Contractual warranty

Warranty (in months)	18
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Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)



Environmental footprint

Total lifecycle Carbon footprint	55 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	6 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.3 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.1 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	46 kg CO2 eq.
Carbon footprint of the end-of-life phase [C1 to C4]	3 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile

Use Better



Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
SCIP Number	50ae7612-fd2e-41e4-a369-50d0dea6e592
EU RoHS Directive	Compliant By Exemption
REACH Regulation	Reference contains Substances of Very High Concern above the threshold

Use Longer



Lifetime extension

Repair	No
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Use Again



Repack and remanufacture

Recyclability potential, in %	75
Circularity Profile	End of Life Information
Take-back	No
WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Technical Illustration

Assembly's dimensions

