

Product datasheet

Specifications



Contactor, TeSys Deca, 3P(3 NO), AC-3, 0 to 440V, 12A, 24VDC coil

LC1D12BDTQ

⚠ Discontinued on: 10 Jun 2022

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Main

Range	TeSys TeSys Deca
Range of product	TeSys Deca
Product or component type	Contactor
Device short name	LC1D
Contactor application	Resistive load Motor control
Utilisation category	AC-3 AC-1
Poles description	3P
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25...400 Hz
[Ie] rated operational current	25 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 12 A (at <60 °C) at <= 440 V AC AC-3 for power circuit
[Uc] control circuit voltage	24 V DC

Complementary

Motor power kW	7.5 kW at 500 V AC 50 Hz 7.5 kW at 660...690 V AC 50 Hz 5.5 kW at 380...400 V AC 50 Hz 5.5 kW at 415...440 V AC 50 Hz 3 kW at 220...230 V AC 50 Hz
Motor power hp	0.5 hp at 115 V AC 60 Hz for 1 phase motors 2 hp at 230/240 V AC 60 Hz for 1 phase motors 3 hp at 200/208 V AC 60 Hz for 3 phases motors 3 hp at 230/240 V AC 60 Hz for 3 phases motors 7.5 hp at 460/480 V AC 60 Hz for 3 phases motors 10 hp at 575/600 V AC 60 Hz for 3 phases motors
Compatibility code	LC1D
Pole contact composition	3 NO
Protective cover	With
[Ith] conventional free air thermal current	10 A (at 60 °C) for signalling circuit 25 A (at 60 °C) for power circuit
Irms rated making capacity	250 A at 440 V AC for power circuit conforming to IEC 60947 140 A AC for signalling circuit conforming to IEC 60947-5-1
Rated breaking capacity	250 A at 440 V for power circuit conforming to IEC 60947
Associated fuse rating	10 A gG for signalling circuit conforming to IEC 60947-5-1 25 A at <= 690 V coordination type 2 for power circuit 40 A at <= 690 V coordination type 1 for power circuit
Average impedance	2.5 mOhm - Ith 25 A 50 Hz for power circuit

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

Power dissipation per pole	0.36 W AC-3 1.56 W AC-1
[Ui] rated insulation voltage	Signalling circuit: 600 V CSA certified Signalling circuit: 600 V UL certified Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Signalling circuit: 690 V conforming to IEC 60947-4-1 Power circuit: 690 V conforming to IEC 60947-4-1
Overvoltage category	III
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947
Safety reliability level	B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1
Mechanical durability	30 Mcycles
Control circuit type	DC standard
Coil technology	With integral suppression device
Control circuit voltage limits	0.1...0.25 Uc (-40...70 °C):drop-out DC 0.7...1.25 Uc (-40...60 °C):operational DC 1...1.25 Uc (60...70 °C):operational DC
Inrush power in W	5.4 W (at 20 °C)
Hold-in power consumption in W	5.4 W at 20 °C
Operating time	20 ±20 % ms opening 63 ±15 % ms closing
Time constant	28 ms
Connections - terminals	Power circuit: screw clamp terminals 1 1...4 mm² - cable stiffness: rigid Power circuit: screw clamp terminals 2 1...4 mm² - cable stiffness: rigid Power circuit: screw clamp terminals 1 1...4 mm² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 2 1...4 mm² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 1...4 mm² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 2 1...2.5 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 1...4 mm² - cable stiffness: rigid Control circuit: screw clamp terminals 2 1...4 mm² - cable stiffness: rigid Control circuit: screw clamp terminals 1 1...4 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 1...4 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 1...4 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 1...2.5 mm² - cable stiffness: flexible with cable end
Tightening torque	Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Power circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 Control circuit: 1.7 N.m - on screw clamp terminal - with screwdriver pozidriv No 2 Power circuit: 1.7 N.m - on screw clamp terminal - with screwdriver pozidriv No 2
Auxiliary contact composition	1 NO + 1 NC
Minimum switching voltage	17 V for signalling circuit
Minimum switching current	5 mA for signalling circuit
Insulation resistance	> 10 MOhm for signalling 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
Mounting support	Rail Plate

Environment

Standards	CSA C22.2 No 14 UL 508 EN/IEC 60947-4-1 EN/IEC 60947-5-1 IEC 60335-1
Product certifications	CSA BV CCC GL UL GOST LROS (Lloyds register of shipping) DNV RINA
IP degree of protection	IP20 conforming to IEC 60529 IP20 conforming to VDE 0106
Climatic withstand	conforming to IACS E10 exposure to damp heat conforming to IEC 60947-1 Annex Q category D exposure to damp heat
Operating altitude	0...3000 m
Fire resistance	850 °C conforming to IEC 60695-2-1
Flame retardance	V1 conforming to UL 94
Mechanical robustness	Shocks contactor opened (10 Gn for 11 ms) Shocks contactor closed (15 Gn for 11 ms) Vibrations contactor opened (2 Gn, 5...300 Hz) Vibrations contactor closed (4 Gn, 5...300 Hz)
Height	77 mm
Width	45 mm
Depth	95 mm
Net weight	0.485 kg
Quantity per set	Set of 10

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	15 cm
Package 1 Width	30 cm
Package 1 Length	40 cm
Package 1 Weight	338 g

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 >](#)

Use Better

Materials and Substances	
SCIP Number	50ae7612-fd2e-41e4-a369-50d0dea6e592
PVC free	Yes

Use Longer

Lifetime extension	
Repair	No

Use Again

Repack and remanufacture	
End of life manual availability	End of Life Information
WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins