

Product data sheet

Specifications



contactor TeSys Deca - 3 poles - AC-3 440V 40 A - coil 72 V DC

LC1D40UD

❗ Discontinued

Main

Range	TeSys
Range of product	TeSys D
Product or component type	Contactor
Device short name	LC1D
Contactor application	Motor control Resistive load
Utilisation category	AC-3 AC-4 AC-2 AC-1
Poles description	3P
[Ue] rated operational voltage	Power circuit <= 690 V AC 25...400 Hz
[Ie] rated operational current	40 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 60 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit
[Uc] control circuit voltage	250 V DC

Complementary

Motor power kW	18.5 kW at 380...400 V AC 50 Hz 22 kW at 500 V AC 50 Hz 30 kW at 660...690 V AC 50 Hz 11 kW at 220...230 V AC 50 Hz 22 kW at 415 V AC 50 Hz 22 kW at 440 V AC 50 Hz 22 kW at 1000 V AC 50 Hz
Motor power hp	3 hp at 115 V AC 60 Hz for 1 phase motors 5 hp at 230/240 V AC 60 Hz for 1 phase motors 10 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 30 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
Compatibility code	LC1D
Pole contact composition	3 NO
Protective cover	With
[Ith] conventional free air thermal current	10 A (at 140 °F (60 °C)) for control circuit 60 A (at 140 °F (60 °C)) for power circuit
Irms rated making capacity	250 A DC for control circuit conforming to IEC 60947-5-1 800 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	800 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

Associated fuse rating	10 A gG for control circuit conforming to IEC 60947-5-1 80 A gG at <= 690 V coordination type 1 for power circuit 80 A gG at <= 690 V coordination type 2 for power circuit
Power dissipation per pole	5.4 W AC-1 2.4 W AC-3
[Ui] rated insulation voltage	Control circuit 600 V CSA Control circuit 600 V UL Power circuit 600 V CSA Power circuit 600 V UL Control circuit 690 V IEC 60947-1 Power circuit 690 V IEC 60947-1
Overvoltage category	III
[Uimp] rated impulse withstand voltage	8 kV IEC 60947
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	10000000 cycles
Control circuit type	DC standard
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 0.75...1.25 Uc (-40...140 °F (-40...60 °C)):operational DC 1...1.25 Uc (140...158 °F (60...70 °C)):operational DC
Inrush power in W	19 W 68 °F (20 °C))
Hold-in power consumption in W	7.4 W 68 °F (20 °C)
Rated operational power in W	32 W 250 V DC-13 3000000 cycles control circuit 76 W 250 V DC-13 1000000 cycles control circuit
Operating time	20 ms opening 50 ms closing
Time constant	34 ms
Maximum operating rate	3600 cyc/h 140 °F (60 °C)
Connections - terminals	Control circuit: screw clamp terminals 1 0.002...0.006 in² (1...4 mm²) - cable stiffness: rigid Control circuit: screw clamp terminals 2 0.002...0.006 in² (1...4 mm²) - cable stiffness: rigid Control circuit: screw clamp terminals 1 0.002...0.006 in² (1...4 mm²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 0.002...0.006 in² (1...4 mm²) - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 0.002...0.004 in² (1...2.5 mm²) - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 2 0.002...0.004 in² (1...2.5 mm²) - cable stiffness: flexible with cable end Power circuit: screw terminals 1 0.004...0.04 in² (2.5...25 mm²) - cable stiffness: rigid Power circuit: screw terminals 2 0.004...0.02 in² (2.5...16 mm²) - cable stiffness: rigid Power circuit: screw terminals 1 0.004...0.04 in² (2.5...25 mm²) - cable stiffness: flexible without cable end Power circuit: screw terminals 2 0.004...0.02 in² (2.5...16 mm²) - cable stiffness: flexible without cable end Power circuit: screw terminals 1 0.004...0.04 in² (2.5...25 mm²) - cable stiffness: flexible with cable end Power circuit: screw terminals 2 0.004...0.02 in² (2.5...10 mm²) - cable stiffness: flexible with cable end
Tightening torque	Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminal flat Ø 6 mm Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminal Philips No 2 Power circuit 44.3 lbf.in (5 N.m) screw terminal flat Ø 6 to Ø 8 mm Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminal pozidriv No 2
Auxiliary contact composition	1 NO + 1 NC
Auxiliary contacts type	Mechanically linked 1 NO + 1 NC IEC 60947-5-1 Mirror contact 1 NC IEC 60947-4-1
Minimum switching voltage	17 V for control circuit

Minimum switching current	5 mA for control circuit
Insulation resistance	> 10 MOhm for control 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 IEC 60947-5-1 EN 60947-5-1 UL 508 IEC 60947-4-1 EN 60947-4-1
Product certifications	GL RINA BV GOST LROS (Lloyds register of shipping) DNV CCC CSA UL
IP degree of protection	IP2X IEC 60529 IP2X VDE 0106
Climatic withstand	IACS E10 exposure to damp heat
Permissible ambient air temperature around the device	-76...176 °F (-60...80 °C) storage -40...140 °F (-40...60 °C) operation 140...158 °F (60...70 °C) with derating
Operating altitude	0...3000 m
Fire resistance	1562 °F (850 °C) IEC 60695-2-1
Flame retardance	V1 UL 94
Mechanical robustness	Shocks contactor opened 10 Gn Shocks contactor closed 15 gn Vibrations contactor opened 2 Gn, 5...300 Hz) Vibrations contactor closed 4 Gn, 5...300 Hz)
Height	5 in (127 mm)
Width	3.3 in (85 mm)
Depth	6.9 in (176 mm)
Net weight	4.817 lb(US) (2.185 kg)

Packing Units

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

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

Environmental Disclosure

[Product Environmental Profile](#)

Use Better



Materials and Substances

EU RoHS Directive

[Compliant](#)

Use Longer



Lifetime extension

Repair

No

Use Again



Repack and remanufacture

Circularity Profile

[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