

Product data sheet

Specifications



contactor TeSys Deca - 3 poles - AC-3 440V 50 A - coil 48 V AC

LC1D50E6

⚠ Discontinued

Main

Range	TeSys
Range of Product	TeSys D
Product or Component Type	Contactors
Device short name	LC1D
Contactor application	Motor control Motor control
Utilisation category	AC-1 AC-2 AC-4 AC-3
Poles description	3P
[Ue] rated operational voltage	Power circuit <= 690 V AC 25...400 Hz
[Ie] rated operational current	80 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit 65 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit
[Uc] control circuit voltage	220 V AC 50/60 Hz

Complementary

Motor power kW	25 kW at 415 V AC 50 Hz 30 kW at 440 V AC 50 Hz 30 kW at 500 V AC 50 Hz 33 kW at 660...690 V AC 50 Hz 15 kW at 220...230 V AC 50 Hz 30 kW at 1000 V AC 50 Hz (AC-4) 30 kW at 380...400 V AC 50 Hz (AC-3) 11 kW at 400 V AC 50 Hz (AC-4)
Maximum Horse Power Rating	7.5 hp at 230/240 V AC 60 Hz for 1 phase motors 15 hp at 200/208 V AC 60 Hz for 3 phase motors 15 hp at 230/240 V AC 60 Hz for 3 phase motors 40 hp at 460/480 V AC 60 Hz for 3 phase motors 40 hp at 575/600 V AC 60 Hz for 3 phase motors 10 hp at 230/240 V AC 60 Hz for 1 phase motors 5 hp at 115 V AC 60 Hz for 1 phase motors
Compatibility code	LC1D
Pole contact composition	3 NO
Protective cover	With
[Ith] conventional free air thermal current	80 A (at 140 °F (60 °C)) for power circuit 10 A (at 140 °F (60 °C)) for control circuit
Irms rated making capacity	140 A at 440 V AC for control circuit conforming to IEC 60947-5-1 140 A AC for control circuit conforming to IEC 60947-5-1 1000 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	1000 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

Associated fuse rating	100 A gG at ≤ 690 V coordination type 1 for power circuit 100 A gG at ≤ 690 V coordination type 2 for power circuit conforming to IEC 60947-5-1 125 A gG at ≤ 690 V coordination type 1 for power circuit 10 A gG for control circuit conforming to IEC 60947-5-1
Power dissipation per pole	9.6 W AC-1 6.3 W AC-3
[Ui] rated insulation voltage	Control circuit 600 V UL Power circuit 600 V CSA Power circuit 600 V UL IEC 60947-1 Control circuit 690 V IEC 60947-1 Power circuit 690 V CSA IEC 60947-1 Control circuit 600 V CSA
Overvoltage category	III
[Uimp] rated impulse withstand voltage	6 kV IEC 60947
Safety reliability level	B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1 B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1
Mechanical durability	6000000 cycles
Control circuit type	AC 50/60 Hz
Coil technology	Without built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.85...1.1 Uc (-40...131 °F (-40...55 °C)):operational AC 60 Hz 1...1.1 Uc (131...158 °F (55...70 °C)):operational AC 60 Hz 0.8...1.1 Uc (-40...140 °F (-40...60 °C)):operational AC 50 Hz 0.3...0.6 Uc (-40...158 °F (-40...70 °C)):drop-out AC 50/60 Hz
Inrush power in VA	160 VA cos phi 0.75 (at 68 °F (20 °C)) 140 VA cos phi 0.75 (at 68 °F (20 °C))
Hold-in power consumption in VA	15 VA 50 Hz cos phi 0.3 (at 68 °F (20 °C)) 13 VA 60 Hz cos phi 0.3 (at 68 °F (20 °C))
Heat dissipation	4...5 W at 50/60 Hz for control circuit
Operating time	12...26 ms closing 4...19 ms opening
Maximum operating rate	3600 cyc/h 140 °F (60 °C)
Connections - terminals	Control circuit: screw clamp terminals 2 0.002...0.006 in² (1...4 mm²) - cable stiffness: rigid without cable end 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 without cable end 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 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: rigid
Tightening torque	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 Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminal flat Ø 6 mm
Auxiliary contact composition	1 NO + 1 NC

Auxiliary contacts type	Mirror contact 1 NC IEC 60947-4-1 Mechanically linked 1 NO + 1 NC IEC 60947-5-1
Terminals description ISO n°1	(21-22)NC (A1-A2)CO
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 energisation between NC and NO contacts 1.5 ms on de-energisation between NC and NO contacts
Mounting Support	Plate Plate

Environment

Standards	IEC 60947-5-1 EN 60947-4-1 UL 508 CSA C22.2 No 14 IEC 60947-4-1
Product Certifications	BV RINA CSA CCC GL LROS (Lloyds register of shipping) DNV UL GL
IP degree of protection	IP2X VDE 0106 IP2X IEC 60529
Climatic withstand	IACS E10 exposure to damp heat IEC 60947-1 Annex Q category D 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...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	Shocks contactor closed 15 gn) Vibrations contactor opened 2 Gn, 5...300 Hz) Vibrations contactor closed 4 Gn, 5...300 Hz) Shocks contactor opened 10 Gn)
Height	4.8 in (122 mm)
Width	2.2 in (55 mm)
Depth	4.7 in (120 mm)
Net Weight	3.09 lb(US) (1.4 kg)
Quantity per Set	Set of 10

Ordering and shipping details

Category	22357-CTR, TESYS D, OPEN, 40-65A AC
Discount Schedule	I12
GTIN	00785901865223
Returnability	No

Country of origin	CZ
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Packing Units

Unit Type of Package 1	PCE
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Nbr. of units in pkg.	1
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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 Longer

Lifetime extension	
Repair	No

Use Again

Repack and remanufacture	
WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.