Product data sheet

Specifications

IEC contactor, TeSys D, nonreversing, 50A, 40HP at 480VAC, up to 100kA SCCR, 3 phase, 3 NO, 24VDC coil, open

LC1D50BD

Product availability: Stock - Normally stocked in distribution facility

Price*: 404.00 USD

Main

Range	TeSys
Range of Product	TeSys Deca
Product or Component Type	Contactor
Device short name	LC1D
contactor application	Resistive load Resistive load
Utilisation category	AC-2 AC-4 AC-3 AC-3e AC-4
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 50 A (at <140 °F (60 °C)) at <= 440 V AC AC-3e for power circuit 50 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit
[Uc] control circuit voltage	24 V DC

Complementary

Motor power kW	25 kW at 415 V AC 50 Hz (AC-3) 30 kW at 440 V AC 50 Hz (AC-3) 30 kW at 500 V AC 50 Hz (AC-3) 33 kW at 660...690 V AC 50 Hz (AC-3) 15 kW at 220...230 V AC 50 Hz (AC-3) 11 kW at 400 V AC 50 Hz (AC-4) 30 kW at 1000 V AC 50 Hz (AC-3) 22 kW at 380...400 V AC 50 Hz (AC-3e) 25 kW at 415 V AC 50 Hz (AC-3e) 30 kW at 440 V AC 50 Hz (AC-3e) 30 kW at 500 V AC 50 Hz (AC-3e) 33 kW at 660...690 V AC 50 Hz (AC-3e) 15 kW at 220...230 V AC 50 Hz (AC-3e) 30 kW at 1000 V AC 50 Hz (AC-3e) 22 kW at 380...400 V AC 50 Hz (AC-3)
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 3 hp at 115 V AC 60 Hz for 1 phase motors
Compatibility code	LC1D
Pole contact composition	3 NO

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

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	900 A at 440 V DC for power circuit conforming to IEC 60947 900 A at 440 V for power circuit conforming to IEC 60947 250 A DC for control circuit conforming to IEC 60947-5-1
Rated breaking capacity	900 A at 440 V for power circuit conforming to IEC 60947
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 10 A gG for control circuit conforming to IEC 60947-5-1
Power dissipation per pole	9.6 W AC-1 3.7 W AC-3e 3.7 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 IEC 60947-1 Power circuit 1000 V CSA IEC 60947-4-1 Control circuit 600 V CSA
Overvoltage category	III
[Uimp] rated impulse withstand voltage	8 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	10000000 cycles
Control circuit type	DC wide range
Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	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 0.1...0.3 Uc -40…158 °F (-40…70 °C) drop-out 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	48 W 24 V DC-13 3000000 cycles - control circuit 96 W 24 V DC-13 1000000 cycles - control circuit 14 W 24 V DC-13 10000000 cycles - control circuit
Operating time	50 ±15 % ms closing 20 ±20 % ms opening
Time constant	34 ms
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
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	CSA C22.2 No 14 IEC 60947-5-1 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1
Product Certifications	CSA DNV RINA BV CCC UL GOST GL UKCA CCC
IP degree of protection	IP2X VDE 0106 IP2X IEC 60529
Climatic withstand	IACS E10 exposure to damp heat
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 for 11 ms) Vibrations contactor opened 2 Gn, 5...300 Hz) Vibrations contactor closed 4 Gn, 5...300 Hz) Shocks contactor opened 10 Gn for 11 ms)
Height	5.0000000000 in (127 mm)
Width	3.3 in (85 mm)
Depth	6.9 in (176 mm)
Net Weight	4.817 lb(US) (2.185 kg)

Ordering and shipping details

Category	US10I1222358
Discount Schedule	0I12
GTIN	3389110420814
Returnability	Yes
Country of origin	CZ

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	3.5 in (9.0 cm)
Package 1 Width	5.5 in (14.0 cm)
Package 1 Length	7.3 in (18.5 cm)
Package 1 Weight	4.782 lb(US) (2.169 kg)
Unit Type of Package 2	S02
Number of Units in Package 2	2
Package 2 Height	5.9 in (15 cm)
Package 2 Width	11.8 in (30 cm)
Package 2 Length	15.7 in (40 cm)
Package 2 Weight	10.646 lb(US) (4.829 kg)

Contractual warranty

Warranty	18 months

Sustainability

Green Premium^{TM} label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO_2 products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >

Transparency

RoHS/REACh

Well-being performance

Reach Free Of Svhc	
Toxic Heavy Metal Free	
Mercury Free	
Rohs Exemption Information	Yes
Pvc Free	

Certifications & Standards

Reach Regulation	REACh Declaration
Eu Rohs Directive	Compliant EU RoHS Declaration
China Rohs Regulation	China RoHS declaration Pro-active China RoHS declaration (out of China RoHS legal scope)
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
Circularity Profile	No need of specific recycling operations
California Proposition 65	WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov

Offer Marketing Illustration

Product benefits / Features

Offer Marketing Illustration

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Product benefits / Features