

Product data sheet

Specifications



IEC contactor, TeSys Deca, nonreversing, 50A, 40HP at 480VAC, up to 100kA SCCR, 3 phase, 3 NO, 480VAC 50/60Hz coil, open

LC1D50AT7

Product availability: Stock - Normally stocked in distribution facility

Price*: 295.20 USD

Main

Range	TeSys TeSys Deca
Range of Product	TeSys Deca
Product or Component Type	Contacteur
Device short name	LC1D
contactor application	Resistive load Motor control
Utilisation category	AC-4 AC-1 AC-3 AC-3e
poles description	3P
[Ue] rated operational voltage	Power circuit <= 690 V AC 25...400 Hz Power circuit <= 300 V DC
[Ie] rated operational current	50 A (at <140.0000000000 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 80 A (at <140.0000000000 °F (60 °C)) at <= 440 V AC AC-1 for power circuit 50 A (at <140.0000000000 °F (60 °C)) at <= 440 V AC AC-3e for power circuit
[Uc] control circuit voltage	480 V AC 60 Hz

Complementary

Motor power kW	15 kW at 220...230 V AC 50/60 Hz (AC-3) 22 kW at 380...400 V AC 50/60 Hz (AC-3) 30 kW at 500 V AC 50/60 Hz (AC-3) 33 kW at 660...690 V AC 50/60 Hz (AC-3) 25 kW at 415 V AC 50/60 Hz (AC-3) 30 kW at 440 V AC 50/60 Hz (AC-3) 11 kW at 400 V AC 50/60 Hz (AC-4) 15 kW at 220...230 V AC 50/60 Hz (AC-3e) 22 kW at 380...400 V AC 50/60 Hz (AC-3e) 30 kW at 500 V AC 50/60 Hz (AC-3e) 33 kW at 660...690 V AC 50/60 Hz (AC-3e) 25 kW at 415 V AC 50/60 Hz (AC-3e) 30 kW at 440 V AC 50/60 Hz (AC-3e)
Maximum Horse Power Rating	3 hp at 115 V AC 50/60 Hz for 1 phase motors 7.5 hp at 230/240 V AC 50/60 Hz for 1 phase motors 15 hp at 200/208 V AC 50/60 Hz for 3 phase motors 15 hp at 230/240 V AC 50/60 Hz for 3 phase motors 40 hp at 460/480 V AC 50/60 Hz for 3 phase motors 40 hp at 575/600 V AC 50/60 Hz for 3 phase motors
Compatibility code	LC1D

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

Pole contact composition	3 NO
Protective cover	With
[I_{th}] conventional free air thermal current	10 A (at 140.0000000000 °F (60 °C)) for signalling circuit 80 A (at 140.0000000000 °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 60947-5-1 900 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	900 A at 440 V for power circuit conforming to IEC 60947
[I_{cw}] rated short-time withstand current	400 A 104.0000000000 °F (40 °C) - 10 s for power circuit 810 A 104.0000000000 °F (40 °C) - 1 s for power circuit 84 A 104.0000000000 °F (40 °C) - 10 min for power circuit 208 A 104.0000000000 °F (40 °C) - 1 min 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 60947-5-1 100 A gG at <= 690 V coordination type 1 for power circuit 100 A gG at <= 690 V coordination type 2 for power circuit
Average impedance	1.5 mOhm - I _{th} 80 A 50 Hz for power circuit
Power dissipation per pole	3.7 W AC-3 9.6 W AC-1 3.7 W AC-3e
[U_i] rated insulation voltage	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 Power circuit 690 V IEC 60947-4-1
Overvoltage category	III
Pollution degree	3
[U_{imp}] rated impulse withstand voltage	6 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	6 Mcycles
Electrical durability	1.45 Mcycles 50 A AC-3 <= 440 V 1.1 Mcycles 80 A AC-1 <= 440 V 1.45 Mcycles 50 A AC-3e <= 440 V
Control circuit type	AC 60 Hz
Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.3...0.6 U _c -40.0000000000...158.0000000000 °F (-40...70 °C) drop-out AC 60 Hz 0.85...1.1 U _c -40.0000000000...140.0000000000 °F (-40...60 °C) operational AC 60 Hz 1...1.1 U _c 140.0000000000...158.0000000000 °F (60...70 °C) operational AC 60 Hz
Inrush power in VA	140 VA 60 Hz cos phi 0.75 (at 68.0000000000 °F (20 °C))
Hold-in power consumption in VA	13 VA 60 Hz cos phi 0.3 (at 68.0000000000 °F (20 °C))
Heat dissipation	4...5 W at 60 Hz
Operating time	4...19 ms opening 12...26 ms closing
Maximum operating rate	3600 cyc/h 140.0000000000 °F (60 °C)
Maximum operating rate	3600 cyc/h at 60 °C

Connections - terminals	<p>Control circuit: screw clamp terminals 2 0.002...0.004 in² (1...2.5 mm²) - cable stiffness: flexible with cable end</p> <p>Control circuit: screw clamp terminals 1 0.002...0.006 in² (1...4 mm²) - cable stiffness: flexible without cable end</p> <p>Control circuit: screw clamp terminals 2 0.002...0.006 in² (1...4 mm²) - cable stiffness: flexible without cable end</p> <p>Control circuit: screw clamp terminals 1 0.002...0.006 in² (1...4 mm²) - cable stiffness: flexible with cable end</p> <p>Control circuit: screw clamp terminals 1 0.002...0.006 in² (1...4 mm²) - cable stiffness: solid without cable end</p> <p>Control circuit: screw clamp terminals 2 0.002...0.006 in² (1...4 mm²) - cable stiffness: solid without cable end</p> <p>Power circuit: EverLink BTR screw connectors 1 0.002...0.05 in² (1...35 mm²) - cable stiffness: flexible without cable end</p> <p>Power circuit: EverLink BTR screw connectors 2 0.002...0.04 in² (1...25 mm²) - cable stiffness: flexible without cable end</p> <p>Power circuit: EverLink BTR screw connectors 1 0.002...0.05 in² (1...35 mm²) - cable stiffness: flexible with cable end</p> <p>Power circuit: EverLink BTR screw connectors 2 0.002...0.04 in² (1...25 mm²) - cable stiffness: flexible with cable end</p> <p>Power circuit: EverLink BTR screw connectors 1 0.002...0.05 in² (1...35 mm²) - cable stiffness: solid without cable end</p> <p>Power circuit: EverLink BTR screw connectors 2 0.002...0.04 in² (1...25 mm²) - cable stiffness: solid without cable end</p>
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Tightening torque	<p>Control circuit 15.05 lbf.in (1.7 N.m) EverLink BTR screw connectors flat Ø 6 mm</p> <p>Control circuit 15.05 lbf.in (1.7 N.m) EverLink BTR screw connectors Philips No 2</p> <p>Power circuit 70.8 lbf.in (8 N.m) EverLink BTR screw connectors 0.04...0.05 in² (25...35 mm²) hexagonal 0.2 in (4 mm)</p> <p>Power circuit 44.3 lbf.in (5 N.m) EverLink BTR screw connectors 0.002...0.04 in² (1...25 mm²) hexagonal 0.2 in (4 mm)</p> <p>Control circuit 15.05 lbf.in (1.7 N.m) EverLink BTR screw connectors pozidriv No 2</p> <p>Power circuit 22.1 lbf.in (2.5 N.m) EverLink BTR screw connectors pozidriv No 2</p>
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Auxiliary contact composition	1 NO + 1 NC
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Auxiliary contacts type	Mechanically linked 1 NO + 1 NC IEC 60947-5-1 Mirror contact 1 NC IEC 60947-4-1
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Signalling circuit frequency	25...400 Hz
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Minimum switching voltage	17 V for signalling circuit
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Minimum switching current	5 mA for signalling circuit
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Insulation resistance	> 10 MOhm for signalling circuit
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Non-overlap time	1.5 ms on de-energisation between NC and NO contact 1.5 ms on energisation between NC and NO contact
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Mounting Support	Plate Rail
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Environment

Standards	<p>EN 60947-4-1</p> <p>EN 60947-5-1</p> <p>IEC 60947-4-1</p> <p>IEC 60947-5-1</p> <p>CSA C22.2 No 14</p> <p>UL 60947-4-1</p> <p>IEC 60335-2-40:Annex JJ</p> <p>UL 60335-2-40:Annex JJ</p> <p>IEC 60335-1:Clause 30.2</p>
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Product Certifications	<p>CCC</p> <p>UL</p> <p>CB Scheme</p> <p>CSA</p> <p>CE</p> <p>UKCA</p> <p>Marine</p> <p>EAC</p>
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IP degree of protection	IP20 front face IEC 60529
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Protective treatment	THIEC 60068-2-30
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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	-40.0000000000...140.0000000000 °F (-40...60 °C) 140.0000000000...158.0000000000 °F (60...70 °C) with derating
Operating altitude	0...9842.52 ft (0...3000 m)
Fire resistance	1562.0000000000 °F (850 °C) IEC 60695-2-1
Flame retardance	V1 conforming to UL 94
Mechanical robustness	Vibrations contactor open 2 Gn, 5...300 Hz) Vibrations contactor closed 4 Gn, 5...300 Hz) Shocks contactor closed 15 Gn for 11 ms) Shocks contactor open 10 Gn for 11 ms)
Height	4.8 in (122 mm)
Width	2.2 in (55 mm)
Depth	4.7 in (120 mm)
Net Weight	1.885 lb(US) (0.855 kg)

Ordering and shipping details

Category	US10I1222357
Discount Schedule	0112
GTIN	3389119408769
Returnability	Yes
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.4 in (6.2 cm)
Package 1 Width	5.4 in (13.7 cm)
Package 1 Length	6.0 in (15.2 cm)
Package 1 Weight	33.2 oz (942.0 g)
Unit Type of Package 2	S02
Number of Units in Package 2	10
Package 2 Height	5.9 in (15.0 cm)
Package 2 Width	11.8 in (30.0 cm)
Package 2 Length	15.7 in (40.0 cm)
Package 2 Weight	21.771 lb(US) (9.875 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	160
Package 3 Height	30.3 in (77.0 cm)
Package 3 Width	31.5 in (80.0 cm)
Package 3 Length	23.6 in (60.0 cm)
Package 3 Weight	368.13 lb(US) (166.98 kg)

Contractual warranty

Warranty

18 months

Sustainability

Green Premium™ 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-CO₂ 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 >](#)



Sustainable Packaging Transparency RoHS/REACH

Resource performance

Sustainable Packaging

Well-being performance

Reach Free Of Svhc

Toxic Heavy Metal Free

Mercury Free

Rohs Exemption Information [Yes](#)

Pvc Free

Certifications & Standards

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 [End of Life Information](#)

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
