

# Product data sheet

Specifications



IEC contactor, TeSys Deca, nonreversing, 12A, 7.5HP at 480VAC, up to 100kA SCCR, 3 phase, 3 NO, 480VAC 50/60Hz coil, open

LC1D12T7

Product availability: Stock - Normally stocked in distribution facility

**Price\*: 142.80 USD**

## Main

Range of Product	TeSys Deca
Product or Component Type	Contactors
Device short name	LC1D
contactor application	Resistive load Motor control
Utilisation category	AC-3 AC-4 AC-1 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	25 A (at <140.0000000000 °F (60 °C)) at <= 440 V AC AC-1 for power circuit 12 A (at <140.0000000000 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 12 A (at <140.0000000000 °F (60 °C)) at <= 440 V AC AC-3e for power circuit
[Uc] control circuit voltage	480 V AC 50/60 Hz

## Complementary

Motor power kW	3 kW at 220...230 V AC 50/60 Hz (AC-3) 5.5 kW at 380...400 V AC 50/60 Hz (AC-3) 5.5 kW at 415...440 V AC 50/60 Hz (AC-3) 7.5 kW at 500 V AC 50/60 Hz (AC-3) 7.5 kW at 660...690 V AC 50/60 Hz (AC-3) 3.7 kW at 400 V AC 50/60 Hz (AC-4) 3 kW at 220...230 V AC 50/60 Hz (AC-3e) 5.5 kW at 380...400 V AC 50/60 Hz (AC-3e) 5.5 kW at 415...440 V AC 50/60 Hz (AC-3e) 7.5 kW at 500 V AC 50/60 Hz (AC-3e) 7.5 kW at 660...690 V AC 50/60 Hz (AC-3e)
Maximum Horse Power Rating	0.5 hp at 115 V AC 50/60 Hz for 1 phase motors 2 hp at 230/240 V AC 50/60 Hz for 1 phase motors 3 hp at 200/208 V AC 50/60 Hz for 3 phase motors 3 hp at 230/240 V AC 50/60 Hz for 3 phase motors 7.5 hp at 460/480 V AC 50/60 Hz for 3 phase motors 10 hp at 575/600 V AC 50/60 Hz for 3 phase motors
Compatibility code	LC1D
Pole contact composition	3 NO
Protective cover	With

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

<b>[Ith] conventional free air thermal current</b>	25 A (at 140.0000000000 °F (60 °C)) for power circuit 10 A (at 140.0000000000 °F (60 °C)) for signalling circuit
<b>Irms rated making capacity</b>	250 A at 440 V for power circuit conforming to IEC 60947 140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1
<b>Rated breaking capacity</b>	250 A at 440 V for power circuit conforming to IEC 60947
<b>[Icw] rated short-time withstand current</b>	105 A 104.0000000000 °F (40 °C) - 10 s for power circuit 210 A 104.0000000000 °F (40 °C) - 1 s for power circuit 30 A 104.0000000000 °F (40 °C) - 10 min for power circuit 61 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
<b>Associated fuse rating</b>	10 A gG for signalling circuit conforming to IEC 60947-5-1 40 A gG at <= 690 V coordination type 1 for power circuit 25 A gG at <= 690 V coordination type 2 for power circuit
<b>Average impedance</b>	2.5 mOhm - Ith 25 A 50 Hz for power circuit
<b>Power dissipation per pole</b>	0.36 W AC-3 1.56 W AC-1 0.36 W AC-3e
<b>[Ui] rated insulation voltage</b>	Power circuit 690 V IEC 60947-4-1 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
<b>Overvoltage category</b>	III
<b>Pollution degree</b>	3
<b>[Uimp] rated impulse withstand voltage</b>	6 kV IEC 60947
<b>Safety reliability level</b>	B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1
<b>Mechanical durability</b>	15 Mcycles
<b>Electrical durability</b>	2 Mcycles 12 A AC-3 <= 440 V 0.8 Mcycles 25 A AC-1 <= 440 V 2 Mcycles 12 A AC-3e <= 440 V
<b>Control circuit type</b>	AC 50/60 Hz
<b>Coil technology</b>	Without built-in suppressor module
<b>Control circuit voltage limits</b>	0.3...0.6 Uc -40.0000000000...158.0000000000 °F (-40...70 °C) drop-out AC 50/60 Hz 0.8...1.1 Uc -40.0000000000...140.0000000000 °F (-40...60 °C) operational AC 50 Hz 0.85...1.1 Uc -40.0000000000...140.0000000000 °F (-40...60 °C) operational AC 60 Hz 1...1.1 Uc 140.0000000000...158.0000000000 °F (60...70 °C) operational AC 50/60 Hz
<b>Inrush power in VA</b>	70 VA 60 Hz cos phi 0.75 (at 68.0000000000 °F (20 °C)) 70 VA 50 Hz cos phi 0.75 (at 68.0000000000 °F (20 °C))
<b>Hold-in power consumption in VA</b>	7.5 VA 60 Hz cos phi 0.3 (at 68.0000000000 °F (20 °C)) 7 VA 50 Hz cos phi 0.3 (at 68.0000000000 °F (20 °C))
<b>Heat dissipation</b>	2...3 W at 50/60 Hz
<b>Operating time</b>	12...22 ms closing 4...19 ms opening
<b>Maximum operating rate</b>	3600 cyc/h 140.0000000000 °F (60 °C)
<b>Maximum operating rate</b>	3600 cyc/h at 60 °C

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

<b>Standards</b>	<p>CSA C22.2 No 14</p> <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>UL 60947-4-1</p> <p>IEC 60335-1:Clause 30.2</p> <p>IEC 60335-2-40:Annex JJ</p> <p>UL 60335-2-40:Annex JJ</p> <p>CSA C22.2 No 60947-4-1</p>
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<b>Product Certifications</b>	<p>UL</p> <p>CCC</p> <p>CSA</p> <p>Marine</p> <p>UKCA</p> <p>EAC</p> <p>CB Scheme</p>
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<b>IP degree of protection</b>	IP20 front face IEC 60529
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<b>Protective treatment</b>	THIEC 60068-2-30
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<b>Climatic withstand</b>	<p>IACS E10 exposure to damp heat</p> <p>IEC 60947-1 Annex Q category D exposure to damp heat</p>
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<b>Permissible ambient air temperature around the device</b>	-40.0000000000...140.0000000000 °F (-40...60 °C) 140.0000000000...158.0000000000 °F (60...70 °C) with derating
<b>Operating altitude</b>	0...9842.52 ft (0...3000 m)
<b>Fire resistance</b>	1562.0000000000 °F (850 °C) IEC 60695-2-1
<b>Flame retardance</b>	V1 conforming to UL 94
<b>Mechanical robustness</b>	Vibrations contactor open 2 Gn, 5...300 Hz) Vibrations contactor closed 4 Gn, 5...300 Hz) Shocks contactor open 10 Gn for 11 ms) Shocks contactor closed 15 Gn for 11 ms)
<b>Height</b>	3.03 in (77 mm)
<b>Width</b>	1.8 in (45 mm)
<b>Depth</b>	3.4 in (86 mm)
<b>Net Weight</b>	0.717 lb(US) (0.325 kg)

## Ordering and shipping details

<b>Category</b>	US10I1222354
<b>Discount Schedule</b>	0I12
<b>GTIN</b>	3389110349238
<b>Returnability</b>	Yes
<b>Country of origin</b>	ID

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	4.3 in (11.0 cm)
<b>Package 1 Width</b>	3.5 in (9.0 cm)
<b>Package 1 Length</b>	1.9 in (4.9 cm)
<b>Package 1 Weight</b>	12.5 oz (353.0 g)
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	20
<b>Package 2 Height</b>	5.9 in (15.0 cm)
<b>Package 2 Width</b>	11.8 in (30.0 cm)
<b>Package 2 Length</b>	15.7 in (40.0 cm)
<b>Package 2 Weight</b>	16.568 lb(US) (7.515 kg)
<b>Unit Type of Package 3</b>	P06
<b>Number of Units in Package 3</b>	320
<b>Package 3 Height</b>	30.3 in (77.0 cm)
<b>Package 3 Width</b>	31.5 in (80.0 cm)
<b>Package 3 Length</b>	23.6 in (60.0 cm)
<b>Package 3 Weight</b>	264.8 lb(US) (120.1 kg)

## Contractual warranty

<b>Warranty</b>	18 months
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## 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-CO<sub>2</sub> 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

 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 [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](http://www.P65Warnings.ca.gov)

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