

# Product data sheet

Specifications



IEC contactor, TeSys Deca, nonreversing, 40A, 30HP at 480VAC, up to 100kA SCCR, 3 phase, 3 NO, 110VAC 50/60Hz coil, open

LC1D40AF7

Product availability: Stock - Normally stocked in distribution facility

Price\*: 261.60 USD

## Main

Range	TeSys TeSys Deca
Range Of Product	TeSys Deca
Product Or Component Type	Contactor
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	60 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit 40 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 40 A (at <140 °F (60 °C)) at <= 440 V AC AC-3e for power circuit
[Uc] Control Circuit Voltage	110 V AC 50/60 Hz

## Complementary

Motor Power Kw	18.5 kW at 380...400 V AC 50/60 Hz (AC-3) 11 kW at 220...230 V AC 50/60 Hz (AC-3) 22 kW at 415...440 V AC 50/60 Hz (AC-3) 22 kW at 500 V AC 50/60 Hz (AC-3) 30 kW at 660...690 V AC 50/60 Hz (AC-3) 9 kW at 400 V AC 50/60 Hz (AC-4) 18.5 kW at 380...400 V AC 50/60 Hz (AC-3e) 11 kW at 220...230 V AC 50/60 Hz (AC-3e) 22 kW at 415...440 V AC 50/60 Hz (AC-3e) 22 kW at 500 V AC 50/60 Hz (AC-3e) 30 kW at 660...690 V AC 50/60 Hz (AC-3e)
Maximum Horse Power Rating	5 hp at 230/240 V AC 50/60 Hz for 1 phase motors 10 hp at 230/240 V AC 50/60 Hz for 3 phase motors 30 hp at 575/600 V AC 50/60 Hz for 3 phase motors 10 hp at 200/208 V AC 50/60 Hz for 3 phase motors 3 hp at 115 V AC 50/60 Hz for 1 phase motors 30 hp at 460/480 V AC 50/60 Hz for 3 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.

<b>Contact Compatibility</b>	M2
<b>Protective Cover</b>	With
<b>[Ith] Conventional Free Air Thermal Current</b>	10 A (at 140 °F (60 °C)) for signalling circuit 60 A (at 140 °F (60 °C)) for power circuit
<b>Irms Rated Making Capacity</b>	140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1 800 A at 440 V for power circuit conforming to IEC 60947
<b>Rated Breaking Capacity</b>	800 A at 440 V for power circuit conforming to IEC 60947
<b>[Icw] Rated Short-Time Withstand Current</b>	320 A 104 °F (40 °C) - 10 s for power circuit 720 A 104 °F (40 °C) - 1 s for power circuit 72 A 104 °F (40 °C) - 10 min for power circuit 165 A 104 °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 80 A gG at <= 690 V coordination type 1 for power circuit 80 A gG at <= 690 V coordination type 2 for power circuit
<b>Average Impedance</b>	1.5 mOhm - Ith 60 A 50 Hz for power circuit
<b>Power Dissipation Per Pole</b>	2.4 W AC-3 5.4 W AC-1 2.4 W AC-3e
<b>[Ui] Rated Insulation Voltage</b>	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
<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>	6 Mcycles
<b>Electrical Durability</b>	1.4 Mcycles 60 A AC-1 <= 440 V 1.5 Mcycles 40 A AC-3 <= 440 V 1.5 Mcycles 40 A AC-3e <= 440 V
<b>Control Circuit Type</b>	AC 50/60 Hz standard
<b>Coil Technology</b>	Without built-in suppressor module
<b>Control Circuit Voltage Limits</b>	0.3...0.6 Uc -40...158 °F (-40...70 °C) drop-out AC 50/60 Hz 0.8...1.1 Uc -40...140 °F (-40...60 °C) operational AC 50 Hz 0.85...1.1 Uc -40...140 °F (-40...60 °C) operational AC 60 Hz 1...1.1 Uc 140...158 °F (60...70 °C) operational AC 50/60 Hz
<b>Inrush Power In Va</b>	140 VA 60 Hz cos phi 0.75 (at 68 °F (20 °C)) 160 VA 50 Hz cos phi 0.75 (at 68 °F (20 °C))
<b>Hold-In Power Consumption In Va</b>	13 VA 60 Hz cos phi 0.3 (at 68 °F (20 °C)) 15 VA 50 Hz cos phi 0.3 (at 68 °F (20 °C))
<b>Heat Dissipation</b>	4...5 W at 50/60 Hz
<b>Operating Time</b>	4...19 ms opening 12...26 ms closing
<b>Maximum Operating Rate</b>	3600 cyc/h 140 °F (60 °C)

<b>Connections - Terminals</b>	<p>Control circuit: screw clamp terminals 2 0.00...0.00 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 0.00...0.01 in<sup>2</sup> (1...4 mm<sup>2</sup>) - cable stiffness: flexible without cable end</p> <p>Control circuit: screw clamp terminals 2 0.00...0.01 in<sup>2</sup> (1...4 mm<sup>2</sup>) - cable stiffness: flexible without cable end</p> <p>Control circuit: screw clamp terminals 1 0.00...0.01 in<sup>2</sup> (1...4 mm<sup>2</sup>) - cable stiffness: flexible with cable end</p> <p>Control circuit: screw clamp terminals 1 0.00...0.01 in<sup>2</sup> (1...4 mm<sup>2</sup>) - cable stiffness: solid without cable end</p> <p>Control circuit: screw clamp terminals 2 0.00...0.01 in<sup>2</sup> (1...4 mm<sup>2</sup>) - cable stiffness: solid without cable end</p> <p>Power circuit: screw connection 1 0.00...0.05 in<sup>2</sup> (1...35 mm<sup>2</sup>) - cable stiffness: flexible without cable end</p> <p>Power circuit: screw connection 2 0.00...0.04 in<sup>2</sup> (1...25 mm<sup>2</sup>) - cable stiffness: flexible without cable end</p> <p>Power circuit: screw connection 1 0.00...0.05 in<sup>2</sup> (1...35 mm<sup>2</sup>) - cable stiffness: flexible with cable end</p> <p>Power circuit: screw connection 2 0.00...0.04 in<sup>2</sup> (1...25 mm<sup>2</sup>) - cable stiffness: flexible with cable end</p> <p>Power circuit: screw connection 1 0.00...0.05 in<sup>2</sup> (1...35 mm<sup>2</sup>) - cable stiffness: solid without cable end</p> <p>Power circuit: screw connection 2 0.00...0.04 in<sup>2</sup> (1...25 mm<sup>2</sup>) - cable stiffness: solid without cable end</p>
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<b>Tightening Torque</b>	<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>Power circuit 70.81 lbf.in (8 N.m) EverLink BTR screw connectors 0.04...0.05 in<sup>2</sup> (25...35 mm<sup>2</sup>) hexagonal 0.16 in (4 mm)</p> <p>Power circuit 44.25 lbf.in (5 N.m) EverLink BTR screw connectors 0.00...0.04 in<sup>2</sup> (1...25 mm<sup>2</sup>) hexagonal 0.16 in (4 mm)</p> <p>Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2</p> <p>Power circuit 22.13 lbf.in (2.5 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>	Mechanically linked 1 NO + 1 NC IEC 60947-5-1 Mirror contact 1 NC IEC 60947-4-1
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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>	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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<b>Mounting Support</b>	Rail Plate
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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 508</p> <p>IEC 60335-1</p>
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<b>Product Certifications</b>	<p>CCC</p> <p>CSA</p> <p>GOST</p> <p>UL</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>	<p>-40...140 °F (-40...60 °C)</p> <p>140...158 °F (60...70 °C) with derating</p>
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<b>Operating Altitude</b>	0...9842.52 ft (0...3000 m)
<b>Fire Resistance</b>	1562 °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 closed 15 Gn for 11 ms) Shocks contactor open 10 Gn for 11 ms)
<b>Height</b>	4.80 in (122 mm)
<b>Width</b>	2.17 in (55 mm)
<b>Depth</b>	4.72 in (120 mm)
<b>Net Weight</b>	1.87 lb(US) (0.85 kg)

## Ordering and shipping details

<b>Category</b>	US10I1222357
<b>Discount Schedule</b>	0112
<b>Gtin</b>	3389119408356
<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>	2.44 in (6.2 cm)
<b>Package 1 Width</b>	5.31 in (13.5 cm)
<b>Package 1 Length</b>	6.10 in (15.5 cm)
<b>Package 1 Weight</b>	32.45 oz (920.0 g)
<b>Unit Type Of Package 2</b>	P06
<b>Number Of Units In Package 2</b>	160
<b>Package 2 Height</b>	29.53 in (75.0 cm)
<b>Package 2 Width</b>	31.50 in (80.0 cm)
<b>Package 2 Length</b>	23.62 in (60.0 cm)
<b>Package 2 Weight</b>	366.72 lb(US) (166.34 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 >](#)



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**

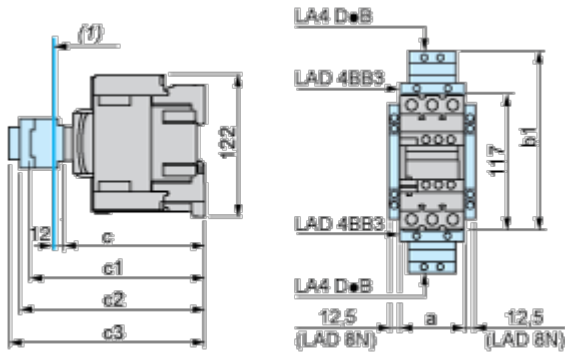
[End of Life Information](#)

**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)

Dimensions Drawings

Dimensions



(1) Minimum electrical clearance

LC1		D40A...D65A
a		55
b1	with LA4 D•2	–
	with LA4 DB3 or LAD 4BB3	136
	with LA4 DF, DT	157
	with LA4 DM, DW, DL	166
c	without cover or add-on blocks	118
	with cover, without add-on blocks	120
c1	with LAD N (1 contact)	–
	with LAD N or C (2 or 4 contacts)	150
c2	with LA6 DK10, LAD 6DK	163
c3	with LAD T, R, S	171
	with LAD T, R, S and sealing cover	175

Connections and Schema

Wiring

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