

# Product data sheet

Specifications



## TeSys Deca contactor - 3P(3 NO) - AC-3/AC-3e - <= 440 V 9 A - 48 V DC coil

LC1D09EL

Product availability: Non-Stock - Not normally stocked in distribution facility

Price\*: 112.80 USD

### Main

Range Of Product	TeSys Deca
Product Or Component Type	Contactors
Device Short Name	LC1D
Contactors Application	Motor control Resistive load
Utilisation Category	AC-1 AC-4 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	9 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 25 A (at <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit 9 A (at <140 °F (60 °C)) at <= 440 V AC AC-3e for power circuit
[Uc] Control Circuit Voltage	48 V DC

### Complementary

Motor Power Kw	2.2 kW at 220...230 V AC 50/60 Hz (AC-3) 4 kW at 380...400 V AC 50/60 Hz (AC-3) 4 kW at 415...440 V AC 50/60 Hz (AC-3) 5.5 kW at 500 V AC 50/60 Hz (AC-3) 5.5 kW at 660...690 V AC 50/60 Hz (AC-3) 2.2 kW at 400 V AC 50/60 Hz (AC-4) 2.2 kW at 220...230 V AC 50/60 Hz (AC-3e) 4 kW at 380...400 V AC 50/60 Hz (AC-3e) 4 kW at 415...440 V AC 50/60 Hz (AC-3e) 5.5 kW at 500 V AC 50/60 Hz (AC-3e) 5.5 kW at 660...690 V AC 50/60 Hz (AC-3e)
Maximum Horse Power Rating	1 hp at 230/240 V AC 50/60 Hz for 1 phase motors 2 hp at 200/208 V AC 50/60 Hz for 3 phase motors 2 hp at 230/240 V AC 50/60 Hz for 3 phase motors 5 hp at 460/480 V AC 50/60 Hz for 3 phase motors 7.5 hp at 575/600 V AC 50/60 Hz for 3 phase motors 0.33 hp at 115 V AC 50/60 Hz for 1 phase motors
Compatibility Code	LC1D
Pole Contact Composition	3 NO
Contact Compatibility	M5
Protective Cover	With
[Ith] Conventional Free Air Thermal Current	25 A (at 140 °F (60 °C)) for power circuit 10 A (at 140 °F (60 °C)) for signalling circuit

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

<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 °F (40 °C) - 10 s for power circuit 210 A 104 °F (40 °C) - 1 s for power circuit 30 A 104 °F (40 °C) - 10 min for power circuit 61 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 25 A gG at <= 690 V coordination type 1 for power circuit 20 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>	1.56 W AC-1 0.2 W AC-3 0.2 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>	30 Mcycles
<b>Electrical Durability</b>	0.6 Mcycles 25 A AC-1 <= 440 V 2 Mcycles 9 A AC-3 <= 440 V 2 Mcycles 9 A AC-3e <= 440 V
<b>Control Circuit Type</b>	DC low consumption
<b>Coil Technology</b>	Built-in bidirectional peak limiting diode suppressor
<b>Control Circuit Voltage Limits</b>	0.1...0.3 Uc -40...158 °F (-40...70 °C) drop-out DC 0.8...1.25 Uc -40...140 °F (-40...60 °C) operational DC 1...1.25 Uc 140...158 °F (60...70 °C) operational DC
<b>Inrush Power In W</b>	2.4 W 68 °F (20 °C))
<b>Hold-In Power Consumption In W</b>	2.4 W 68 °F (20 °C)
<b>Operating Time</b>	77 ±15 % ms closing 25 ±20 % ms opening
<b>Time Constant</b>	40 ms
<b>Maximum Operating Rate</b>	3600 cyc/h 140 °F (60 °C)

<b>Connections - Terminals</b>	<p>Power 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>Power 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>Power 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>Power 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>Power 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>Power 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>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 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: 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>
<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>
<b>Auxiliary Contact Composition</b>	1 NO + 1 NC
<b>Auxiliary Contacts Type</b>	Mechanically linked 1 NO + 1 NC IEC 60947-5-1 Mirror contact 1 NC IEC 60947-4-1
<b>Signalling Circuit Frequency</b>	25...400 Hz
<b>Minimum Switching Voltage</b>	17 V for signalling circuit
<b>Minimum Switching Current</b>	5 mA for signalling circuit
<b>Insulation Resistance</b>	> 10 MOhm for signalling circuit
<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
<b>Mounting Support</b>	Rail Plate

## 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>
<b>Product Certifications</b>	<p>DNV</p> <p>BV</p> <p>CSA</p> <p>RINA</p> <p>GOST</p> <p>CCC</p> <p>GL</p> <p>LROS (Lloyds register of shipping)</p> <p>UL</p> <p>UKCA</p>
<b>Ip Degree Of Protection</b>	IP20 front face IEC 60529
<b>Protective Treatment</b>	THIEC 60068-2-30
<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>

<b>Permissible Ambient Air Temperature Around The Device</b>	-40...140 °F (-40...60 °C) 140...158 °F (60...70 °C) with derating
<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 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>	1.77 in (45 mm)
<b>Depth</b>	3.74 in (95 mm)
<b>Net Weight</b>	1.06 lb(US) (0.48 kg)

## Ordering and shipping details

<b>Category</b>	US10I1222354
<b>Discount Schedule</b>	0I12
<b>Gtin</b>	3389110361100
<b>Returnability</b>	No
<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>	1.93 in (4.9 cm)
<b>Package 1 Width</b>	4.37 in (11.1 cm)
<b>Package 1 Length</b>	3.50 in (8.9 cm)
<b>Package 1 Weight</b>	12.84 oz (364.0 g)
<b>Unit Type Of Package 2</b>	S02
<b>Number Of Units In Package 2</b>	15
<b>Package 2 Height</b>	5.91 in (15.0 cm)
<b>Package 2 Width</b>	11.81 in (30.0 cm)
<b>Package 2 Length</b>	15.75 in (40.0 cm)
<b>Package 2 Weight</b>	13.04 lb(US) (5.915 kg)
<b>Unit Type Of Package 3</b>	P06
<b>Number Of Units In Package 3</b>	240
<b>Package 3 Height</b>	30.31 in (77.0 cm)
<b>Package 3 Width</b>	31.50 in (80.0 cm)
<b>Package 3 Length</b>	23.62 in (60.0 cm)
<b>Package 3 Weight</b>	299.87 lb(US) (136.02 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

✓ Toxic Heavy Metal Free

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✓ Mercury Free

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✓ Rohs Exemption Information [Yes](#)

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✓ Pvc Free

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## Certifications & Standards

**Reach Regulation** [REACH Declaration](#)

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**Eu Rohs Directive** Compliant with Exemptions

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**China Rohs Regulation** [China RoHS declaration](#)  
Product out of China RoHS scope. Substance declaration for your information.

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**Environmental Disclosure** [Product Environmental Profile](#)

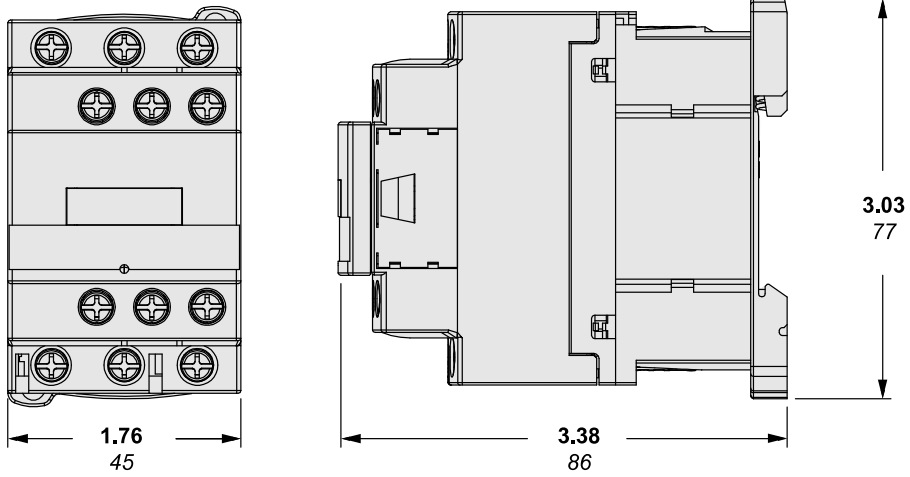
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**Circularity Profile** [End of Life Information](#)

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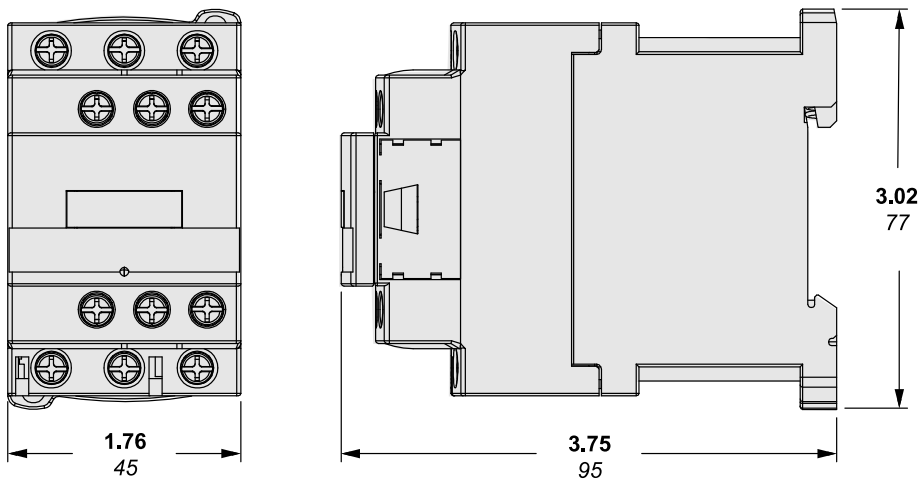
## Dimensions

### CONTACTOR WITH AC COIL



in.  
mm

### CONTACTOR WITH DC COIL



All dimensions are approximate. Also refer to technical drawings and documentation.