

# Product data sheet

Specifications



IEC contactor, TeSys Deca, nonreversing, 9A, 5HP at 480VAC, up to 100kA SCCR, 3 phase, 3 NO, 48VAC 50/60Hz coil, open style

LC1D09E7

Product availability: Stock - 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-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	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 AC 50/60 Hz

## 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	M2
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 °F (60 °C)) for power circuit 10 A (at 140 °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 °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>	15 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>	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>	70 VA 60 Hz cos phi 0.75 (at 68 °F (20 °C)) 70 VA 50 Hz cos phi 0.75 (at 68 °F (20 °C))
<b>Hold-In Power Consumption In Va</b>	7.5 VA 60 Hz cos phi 0.3 (at 68 °F (20 °C)) 7 VA 50 Hz cos phi 0.3 (at 68 °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 °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
<b>Environment</b>	
<b>Standards</b>	CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508 IEC 60335-1
<b>Product Certifications</b>	GOST GL LROS (Lloyds register of shipping) DNV UL RINA CCC BV CSA UKCA
<b>Ip Degree Of Protection</b>	IP20 front face IEC 60529
<b>Protective Treatment</b>	THIEC 60068-2-30
<b>Climatic Withstand</b>	IACS E10 exposure to damp heat IEC 60947-1 Annex Q category D exposure to damp heat

<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>	3.39 in (86 mm)
<b>Net Weight</b>	0.71 lb(US) (0.32 kg)

## Ordering and shipping details

<b>Category</b>	US10I1222354
<b>Discount Schedule</b>	0I12
<b>Gtin</b>	3389110348736
<b>Returnability</b>	Yes
<b>Country Of Origin</b>	MX

## Packing Units

<b>Unit Type Of Package 1</b>	PCE
<b>Number Of Units In Package 1</b>	1
<b>Package 1 Height</b>	1.97 in (5.000 cm)
<b>Package 1 Width</b>	3.62 in (9.200 cm)
<b>Package 1 Length</b>	4.41 in (11.200 cm)
<b>Package 1 Weight</b>	12.63 oz (358.000 g)
<b>Unit Type Of Package 2</b>	S02
<b>Number Of Units In Package 2</b>	20
<b>Package 2 Height</b>	5.91 in (15.000 cm)
<b>Package 2 Width</b>	11.81 in (30.000 cm)
<b>Package 2 Length</b>	15.75 in (40.000 cm)
<b>Package 2 Weight</b>	16.33 lb(US) (7.409 kg)
<b>Unit Type Of Package 3</b>	P06
<b>Number Of Units In Package 3</b>	160
<b>Package 3 Height</b>	17.72 in (45.000 cm)
<b>Package 3 Width</b>	23.62 in (60.000 cm)
<b>Package 3 Length</b>	31.50 in (80.000 cm)
<b>Package 3 Weight</b>	145.51 lb(US) (66.000 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.

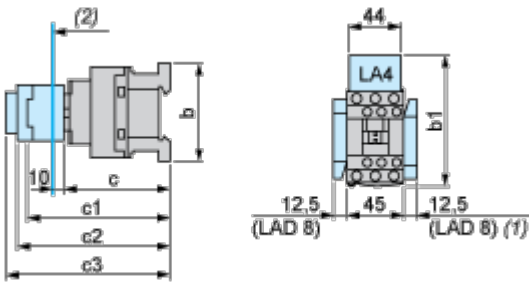
**Circularity Profile**

[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

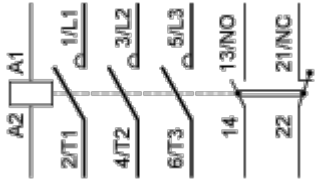


- (1) Including LAD 4BB
- (2) Minimum electrical clearance

LC1		D09...D18	D093...D123	D099...D129
<b>b</b>	without add-on blocks	77	99	80
<b>b1</b>	with LAD 4BB	94	107	95.5
	with LA4 D•2	110 <sup>(1)</sup>	123 <sup>(1)</sup>	111.5 <sup>(1)</sup>
	with LA4 DF, DT	119 <sup>(1)</sup>	132 <sup>(1)</sup>	120.5 <sup>(1)</sup>
	with LA4 DW, DL	126 <sup>(1)</sup>	139 <sup>(1)</sup>	127.5 <sup>(1)</sup>
<b>c</b>	without cover or add-on blocks	84	84	84
	with cover, without add-on blocks	86	86	86
<b>c1</b>	with LAD N or C (2 or 4 contacts)	117	117	117
<b>c2</b>	with LA6 DK10, LAD 6K10	129	129	129
<b>c3</b>	with LAD T, R, S	137	137	137
	with LAD T, R, S and sealing cover	141	141	141
<b>(1)</b>	Including LAD 4BB.			

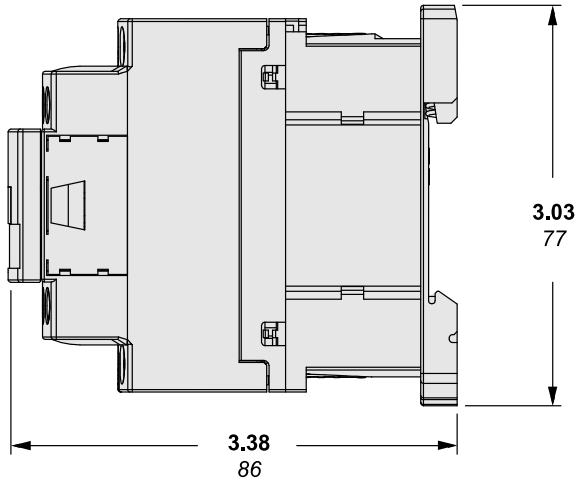
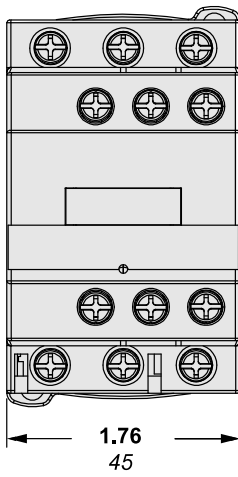
### Wiring

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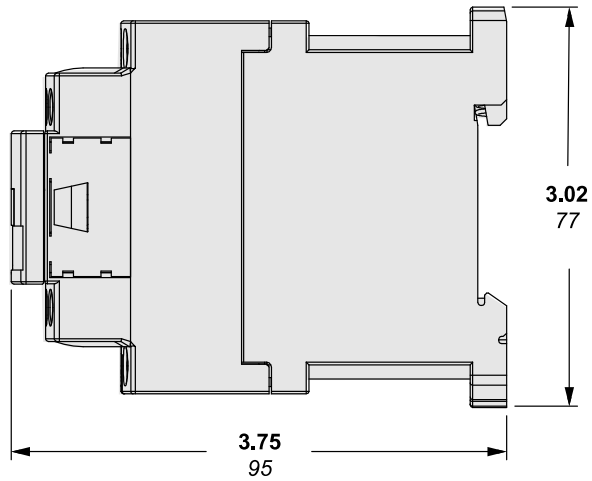
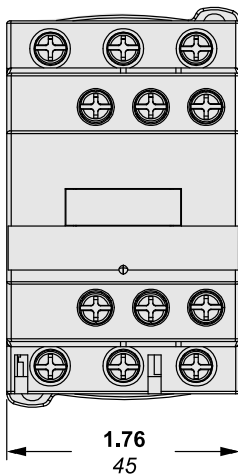
## Dimensions

### CONTACTOR WITH AC COIL



in.  
mm

### CONTACTOR WITH DC COIL



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