

# Product data sheet

Specifications



IEC contactor, TeSys Deca, nonreversing, 40A, 30HP at 480VAC, up to 100kA SCCR, 3 phase, 3 NO, 24VDC coil, open style

LC1D40ABD

Product availability: Stock - Normally stocked in distribution facility

**Price\*: 275.00 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	24 V DC

## 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>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>	10 Mcycles
<b>Electrical durability</b>	0.7 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>	DC standard
<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 0.75...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>	19 W 68 °F (20 °C))
<b>Hold-in power consumption in W</b>	7.4 W 68 °F (20 °C)
<b>Operating time</b>	50 ±15 % ms closing 20 ±20 % ms opening
<b>Time constant</b>	34 ms
<b>Maximum operating rate</b>	3600 cyc/h 140 °F (60 °C)
<b>Maximum operating rate</b>	3600 cyc/h at 60 °C

<b>Connections - terminals</b>	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 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 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 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 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 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 Power circuit: screw connection 1 0.002...0.05 in <sup>2</sup> (1...35 mm <sup>2</sup> ) - cable stiffness: flexible without cable end Power circuit: screw connection 2 0.002...0.04 in <sup>2</sup> (1...25 mm <sup>2</sup> ) - cable stiffness: flexible without cable end Power circuit: screw connection 1 0.002...0.05 in <sup>2</sup> (1...35 mm <sup>2</sup> ) - cable stiffness: flexible with cable end Power circuit: screw connection 2 0.002...0.04 in <sup>2</sup> (1...25 mm <sup>2</sup> ) - cable stiffness: flexible with cable end Power circuit: screw connection 1 0.002...0.05 in <sup>2</sup> (1...35 mm <sup>2</sup> ) - cable stiffness: solid without cable end Power circuit: screw connection 2 0.002...0.04 in <sup>2</sup> (1...25 mm <sup>2</sup> ) - cable stiffness: solid without cable end
<b>Tightening torque</b>	Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals flat Ø 6 mm Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals Philips No 2 Power circuit 70.8 lbf.in (8 N.m) EverLink BTR screw connectors 0.04...0.05 in <sup>2</sup> (25...35 mm <sup>2</sup> ) hexagonal 0.2 in (4 mm) Power circuit 44.3 lbf.in (5 N.m) EverLink BTR screw connectors 0.002...0.04 in <sup>2</sup> (1...25 mm <sup>2</sup> ) hexagonal 0.2 in (4 mm) Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2 Power circuit 22.1 lbf.in (2.5 N.m) screw clamp terminals pozidriv No 2
<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>	EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 CSA C22.2 No 14 UL 60947-4-1 IEC 60335-2-40:Annex JJ UL 60335-2-40:Annex JJ IEC 60335-1:Clause 30.2
<b>Product Certifications</b>	CCC UL CB Scheme CSA CE UKCA Marine EAC
<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 closed 15 Gn for 11 ms) Shocks contactor open 10 Gn for 11 ms)
<b>Height</b>	4.8 in (122 mm)
<b>Width</b>	2.2 in (55 mm)
<b>Depth</b>	4.7 in (120 mm)
<b>Net Weight</b>	2.039 lb(US) (0.925 kg)

## Ordering and shipping details

<b>Category</b>	US10I1222358
<b>Discount Schedule</b>	0112
<b>GTIN</b>	3389119408486
<b>Returnability</b>	Yes
<b>Country of origin</b>	FR

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	2.441 in (6.200 cm)
<b>Package 1 Width</b>	5.394 in (13.700 cm)
<b>Package 1 Length</b>	5.984 in (15.200 cm)
<b>Package 1 Weight</b>	34.533 oz (979.000 g)
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	10
<b>Package 2 Height</b>	5.906 in (15.000 cm)
<b>Package 2 Width</b>	11.811 in (30.000 cm)
<b>Package 2 Length</b>	15.748 in (40.000 cm)
<b>Package 2 Weight</b>	22.223 lb(US) (10.080 kg)
<b>Unit Type of Package 3</b>	P06
<b>Number of Units in Package 3</b>	160
<b>Package 3 Height</b>	29.528 in (75.000 cm)
<b>Package 3 Width</b>	23.622 in (60.000 cm)
<b>Package 3 Length</b>	31.496 in (80.000 cm)
<b>Package 3 Weight</b>	395.245 lb(US) (179.280 kg)

## Contractual warranty

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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-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

 Reach Free Of Svhc

 Mercury Free

 Rohs Exemption Information Yes

## 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](#)

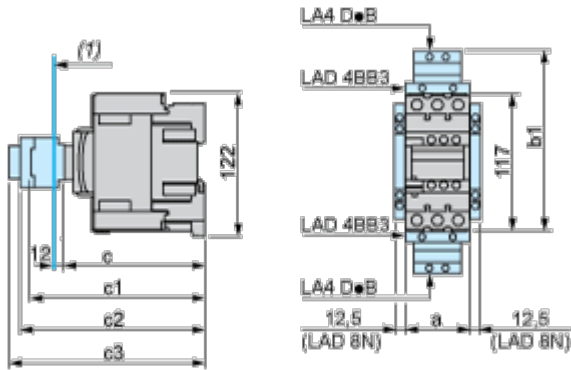
Weee The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

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 LAD 4BB3	136
	with LA4 DF, DT	157
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	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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