

# 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 D 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 140 °F (60 °C) <= 440 V AC AC-1 power circuit 40 A 140 °F (60 °C) <= 440 V AC AC-3 power circuit 40 A 140 °F (60 °C) <= 440 V AC AC-3e power circuit
[Uc] control circuit voltage	24 V DC

## Complementary

Motor power kW	18.5 kW 380...400 V AC 50/60 Hz AC-3) 11 kW 220...230 V AC 50/60 Hz AC-3) 22 kW 415...440 V AC 50/60 Hz AC-3) 22 kW 500 V AC 50/60 Hz AC-3) 30 kW 660...690 V AC 50/60 Hz AC-3) 9 kW 400 V AC 50/60 Hz AC-4) 18.5 kW 380...400 V AC 50/60 Hz AC-3e) 11 kW 220...230 V AC 50/60 Hz AC-3e) 22 kW 415...440 V AC 50/60 Hz AC-3e) 22 kW 500 V AC 50/60 Hz AC-3e) 30 kW 660...690 V AC 50/60 Hz AC-3e)
Maximum Horse Power Rating	5 hp 230/240 V at AC 50/60 Hz for 1 phase 10 hp 230/240 V at AC 50/60 Hz for 3 phase 30 hp 575/600 V at AC 50/60 Hz for 3 phase 10 hp 200/208 V at AC 50/60 Hz for 3 phase 3 hp 115 V at AC 50/60 Hz for 1 phase 30 hp 460/480 V at AC 50/60 Hz for 3 phase
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>	M4
<b>Protective cover</b>	With
<b>[Ith] conventional free air thermal current</b>	10 A 140 °F (60 °C) signalling circuit 60 A 140 °F (60 °C) power circuit
<b>Irms rated making capacity</b>	140 A AC signalling circuit IEC 60947-5-1 250 A DC signalling circuit IEC 60947-5-1 800 A 440 V power circuit IEC 60947
<b>Rated breaking capacity</b>	800 A 440 V power circuit IEC 60947
<b>[Icw] rated short-time withstand current</b>	320 A 104 °F (40 °C) - 10 s power circuit 720 A 104 °F (40 °C) - 1 s power circuit 72 A 104 °F (40 °C) - 10 min power circuit 165 A 104 °F (40 °C) - 1 min power circuit 100 A - 1 s signalling circuit 120 A - 500 ms signalling circuit 140 A - 100 ms signalling circuit
<b>Associated fuse rating</b>	10 A gG signalling circuit IEC 60947-5-1 80 A gG ≤ 690 V type 1 power circuit 80 A gG ≤ 690 V type 2 power circuit
<b>Average impedance</b>	1.5 mOhm - Ith 60 A 50 Hz 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>	42.5...57.5 ms closing 16...24 ms opening
<b>Time constant</b>	34 ms
<b>Maximum operating rate</b>	3600 cyc/h 140 °F (60 °C)
<b>Connections - terminals</b>	Control circuit screw clamp terminals 2 0.00...0.00 in <sup>2</sup> (1...2.5 mm <sup>2</sup> ) flexible with cable end Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) flexible without cable end Control circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) flexible without cable end Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) flexible with cable end Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) solid without cable end Control circuit screw clamp terminals 2 0.00...0.01 in <sup>2</sup> (1...4 mm <sup>2</sup> ) solid without cable end Power circuit screw connection 1 0.00...0.05 in <sup>2</sup> (1...35 mm <sup>2</sup> ) flexible without cable end Power circuit screw connection 2 0.00...0.04 in <sup>2</sup> (1...25 mm <sup>2</sup> ) flexible without cable end Power circuit screw connection 1 0.00...0.05 in <sup>2</sup> (1...35 mm <sup>2</sup> ) flexible with cable end Power circuit screw connection 2 0.00...0.04 in <sup>2</sup> (1...25 mm <sup>2</sup> ) flexible with cable end Power circuit screw connection 1 0.00...0.05 in <sup>2</sup> (1...35 mm <sup>2</sup> ) solid without cable end Power circuit screw connection 2 0.00...0.04 in <sup>2</sup> (1...25 mm <sup>2</sup> ) 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 70.81 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)  
 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)  
 Control circuit 15.05 lbf.in (1.7 N.m) screw clamp terminals pozidriv No 2  
 Power circuit 22.13 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 signalling circuit
<b>Minimum switching current</b>	5 mA signalling circuit
<b>Insulation resistance</b>	> 10 MOhm 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>	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>	CCC CSA GOST UL
<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>	4.80 in (122 mm)
<b>Width</b>	2.17 in (55 mm)
<b>Depth</b>	4.72 in (120 mm)
<b>Net Weight</b>	2.04 lb(US) (0.925 kg)

## Ordering and shipping details

<b>Category</b>	22358-CTR, TESYS D, OPEN, 40-65A DC
<b>Discount Schedule</b>	I12
<b>GTIN</b>	3389119408486
<b>Returnability</b>	Yes
<b>Country of origin</b>	FR

## Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.44 in (6.2 cm)
Package 1 Width	5.39 in (13.7 cm)
Package 1 Length	5.98 in (15.2 cm)
Package 1 Weight	34.89 oz (989 g)
Unit Type of Package 2	S02
Number of Units in Package 2	10
Package 2 Height	5.91 in (15 cm)
Package 2 Width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)
Package 2 Weight	22.66 lb(US) (10.278 kg)
Unit Type of Package 3	P06
Number of Units in Package 3	160
Package 3 Height	29.53 in (75 cm)
Package 3 Width	23.62 in (60 cm)
Package 3 Length	31.50 in (80 cm)
Package 3 Weight	392.11 lb(US) (177.86 kg)

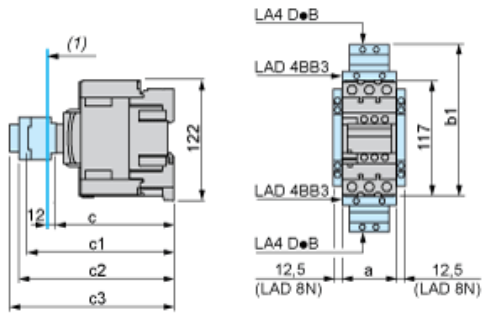
## Offer Sustainability

Sustainable offer status	Green Premium product
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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
REACH free of SVHC	Yes
EU RoHS Directive	Compliant <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS declaration</a> Pro-active China RoHS declaration (out of China RoHS legal scope)
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
PVC free	Yes

## Contractual warranty

Warranty	18 months
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**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

**Wiring**

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**Recommended replacement(s)**