

Product data sheet

Specifications



IEC contactor, TeSys Deca
Advanced, nonreversing, 40A, 30HP
at 480VAC, up to 100kA SCCR, 3
phase, 3 NO, 24/60VAC/VDC coil

LC1D40ABNE

Product availability: Stock - Normally stocked in distribution facility

Main

Range of Product	TeSys Deca Advanced
Product or Component Type	Contactor
Device short name	LC1D
Contactor application	Resistive load Motor control
Utilisation category	AC-3 AC-1 AC-3e
Poles description	3P
[Ue] rated operational voltage	Power circuit <= 690 V AC 25...400 Hz
[Ie] rated operational current	60 A (at <140 °F (60 °C)) at <= 440 V AC-1 for power circuit 40 A (at <140 °F (60 °C)) at <= 440 V AC-3 for power circuit 40 A (at <140 °F (60 °C)) at <= 440 V AC-3e for power circuit
[Uc] control circuit voltage	24...60 V AC 50/60 Hz 24...60 V DC

Complementary

Motor power kW	11 kW at 220...230 V AC 50 Hz (AC-3) 18.5 kW at 380...400 V AC 50 Hz (AC-3) 22 kW at 415 V AC 50 Hz (AC-3) 22 kW at 440 V AC 50 Hz (AC-3) 22 kW at 500 V AC 50 Hz (AC-3) 30 kW at 660...690 V AC 50 Hz (AC-3) 11 kW at 220...230 V AC 50 Hz (AC-3e) 18.5 kW at 380...400 V AC 50 Hz (AC-3e) 22 kW at 415 V AC 50 Hz (AC-3e) 22 kW at 440 V AC 50 Hz (AC-3e) 22 kW at 500 V AC 50 Hz (AC-3e) 30 kW at 660...690 V AC 50 Hz (AC-3e)
Maximum Horse Power Rating	3 hp at 115 V AC 60 Hz for 1 phase motors 5 hp at 230/240 V AC 60 Hz for 1 phase motors 10 hp at 200/208 V AC 60 Hz for 3 phase motors 10 hp at 230/240 V AC 60 Hz for 3 phase motors 30 hp at 460/480 V AC 60 Hz for 3 phase motors 30 hp at 575/600 V AC 60 Hz for 3 phase motors
Compatibility code	LC1D
Pole contact composition	3 NO
Protective cover	With
[Ith] conventional free air thermal current	60 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.

Irms rated making capacity	800 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
Rated breaking capacity	800 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	72 A 104 °F (40 °C) - 10 min for power circuit 165 A 104 °F (40 °C) - 1 min for power circuit 320 A 104 °F (40 °C) - 10 s for power circuit 720 A 104 °F (40 °C) - 1 s for power circuit 100 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit 140 A - 100 ms for signalling circuit
Associated fuse rating	80 A gG at <= 690 V coordination type 1 for power circuit 80 A gG at <= 690 V coordination type 2 for power circuit 10 A gG for signalling circuit conforming to IEC 60947-5-1
Average impedance	1.5 mOhm - Ith 60 A 50 Hz for power circuit
Power dissipation per pole	5.4 W AC-1 2.4 W AC-3 2.4 W AC-3e
[Ui] rated insulation voltage	Power circuit 690 V IEC 60947-4-1 Signalling circuit 690 V IEC 60947-1
Overvoltage category	III
Pollution degree	3
[Uimp] rated impulse withstand voltage	6 kV IEC 60947
Safety reliability level	B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load EN/ISO 13849-1
Mechanical durability	6 Mcycles
Electrical durability	2 Mcycles 35 A AC-3 <= 440 V 0.7 Mcycles 60 A AC-1 <= 440 V 2 Mcycles 35 A AC-3e <= 440 V
Control circuit type	AC/DC 50/60 Hz AC/DC electronic
Coil technology	Built-in bidirectional peak limiting
Control circuit voltage limits	<= 0.1 Uc (-40...158 °F (-40...70 °C)):drop-out AC/DC 0.85...1.1 Uc (-40...140 °F (-40...60 °C)):operational AC 0.8...1.1 Uc (-40...140 °F (-40...60 °C)):operational DC 1...1.1 Uc (140...158 °F (60...70 °C)):operational AC/DC
Inrush power in VA	15 VA 50/60 Hz (at 68 °F (20 °C))
Inrush power in W	16 W 68 °F (20 °C))
Hold-in power consumption in VA	1 VA 50/60 Hz (at 68 °F (20 °C))
Hold-in power consumption in W	0.7 W 68 °F (20 °C)
Heat dissipation	0.7 W at 50/60 Hz
Operating time	55...65 ms closing 20...120 ms opening >= 17221) 20...80 ms opening >= 18011)
Maximum operating rate	3600 cyc/h at 60 °C

Connections - terminals	<p>Control circuit: screw clamp terminals 1 0.002...0.006 in² (1...4 mm²) - cable stiffness: flexible without cable end</p> <p>Control circuit: screw clamp terminals 2 0.002...0.006 in² (1...4 mm²) - cable stiffness: flexible without cable end</p> <p>Control circuit: screw clamp terminals 1 0.002...0.006 in² (1...4 mm²) - cable stiffness: flexible with cable end</p> <p>Control circuit: screw clamp terminals 2 0.002...0.004 in² (1...2.5 mm²) - cable stiffness: flexible with cable end</p> <p>Control circuit: screw clamp terminals 1 0.002...0.006 in² (1...4 mm²) - cable stiffness: solid</p> <p>Control circuit: screw clamp terminals 2 0.002...0.006 in² (1...4 mm²) - cable stiffness: solid</p> <p>Power circuit: EverLink BTR screw connectors 1 0.002...0.05 in² (1...35 mm²) - cable stiffness: flexible without cable end</p> <p>Power circuit: EverLink BTR screw connectors 1 0.002...0.05 in² (1...35 mm²) - cable stiffness: flexible with cable end</p> <p>Power circuit: EverLink BTR screw connectors 1 0.002...0.05 in² (1...35 mm²) - cable stiffness: solid</p> <p>Power circuit: EverLink BTR screw connectors 2 0.002...0.04 in² (1...25 mm²) - cable stiffness: flexible without cable end</p> <p>Power circuit: EverLink BTR screw connectors 2 0.002...0.04 in² (1...25 mm²) - cable stiffness: flexible with cable end</p> <p>Power circuit: EverLink BTR screw connectors 2 0.002...0.04 in² (1...25 mm²) - cable stiffness: solid</p>
Tightening torque	<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 70.8 lbf.in (8 N.m) EverLink BTR screw connectors 0.04...0.05 in² (25...35 mm²) hexagonal 0.2 in (4 mm)</p> <p>Power circuit 44.3 lbf.in (5 N.m) EverLink BTR screw connectors 0.002...0.04 in² (1...25 mm²) hexagonal 0.2 in (4 mm)</p> <p>Power circuit 22.1 lbf.in (2.5 N.m) lugs-ring terminals pozidriv No 2 M4</p> <p>Control circuit 15.05 lbf.in (1.7 N.m) lugs-ring terminals pozidriv No 2 M3.5</p>
Auxiliary contact composition	1 NO + 1 NC
Auxiliary contacts type	Mechanically linked 1 NO + 1 NC IEC 60947-5-1 Mirror contact 1 NC IEC 60947-4-1
Signalling circuit frequency	25...400 Hz
Minimum switching voltage	17 V for signalling circuit
Minimum switching current	5 mA for signalling circuit
Insulation resistance	> 10 MOhm for signalling circuit
Non-overlap time	1.5 ms on de-energisation between NC and NO contact 1.5 ms on energisation between NC and NO contact
Mounting Support	Plate Rail

Environment

Standards	<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>CSA C22.2 No 14</p> <p>UL 60947-4-1</p> <p>IEC 60335-2-40:Annex JJ</p> <p>UL 60335-2-40:Annex JJ</p> <p>IEC 60335-1:Clause 30.2</p>
Product Certifications	<p>CCC</p> <p>CSA</p> <p>EAC</p> <p>UL</p> <p>KC</p> <p>DNV-GL</p> <p>LROS (Lloyds register of shipping)</p> <p>UKCA</p>
IP degree of protection	IP20 front face IEC 60529
Climatic withstand	<p>IACS E10 exposure to damp heat</p> <p>IEC 60947-1 Annex Q category D exposure to damp heat</p>

Permissible ambient air temperature around the device	-40...140 °F (-40...60 °C) 140...158 °F (60...70 °C) with derating
Operating altitude	0...9842.52 ft (0...3000 m)
Fire resistance	1562 °F (850 °C) IEC 60695-2-1
Flame retardance	V1 conforming to UL 94
Mechanical robustness	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)
Height	4.8 in (122 mm)
Width	2.2 in (55 mm)
Depth	4.7 in (120 mm)
Net Weight	2.187 lb(US) (0.992 kg)

Ordering and shipping details

Category	US10I1222356
Discount Schedule	0I12
GTIN	3606480988202
Returnability	Yes
Country of origin	FR

Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	2.44 in (6.200 cm)
Package 1 Width	5.39 in (13.700 cm)
Package 1 Length	5.98 in (15.200 cm)
Package weight(Lbs)	2.344 lb(US) (1.063 kg)
Unit Type of Package 2	S02
Number of Units in Package 2	9
Package 2 Height	5.91 in (15.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	21.806 lb(US) (9.891 kg)

Contractual warranty

Warranty	18 months
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Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

Environmental footprint

Carbon footprint (kg CO2 eq, Total Life cycle) 24

Environmental Disclosure [Product Environmental Profile](#)

Use Better

Materials and Substances

Packaging made with recycled cardboard Yes

Packaging without single use plastic Yes

[EU RoHS Directive](#) Compliant with Exemptions

SCIP Number 9bb0b51e-73b5-4128-a86b-723dbbccfe86

REACH Regulation [REACH Declaration](#)

Halogen content performance Halogen free plastic parts & cables product

Use Again

Repack and remanufacture

Circularity Profile [End of Life Information](#)

Take-back No

Technical Illustration

Assembly's dimensions

