

Product datasheet

Specifications



TeSys Deca contactor, 3P (3NO), AC-3 <=440V 115 A, 240 V AC 60 Hz coil, lugs/bars terminals

LC1D1156U6

⚠ Discontinued on: 1 Nov 2020

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Main

Range	TeSys
Range of product	TeSys Deca
Product or component type	Contactor
Device short name	LC1D
Contactor application	Motor control Resistive load
Utilisation category	AC-1 AC-3
Poles description	3P
[Ue] rated operational voltage	Power circuit: <= 1000 V AC 25...400 Hz Power circuit: <= 300 V DC
[Ie] rated operational current	200 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 115 A (at <60 °C) at <= 440 V AC AC-3 for power circuit
[Uc] control circuit voltage	240 V AC 60 Hz

Complementary

Motor power kW	30 kW at 220...230 V AC 50/60 Hz 55 kW at 380...400 V AC 50/60 Hz 59 kW at 415...440 V AC 50/60 Hz 75 kW at 500 V AC 50/60 Hz 80 kW at 660...690 V AC 50/60 Hz 65 kW at 1000 V AC 50/60 Hz
Motor power hp	30 hp at 200/208 V AC 50/60 Hz for 3 phases motors 40 hp at 230/240 V AC 50/60 Hz for 3 phases motors 75 hp at 460/480 V AC 50/60 Hz for 3 phases motors 100 hp at 575/600 V AC 50/60 Hz for 3 phases motors
Compatibility code	LC1D
Pole contact composition	3 NO
Protective cover	With
[Ith] conventional free air thermal current	200 A (at 60 °C) for power circuit
Irms rated making capacity	140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1 1260 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	1100 A at 440 V for power circuit conforming to IEC 60947

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

[Icw] rated short-time withstand current	100 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit 140 A - 100 ms for signalling circuit 250 A 40 °C - 10 min for power circuit 550 A 40 °C - 1 min for power circuit 950 A 40 °C - 10 s for power circuit 1100 A 40 °C - 1 s for power circuit
Associated fuse rating	250 A gG at <= 690 V coordination type 1 for power circuit 200 A gG at <= 690 V coordination type 2 for power circuit 10 A gG for signalling circuit
Average impedance	0.6 mOhm - lth 200 A 50 Hz for power circuit
Power dissipation per pole	24 W AC-1 7.9 W AC-3
[Ui] rated insulation voltage	Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Power circuit: 1000 V conforming to IEC 60947-4-1 Signalling circuit: 600 V CSA certified Signalling circuit: 600 V UL certified Signalling circuit: 690 V conforming to IEC 60947-1
Overvoltage category	III
Pollution degree	3
[Uimp] rated impulse withstand voltage	8 kV conforming to IEC 60947
Safety reliability level	B10d = 684932 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 10000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1
Mechanical durability	8 Mcycles
Electrical durability	0.8 Mcycles 200 A AC-1 at Ue <= 440 V 0.95 Mcycles 115 A AC-3 at Ue <= 440 V
Control circuit type	AC at 60 Hz
Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.3...0.6 Uc (-40...70 °C):drop-out AC 60 Hz 0.85...1.1 Uc (-40...55 °C):operational AC 60 Hz 1...1.1 Uc (55...70 °C):operational AC 60 Hz
Inrush power in VA	300 VA 60 Hz cos phi 0.8 (at 20 °C)
Hold-in power consumption in VA	22 VA 60 Hz cos phi 0.3 (at 20 °C)
Heat dissipation	3...8 W at 60 Hz
Operating time	6...20 ms opening 20...50 ms closing
Maximum operating rate	2400 cyc/h at 60 °C
Connections - terminals	Control circuit: lugs-ring terminals 2 1...2.5 mm² - cable stiffness: flexible with cable end Control circuit: lugs-ring terminals 1 1...2.5 mm² - cable stiffness: flexible with cable end Control circuit: lugs-ring terminals 1 1...2.5 mm² - cable stiffness: flexible without cable end Control circuit: lugs-ring terminals 2 1...2.5 mm² - cable stiffness: flexible without cable end Control circuit: lugs-ring terminals 1 1...2.5 mm² - cable stiffness: solid Control circuit: lugs-ring terminals 2 1...2.5 mm² - cable stiffness: solid Power circuit: lugs-ring terminals 1 10...120 mm² - cable stiffness: flexible without cable end Power circuit: lugs-ring terminals 2 10...50 mm² - cable stiffness: flexible without cable end Power circuit: lugs-ring terminals 1 10...120 mm² - cable stiffness: flexible with cable end Power circuit: lugs-ring terminals 2 10...50 mm² - cable stiffness: flexible with cable end Power circuit: lugs-ring terminals 1 10...120 mm² - cable stiffness: solid Power circuit: lugs-ring terminals 2 10...50 mm² - cable stiffness: solid

Tightening torque	Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 12 N.m - on connector hexagonal screw head 4 mm
Auxiliary contact composition	1 NO + 1 NC
Auxiliary contacts type	type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1 type mirror contact 1 NC conforming to 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	CSA C22.2 No 14 EN 60947-4-1 IEC 60947-4-1 IEC 60335-1:Clause 30.2 IEC 60335-2-40:Annex JJ UL 60335-2-40:Annex JJ UL 60947-4-1 CSA C22.2 No 60947-4-1 JIS C8201-4-1
Product certifications	UL CSA CCC UKCA CE EAC Marine
IP degree of protection	IP20 front face conforming to IEC 60529
Climatic withstand	conforming to IACS E10 exposure to damp heat conforming to IEC 60947-1 Annex Q category D exposure to damp heat
Permissible ambient air temperature around the device	-40...60 °C 60...70 °C with derating
Operating altitude	0...3000 m
Fire resistance	850 °C conforming to 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 closed (15 Gn for 11 ms) Shocks contactor open (6 Gn for 11 ms)
Height	158 mm
Width	120 mm
Depth	136 mm
Net weight	2.5 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1

Contractual warranty

Warranty (in months)	18
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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 >](#)

Use Longer

Lifetime extension	
Repair	No

Use Again

Repack and remanufacture	
WEEE Label	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins