

Product data sheet

Specifications



Contactor, TeSys Deca, 3P(3NO),
AC-3/AC-3e, <=440V, 115A, 48V
AC 50 Hz coil, lugs/bars terminals

LC1D1156E5

⚠ Discontinued on: Jul 12, 2021

⚠ End-of-service on: Aug 2, 2021

⚠ Discontinued

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-4 AC-1 AC-3 AC-3e
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 <140 °F (60 °C)) at <= 440 V AC AC-1 for power circuit 115 A (at <140 °F (60 °C)) at <= 440 V AC AC-3 for power circuit 115 A (at <140 °F (60 °C)) at <= 440 V AC AC-3e for power circuit
[Uc] control circuit voltage	48 V AC 50 Hz

Complementary

Motor power kW	30 kW at 220...230 V AC 50/60 Hz (AC-3) 55 kW at 380...400 V AC 50/60 Hz (AC-3) 59 kW at 415...440 V AC 50/60 Hz (AC-3) 75 kW at 500 V AC 50/60 Hz (AC-3) 80 kW at 660...690 V AC 50/60 Hz (AC-3) 65 kW at 1000 V AC 50/60 Hz (AC-3) 18.5 kW at 400 V AC 50/60 Hz (AC-4) 30 kW at 220...230 V AC 50/60 Hz (AC-3e) 55 kW at 380...400 V AC 50/60 Hz (AC-3e) 59 kW at 415...440 V AC 50/60 Hz (AC-3e) 75 kW at 500 V AC 50/60 Hz (AC-3e) 80 kW at 660...690 V AC 50/60 Hz (AC-3e) 65 kW at 1000 V AC 50/60 Hz (AC-3e)
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 140 °F (60 °C)) for power circuit

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

Irms rated making capacity	1260 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	1100 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	250 A 104 °F (40 °C) - 10 min for power circuit 550 A 104 °F (40 °C) - 1 min for power circuit 950 A 104 °F (40 °C) - 10 s for power circuit 1100 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	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 - Ith 200 A 50 Hz for power circuit
Power dissipation per pole	24 W AC-1 7.9 W AC-3 7.9 W AC-3e
[UI] rated insulation voltage	Power circuit 600 V CSA Power circuit 600 V UL Power circuit 1000 V IEC 60947-4-1 Signalling circuit 690 V IEC 60947-1 Signalling circuit 600 V CSA Signalling circuit 600 V UL
Overvoltage category	III
Pollution degree	3
[Uimp] rated impulse withstand voltage	8 kV IEC 60947
Safety reliability level	B10d = 684932 cycles contactor with nominal load EN/ISO 13849-1 B10d = 10000000 cycles contactor with mechanical load EN/ISO 13849-1
Mechanical durability	8 Mcycles
Electrical durability	0.8 Mcycles 200 A AC-1 <= 440 V 0.95 Mcycles 115 A AC-3 <= 440 V 0.95 Mcycles 115 A AC-3e <= 440 V
Control circuit type	AC 50 Hz
Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.3...0.6 Uc (-40...158 °F (-40...70 °C)):drop-out AC 50 Hz 0.85...1.1 Uc (-40...131 °F (-40...55 °C)):operational AC 50 Hz 1...1.1 Uc (131...158 °F (55...70 °C)):operational AC 50 Hz
Inrush power in VA	300 VA 50 Hz cos phi 0.8 (at 68 °F (20 °C))
Hold-in power consumption in VA	22 VA 50 Hz cos phi 0.3 (at 68 °F (20 °C))
Heat dissipation	3...8 W at 50 Hz
Operating time	6...20 ms opening 20...50 ms closing
Connections - terminals	Control circuit: lugs-ring terminals - external diameter: 0.3 in (8 mm) Power circuit: lugs-ring terminals - external diameter: 1.0 in (25 mm) Power circuit: bars 1 - busbar cross section: 5 x 25 mm
Tightening torque	Control circuit 10.6 lbf.in (1.2 N.m) lugs-ring terminals flat Ø 6 mm M3.5 Control circuit 10.6 lbf.in (1.2 N.m) lugs-ring terminals Philips No 2 M3.5 Power circuit 106.2 lbf.in (12 N.m) lugs-ring terminals hexagonal 0.5 in (13 mm) M8 Power circuit 106.2 lbf.in (12 N.m) bars hexagonal 0.5 in (13 mm) M8
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	CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508
Product certifications	GOST BV RINA GL CSA LROS (Lloyds register of shipping) CCC UL DNV UKCA
IP degree of protection	IP20 front face IEC 60529
Protective treatment	THIEC 60068-2-30
Climatic withstand	IACS E10 exposure to damp heat IEC 60947-1 Annex Q category D exposure to damp heat
Permissible ambient air temperature around the device	-40...140 °F (-40...60 °C) 140...158 °F (60...70 °C) with derating
Operating altitude	0...3000 m
Fire resistance	1562 °F (850 °C) IEC 60695-2-1
Flame retardance	V1 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	6.2 in (158 mm)
Width	4.7 in (120 mm)
Depth	5.4 in (136 mm)
Net weight	5.5 lb(US) (2.5 kg)

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	6.6 in (16.8 cm)
Package 1 Width	8.2 in (20.8 cm)
Package 1 Length	7.3 in (18.5 cm)
Package 1 Weight	4.65 lb(US) (2.11 kg)

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 Better

Materials and Substances	
EU RoHS Directive	Compliant
PVC free	Yes

Use Longer

Lifetime extension	
Repair	No

Use Again

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