Product datasheet

Specifications

TeSys D contactor - 3P(3 NO) - AC-3 - <= 440 V 95 A - 110 V AC 50 Hz coil

LC1D95F5

Main

Range	TeSys
Range of product	TeSys Deca
Product or component type	Contactor
Device short name	LC1D
Contactor application	Resistive load Motor control
Utilisation category	AC-3 AC-3e AC-4 AC-1
Poles description	3P
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25...400 Hz
[Ie] rated operational current	95 A (at <60 °C) at <= 440 V AC-3 for power circuit 125 A (at <60 °C) at <= 1000 V AC-1 for power circuit 95 A (at <60 °C) at <= 440 V AC-3e for power circuit
[Uc] control circuit voltage	110 V AC 50 Hz

Complementary

Motor power kW	25 kW at 220...230 V AC 50 Hz (AC-3) 45 kW at 380...400 V AC 50 Hz (AC-3) 45 kW at 415...440 V AC 50 Hz (AC-3) 55 kW at 500 V AC 50 Hz (AC-3) 45 kW at 660...690 V AC 50 Hz (AC-3) 15 kW at 400 V AC 50 Hz (AC-4) 25 kW at 220...230 V AC 50 Hz (AC-3e) 45 kW at 380...400 V AC 50 Hz (AC-3e) 45 kW at 415...440 V AC 50 Hz (AC-3e) 55 kW at 500 V AC 50 Hz (AC-3e) 45 kW at 660...690 V AC 50 Hz (AC-3e)
Motor power hp	7.5 hp at 120 V AC 60 Hz for 1 phase motors 15 hp at 230/240 V AC 60 Hz for 1 phase motors 30 hp at 200/208 V AC 60 Hz for 3 phases motors 30 hp at 230/240 V AC 60 Hz for 3 phases motors 60 hp at 460/480 V AC 60 Hz for 3 phases motors 60 hp at 575/600 V AC 60 Hz for 3 phases motors
Compatibility code	LC1D
Pole contact composition	3 NO
Protective cover	With
[Ith] conventional free air thermal current	10 A (at 60 °C) for signalling circuit 125 A (at 60 °C) for power circuit
Irms rated making capacity	1100 A at 440 V AC 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	1100 A 40 °C - 1 s for power circuit 800 A 40 °C - 10 s for power circuit 400 A 40 °C - 1 min for power circuit 135 A 40 °C - 10 min for power circuit 140 A - 100 ms for signalling circuit 120 A - 500 ms for signalling circuit 100 A - 1 s for signalling circuit
Associated fuse rating	10 A gG for signalling circuit conforming to IEC 60947-5-1 200 A gG at <= 690 V coordination type 1 for power circuit 160 A gG at <= 690 V coordination type 2 for power circuit
Average impedance	0.8 mOhm - Ith 125 A 50 Hz for power circuit
Power dissipation per pole	12.5 W AC-1 7.2 W AC-3 7.2 W AC-3e
[Ui] rated insulation voltage	Power circuit: 1000 V conforming to IEC 60947-4-1 Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Signalling circuit: 690 V conforming to IEC 60947-1 Signalling circuit: 600 V CSA certified Signalling circuit: 600 V UL certified
Overvoltage category	III
Pollution degree	3
[Uimp] rated impulse withstand voltage	8 kV conforming to IEC 60947
Safety reliability level	B10d = 1.3 Mcycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 20 Mcycles contactor with mechanical load conforming to EN/ISO 13849-1
Mechanical durability	10 Mcycles
Electrical durability	1.2 Mcycles 95 A AC-3 1.3 Mcycles 125 A AC-1 1.2 Mcycles 95 A AC-3e
Control circuit type	AC at 50 Hz
Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.3...0.6 Uc (-40…70 °C):drop-out AC 50 Hz 0.85...1.1 Uc (-40…55 °C):operational AC 50 Hz 1...1.1 Uc (55…70 °C):operational AC 50 Hz
Inrush power in VA	200 VA 50 Hz cos phi 0.75 (at 20 °C)
Hold-in power consumption in VA	20 VA 50 Hz cos phi 0.3 (at 20 °C)
Heat dissipation	6…10 W at 50 Hz
Operating time	20...35 ms closing 6...20 ms opening
Maximum operating rate	3600 cyc/h at 60 °C
Connections - terminals	Control circuit: screw clamp terminals 2 1…2.5 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 1…2.5 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminals 1 1…4 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 2 1…4 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminals 1 1…4 mm² - cable stiffness: solid without cable end Control circuit: screw clamp terminals 2 1…4 mm² - cable stiffness: solid without cable end Power circuit: connector 1 4…50 mm² - cable stiffness: flexible without cable end Power circuit: connector 2 4…25 mm² - cable stiffness: flexible without cable end Power circuit: connector 1 4…50 mm² - cable stiffness: flexible with cable end Power circuit: connector 2 4…16 mm² - cable stiffness: flexible with cable end Power circuit: connector 1 4…50 mm² - cable stiffness: solid without cable end Power circuit: connector 2 4…25 mm² - cable stiffness: solid without cable end

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 - with screwdriver flat Ø 6 to Ø 8 mm Power circuit: 12 N.m - on connector hexagonal screw head 4 mm Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver pozidriv No 2
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	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
Product certifications	CCC UL CB Scheme CSA CE UKCA Marine EAC
IP degree of protection	IP20 front face conforming to IEC 60529
Protective treatment	TH conforming to IEC 60068-2-30
Climatic withstand	conforming to IACS E10 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) Shocks contactor open (8 Gn for 11 ms) Vibrations contactor closed (3 Gn, 5...300 Hz) Shocks contactor closed (10 Gn for 11 ms)
Height	127 mm
Width	85 mm
Depth	130 mm
Net weight	1.61 kg

Packing Units

Unit Type of Package 1	PCE

Number of Units in Package 1	1
Package 1 Height	10.0 cm
Package 1 Width	13.5 cm
Package 1 Length	14.0 cm
Package 1 Weight	1.559 kg
Unit Type of Package 2	S02
Number of Units in Package 2	5
Package 2 Height	15.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	8.193 kg

Contractual warranty

Warranty (in months)	18

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

Total lifecycle Carbon footprint	**106**

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**Yes**
EU RoHS Directive	**Compliant**
REACh Regulation	**REACh Declaration**
PVC free	**Yes**

Use Again

Repack and remanufacture

End of life manual availability	**No need of specific recycling operations**
Take-back	**No**
WEEE Label	**The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins**

Offer Marketing Illustration

Product benefits / Features

Offer Marketing Illustration

Product benefits / Features

Offer Marketing Illustration

Product benefits / Features

Technical Illustration

Assembly's dimensions