Product datasheet

Specifications

contactor TeSys LC1-D - 3 poles - AC-3 440V 38 A - coil 24 V DC

LC1D383BD

Discontinued on: 10 Jun 2022

End-of-service on: 26 Nov 2024

Discontinued

Main

Range	TeSys
Range of product	TeSys D
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: <= 690 V AC 25...400 Hz
[Ie] rated operational current	50 A (at <60 °C) at <= 440 V AC AC-1 for power circuit 38 A (at <60 °C) at <= 440 V AC AC-3 for power circuit
[Uc] control circuit voltage	24 V DC

Complementary

Motor power kW	18.5 kW at 500 V AC 50 Hz 18.5 kW at 660...690 V AC 50 Hz 18.5 kW at 380...400 V AC 50 Hz 18.5 kW at 415...440 V AC 50 Hz 9 kW at 220...230 V AC 50 Hz
Motor power hp	2 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 phases motors 10 hp at 230/240 V AC 60 Hz for 3 phases motors 20 hp at 460/480 V AC 60 Hz for 3 phases motors 25 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 control circuit 50 A (at 60 °C) for power circuit
Irms rated making capacity	250 A DC for control circuit conforming to IEC 60947-5-1 450 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	450 kA at 440 V for power circuit conforming to IEC 60947
Associated fuse rating	10 A gG for control circuit conforming to IEC 60947-5-1 63 A at <= 690 V coordination type 1 for power circuit 63 A at <= 690 V coordination type 2 for power circuit
Average impedance	2 mOhm - Ith 50 A 50 Hz for power circuit

Power dissipation per pole	3 W AC-3 5 W AC-1
[Ui] rated insulation voltage	Control circuit: 600 V CSA certified Control circuit: 600 V UL certified Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Control circuit: 690 V conforming to IEC 60947-4-1 Power circuit: 690 V conforming to IEC 60947-4-1
Overvoltage category	III
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947
Safety reliability level	B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1
Mechanical durability	30000000 cycles
Control circuit type	DC standard
Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.1...0.25 Uc (-40…70 °C):drop-out DC 0.7...1.25 Uc (-40…60 °C):operational DC 1...1.25 Uc (60…70 °C):operational DC
Inrush power in W	5.4 W (at 20 °C)
Hold-in power consumption in W	5.4 W at 20 °C
Operating time	20 ms closing 63 ms opening
Time constant	28 ms
Maximum operating rate	3600 cyc/h 60 °C
Connections - terminals	Control circuit: spring terminals 1 2.5 mm² - cable stiffness: flexible without cable end Control circuit: spring terminals 2 2.5 mm² - cable stiffness: flexible without cable end Power circuit: spring terminals 1 4 mm² - cable stiffness: flexible without cable end Power circuit: spring terminals 2 4 mm² - cable stiffness: flexible without cable end
Auxiliary contact composition	1 NO + 1 NC
Minimum switching voltage	17 V for control circuit
Minimum switching current	5 mA for control circuit
Insulation resistance	> 10 MOhm for control circuit
Non-overlap time	1.5 ms on de-energisation between NC and NO contacts 1.5 ms on energisation between NC and NO contacts
Mounting support	Rail Plate

Environment

Standards	EN/IEC 60947-5-1 CSA C22.2 No 14 UL 508 EN/IEC 60947-4-1
Product certifications	UL GL CSA CCC BV RINA GOST DNV LROS (Lloyds register of shipping)
IP degree of protection	IP2X conforming to IEC 60529 IP2X conforming to VDE 0106

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	-60…80 °C storage -40…60 °C operation 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	Shocks contactor closed (15 gn) Shocks contactor opened (8 gn) Vibrations contactor opened (2 Gn, 5...300 Hz) Vibrations contactor closed (4 Gn, 5...300 Hz)
Height	85 mm
Width	45 mm
Depth	101 mm
Net weight	0.54 kg

Packing Units

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

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 >

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