

LC1D115BD

TeSys D contactor - 3P(3 NO) - AC-3 - ≤ 440 V
115 A - 24 V DC standard coil



Main

Range of product	TeSys D
Range	TeSys
Product name	TeSys D
Product or component type	Contactor
Device short name	LC1D
Contactor application	Resistive load Motor control
Utilisation category	AC-3 AC-1
Poles description	3P
Pole contact composition	3 NO
[Ue] rated operational voltage	≤ 1000 V AC 25...400 Hz for power circuit ≤ 300 V DC for power circuit
[Ie] rated operational current	200 A (≤ 60 °C) at ≤ 440 V AC AC-1 for power circuit 115 A (≤ 60 °C) at ≤ 440 V AC AC-3 for power circuit
Motor power kW	55 kW at 380...400 V AC 50/60 Hz 75 kW at 500 V AC 50/60 Hz 80 kW at 660...690 V AC 50/60 Hz 59 kW at 415...440 V AC 50/60 Hz 65 kW at 1000 V AC 50/60 Hz 30 kW at 220...230 V AC 50/60 Hz
Motor power hp	75 hp at 460/480 V AC 50/60 Hz for 3 phases motors 40 hp at 230/240 V AC 50/60 Hz for 3 phases motors 30 hp at 200/208 V AC 50/60 Hz for 3 phases motors 100 hp at 575/600 V AC 50/60 Hz for 3 phases motors
Control circuit type	DC standard
Control circuit voltage	24 V DC
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	Conforming to IEC 60947
Overvoltage category	III

[I _{th}] conventional free air thermal current	200 A at ≤ 60 °C for power circuit
I _{rms} 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
[I _{cw}] rated short-time withstand current	140 A 100 ms signalling circuit 550 A ≤ 40 °C 1 min power circuit 1100 A ≤ 40 °C 1 s power circuit 250 A ≤ 40 °C 10 min power circuit 120 A 500 ms signalling circuit 950 A ≤ 40 °C 10 s power circuit 100 A 1 s signalling circuit
Associated fuse rating	250 A gG at ≤ 690 V coordination type 1 for power circuit 10 A gG for signalling circuit 200 A gG at ≤ 690 V coordination type 2 for power circuit
Average impedance	0.6 mΩ at 50 Hz - I _{th} 200 A for power circuit
[U _i] rated insulation voltage	600 V for power circuit certifications CSA 600 V for signalling circuit certifications UL 690 V for signalling circuit conforming to IEC 60947-1 600 V for power circuit certifications UL 1000 V for power circuit conforming to IEC 60947-4-1 600 V for signalling circuit certifications CSA
Electrical durability	0.95 Mcycles 115 A AC-3 at U _e ≤ 440 V 0.8 Mcycles 200 A AC-1 at U _e ≤ 440 V
Power dissipation per pole	24 W AC-1 7.9 W AC-3
Protective cover	With
Mounting support	Rail Plate
Standards	IEC 60947-5-1 UL 508 EN 60947-4-1 IEC 60947-4-1 EN 60947-5-1 CSA C22.2 No 14
Product certifications	GOST DNV GL LROS CSA UL RINA CCC BV
Connections - terminals	Power circuit : connector 1 cable(s) 10...120 mm ² - cable stiffness: flexible - with cable end Control circuit : screw clamp terminals 1 cable(s) 1...2.5 mm ² - cable stiffness: flexible - without cable end Power circuit : connector 2 cable(s) 10...50 mm ² - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 2 cable(s) 1...2.5 mm ² - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 1 cable(s) 1...2.5 mm ² - cable stiffness: solid - without cable end Control circuit : screw clamp terminals 2 cable(s) 1...2.5 mm ² - cable stiffness: solid - without cable end Control circuit : screw clamp terminals 2 cable(s) 1...2.5 mm ² - cable stiffness: flexible - with cable end Control circuit : screw clamp terminals 1 cable(s) 1...2.5 mm ² - cable stiffness: flexible - with cable end Power circuit : connector 1 cable(s) 10...120 mm ² - cable stiffness: flexible - without cable end Power circuit : connector 2 cable(s) 10...50 mm ² - cable stiffness: flexible - with cable end Power circuit : connector 2 cable(s) 10...50 mm ² - cable stiffness: solid - without cable end Power circuit : connector 1 cable(s) 10...120 mm ² - cable stiffness: solid - without cable end
Tightening torque	Power circuit : 12 N.m - on connector hexagonal 4 mm 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
Operating time	40...75 ms opening 20...35 ms closing
Safety reliability level	B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1

B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1

Mechanical durability	8 Mcycles
Operating rate	1200 cyc/h at ≤ 60 °C




Complementary

Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.75...1.2 Uc operational at 55 °C, DC 0.15...0.4 Uc drop-out at 55 °C, DC
Time constant	25 ms
Inrush power in W	270...365 W at 20 °C
Hold-in power consumption in W	2.4...5.1 W at 20 °C
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 current	5 mA for signalling circuit
Minimum switching voltage	17 V for signalling circuit
Non-overlap time	1.5 ms on energisation (between NC and NO contact) 1.5 ms on de-energisation (between NC and NO contact)
Insulation resistance	> 10 MOhm for signalling circuit
Contact compatibility	M10
Compatibility code	LC1D

Environment

IP degree of protection	IP2x front face conforming to IEC 60529
Protective treatment	TH conforming to IEC 60068-2-30
Pollution degree	3
Ambient air temperature for operation	-5...60 °C
Ambient air temperature for storage	-60...80 °C
Permissible ambient air temperature around the device	-40...70 °C at Uc
Operating altitude	3000 m without derating in temperature
Fire resistance	850 °C conforming to IEC 60695-2-1
Flame retardance	V1 conforming to UL 94
Mechanical robustness	Shocks contactor open 6 Gn for 11 ms Shocks contactor closed 15 Gn for 11 ms Vibrations contactor open 2 Gn, 5...300 Hz Vibrations contactor closed 4 Gn, 5...300 Hz
Height	158 mm
Width	120 mm
Depth	136 mm
Product weight	2.5 kg

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0927 - Schneider Electric declaration of conformity  Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold Reference not containing SVHC above the threshold
Product environmental profile	Available  Product environmental
Product end of life instructions	Available  End of life manual

Contractual warranty

Warranty period	18 months
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