

LC2D115BD

TeSys D reversing contactor - 3P(3 NO) - AC-3
- <= 440 V 115 A - 24 V DC coil

Main

Range of product	TeSys D
Product or component type	Reversing contactor
Device short name	LC2D
Contactors application	Motor control Resistive load
Utilisation category	AC-1 AC-3
Device presentation	Preassembled with reversing power busbar
Poles description	3P
Power pole contact composition	3 NO
[Ue] rated operational voltage	<= 1000 V AC 25...400 Hz for power circuit <= 690 V DC for power circuit
[Ie] rated operational current	115 A (<= 60 °C) at <= 440 V AC AC-3 for power circuit 200 A (<= 60 °C) at <= 440 V AC AC-1 for power circuit
Motor power kW	65 kW at 1000 V AC 50/60 Hz 80 kW at 660...690 V AC 50/60 Hz 75 kW at 500 V AC 50/60 Hz 59 kW at 415...440 V AC 50/60 Hz 55 kW at 380...400 V AC 50/60 Hz 30 kW at 220...230 V AC 50/60 Hz
Motor power HP (UL / CSA)	100 hp at 575/600 V AC 50/60 Hz for 3 phases motors 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
Control circuit type	DC standard
Control circuit voltage	24 V DC
Auxiliary contact composition	1 NO + 1 NC
[Uimp] rated impulse withstand voltage	8 kV conforming to IEC 60947
Overvoltage category	III
[Ith] conventional free air thermal current	200 A at <= 60 °C for power circuit
Irms rated making capacity	1260 A at 440 V for power circuit conforming to IEC 60947 250 A DC for signalling circuit conforming to IEC 60947-5-1 140 A AC 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 power circuit 950 A <= 40 °C 10 s power circuit 550 A <= 40 °C 1 min power circuit 250 A <= 40 °C 10 min power circuit 140 A 100 ms signalling circuit 120 A 500 ms signalling circuit 100 A 1 s signalling circuit

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Associated fuse rating	200 A gG at <= 690 V coordination type 2 for power circuit 250 A gG at <= 690 V coordination type 1 for power circuit 10 A gG for signalling circuit conforming to IEC 60947-5-1
Average impedance	0.6 mOhm at 50 Hz - lth 200 A for power circuit
[Ui] rated insulation voltage	1000 V for power circuit conforming to IEC 60947-4-1 600 V for signalling circuit certifications UL 600 V for signalling circuit certifications CSA 690 V for signalling circuit conforming to IEC 60947-1 600 V for power circuit certifications UL 600 V for power circuit certifications CSA
Electrical durability	0.95 Mcycles 115 A AC-3 at Ue <= 440 V 0.8 Mcycles 200 A AC-1 at Ue <= 440 V
Power dissipation per pole	7.9 W AC-3 24 W AC-1
Safety cover	With
Interlocking type	Electrical Mechanical
Mounting support	Plate Rail
Standards	EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508 CSA C22.2 n°14
Product certifications	BV CCC CSA DNV GL GOST RINA UL LROS
Connections - terminals	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 Power circuit: connector 2 cable(s) 10...50 mm ² - cable stiffness: flexible - with cable end Power circuit: connector 1 cable(s) 10...120 mm ² - cable stiffness: flexible - with cable end Power circuit: connector 2 cable(s) 10...50 mm ² - cable stiffness: flexible - without cable end Power circuit: connector 1 cable(s) 10...120 mm ² - cable stiffness: flexible - 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 1 cable(s) 1...2.5 mm ² - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 1 cable(s) 1...2.5 mm ² - cable stiffness: flexible - with 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: flexible - without cable end Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm ² - cable stiffness: flexible - with 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 Philips No 2 Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm
Operating time	40...75 ms opening 20...35 ms closing

Safety reliability level	B10d = 2000000 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	8000000 cycles
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 at 55 °C operational 0.15...0.4 Uc at 55 °C drop-out
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 mirror contact (1 NC) conforming to IEC 60947-4-1 Type mechanically linked (1 NO + 1 NC) conforming to IEC 60947-5-1
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

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 closed 4 Gn, 5...300 Hz Vibrations contactor open 2 Gn, 5...300 Hz
Height	158 mm
Width	266 mm
Depth	148 mm
Product weight	6.35 kg