Product datasheet

Specifications

reversing contactor TeSys LC2-D - 3 poles - AC-3 - 440 V 50 A - coil 220 V AC

LC2D50M7

Discontinued on: 01-Nov-2020

Discontinued

Main

Range	TeSys
Product Name	TeSys D
Product Or Component Type	Reversing contactor
Device Short Name	LC2D
Contactor Application	Motor control Resistive load
Utilisation Category	AC-3 AC-1
Device Presentation	Preassembled with reversing power busbar
Poles Description	3P
Power Pole Contact Composition	3 NO
[Ue] Rated Operational Voltage	Power circuit: <= 1000 V AC 25...400 Hz
[Ie] Rated Operational Current	50 A (at <55 °C) at <= 440 V AC AC-3 for power circuit 80 A (at <40 °C) at <= 440 V AC AC-1 for power circuit
Motor Power Kw	15 kW at 220...230 V AC 50 Hz 22 kW at 380...400 V AC 50 Hz 30 kW at 500 V AC 50 Hz 33 kW at 660...690 V AC 50 Hz 25 kW at 415 V AC 50 Hz 30 kW at 440 V AC 50 Hz
Motor Power Hp (Ul / Csa)	3 hp at 115 V AC 60 Hz for 1 phase motors 15 hp at 200/208 V AC 60 Hz for 3 phases motors 40 hp at 575...600 V AC 60 Hz for 3 phases motors 40 hp at 460...480 V AC 60 Hz for 3 phases motors 15 hp at 220...240 V AC 60 Hz for 3 phases motors 7.5 hp at 230...240 V AC 60 Hz for 1 phase motors
Control Circuit Type	AC at 50/60 Hz
[Uc] Control Circuit Voltage	220 V AC 50/60 Hz
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	10 A (at 60 °C) for signalling circuit
Irms Rated Making Capacity	140 A AC for signalling circuit conforming to IEC 60947-5-1 250 A DC for signalling circuit conforming to IEC 60947-5-1 900 A at 440 V for power circuit conforming to IEC 60947-4
Rated Breaking Capacity	400 A at 690 V for power circuit conforming to IEC 60947 900 A at 220/415/440 V for power circuit conforming to IEC 60947 900 A at 500 V for power circuit conforming to IEC 60947

[Icw] Rated Short-Time Withstand Current	100 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit 140 A - 100 ms for signalling circuit 400 A 40 °C - 10 s for power circuit 810 A 40 °C - 1 s for power circuit 84 A 40 °C - 10 min for power circuit 208 A 40 °C - 1 min for power circuit
Associated Fuse Rating	10 A gG for signalling circuit conforming to IEC 60947-5-1
Average Impedance	1.5 mOhm - Ith 60 A 50 Hz for power circuit
[Ui] Rated Insulation Voltage	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 Power circuit: 1000 V conforming to IEC 60947-4-1
Electrical Durability	1.4 Mcycles 80 A AC-1 at Ue <= 440 V 1.5 Mcycles 50 A AC-3 at Ue <= 440 V
Power Dissipation Per Pole	3.7 W AC-3 9.6 W AC-1
Front Cover	With
Interlocking Type	Mechanical
Mounting Support	Plate Rail
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	BV CCC CSA DNV GL RINA UL EAC
Connections - Terminals	Control circuit: screw clamp terminals 1 cable(s) 1…4 mm²flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 1…4 mm²flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 1…4 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 1…2.5 mm²flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 1…4 mm²solid without cable end Control circuit: screw clamp terminals 2 cable(s) 1…4 mm²solid without cable end Power circuit: screw clamp terminals 1 cable(s) 2.5…25 mm²flexible without cable end Power circuit: screw clamp terminals 2 cable(s) 2.5…16 mm²flexible without cable end Power circuit: screw clamp terminals 1 cable(s) 2.5…25 mm²flexible with cable end Power circuit: screw clamp terminals 2 cable(s) 2.5…10 mm²flexible with cable end Power circuit: screw clamp terminals 1 cable(s) 2.5…25 mm²solid without cable end Power circuit: screw clamp terminals 2 cable(s) 2.5…16 mm²solid without cable end
Tightening Torque	Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 6 N.m - on screw clamp terminals - with screwdriver flat Ø 8 mm Power circuit: 6 N.m - on screw clamp terminals
Operating Time	20...26 ms closing 8...12 ms opening
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	16000000 cycles
Maximum Operating Rate	3600 cyc/h 55 °C

Complementary

Coil Technology	Built-in bidirectional peak limiting diode suppressor
Control Circuit Voltage Limits	0.3...0.6 Uc (-40…70 °C):drop-out AC 50/60 Hz 0.8...1.1 Uc (-40…55 °C):operational AC 50 Hz 0.85...1.1 Uc (-40…55 °C):operational AC 60 Hz 1...1.1 Uc (55…70 °C):operational AC 50/60 Hz
Inrush Power In Va	200 VA 50 Hz cos phi 0.75 (at 20 °C) 220 VA 60 Hz cos phi 0.75 (at 20 °C)
Heat Dissipation	6…10 W at 50/60 Hz
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 de-energisation between NC and NO contact 1.5 ms on energisation between NC and NO contact
Insulation Resistance	> 10 MOhm for signalling circuit

Environment

Ip Degree Of Protection	IP20 front face conforming to IEC 60529
Protective Treatment	TH conforming to IEC 60068-2-30
Pollution Degree	3
Ambient Air Temperature For Operation	-40…60 °C 60…70 °C with derating
Ambient Air Temperature For Storage	-60…80 °C
Operating Altitude	0...3000 m
Fire Resistance	960 °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 closed: 10 Gn for 11 ms Shocks contactor open: 8 Gn for 11 ms Vibrations contactor closed: 3 Gn, 5...300 Hz
Height	127 mm
Width	165 mm
Depth	142 mm
Net Weight	2.4 kg

Sustainability

Green Premium^{TM} label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO_2 products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >

Transparency

RoHS/REACh

Well-being performance

Reach Free Of Svhc	
Toxic Heavy Metal Free	
Mercury Free	
Rohs Exemption Information	Yes
Pvc Free	

Certifications & Standards

Eu Rohs Directive	Compliant EU RoHS Declaration
China Rohs Regulation	China RoHS declaration Pro-active China RoHS declaration (out of China RoHS legal scope)
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	End of Life Information