Product datasheet

Specifications



TeSys D reversing contactor -3P(3 NO) - AC-3 - <= 440 V 38 A -250 V DC coil

LC2D38UD

(!) End-of-service on: 04-Nov-2020

① Discontinued

Main

Wall	
Range	TeSys
Product Name	TeSys D
Product Or Component Type	Reversing contactor
Device Short Name	LC2D
Contactor Application	Resistive load
	Motor control
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: <= 690 V AC 25400 Hz
	Power circuit: <= 300 V DC
[le] Rated Operational Current	50 A (at <60 °C) at <= 440 V AC AC-1 for power circuit
	38 A (at <60 $^{\circ}$ C) at <= 440 V AC AC-3 for power circuit
Motor Power Kw	9 kW at 220230 V AC 50 Hz
	18.5 kW at 380400 V AC 50 Hz
	18.5 kW at 415440 V AC 50 Hz
	18.5 kW at 500 V AC 50 Hz
	18.5 kW at 660690 V AC 50 Hz
Motor Power Hp (UI / Csa)	10 hp at 230/240 V AC 60 Hz for 3 phases motors
	5 hp at 240 V AC 60 Hz for 1 phase motors
	10 hp at 200/208 V AC 60 Hz for 3 phases motors
	20 hp at 480 V AC 60 Hz for 3 phases motors
	25 hp at 600 V AC 60 Hz for 3 phases motors
Control Circuit Type	DC standard
[Uc] Control Circuit Voltage	250 V DC
Auxiliary Contact Composition	1 NO + 1 NC
[Uimp] Rated Impulse Withstand Voltage	6 kV conforming to IEC 60947
Overvoltage Category	III
[Ith] Conventional Free Air	10 A (at 60 °C) for signalling circuit
Thermal Current	50 A (at 60 °C) for power 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
	550 A at 440 V for power circuit conforming to IEC 60947
Rated Breaking Capacity	550 A at 440 V for power circuit conforming to IEC 60947

[Icw] Rated Short-Time Withstand Current	60 A 40 °C - 10 min for power circuit 430 A 40 °C - 1 s for power circuit 150 A 40 °C - 1 min for power circuit 310 A 40 °C - 10 s for power circuit 100 A - 1 s for signalling circuit 120 A - 500 ms for signalling circuit 140 A - 100 ms for signalling circuit
Associated Fuse Rating	10 A gG for signalling circuit conforming to IEC 60947-5-1 63 A gG at <= 690 V coordination type 1 for power circuit 63 A gG at <= 690 V coordination type 2 for power circuit
Average Impedance	2 mOhm - Ith 50 A 50 Hz for power circuit
[Ui] Rated Insulation Voltage	Power circuit: 690 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
Electrical Durability	1.4 Mcycles 50 A AC-1 at Ue <= 440 V 1.4 Mcycles 38 A AC-3 at Ue <= 440 V
Power Dissipation Per Pole	5 W AC-1 3 W AC-3
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	GL RINA LROS (Lloyds register of shipping) CSA GOST CCC BV DNV UL
Connections - Terminals	Control circuit: screw clamp terminals 1 cable(s) 14 mm ² flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm ² flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm ² flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 125 mm ² flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm ² solid Control circuit: screw clamp terminals 1 cable(s) 14 mm ² solid Control circuit: screw clamp terminals 2 cable(s) 14 mm ² solid Power circuit: screw clamp terminals 1 cable(s) 2.510 mm ² flexible without cable end Power circuit: screw clamp terminals 2 cable(s) 2.510 mm ² flexible without cable end Power circuit: screw clamp terminals 1 cable(s) 110 mm ² flexible with cable end Power circuit: screw clamp terminals 1 cable(s) 110 mm ² flexible with cable end Power circuit: screw clamp terminals 1 cable(s) 110 mm ² flexible with cable end Power circuit: screw clamp terminals 2 cable(s) 1.56 mm ² flexible with cable end Power circuit: screw clamp terminals 2 cable(s) 1.510 mm ² flexible with cable end Power circuit: screw clamp terminals 2 cable(s) 1.510 mm ² flexible with cable end Power circuit: screw clamp terminals 2 cable(s) 1.510 mm ² flexible with cable end Power circuit: screw clamp terminals 1 cable(s) 1.510 mm ² flexible with cable end Power circuit: screw clamp terminals 1 cable(s) 1.510 mm ² solid
Tightening Torque	Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat \emptyset 6 mm Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 2.5 N.m - on screw clamp terminals - with screwdriver flat \emptyset 6 mm Power circuit: 2.5 N.m - on screw clamp terminals - with screwdriver Philips No 2
Operating Time	53.5572.45 ms closing 1624 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	30 Mcycles

Maximum Operating Rate 3600 cyc/h 60 °C

Complementary

Coil Technology	Built-in bidirectional peak limiting diode suppressor
Control Circuit Voltage Limits	0.10.25 Uc (-4070 °C):drop-out DC 0.71.25 Uc (-4060 °C):operational DC 11.25 Uc (6070 °C):operational DC
Time Constant	28 ms
Inrush Power In W	5.4 W (at 20 °C)
Hold-In Power Consumption In W	5.4 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	25400 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	-4060 °C 6070 °C with derating
Ambient Air Temperature For Storage	-6080 °C
Operating Altitude	03000 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, 5300 Hz Vibrations contactor closed: 4 Gn, 5300 Hz Shocks contactor closed: 15 Gn for 11 ms Shocks contactor open: 8 Gn for 11 ms
Height	85 mm
Width	90 mm
Depth	101 mm
Net Weight	1.137 kg

Contractual warranty

Warranty

18 months

Sustainability Screen Premium

Green PremiumTM label is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ 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
Circularity Profile	End of Life Information