Product data sheet

Specifications



TeSys D reversing contactor - 3P(3 NO) - AC-3 - <= 440 V 50 A - 600 V AC coil

LC2D50AX7

(!) Discontinued

Main

IVIAIII	
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-1 AC-3
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-3 for power circuit 80 A (at <60 °C) at <= 440 V AC AC-1 for power circuit
Motor Power Kw	15 kW at 220230 V AC 50 Hz 22 kW at 380400 V AC 50 Hz 30 kW at 500 V AC 50 Hz 33 kW at 660690 V AC 50 Hz 25 kW at 415 V AC 50 Hz 30 kW at 440 V AC 50 Hz
Motor Power Hp (UI / Csa)	3 hp at 115 V AC 60 Hz for 1 phase motors 7.5 hp at 230/240 V AC 60 Hz for 1 phase motors 15 hp at 200/208 V AC 60 Hz for 3 phases motors 15 hp at 230/240 V AC 60 Hz for 3 phases motors 40 hp at 460/480 V AC 60 Hz for 3 phases motors 40 hp at 575/600 V AC 60 Hz for 3 phases motors
Control Circuit Type	AC at 50/60 Hz
[Uc] Control Circuit Voltage	600 V AC 50/60 Hz
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 Thermal Current	10 A (at 60 °C) for signalling circuit 80 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 60947-5-1 900 A at 440 V for power circuit conforming to IEC 60947
Rated Breaking Capacity	900 A at 440 V for power circuit conforming to IEC 60947

[Icw] Rated Short-Time Withstand	400 A 40 °C - 10 s for power circuit
Current	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 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
	100 A gG at <= 690 V coordination type 1 for power circuit 100 A gG at <= 690 V coordination type 2 for power circuit
Average Impedance	1.5 mOhm - Ith 80 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	1.45 Mcvcles 50 A AC-3 at Ue <= 440 V
	1.1 Mcycles 80 A AC-1 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	Rail
	Plate
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	UL
	GOST CCC
	CSA
Connections - Terminals	Control circuit: screw clamp terminals 1 cable(s) 14 mm²flexible without cable end
	Control circuit: screw clamp terminals 2 cable(s) 14 mm²flexible 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) 12.5 mm ² flexible with cable end
	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: EverLink BTR screw connectors 1 cable(s) 135 mm²flexible without
	cable end
	Power circuit: EverLink BTR screw connectors 2 cable(s) 125 mm ² flexible without cable end
	Power circuit: EverLink BTR screw connectors 1 cable(s) 135 mm ² flexible with cable end
	Power circuit: EverLink BTR screw connectors 2 cable(s) 125 mm ² flexible with
	cable end
	Power circuit: EverLink BTR screw connectors 1 cable(s) 135 mm ² solid Power circuit: EverLink BTR screw connectors 2 cable(s) 125 mm ² solid
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: 8 N.m - on EverLink BTR screw connectors - cable 2535 mm ²
	hexagonal screw head 4 mm Rever circuit: 5 N m, on Everlink RTR screw connectors, cable 1, 25 mm ²
	Power circuit: 5 N.m - on EverLink BTR screw connectors - cable 125 mm ² hexagonal screw head 4 mm
Operating Time	419 ms opening
	1226 ms closing
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	
	6 Mcycles
Maximum Operating Rate	3600 cyc/h 60 °C

Complementary

Coil Technology	Without built-in suppressor module
Control Circuit Voltage Limits	0.30.6 Uc (-4070 °C):drop-out AC 50/60 Hz 0.81.1 Uc (-4060 °C):operational AC 50 Hz 0.851.1 Uc (-4060 °C):operational AC 60 Hz 11.1 Uc (6070 °C):operational AC 50/60 Hz
Inrush Power In Va	140 VA 60 Hz cos phi 0.75 (at 20 °C) 160 VA 50 Hz cos phi 0.75 (at 20 °C)
Hold-In Power Consumption In Va	13 VA 60 Hz cos phi 0.3 (at 20 °C) 15 VA 50 Hz cos phi 0.3 (at 20 °C)
Heat Dissipation	45 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	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 contact1.5 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 open: 10 Gn for 11 ms Shocks contactor closed: 15 Gn for 11 ms
Height	122 mm
Width	119 mm
Depth	120 mm
Net Weight	1.88 kg

Contractual warranty

Warranty

18 months

Sustainability

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

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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