



# TeSys D reversing contactor -3P(3 NO) - AC-3 - <= 440 V 38 A -480 V AC coil

LC2D38T7V

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

#### ! Discontinued

### Main

Walli	
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: <= 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 °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	AC at 50/60 Hz
[Uc] Control Circuit Voltage	480 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
[lth] Conventional Free Air Thermal Current	10 A (at 60 °C) for signalling circuit 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 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	Electrical and 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	GOST BV UL DNV CCC LROS (Lloyds register of shipping) CSA GL RINA
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 mm²flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 12.5 mm²flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm²solid Control circuit: screw clamp terminals 2 cable(s) 14 mm²solid Power circuit: screw clamp terminals 1 cable(s) 2.510 mm²flexible without cable end Power circuit: screw clamp terminals 2 cable(s) 2.510 mm²flexible without cable end Power circuit: screw clamp terminals 1 cable(s) 110 mm²flexible with cable end Power circuit: screw clamp terminals 2 cable(s) 1.56 mm²flexible with cable end Power circuit: screw clamp terminals 1 cable(s) 1.510 mm²solid Power circuit: screw clamp terminals 2 cable(s) 2.510 mm²solid
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	1222 ms closing 419 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	15 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	70 VA 60 Hz cos phi 0.75 (at 20 °C) 70 VA 50 Hz cos phi 0.75 (at 20 °C)
Hold-In Power Consumption In Va	7.5 VA 60 Hz cos phi 0.3 (at 20 °C) 7 VA 50 Hz cos phi 0.3 (at 20 °C)
Heat Dissipation	23 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 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	92 mm
Net Weight	0.807 kg

# **Contractual warranty**

Warranty 18 months



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Transparency RoHS/REACh

### Well-being performance

<b>⊘</b>	Reach Free Of Svhc	
<b>⊘</b>	Toxic Heavy Metal Free	
<b>⊘</b>	Mercury Free	
<b>⊘</b>	Rohs Exemption Information Yes	
<b>9</b>	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