



Main

Range	TeSys
Product name	TeSys D
Product or component type	Changeover contactor
Device short name	LC2D
Contactor application	Resistive load
Utilisation category	AC-1
Device presentation	Preamsembled with reversing power busbar
Poles description	4P
Pole contact composition	4 NO
System Voltage	<= 690 V AC 25...400 Hz power circuit <= 300 V DC power circuit
[Ie] rated operational current	40 A (<= 140 °F (60 °C)) at <= 440 V AC AC-1 power circuit
Control circuit type	DC low consumption
[Uc] control circuit voltage	24 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 thermal current	40 A at <= 140 °F (60 °C) power circuit 10 A at <= 140 °F (60 °C) signalling circuit
Irms rated making capacity	450 A at 440 V power circuit conforming to IEC 60947 140 A AC signalling circuit conforming to IEC 60947-5-1 250 A DC signalling circuit conforming to IEC 60947-5-1
Rated breaking capacity	450 A at 440 V power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	120 A <= 104 °F (40 °C) 1 min power circuit 240 A <= 104 °F (40 °C) 10 s power circuit 380 A <= 104 °F (40 °C) 1 s power circuit 50 A <= 104 °F (40 °C) 10 min power circuit 100 A 1 s signalling circuit 120 A 500 ms signalling circuit 140 A 100 ms signalling circuit
Associated fuse rating	40 A gG at <= 690 V coordination type 2 power circuit 63 A gG at <= 690 V coordination type 1 power circuit 10 A gG signalling circuit conforming to IEC 60947-5-1
Average impedance	2 mOhm at 50 Hz - Ith 40 A power circuit
[Ui] rated insulation voltage	600 V power circuit certifications CSA 600 V power circuit certifications UL 690 V power circuit conforming to IEC 60947-4-1 690 V signalling circuit conforming to IEC 60947-1 600 V signalling circuit certifications CSA 600 V signalling circuit certifications UL
Electrical durability	1.4 Mcycles 40 A AC-1 <= 440 V
Power dissipation per pole	3.2 W AC-1
Protective cover	With
Interlocking type	Mechanical
Mounting support	Plate Rail

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Standards	UL 508 CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1
Product certifications	UL CSA CCC EAC GL BV DNV RINA
Connections - terminals	Control circuit: screw clamp terminals 2 cable(s) 0...0 in ² (1...2.5 mm ²) - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 2 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 1 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 2 cable(s) 0...0.01 in ² (1...4 mm ²) - cable stiffness: solid - without cable end Power circuit: connector 1 cable(s) 0...0.02 in ² (2.5...10 mm ²) - cable stiffness: flexible - without cable end Power circuit: connector 2 cable(s) 0...0.02 in ² (2.5...10 mm ²) - cable stiffness: flexible - without cable end Power circuit: connector 1 cable(s) 0...0.02 in ² (2.5...10 mm ²) - cable stiffness: flexible - with cable end Power circuit: connector 2 cable(s) 0...0.02 in ² (2.5...10 mm ²) - cable stiffness: flexible - with cable end Power circuit: connector 1 cable(s) 0...0.02 in ² (2.5...16 mm ²) - cable stiffness: solid - without cable end Power circuit: connector 2 cable(s) 0...0.02 in ² (2.5...16 mm ²) - cable stiffness: solid - without cable end
Tightening torque	Control circuit: 15.04 lbf.in (1.7 N.m) - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 15.04 lbf.in (1.7 N.m) - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 15.04 lbf.in (1.7 N.m) - on connector - with screwdriver flat Ø 6 mm Power circuit: 15.04 lbf.in (1.7 N.m) - on connector - with screwdriver Philips No 2
Operating time	65.45...88.55 ms closing 20...30 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
Operating rate	3600 cyc/h at ≤ 140 °F (60 °C)

Complementary

Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.1...0.3 U _c drop-out at 140 °F (60 °C), DC 0.8...1.25 U _c operational at 140 °F (60 °C), DC
Time constant	40 ms
Inrush power in W	2.4 W at 68 °F (20 °C)

Hold-in power consumption in W	2.4 W at 68 °F (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	25...400 Hz
Minimum switching current	5 mA signalling circuit
Minimum switching voltage	17 V 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 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	23...140 °F (-5...60 °C)
ambient air temperature for storage	-76...176 °F (-60...80 °C)
permissible ambient air temperature around the device	-40...158 °F (-40...70 °C) at Uc
operating altitude	9842.52 ft (3000 m) without derating in temperature
fire resistance	1562 °F (850 °C) conforming to IEC 60695-2-1
flame retardance	V1 conforming to UL 94
mechanical robustness	Vibrations contactor open 2 Gn, 5...300 Hz Vibrations contactor closed 4 Gn, 5...300 Hz Shocks contactor closed 15 Gn for 11 ms Shocks contactor open 8 Gn for 11 ms
height	3.58 in (91 mm)
width	3.54 in (90 mm)
depth	3.86 in (98 mm)
product weight	1.87 lb(US) (0.85 kg)

Offer Sustainability

Green Premium product	Green Premium product
Compliant - since 0711 - Schneider Electric declaration of conformity	Compliant - since 0711 - Schneider Electric declaration of conformity
Reference not containing SVHC above the threshold	Reference not containing SVHC above the threshold
Available	Available
Available	Available

Contractual warranty

Warranty period	18 months
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