

LC2D80004Z7

TeSys D changeover contactor - 4P(4 NO) - AC-1 -
≤ 440 V 125 A - 21 V AC coil



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	Preassembled with reversing power busbar
Poles description	4P
Pole contact composition	4 NO
[Ue] rated operational voltage	≤ 1000 V AC 25...400 Hz for power circuit ≤ 300 V DC for power circuit
[Ie] rated operational current	125 A (≤ 60 °C) at ≤ 440 V AC AC-1 for power circuit
Control circuit type	AC 50/60 Hz
Control circuit voltage	21 V AC 50/60 Hz
[Uimp] rated impulse withstand voltage	8 kV conforming to IEC 60947
Overvoltage category	III
[Ith] conventional free air thermal current	125 A at ≤ 60 °C for power circuit
Irms rated making capacity	1100 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	1100 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	135 A ≤ 40 °C 10 min power circuit 640 A ≤ 40 °C 10 s power circuit 990 A ≤ 40 °C 1 s power circuit 320 A ≤ 40 °C 1 min power circuit
Associated fuse rating	160 A gG at ≤ 690 V coordination type 2 for power circuit 200 A gG at ≤ 690 V coordination type 1 for power circuit
Average impedance	At 50 Hz - Ith 125 A for power circuit
[Ui] rated insulation voltage	1000 V for power circuit conforming to IEC 60947-4-1 600 V for power circuit certifications CSA 600 V for power circuit certifications UL
Electrical durability	0.8 Mcycles 125 A AC-1 at Ue ≤ 440 V
Power dissipation per pole	12.5 W AC-1
Protective cover	Without
Interlocking type	Mechanical
Mounting support	Plate Rail
Standards	EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508 CSA C22.2 No 14
Product certifications	BV CCC CSA DNV GL GOST RINA

The information provided in this documentation contains general descriptions and/or technical characteristics of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Connections - terminals	<p>Control circuit : screw clamp terminals 2 cable(s) 1...2.5 mm² - cable stiffness: flexible - with cable end</p> <p>Control circuit : screw clamp terminals 1 cable(s) 1...4 mm² - cable stiffness: flexible - without cable end</p> <p>Control circuit : screw clamp terminals 2 cable(s) 1...4 mm² - cable stiffness: flexible - without cable end</p> <p>Control circuit : screw clamp terminals 1 cable(s) 1...4 mm² - cable stiffness: solid - without cable end</p> <p>Control circuit : screw clamp terminals 2 cable(s) 1...4 mm² - cable stiffness: solid - without cable end</p> <p>Control circuit : screw clamp terminals 1 cable(s) 1...2.5 mm² - cable stiffness: flexible - with cable end</p> <p>Power circuit : connector 1 cable(s) 4...50 mm² - cable stiffness: flexible - without cable end</p> <p>Power circuit : connector 2 cable(s) 4...25 mm² - cable stiffness: flexible - without cable end</p> <p>Power circuit : connector 1 cable(s) 4...50 mm² - cable stiffness: flexible - with cable end</p> <p>Power circuit : connector 2 cable(s) 4...16 mm² - cable stiffness: flexible - with cable end</p> <p>Power circuit : connector 1 cable(s) 4...50 mm² - cable stiffness: solid - without cable end</p> <p>Power circuit : connector 2 cable(s) 4...25 mm² - cable stiffness: solid - without cable end</p>
Tightening torque	<p>Power circuit : 9 N.m - on connector - with screwdriver flat Ø 6 to Ø 8 mm</p> <p>Power circuit : 9 N.m - on connector hexagonal 4 mm</p> <p>Control circuit : 1.2 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm</p> <p>Control circuit : 1.2 N.m - on screw clamp terminals - with screwdriver Philips No 2</p>
Operating time	<p>20...35 ms closing</p> <p>6...20 ms opening</p>
Safety reliability level	<p>B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1</p> <p>B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1</p>
Mechanical durability	4 Mcycles
Operating rate	3600 cyc/h at ≤ 60 °C

Complementary

Coil technology	Without built-in suppressor module
Control circuit voltage limits	<p>0.3...0.6 U_c at 55 °C drop-out 50/60 Hz</p> <p>0.8...1.1 U_c at 55 °C operational 50 Hz</p> <p>0.85...1.1 U_c at 55 °C operational 60 Hz</p>
Inrush power in VA	<p>245 VA at 20 °C (cos φ 0.75) 60 Hz</p> <p>245 VA at 20 °C (cos φ 0.75) 50 Hz</p>
Hold-in power consumption in VA	<p>26 VA at 20 °C (cos φ 0.3) 60 Hz</p> <p>26 VA at 20 °C (cos φ 0.3) 50 Hz</p>
Heat dissipation	6...10 W at 50/60 Hz

Environment

IP degree of protection	IP2x front face conforming to IEC 60529
Protective treatment	TH conforming to IEC 60068-2-30
Pollution degree	3
Ambient air temperature for operation	-5...60 °C
Ambient air temperature for storage	-60...80 °C
Permissible ambient air temperature around the device	-40...70 °C at U _c
Operating altitude	3000 m without derating in temperature

Fire resistance	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 Shocks contactor open 8 Gn for 11 ms Vibrations contactor closed 3 Gn, 5...300 Hz Shocks contactor closed 10 Gn for 11 ms
Height	127 mm
Width	207 mm
Depth	158 mm
Product weight	3.2 kg