

LP1D65008ED

TeSys D contactor - 4P(2 NO + 2 NC) - AC-1 -
≤ 440 V 80 A - 48 V DC coil



Main

Range of product	TeSys D
Product or component type	Contacteur
Device short name	LP1D
Contacteur application	Resistive load
Utilisation category	AC-1
Poles description	4P
Power pole contact composition	2 NO + 2 NC
[Ue] rated operational voltage	≤ 690 V AC 25...400 Hz for power circuit ≤ 690 V DC for power circuit
[Ie] rated operational current	80 A (≤ 60 °C) at ≤ 440 V AC AC-1 for power circuit
Control circuit type	DC standard
Control circuit voltage	48 V DC
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947
Overtoltage category	III
[Ith] conventional free air thermal current	80 A at ≤ 60 °C for power circuit
Irms rated making capacity	1000 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	1000 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	110 A ≤ 40 °C 10 min power circuit 260 A ≤ 40 °C 1 min power circuit 520 A ≤ 40 °C 10 s power circuit 900 A ≤ 40 °C 1 s power circuit
Associated fuse rating	125 A gG at ≤ 690 V coordination type 1 for power circuit 125 A gG at ≤ 690 V coordination type 2 for power circuit
Average impedance	1.5 mOhm at 50 Hz - Ith 80 A for power circuit
[Ui] rated insulation voltage	690 V for power circuit conforming to IEC 60947-4-1 600 V for power circuit certifications CSA 600 V for power circuit certifications UL
Power dissipation per pole	9.6 W AC-1
Safety cover	Without
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 n°14
Product certifications	BV CCC CSA DNV GL GOST RINA UL LROS

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance 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>Power circuit: screw clamp terminals 1 cable(s) 1...35 mm² - cable stiffness: flexible - without cable end</p> <p>Power circuit: screw clamp terminals 2 cable(s) 1...25 mm² - cable stiffness: flexible - without cable end</p> <p>Power circuit: screw clamp terminals 1 cable(s) 1...35 mm² - cable stiffness: flexible - with cable end</p> <p>Power circuit: screw clamp terminals 2 cable(s) 1...25 mm² - cable stiffness: flexible - with cable end</p> <p>Power circuit: screw clamp terminals 1 cable(s) 1...35 mm² - cable stiffness: solid - without cable end</p> <p>Power circuit: screw clamp terminals 2 cable(s) 1...25 mm² - cable stiffness: solid - without 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: flexible - with cable end</p> <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: solid - without cable end</p> <p>Control circuit: screw clamp terminals 2 cable(s) 1...4 mm² - cable stiffness: solid - without cable end</p>
Tightening torque	<p>Power circuit: 5 N.m - on screw clamp terminals - cable ≤ 25 mm² hexagonal 4 mm</p> <p>Power circuit: 8 N.m - on screw clamp terminals - cable 25...35 mm² hexagonal 4 mm</p> <p>Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm</p> <p>Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2</p>
Operating time	<p>4...19 ms opening</p> <p>12...26 ms closing</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 (millions)	6 Mcycles
Operating rate	3600 cyc/h at ≤ 60 °C

Complementary

Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	<p>0.1...0.3 Uc at 55 °C drop-out</p> <p>0.85...1.1 Uc at 55 °C operational</p>
Time constant	75 ms
Inrush power in W	22 W at 20 °C
Hold-in power consumption in W	22 W at 20 °C

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 Uc
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	<p>Vibrations contactor open 2 Gn, 5...300 Hz</p> <p>Vibrations contactor closed 4 Gn, 5...300 Hz</p> <p>Shocks contactor open 10 Gn for 11 ms</p> <p>Shocks contactor closed 15 Gn for 11 ms</p>

Height	127 mm
Width	85 mm
Depth	125 mm
Product weight	2.22 kg