Product datasheet
Characteristics

LP1D80008FD
TeSys D contactor - 4P(2 NO + 2 NC) - AC-1 - <= 440 V 125 A - 110 V DC coil

Main

Range	TeSys
Product name	TeSys D
Product or component type	Contactor
Device short name	LP1D
Contactor application	Resistive load
Utilisation category	AC-1
Poles description	4P
Pole contact composition	2 NO + 2 NC
[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	DC standard
Control circuit voltage	110 V DC
[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	0.8 mOhm 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
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 UL LROS

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Connections - terminals	Control circuit : screw clamp terminals 2 cable(s) 1...2.5 mm² - cable stiffness: flexible - with cable end Control circuit : screw clamp terminals 1 cable(s) 1...4 mm² - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 2 cable(s) 1...4 mm² - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 1 cable(s) 1...4 mm² - cable stiffness: solid - without cable end Control circuit : screw clamp terminals 2 cable(s) 1...4 mm² - cable stiffness: solid - without cable end Control circuit : screw clamp terminals 1 cable(s) 1...2.5 mm² - cable stiffness: flexible - with cable end Power circuit : connector 1 cable(s) 4...50 mm² - cable stiffness: flexible - without cable end Power circuit : connector 2 cable(s) 4...25 mm² - cable stiffness: flexible - without cable end Power circuit : connector 1 cable(s) 4...50 mm² - cable stiffness: flexible - with cable end Power circuit : connector 2 cable(s) 4...16 mm² - cable stiffness: flexible - with cable end Power circuit : connector 1 cable(s) 4...50 mm² - cable stiffness: solid - without cable end Power circuit : connector 2 cable(s) 4...25 mm² - cable stiffness: solid - without cable end
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 : 9 N.m - on connector - with screwdriver flat Ø 6 to Ø 8 mm Power circuit : 9 N.m - on connector hexagonal 4 mm
Operating time	20...35 ms closing 6...20 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	4 Mcycles
Operating rate	3600 cyc/h at <= 60 °C

Complementary

Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.1...0.3 Uc at 55 °C drop-out 0.85...1.1 Uc at 55 °C operational
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	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	96 mm
Depth	125 mm
Product weight	2.91 kg