Product data sheet Characteristics

LP1D80004BD

TeSys D contactor - 4P(4 NO) - AC-1 - <= 440 V 125 A - 24 V DC coil



Main

IVIAIII	
Range of product	TeSys D
Product or component type	Contactor
Device short name	LP1D
Contactor application	Resistive load
Utilisation category	AC-1
Poles description	4P
Power pole contact composition	4 NO
[Ue] rated operational voltage	<= 300 V DC for power circuit <= 1000 V AC 25400 Hz for power circuit
[le] rated operational current	125 A (<= 60 °C) at <= 440 V AC AC-1 for power circuit
Control circuit type	DC standard
Control circuit voltage	24 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
[lcw] rated short-time withstand current	990 A <= 40 °C 1 s power circuit 640 A <= 40 °C 10 s power circuit 320 A <= 40 °C 1 min power circuit 135 A <= 40 °C 10 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	0.80 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 UL 600 V for power circuit certifications CSA
Electrical durability	0.8 Mcycles 125 A AC-1 at Ue <= 440 V
Power dissipation per pole	12.5 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 No 14

Product certifications	BV CCC CSA DNV GL GOST RINA UL LROS
Connections - terminals	Control circuit: screw clamp terminals 1 cable(s) 12.5 mm² - cable stiffness: flexible - with cable end Power circuit: connector 2 cable(s) 425 mm² - ca- ble stiffness: solid - without cable end Power circuit: connector 1 cable(s) 450 mm² - ca- ble stiffness: solid - without cable end Power circuit: connector 2 cable(s) 416 mm² - ca- ble stiffness: flexible - with cable end Power circuit: connector 1 cable(s) 450 mm² - ca- ble stiffness: flexible - with cable end Power circuit: connector 1 cable(s) 425 mm² - ca- ble stiffness: flexible - without cable end Power circuit: connector 1 cable(s) 450 mm² - ca- ble stiffness: flexible - without cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm² - cable stiffness: solid - without cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm² - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 2 cable(s) 12.5 mm² - cable stiffness: flexible - with cable end Control circuit: screw clamp terminals 2 cable(s) 14 mm² - cable stiffness: flexible - without cable end Control circuit: screw clamp terminals 1 cable(s) 14 mm² - cable stiffness: flexible - without cable end
Tightening torque	Power circuit: 9 N.m - on connector hexagonal 4 mm Power circuit: 9 N.m - on connector - with screwdriv- er flat Ø 6 to Ø 8 mm Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver Philips No 2 Control circuit: 1.7 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm
Operating time	620 ms opening 2035 ms closing
Safety reliability level	B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 B10d = 1369863 cycles contactor with nominal 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	0.851.1 Uc at 55 °C operational 0.10.3 Uc at 55 °C drop-out	
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	-560 °C
Ambient air temperature for storage	-6080 °C
Permissible ambient air temperature around the device	-4070 °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	Shocks contactor closed 10 Gn for 11 ms Shocks contactor open 8 Gn for 11 ms Vibrations contactor closed 3 Gn, 5300 Hz Vibrations contactor open 2 Gn, 5300 Hz	
Height	127 mm	
Width	96 mm	
Depth	125 mm	
Product weight	2.685 kg	

