

LP1D80008FW

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



Main

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| Range | TeSys |
| Product name | TeSys D |
| Product or component type | Contacteur |
| Device short name | LP1D |
| Contacteur 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 wide range |
| 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 mm ² - cable stiffness: flexible - with cable end Control circuit : screw clamp terminals 1 cable(s) 1...4 mm ² - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 2 cable(s) 1...4 mm ² - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 1 cable(s) 1...4 mm ² - cable stiffness: solid - without cable end Control circuit : screw clamp terminals 2 cable(s) 1...4 mm ² - cable stiffness: solid - without cable end Control circuit : screw clamp terminals 1 cable(s) 1...2.5 mm ² - cable stiffness: flexible - with cable end Power circuit : connector 1 cable(s) 4...50 mm ² - cable stiffness: flexible - without cable end Power circuit : connector 2 cable(s) 4...25 mm ² - cable stiffness: flexible - without cable end Power circuit : connector 1 cable(s) 4...50 mm ² - cable stiffness: flexible - with cable end Power circuit : connector 2 cable(s) 4...16 mm ² - cable stiffness: flexible - with cable end Power circuit : connector 1 cable(s) 4...50 mm ² - cable stiffness: solid - without cable end Power circuit : connector 2 cable(s) 4...25 mm ² - 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

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| Coil technology | Without built-in suppressor module |
| Control circuit voltage limits | 0.1...0.3 U _c at 55 °C drop-out 0.75...1.2 U _c 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

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| 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

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| Height | 127 mm |
| Width | 96 mm |
| Depth | 125 mm |
| Product weight | 2.685 kg |
