

Product data sheet

Characteristics

LP1D80008EW

TeSys D contactor - 4P(2 NO + 2 NC) - AC-1 -
≤ 440 V 125 A - 48 V DC coil





Main

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
Power pole contact composition	2 NO + 2 NC
[Ue] rated operational voltage	Power circuit: <= 1000 V AC 25...400 Hz Power circuit: <= 300 V DC
[Ie] rated operational current	125 A (at <60 °C) at <= 440 V AC AC-1 for power circuit
[Uc] control circuit voltage	48 V DC
Coil type	Wide range
[Uimp] rated impulse withstand voltage	8 kV conforming to IEC 60947
Overtoltage 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 for power circuit 320 A 40 °C - 1 min for power circuit 640 A 40 °C - 10 s for power circuit 990 A 40 °C - 1 s for power circuit
Associated fuse rating	200 A gG at <= 690 V coordination type 1 for power circuit 160 A gG at <= 690 V coordination type 2 for power circuit
Average impedance	0.8 mOhm - Ith 125 A 50 Hz for power circuit
[Ui] rated insulation voltage	Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Power circuit: 1000 V conforming to IEC 60947-4-1
Electrical durability	0.8 Mcycles 125 A AC-1 at Ue <= 440 V
Power dissipation per pole	12.5 W AC-1
Front cover	Without
Mounting support	Rail Plate
Standards	CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1 UL 508
Product certifications	BV CCC CSA DNV EAC GL LROS (Lloyds register of shipping) UL

Connections - terminals	Control circuit: screw clamp terminals 1 cable(s) 1... 4 mm ² flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 1... 4 mm ² flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 1... 2.5 mm ² flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 1... 4 mm ² solid Control circuit: screw clamp terminals 2 cable(s) 1... 4 mm ² solid Power circuit: connector 1 cable(s) 4... 50 mm ² flexible without cable end Power circuit: connector 2 cable(s) 4... 25 mm ² flexible without cable end Power circuit: connector 1 cable(s) 4... 50 mm ² flexible with cable end Power circuit: connector 2 cable(s) 4... 16 mm ² flexible with cable end Power circuit: connector 1 cable(s) 4...50 mm ² solid Power circuit: connector 2 cable(s) 4...25 mm ² solid Control circuit: screw clamp terminals 1 cable(s) 1... 2.5 mm ² flexible with cable end
Tightening torque	Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm Control circuit: 1.2 N.m - on screw clamp terminals - with screwdriver Philips No 2 Power circuit: 12 N.m - on connector - with screwdriver flat Ø 6 to Ø 8 mm Power circuit: 12 N.m - on connector hexagonal screw head 4 mm
Operating time	6...20 ms opening 20...35 ms closing
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
Maximum operating rate	3600 cyc/h 60 °C

Complementary

Coil technology	Without built-in suppressor module
Control circuit voltage limits	0.1...0.3 U _c (-40...70 °C):drop-out DC 0.75...1.2 U _c (-40...55 °C):operational DC 1...1.2 U _c (55...70 °C):operational DC
Time constant	75 ms
Inrush power in W	22 W at 20 °C
Hold-in power consumption in W	22 W at 20 °C
Contact compatibility	M4
Compatibility code	LP1D

Environment

IP degree of protection	IP20 front face conforming to IEC 60529
Protective treatment	TH conforming to IEC 60068-2-30
Pollution degree	3
Ambient air temperature for operation	-40...60 °C 60...70 °C with derating
Ambient air temperature for storage	-60...80 °C
Operating altitude	0...3000 m
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 Vibrations contactor closed: 3 Gn, 5...300 Hz Shocks contactor open: 8 Gn for 11 ms Shocks contactor closed: 10 Gn for 11 ms
Height	127 mm
Width	96 mm

Depth	196 mm
Net weight	2.91 kg

Packing Units

Package 1 Weight	2.857 kg
Package 1 Height	1.400 dm
Package 1 width	1.100 dm
Package 1 Length	2.050 dm

Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	REACH Declaration
REACH free of SVHC	Yes
EU RoHS Directive	Compliant EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
PVC free	Yes

Contractual warranty

Warranty	18 months
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