Product datasheet

Specifications

Discontinued

contactor - TeSys LP1-D - 4 poles - AC-1 440V 80 A - coil 48 V DC

LP1D65004EW

Discontinued on: 14 Nov 2017

Main

Range of product	TeSys Deca
Product or component type	Contactor
Device short name	LP1D
Contactor application	Resistive load
Utilisation category	AC-1 AC-3 AC-3e AC-4
Poles description	4P
[Ue] rated operational voltage	Power circuit: <= 690 V AC 25...400 Hz
[Ie] rated operational current	80 A (at <60 °C) AC AC-1 for power circuit
[Uc] control circuit voltage	48 V DC

Complementary

Compatibility code	LP1D
Pole contact composition	4 NO
Protective cover	With
[Ith] conventional free air thermal current	10 A (at 60 °C) for control circuit 80 A (at 60 °C) for power circuit
Irms rated making capacity	1000 A at 440 V for power circuit conforming to IEC 60947 250 A AC for control circuit conforming to IEC 60947-5-1
Rated breaking capacity	1000 A at 440 V for power circuit conforming to IEC 60947
Associated fuse rating	10 A gG for control circuit conforming to IEC 60947-5-1 125 A gG at <= 690 V coordination type 2 for power circuit 160 A gG at <= 690 V coordination type 1 for power circuit
Average impedance	1 mOhm - Ith 80 A 50 Hz for power circuit
Power dissipation per pole	9.6 W AC-1
[Ui] rated insulation voltage	Control circuit: 600 V CSA certified Control circuit: 600 V UL certified Power circuit: 600 V CSA certified Power circuit: 600 V UL certified Control circuit: 690 V conforming to IEC 60947-1 Power circuit: 690 V conforming to IEC 60947-1
Overvoltage category	III
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947
Mechanical durability	10000000 cycles

Control circuit type	DC standard
Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.1...0.3 Uc (60 °C):drop-out DC 0.75...1.25 Uc (60 °C):operational DC
Inrush power in W	19 W (at 20 °C)
Hold-in power consumption in W	7.4 W at 20 °C
Rated operational power in W	12 W at 48 V DC-13 - electrical durability: 10000000 cycles - for control circuit 38 W at 48 V DC-13 - electrical durability: 3000000 cycles - for control circuit 76 W at 48 V DC-13 - electrical durability: 1000000 cycles - for control circuit
Operating time	20 ms opening 50 ms closing
Time constant	34 ms
Maximum operating rate	3600 cyc/h 60 °C
Connections - terminals	Control circuit: screw clamp terminal 1 1…4 mm² - cable stiffness: solid without cable end Control circuit: screw clamp terminal 2 1…2.5 mm² - cable stiffness: flexible with cable end Control circuit: screw clamp terminal 2 1…4 mm² - cable stiffness: flexible without cable end Control circuit: screw clamp terminal 2 1…4 mm² - cable stiffness: solid without cable end Power circuit: screw clamp terminal 1 1…35 mm² - cable stiffness: solid without cable end Power circuit: screw clamp terminal 2 1…25 mm² - cable stiffness: solid without cable end Power circuit: screw clamp terminal 2 1…35 mm² - cable stiffness: solid without cable end
Tightening torque	Control circuit: 1.2 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm Control circuit: 1.2 N.m - on screw clamp terminal - with screwdriver Philips No 2 Power circuit: 5 N.m - on screw clamp terminal - with screwdriver flat Ø 6 to Ø 8 mm
Auxiliary contacts type	type mechanically linked 1 NO + 1 NC conforming to IEC 60947-5-1 type mirror contact 1 NC conforming to IEC 60947-4-1
Minimum switching voltage	17 V for control circuit
Minimum switching current	5 mA for control circuit
Insulation resistance	> 10 MOhm for control circuit
Non-overlap time	1.5 ms on de-energisation between NC and NO contacts 1.5 ms on energisation between NC and NO contacts
Mounting support	Plate Rail

Environment

Standards	IEC 60947-1 EN 60947-1 NF C 63-110 IEC 60947-4-1 VDE 0660 JEM 1038 BS 5424 EN 60947-4-1
Product certifications	PTB SNCF UL Sichere trennung GOST RINA CSA GL DNV
IP degree of protection	IP2X conforming to IEC 60529 IP2X conforming to VDE 0106

Protective treatment	TH (pollution degree 3) conforming to IEC 60068
Permissible ambient air temperature around the device	-60…80 °C storage -40…60 °C operation 60…70 °C with derating
Operating altitude	3000 m without derating
Fire resistance	850 °C conforming to IEC 60695-2-1
Flame retardance	V1 conforming to UL 94
Mechanical robustness	Shocks contactor opened (10 Gn) Shocks contactor closed (15 gn) Vibrations contactor opened (2 Gn, 5...300 Hz) Vibrations contactor closed (4 Gn, 5...300 Hz)
Height	127 mm
Width	85 mm
Depth	182 mm
Product weight	2.21 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1

Contractual warranty

Warranty (in months)	18

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

Use Longer

Lifetime extension

Repair	No

Use Again

Repack and remanufacture

WEEE Label	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins