



Main

Range of product	TeSys D
Product or component type	Contacteur
Device short name	LP1D
Contacteur application	Resistive load
Utilisation category	AC-1
Control circuit type	DC
Coil type	Standard
Poles description	4P
Pole contact composition	4 NO
[Ie] rated operational current	80 A (<= 60 °C) AC AC-1 for power circuit
[Uc] control circuit voltage	24 V DC
Connections - terminals	Control circuit : screw clamp terminal 1 cable 1...4 mm ² - cable stiffness: solid - without cable end Control circuit : screw clamp terminal 2 cable 1...4 mm ² - cable stiffness: flexible - without cable end Control circuit : screw clamp terminal 2 cable 1...4 mm ² - cable stiffness: solid - without cable end Power circuit : screw clamp terminal 1 cable 1...35 mm ² - cable stiffness: solid - without cable end Power circuit : screw clamp terminal 2 cable 1...25 mm ² - cable stiffness: solid - without cable end Power circuit : screw clamp terminal 2 cable 1...35 mm ² - cable stiffness: solid - without cable end Control circuit : screw clamp terminal 2 cable 1...2.5 mm ² - cable stiffness: flexible - with cable end

Complementary

Coil technology	Built-in bidirectional peak limiting diode suppressor
Protective cover	With
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
Control circuit voltage limits	0.1...0.3 Uc at 60 °C drop-out 0.75...1.25 Uc at 60 °C operational
Time constant	34 ms
[Ui] rated insulation voltage	600 V for control circuit certifications CSA 600 V for control circuit certifications UL 600 V for power circuit certifications CSA 600 V for power circuit certifications UL 690 V for control circuit conforming to IEC 60947-1 690 V for power circuit conforming to IEC 60947-1
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947
Overvoltage category	III
Mounting support	Plate Rail
Flame retardance	V1 conforming to UL 94
Tightening torque	Control circuit : 1.2 N.m - on screw clamp terminal - with screwdriver Philips No 2 Control circuit : 1.2 N.m - on screw clamp terminal - with screwdriver flat Ø 6 mm Power circuit : 5 N.m - on screw clamp terminal - with screwdriver flat Ø 6 to Ø 8 mm
[Ue] rated operational voltage	<= 690 V AC 25...400 Hz for power circuit
[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

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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	At 50 Hz - lth 80 A for power circuit
Power dissipation per pole	9.6 W AC-1
Inrush power in W	19 W at 20 °C
Hold-in power consumption in W	7.4 W at 20 °C
Operating time	20 ms opening 50 ms closing
Mechanical durability	10000000 cycles
Operating rate	3600 cyc/h at <= 60 °C
Minimum switching current	5 mA for control circuit
Minimum switching voltage	17 V 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
Insulation resistance	> 10 MOhm for control circuit
Rated operational power in W	14 W at 24 V DC-13 - electrical durability: 10000000 cycles - for control circuit 48 W at 24 V DC-13 - electrical durability: 3000000 cycles - for control circuit 96 W at 24 V DC-13 - electrical durability: 1000000 cycles - for control circuit
Height	127 mm
Width	85 mm
Depth	182 mm
Product weight	2.21 kg

Environment

standards	BS 5424 EN 60947-1 EN 60947-4-1 IEC 60947-1 IEC 60947-4-1 JEM 1038 NF C 63-110 VDE 0660
product certifications	CSA DNV GL GOST PTB RINA Sichere trennung SNCF UL
IP degree of protection	IP2x conforming to IEC 60529 IP2x conforming to VDE 0106
protective treatment	TH (pollution degree: 3) conforming to IEC 60068
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
shock resistance	10 gn contactor opened 15 gn contactor closed
vibration resistance	2 gn 5...300 Hz contactor opened 4 gn 5...300 Hz contactor closed

Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0707 - Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Available