



## 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
Pole contact composition	2 NO + 2 NC
[Ue] rated operational voltage	<= 690 V AC 25...400 Hz for power circuit <= 300 V DC for power circuit
[Ie] rated operational current	80 A (<= 60 °C) at <= 440 V AC AC-1 for power circuit
[Uc] control circuit voltage	110 V DC
Coil type	DC standard
[Uimp] rated impulse withstand voltage	6 kV conforming to IEC 60947
Overvoltage category	III
[Ith] conventional free air thermal current	80 A at <= 60 °C for power circuit
Irms rated making capacity	1000 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	1000 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	520 A <= 40 °C 10 s power circuit 900 A <= 40 °C 1 s power circuit 110 A <= 40 °C 10 min power circuit 260 A <= 40 °C 1 min power circuit
Associated fuse rating	125 A gG at <= 690 V coordination type 1 for power circuit 125 A gG at <= 690 V coordination type 2 for power circuit
Average impedance	1.5 mOhm at 50 Hz - Ith 80 A for power circuit
[Ui] rated insulation voltage	600 V for power circuit certifications CSA 600 V for power circuit certifications UL 690 V for power circuit conforming to IEC 60947-4-1
Electrical durability	1.4 Mcycles 80 A AC-1 at Ue <= 440 V
Power dissipation per pole	9.6 W AC-1
Protective cover	Without
Mounting support	Plate Rail
Standards	UL 508 CSA C22.2 No 14 EN 60947-4-1 EN 60947-5-1 IEC 60947-4-1 IEC 60947-5-1
Product certifications	UL CSA CCC EAC GL BV DNV LROS (Lloyds register of shipping)
Connections - terminals	Control circuit : screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> - cable stiffness: flexible - with cable end Control circuit : screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 2 cable(s) 1...4 mm <sup>2</sup> - cable stiffness: flexible - without cable end Control circuit : screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> - cable stiffness: flexible -

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with cable end  
 Control circuit : screw clamp terminals 1 cable(s) 1...4 mm<sup>2</sup> - cable stiffness: solid - without cable end  
 Control circuit : screw clamp terminals 2 cable(s) 1...4 mm<sup>2</sup> - cable stiffness: solid - without cable end  
 Power circuit : screw clamp terminals 1 cable(s) 1...35 mm<sup>2</sup> - cable stiffness: flexible - without cable end  
 Power circuit : screw clamp terminals 2 cable(s) 1...25 mm<sup>2</sup> - cable stiffness: flexible - without cable end  
 Power circuit : screw clamp terminals 1 cable(s) 1...35 mm<sup>2</sup> - cable stiffness: flexible - with cable end  
 Power circuit : screw clamp terminals 2 cable(s) 1...25 mm<sup>2</sup> - cable stiffness: flexible - with cable end  
 Power circuit : screw clamp terminals 1 cable(s) 1...35 mm<sup>2</sup> - cable stiffness: solid - without cable end  
 Power circuit : screw clamp terminals 2 cable(s) 1...25 mm<sup>2</sup> - 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 : 8 N.m - on screw clamp terminals - cable 25...35 mm <sup>2</sup> hexagonal 4 mm Power circuit : 5 N.m - on screw clamp terminals - cable 1...25 mm <sup>2</sup> hexagonal 4 mm
Operating time	12...26 ms closing 4...19 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	6 Mcycles
Operating rate	3600 cyc/h at ≤ 60 °C

## Complementary

Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.1...0.3 U <sub>c</sub> drop-out at 55 °C, DC 0.85...1.1 U <sub>c</sub> operational at 55 °C, 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

## 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	-5...60 °C
ambient air temperature for storage	-60...80 °C
permissible ambient air temperature around the device	-40...70 °C at U <sub>c</sub>
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 Vibrations contactor closed 4 Gn, 5...300 Hz Shocks contactor open 10 Gn for 11 ms Shocks contactor closed 15 Gn for 11 ms
height	127 mm
width	85 mm
depth	182 mm
product weight	2.22 kg

## 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

