

## Product data sheet

### Characteristics

# LP1D40008EW

TeSys D contactor - 4P(2 NO + 2 NC) - AC-1 -  
≤ 440 V 60 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: <= 690 V AC 25...400 Hz Power circuit: <= 300 V DC
[Ie] rated operational current	60 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	6 kV conforming to IEC 60947
Overtoltage category	III
[Ith] conventional free air thermal current	60 A (at 60 °C) for power circuit
Irms rated making capacity	800 A at 440 V for power circuit conforming to IEC 60947
Rated breaking capacity	800 A at 440 V for power circuit conforming to IEC 60947
[Icw] rated short-time withstand current	72 A 40 °C - 10 min for power circuit 165 A 40 °C - 1 min for power circuit 320 A 40 °C - 10 s for power circuit 720 A 40 °C - 1 s for power circuit
Associated fuse rating	80 A gG at <= 690 V coordination type 1 for power circuit 80 A gG at <= 690 V coordination type 2 for power circuit
Average impedance	1.5 mOhm - Ith 60 A 50 Hz for power circuit
[Ui] rated insulation voltage	Power circuit: 690 V conforming to IEC 60947-4-1 Power circuit: 600 V CSA certified Power circuit: 600 V UL certified
Electrical durability	1.4 Mcycles 60 A AC-1 at Ue <= 440 V
Power dissipation per pole	5.4 W AC-1
Front cover	Without
Mounting support	Plate Rail
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	Power circuit: screw clamp terminals 1 cable(s) 1... 35 mm <sup>2</sup> flexible without cable end Power circuit: screw clamp terminals 2 cable(s) 1... 25 mm <sup>2</sup> flexible without cable end Power circuit: screw clamp terminals 1 cable(s) 1... 35 mm <sup>2</sup> flexible with cable end Power circuit: screw clamp terminals 2 cable(s) 1... 25 mm <sup>2</sup> flexible with cable end Power circuit: screw clamp terminals 1 cable(s) 1... 35 mm <sup>2</sup> solid Power circuit: screw clamp terminals 2 cable(s) 1... 25 mm <sup>2</sup> solid Control circuit: screw clamp terminals 1 cable(s) 1... 4 mm <sup>2</sup> flexible without cable end Control circuit: screw clamp terminals 2 cable(s) 1... 4 mm <sup>2</sup> flexible without cable end Control circuit: screw clamp terminals 1 cable(s) 1... 4 mm <sup>2</sup> flexible with cable end Control circuit: screw clamp terminals 2 cable(s) 1... 2.5 mm <sup>2</sup> flexible with cable end Control circuit: screw clamp terminals 1 cable(s) 1... 4 mm <sup>2</sup> solid Control circuit: screw clamp terminals 2 cable(s) 1... 4 mm <sup>2</sup> solid
Tightening torque	Power circuit: 8 N.m - on screw clamp terminals - cable 25...35 mm <sup>2</sup> hexagonal screw head 4 mm 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: 5 N.m - on screw clamp terminals - cable 1...25 mm <sup>2</sup> hexagonal screw head 4 mm
Operating time	4...19 ms opening 12...26 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	10 Mcycles
Maximum operating rate	3600 cyc/h 60 °C

## Complementary

Coil technology	Built-in bidirectional peak limiting diode suppressor
Control circuit voltage limits	0.1...0.3 U <sub>c</sub> (-40...70 °C):drop-out DC 0.75...1.2 U <sub>c</sub> (-40...55 °C):operational DC 1...1.2 U <sub>c</sub> (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	M3
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: 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
Net weight	2.21 kg

### Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	2.14 kg
Package 1 Height	13.9 cm
Package 1 width	17.5 cm
Package 1 Length	22.7 cm

### Offer Sustainability

Sustainable offer status	Green Premium product
REACH free of SVHC	Yes
EU RoHS Directive	Compliant <a href="#">EU RoHS Declaration</a>
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>
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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