

# LP1K12004ED

TeSys K contactor - 4P(4 NO) - AC-1 - <= 440 V 20 A - 48 V DC coil



## Main

Range	TeSys
Product name	TeSys K
Product or component type	Contacteur
Device short name	LP1K
Contacteur application	Resistive load
Utilisation category	AC-1
Poles description	4P
Pole contact composition	4 NO
[Ue] rated operational voltage	690 V AC 50/60 Hz for power circuit
[Ie] rated operational current	20 A (<= 50 °C) at <= 440 V AC AC-1 for power circuit 16 A (<= 70 °C) at 690 V AC AC-1 for power circuit
Control circuit type	DC standard
Control circuit voltage	48 V DC
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	20 A at <= 50 °C for power circuit
Irms rated making capacity	144 A AC for power circuit conforming to NF C 63-110 144 A AC for power circuit conforming to IEC 60947
Rated breaking capacity	110 A at 440 V conforming to IEC 60947 80 A at 500 V conforming to IEC 60947 70 A at 660...690 V conforming to IEC 60947
[Icw] rated short-time withstand current	115 A <= 50 °C 1 s power circuit 105 A <= 50 °C 5 s power circuit 100 A <= 50 °C 10 s power circuit 75 A <= 50 °C 30 s power circuit 55 A <= 50 °C 1 min power circuit 50 A <= 50 °C 3 min power circuit 25 A <= 50 °C >= 15 s power circuit
Associated fuse rating	25 A gG at <= 440 V for power circuit 25 A aM for power circuit
Average impedance	3 mOhm at 50 Hz - Ith 20 A for power circuit
[Ui] rated insulation voltage	690 V for power circuit conforming to IEC 60947-4-1 600 V for power circuit conforming to UL 508 600 V for power circuit conforming to CSA C22.2 No 14
Electrical durability	0.3 Mcycles 20 A AC-1 at Ue <= 440 V
Mounting support	Plate Rail
Standards	BS 5424 IEC 60947 NF C 63-110 VDE 0660
Product certifications	CSA UL
Connections - terminals	Screw clamp terminals 1 cable(s) 1.5...4 mm <sup>2</sup> - cable stiffness: solid Screw clamp terminals 1 cable(s) 0.75...4 mm <sup>2</sup> - cable stiffness: flexible - without cable end Screw clamp terminals 1 cable(s) 0.34...2.5 mm <sup>2</sup> -

The information provided in this documentation contains general descriptions and/or technical characteristics of the products contained herein. This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

	cable stiffness: flexible - with cable end Screw clamp terminals 2 cable(s) 1.5...4 mm <sup>2</sup> - cable stiffness: solid Screw clamp terminals 2 cable(s) 0.75...4 mm <sup>2</sup> - cable stiffness: flexible - without cable end Screw clamp terminals 2 cable(s) 0.34...1.5 mm <sup>2</sup> - cable stiffness: flexible - with cable end
Tightening torque	1.3 N.m - on screw clamp terminals - with screwdriver Philips No 2 1.3 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm
Operating time	10 ms coil de-energisation and NO opening 30...40 ms coil energisation and NO 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
Operating rate	3600 cyc/h

## Complementary

Control circuit voltage limits	0.8...1.15 U <sub>c</sub> at ≤ 50 °C operational 0.1...0.75 U <sub>c</sub> at ≤ 50 °C drop-out
Inrush power in W	3 W at 20 °C
Hold-in power consumption in W	3 W at 20 °C
Heat dissipation	3 W

## Environment

IP degree of protection	IP2x conforming to VDE 0106
Protective treatment	TC conforming to IEC 60068 TC conforming to DIN 50016
Ambient air temperature for operation	-25...50 °C
Ambient air temperature for storage	-50...80 °C
Operating altitude	2000 m without derating in temperature
Flame retardance	V1 conforming to UL 94 Requirement 2 conforming to NF F 16-101 Requirement 2 conforming to NF F 16-102
Mechanical robustness	Shocks contactor closed, on Z axis 15 Gn for 11 ms IEC 60068-2-27 Shocks contactor opened, on Z axis 10 Gn for 11 ms IEC 60068-2-27 Vibrations contactor closed 4 Gn, 5...300 Hz IEC 60068-2-6 Vibrations contactor opened 2 Gn, 5...300 Hz IEC 60068-2-6 Shocks contactor opened, on X axis 10 Gn for 11 ms IEC 60068-2-27 Shocks contactor opened, on Y axis 6 Gn for 11 ms IEC 60068-2-27 Shocks contactor closed, on X axis 15 Gn for 11 ms IEC 60068-2-27 Shocks contactor closed, on Y axis 10 Gn for 11 ms IEC 60068-2-27
Height	58 mm
Width	45 mm
Depth	57 mm
Product weight	0.225 kg

## Offer Sustainability

Sustainable offer status	Green Premium product
RoHS	Compliant - since 0640 - Schneider Electric declaration of conformity
REACH	Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Need no specific recycling operations