

# Product data sheet

Specifications



## Contactors, TeSys K, 3P, AC-3/ AC-3e, 440V, 9A, 1NC aux, 110V DC coil

LP1K0901FD

### Main

Range of product	TeSys K
Range	TeSys
Product or component type	Contactors
Device short name	LP1K
Contactors application	Resistive load Motor control
Utilisation category	AC-3 AC-4 AC-1 AC-3e
Poles description	3P
Pole contact composition	3 NO
[Ie] rated operational current	20 A (at <math>50\text{ }^\circ\text{C}</math>) at <math>\leq 440\text{ V AC}</math> AC-1 for power circuit 9 A at <math>\leq 440\text{ V AC}</math> AC-3 for power circuit 16 A (at <math>70\text{ }^\circ\text{C}</math>) at <math>690\text{ V AC}</math> AC-1 for power circuit 9 A at <math>\leq 440\text{ V AC}</math> AC-3e for power circuit
Auxiliary contact composition	1 NC

### Complementary

Auxiliary contacts type	type instantaneous 1 NC
Control circuit voltage limits	Operational: 0.8...1.15 $U_c$ (at <math>50\text{ }^\circ\text{C}</math>) Drop-out: 0.1...0.75 $U_c$ (at <math>50\text{ }^\circ\text{C}</math>)
[Ui] rated insulation voltage	Power circuit: 600 V conforming to UL 508 Power circuit: 690 V conforming to IEC 60947-4-1 Signalling circuit: 690 V conforming to IEC 60947-4-1 Signalling circuit: 690 V conforming to IEC 60947-5-1 Signalling circuit: 600 V conforming to UL 508 Power circuit: 600 V conforming to CSA C22.2 No 14 Signalling circuit: 600 V conforming to CSA C22.2 No 14
[Uimp] rated impulse withstand voltage	8 kV
Overtoltage category	III
Mounting support	Plate Rail
Flame retardance	V1 conforming to UL 94 Requirement 2 conforming to NF F 16-101 Requirement 2 conforming to NF F 16-102
Tightening torque	0.8...1.3 N.m - on screw clamp terminals Philips No 2 0.8...1.3 N.m - on screw clamp terminals flat $\text{Ø} 6\text{ mm}$ 0.8...1.3 N.m - on screw clamp terminals pozidriv No 2

<b>[Ue] rated operational voltage</b>	Power circuit: 690 V AC 50/60 Hz Signalling circuit: ≤ 690 V AC 50/60 Hz
<b>[Ith] conventional free air thermal current</b>	20 A (at 50 °C) for power circuit 10 A (at 50 °C) for signalling circuit
<b>Irms rated making capacity</b>	110 A AC for power circuit conforming to NF C 63-110 110 A AC for power circuit conforming to IEC 60947 110 A AC for signalling circuit conforming to IEC 60947
<b>Rated breaking capacity</b>	110 A at 415 V conforming to IEC 60947 110 A at 440 V conforming to IEC 60947 80 A at 500 V conforming to IEC 60947 110 A at 220...230 V conforming to IEC 60947 110 A at 380...400 V conforming to IEC 60947 70 A at 660...690 V conforming to IEC 60947
<b>Associated fuse rating</b>	25 A gG at ≤ 440 V for power circuit 25 A aM for power circuit 10 A gG for signalling circuit conforming to IEC 60947 10 A gG for signalling circuit conforming to VDE 0660
<b>Average impedance</b>	3 mOhm - Ith 20 A 50 Hz for power circuit
<b>Inrush power in W</b>	3 W (at 20 °C)
<b>Hold-in power consumption in W</b>	3 W at 20 °C
<b>Operating time</b>	30...40 ms coil energisation and NO closing 10 ms coil de-energisation and NO opening
<b>Safety reliability level</b>	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
<b>Mechanical durability</b>	10 Mcycles
<b>Maximum operating rate</b>	3600 cyc/h
<b>Minimum switching current</b>	5 mA for signalling circuit
<b>Minimum switching voltage</b>	17 V for signalling circuit
<b>Insulation resistance</b>	> 10 MOhm for signalling circuit
<b>Height</b>	58 mm
<b>Width</b>	45 mm
<b>Depth</b>	57 mm
<b>Net weight</b>	0.225 kg

## Environment

<b>Standards</b>	EN/IEC 60947-4-1 GB/T 14048.4 UL 60947-4-1 CSA C22.2 No 60947-4-1 JIS C8201-4-1
<b>Product certifications</b>	CB Scheme CCC UL CSA EAC CE UKCA
<b>Ambient air temperature for operation</b>	-25...50 °C
<b>Ambient air temperature for storage</b>	-50...80 °C
<b>Operating altitude</b>	2000 m without derating

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	6.5 cm

Package 1 Width	4.7 cm
Package 1 Length	6.1 cm
Package 1 Weight	216.0 g
Unit Type of Package 2	S02
Number of Units in Package 2	40
Package 2 Height	15.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	9.095 kg
Unit Type of Package 3	P06
Number of Units in Package 3	640
Package 3 Height	75 cm
Package 3 Width	40 cm
Package 3 Length	80 cm
Package 3 Weight	156 kg

## Offer Sustainability

Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
REACH free of SVHC	Yes
EU RoHS Directive	Compliant <a href="#">EU RoHS Declaration</a>
Toxic heavy metal free	Yes
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS declaration</a> Pro-active China RoHS declaration (out of China RoHS legal scope)
RoHS exemption information	<a href="#">Yes</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
California proposition 65	WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

## Contractual warranty

Warranty	18 months
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## Recommended replacement(s)