# **Product datasheet**





# TeSys K contactor - 3P - AC-3 <= 440 V 9 A - 1 NC aux. - 24 V DC coil

LP1K0901BD

#### Main

Range	TeSys
product or component type	Contactor
Device short name	LP1K
contactor application	Resistive load Motor control

Complementary		
Utilisation category	AC-3 AC-3e AC-1 AC-4	
poles description	3P	
power pole contact composition	3 NO	
[Ue] rated operational voltage	Power circuit: <= 690 V AC <= 400 Hz Signalling circuit: <= 690 V AC <= 400 Hz	
[le] rated operational current	9 A (at <60 °C) at <= 440 V AC AC-3 for power circuit 9 A (at <60 °C) at <= 440 V AC AC-3e for power circuit 20 A (at <60 °C) at <= 690 V AC AC-1 for power circuit	
Control circuit type	DC standard	
[Uc] control circuit voltage	24 V DC	
Motor power kW	2.2 kW at 220230 V AC 50/60 Hz AC-3 4 kW at 380415 V AC 50/60 Hz AC-3 4 kW at 440/690 V AC 50/60 Hz AC-3 2.2 kW at 220230 V AC 50/60 Hz AC-3e 4 kW at 380415 V AC 50/60 Hz AC-3e 4 kW at 440/690 V AC 50/60 Hz AC-3e 2.2 kW at 220230 V AC 50/60 Hz AC-4 4 kW at 380415 V AC 50/60 Hz AC-4 4 kW at 380415 V AC 50/60 Hz AC-4 4 kW at 440/690 V AC 50/60 Hz AC-4	
Auxiliary contact composition	1 NC	
[Uimp] rated impulse withstand voltage	8 kV	
Overvoltage category	III	
[Ith] conventional free air thermal current	20 A (at 60 °C) for power circuit 10 A (at 50 °C) for signalling circuit	
Irms rated making capacity	110 A AC for power circuit conforming to IEC 60947 110 A AC for signalling circuit conforming to IEC 60947	
Rated breaking capacity	110 A at 220230 V conforming to IEC 60947 110 A at 380400 V conforming to IEC 60947 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 70 A at 660690 V conforming to IEC 60947	

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[lcw] rated short-time withstand	90 A 50 °C - 1 s for power circuit
current	85 A 50 °C - 5 s for power circuit
	80 A 50 °C - 10 s for power circuit
	60 A 50 °C - 30 s for power circuit
	45 A 50 °C - 1 min for power circuit
	40 A 50 °C - 3 min for power circuit
	20 A 50 °C - >= 15 min for power circuit
	80 A - 1 s for signalling circuit
	90 A - 500 ms for signalling circuit
	110 A - 100 ms for signalling circuit
Associated fuse rating	25 A gG at <= 440 V for power circuit
G	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
Average impedance	3 mOhm - Ith 20 A 50 Hz for power circuit
[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
Insulation resistance	> 10 MOhm for signalling circuit
Inrush power in W	3 W (at 20 °C)
Hold-in power consumption in W	
	3 W at 20 °C
Heat dissipation	1.3 W
Control circuit voltage limits	Operational: 0.81.15 Uc (at <50 °C)  Drop-out: >= 0.10 Uc (at <50 °C)
Connections - terminals	Screw clamp terminals 1 cable(s) 1.54 mm <sup>2</sup> solid
	Screw clamp terminals 1 cable(s) 0.754 mm²flexible without cable end
	Screw clamp terminals 1 cable(s) 0.342.5 mm²flexible with cable end
	Screw clamp terminals 2 cable(s) 1.54 mm²solid
	Screw clamp terminals 2 cable(s) 0.754 mm²flexible without cable end
	Screw clamp terminals 2 cable(s) 0.341.5 mm²flexible with cable end
	Power circuit: screw clamp terminals 2 cable(s) 1.5 mm²flexible with cable end
Maximum operating rate	3600 cyc/h
Auxiliary contacts type	type instantaneous 1 NC
Minimum switching current	5 mA for signalling circuit
Minimum switching voltage	17 V for signalling circuit
mounting support	Rail
÷ ,,	Plate
Tightening termin	0.9. 4.2 N.m. on corous domp terminals Division No. 2
Tightening torque	0.81.3 N.m - on screw clamp terminals Philips No 2
	0.81.3 N.m - on screw clamp terminals flat Ø 6 mm
	0.81.3 N.m - on screw clamp terminals pozidriv No 2
Operating time	3040 ms coil energisation and NO closing
-1-3-4-19	10 ms coil de-energisation and NO opening
Safety reliability level	B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1
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	B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO
	B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1
Mechanical durability	
	13849-1 10 Mcycles
Mechanical durability  Electrical durability	13849-1 10 Mcycles 1.3 Mcycles 9 A AC-3 at Ue <= 440 V
	13849-1  10 Mcycles  1.3 Mcycles 9 A AC-3 at Ue <= 440 V  1.3 Mcycles 9 A AC-3e at Ue <= 440 V
	13849-1  10 Mcycles  1.3 Mcycles 9 A AC-3 at Ue <= 440 V  1.3 Mcycles 9 A AC-3e at Ue <= 440 V  0.16 Mcycles 20 A AC-1 at Ue <= 690 V
	13849-1  10 Mcycles  1.3 Mcycles 9 A AC-3 at Ue <= 440 V  1.3 Mcycles 9 A AC-3e at Ue <= 440 V
	13849-1  10 Mcycles  1.3 Mcycles 9 A AC-3 at Ue <= 440 V  1.3 Mcycles 9 A AC-3e at Ue <= 440 V  0.16 Mcycles 20 A AC-1 at Ue <= 690 V
Electrical durability	13849-1  10 Mcycles  1.3 Mcycles 9 A AC-3 at Ue <= 440 V  1.3 Mcycles 9 A AC-3e at Ue <= 440 V  0.16 Mcycles 20 A AC-1 at Ue <= 690 V  0.02 Mcycles 54 A AC-4 at Ue <= 440 V
Electrical durability  Height	13849-1  10 Mcycles  1.3 Mcycles 9 A AC-3 at Ue <= 440 V  1.3 Mcycles 9 A AC-3e at Ue <= 440 V  0.16 Mcycles 20 A AC-1 at Ue <= 690 V  0.02 Mcycles 54 A AC-4 at Ue <= 440 V

net weight 0.225 kg

### **Environment**

Standards	EN/IEC 60947-4-1 EN/IEC 60947-5-1 UL 60947-4-1 UL 60947-5-1 CSA C22.2 No 60947-4-1 CSA C22.2 No 60947-5-1 GB/T 14048.4	
Product certifications	CB Scheme CCC UL CSA EAC CE UKCA	
IP degree of protection	IP2X	
Ambient air temperature for operation	-2550 °C	
Ambient air temperature for storage	perature for -5080 °C	
Operating altitude	2000 m without derating	
Flame retardance	V1 conforming to UL 94 Requirement 2 conforming to NF F 16-101 Requirement 2 conforming to NF F 16-102	

# **Packing Units**

Unit Type of Package 1	PCE	
Number of Units in Package 1	1	
Package 1 Height	5.000 cm	
Package 1 Width	6.000 cm	
Package 1 Length	6.500 cm	
Package 1 Weight	221.000 g	
Unit Type of Package 2	S02	
Number of Units in Package 2	40	
Package 2 Height	2 Height 15.000 cm	
Package 2 Width	30.000 cm	
Package 2 Length	40.000 cm	
Package 2 Weight	9.218 kg	
Unit Type of Package 3	P06	
Number of Units in Package 3	640	
Package 3 Height	75.000 cm	
Package 3 Width	60.000 cm	
Package 3 Length	80.000 cm	
Package 3 Weight	153.616 kg	

# **Contractual warranty**

Warranty 18 months

# Sustainability Green Premium\*

**Green Premium**<sup>TM</sup> **label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >





Transparency RoHS/REACh

#### Well-being performance

<b>⊘</b>	Reach Free Of Svhc	
<b>⊘</b>	Toxic Heavy Metal Free	
<b>⊘</b>	Mercury Free	
<b>⊘</b>	Rohs Exemption Information	Yes

#### **Certifications & Standards**

REACh Declaration
Compliant
EU RoHS Declaration
China RoHS declaration
Pro-active China RoHS declaration (out of China RoHS legal scope)
Product Environmental Profile
The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
End of Life Information