# Product data sheet Characteristics

# LP1K0610BD3

TeSys K contactor - 3P - AC-3 <= 440 V 6 A - 1 NO aux. - 24 V DC coil





#### Main

Main		
Range of product	TeSys K	
Range	TeSys	
Product or component type	Contactor	
Product name	TeSys K	
Device short name	LP1K	
Device application	Control	
Contactor application	Motor control	

#### Complementary

99999		
Main		
Range of product	TeSys K	
Range	TeSys	
Product or component type	Contactor	
Product name	TeSys K	
Device short name	LP1K	
Device application	Control	
Contactor application	Motor control	
Complementary		
Utilisation category	AC-3	
	AC-4	
Poles description	3P	
Pole contact composition	3 NO	
[Ue] rated operational voltage	690 V AC 50/60 Hz for power circuit <= 690 V AC 50/60 Hz for signalling circuit	
[le] rated operational current	6 A at <= 440 V AC AC-3 for power circuit	
Control circuit type	DC standard	
[Uc] control circuit voltage	24 V DC	
Motor power kW	1.5 kW at 220230 V AC 50/60 Hz AC-3 2.2 kW at 380415 V AC 50/60 Hz AC-3 1.5 kW at 400 V AC 50/60 Hz AC-4 3 kW at 660690 V AC 50/60 Hz AC-3 3 kW at 440 V AC 50/60 Hz AC-3 3 kW at 440 V AC 50/60 Hz AC-3 3 kW at 480 V AC 50/60 Hz AC-3 3 kW at 500600 V AC 50/60 Hz AC-3	
Auxiliary contact composition	1 NO	
[Uimp] rated impulse withstand voltage	8 kV	
Overvoltage category	III	
[Ith] conventional free air thermal current	20 A at <= 50 °C for power circuit 10 A at <= 50 °C for signalling circuit	
Current May 7, 2019	10 A at <= 50 °C for signalling circuit	

Irms rated making capacity	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
Rated breaking capacity	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 220230 V conforming to IEC 60947 110 A at 380400 V conforming to IEC 60947 70 A at 660690 V conforming to IEC 60947
[lcw] rated short-time withstand current	20 A <= 50 °C >= 15 min power circuit  90 A <= 50 °C 1 s power circuit  85 A <= 50 °C 5 s power circuit  80 A <= 50 °C 10 s power circuit  60 A <= 50 °C 30 s power circuit  45 A <= 50 °C 1 min power circuit  40 A <= 50 °C 3 min power circuit  80 A 1 s signalling circuit  90 A 500 ms signalling circuit  110 A 100 ms signalling circuit
Associated fuse rating	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
Average impedance	3 mOhm at 50 Hz - Ith 20 A for power circuit
[Ui] rated insulation voltage	690 V for signalling circuit conforming to IEC 60947-4-1 690 V for signalling circuit conforming to IEC 60947-5-1 600 V for signalling circuit conforming to UL 508 600 V for power circuit conforming to CSA C22.2 No 14 600 V for signalling circuit conforming to CSA C22.2 No 14 690 V for power circuit conforming to IEC 60947-4-1 600 V for power circuit conforming to UL 508
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	3 W
Control circuit voltage limits	0.81.15 Uc at <= 50 °C operational 0.10.75 Uc at <= 50 °C drop-out
Connections - terminals	Screw clamp terminals 1 cable(s) 1.54 mm² - cable stiffness: solid Screw clamp terminals 1 cable(s) 0.754 mm² - cable stiffness: flexible - without cable end Screw clamp terminals 1 cable(s) 0.342.5 mm² - cable stiffness: flexible - with cable end Screw clamp terminals 2 cable(s) 1.54 mm² - cable stiffness: solid Screw clamp terminals 2 cable(s) 0.754 mm² - cable stiffness: flexible - without cable end Screw clamp terminals 2 cable(s) 0.341.5 mm² - cable stiffness: flexible - with cable end
Operating rate	3600 cyc/h
Coil technology	Built-in bidirectional peak limiting diode suppressor
Auxiliary contacts type	Type instantaneous (1 NO)
Minimum switching current	5 mA for signalling circuit
Minimum switching voltage	17 V for signalling circuit
Mounting support	Plate Rail
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 3040 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
Non overlap distance	0.5 mm
Mechanical durability	10 Mcycles
Electrical durability	1.3 Mcycles 6 A AC-3 at Ue <= 440 V
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, 5300 Hz IEC 60068-2-6 Vibrations contactor opened 2 Gn, 5300 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	
Depth	57 mm	
Product weight	0.225 kg	
Compatibility code	LP1K	
Environment		

Standards	BS 5424
	IEC 60947
	NF C 63-110
	VDE 0660
Product certifications	CSA
	UL
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 storage	-5080 °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

### Offer Sustainability

Sustainable offer status	Green Premium product	
RoHS (date code: YYWW)	Compliant - since 0825 - Schneider Electric declaration of conformity	
	Schneider Electric declaration of conformity	
REACh	Reference not containing SVHC above the threshold	
	Reference not containing SVHC above the threshold	
Product environmental profile	Available	
	Product environmental	
Product end of life instructions	Available	
	End of life manual	

## Contractual warranty

Warranty period	18 months