Product data sheet Characteristics

LP4K0910BW3

TeSys K contactor - 3P(3 NO) - AC-3 - <= 440 V 9 A - 24 V DC coil



Main

IVIAIII	
Commercial Status	Commercialised
Range	TeSys
Product name	TeSys K
Product or component type	Contactor
Device short name	LP4K
Contactor application	Motor control Resistive load
Utilisation category	AC-1 AC-3 AC-4
Poles description	3P
Power pole contact composition	3 NO
[Ue] rated operational voltage	<= 690 V AC 50/60 Hz for signalling circuit 690 V AC 50/60 Hz for power circuit
[le] rated operational current	9 A at <= 440 V AC AC-3 for power circuit 16 A (<= 70 °C) at 690 V AC AC-1 for power circuit 20 A (<= 50 °C) at <= 440 V AC AC-1 for power cir- cuit
Motor power kW	4 kW at 660690 V AC 50/60 Hz 4 kW at 500600 V AC 50/60 Hz 4 kW at 480 V AC 50/60 Hz 4 kW at 440 V AC 50/60 Hz 4 kW at 380415 V AC 50/60 Hz 2.2 kW at 220230 V AC 50/60 Hz
Control circuit type	DC low consumption
Control circuit voltage	24 V DC
Auxiliary contact composition	1 NO
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	10 A at <= 50 °C for signalling circuit 20 A at <= 50 °C for power circuit
Irms rated making capacity	110 A AC for signalling circuit conforming to IEC 60947 110 A AC for power circuit conforming to IEC 60947 110 A AC for power circuit conforming to NF C 63-110
Rated breaking capacity	70 A at 660690 V conforming to IEC 60947 110 A at 380400 V conforming to IEC 60947 110 A at 220230 V conforming to IEC 60947 80 A at 500 V conforming to IEC 60947 110 A at 440 V conforming to IEC 60947 110 A at 415 V conforming to IEC 60947
[lcw] rated short-time withstand current	20 A <= 50 °C >= 15 s power circuit 110 A 100 ms signalling circuit 90 A 500 ms signalling circuit 80 A 1 s signalling circuit 40 A <= 50 °C 3 min power circuit 45 A <= 50 °C 1 min power circuit 60 A <= 50 °C 30 s power circuit 80 A <= 50 °C 10 s power circuit 85 A <= 50 °C 5 s power circuit 90 A <= 50 °C 1 s power circuit

Associated fuse rating	10 A gG for signalling circuit conforming to VDE 0660 10 A gG for signalling circuit conforming to IEC 60947 25 A aM for power circuit 25 A gG at <= 440 V for power circuit
Average impedance	3 mOhm at 50 Hz - Ith 20 A for power circuit
[Ui] rated insulation voltage	600 V for signalling circuit conforming to CSA C22.2 No 14 600 V for power circuit conforming to CSA C22.2 No 14 600 V for signalling circuit conforming to UL 508 690 V for signalling circuit conforming to IEC 60947-5-1 690 V for signalling circuit conforming to IEC 60947-4-1 690 V for power circuit conforming to IEC 60947-4-1 690 V for power circuit conforming to UL 508
Electrical durability	1.3 Mcycles 9 A AC-3 at Ue <= 440 V 0.18 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 2 cable(s) 0.341.5 mm² - cable stiffness: flexible - with cable end Screw clamp terminals 2 cable(s) 0.754 mm² - cable stiffness: flexible - without cable end Screw clamp terminals 2 cable(s) 1.54 mm² - cable stiffness: solid Screw clamp terminals 1 cable(s) 0.342.5 mm² - cable stiffness: flexible - with cable end Screw clamp terminals 1 cable(s) 0.754 mm² - cable stiffness: flexible - without cable end Screw clamp terminals 1 cable(s) 1.54 mm² - cable stiffness: solid
Tightening torque	1.3 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm 1.3 N.m - on screw clamp terminals - with screwdriver Philips No 2
Operating time	3040 ms coil energisation and NO closing 1020 ms coil de-energisation and NO opening
Safety reliability level	B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1
Mechanical durability	30 Mcycles
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Operating rate	3600 cyc/h

Complementary

Coil technology	Built-in bidirectional peak limiting diode suppressor	
Control circuit voltage limits	0.10.7 Uc at <= 50 °C drop-out 0.71.30 Uc at <= 50 °C operational	
Inrush power in W	1.8 W at 20 °C	
Hold-in power consumption in W	1.8 W at 20 °C	
Heat dissipation	1.8 W	
Auxiliary contacts type	Type instantaneous (1 NO)	
Minimum switching current	5 mA for signalling circuit	
Minimum switching voltage	17 V for signalling circuit	
Non overlap distance	0.5 mm	
Insulation resistance	> 10 MOhm for signalling circuit	



Environment

IP2x conforming to VDE 0106
TC conforming to DIN 50016 TC conforming to IEC 60068
-2550 °C
-5080 °C
2000 m without derating in temperature
Requirement 2 conforming to NF F 16-102 Requirement 2 conforming to NF F 16-101 V1 conforming to UL 94
Shocks contactor closed, on Y axis 10 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 opened, on Y axis 6 Gn for 11 ms IEC 60068-2-27 Shocks contactor opened, on X axis 10 Gn for 11 ms IEC 60068-2-27 Vibrations contactor opened 2 Gn, 5300 Hz IEC 60068-2-6 Vibrations contactor closed 4 Gn, 5300 Hz IEC 60068-2-6 Shocks contactor opened, on Z axis 10 Gn for 11 ms IEC 60068-2-27 Shocks contactor closed, on Z axis 15 Gn for 11 ms IEC 60068-2-27
58 mm
45 mm
57 mm
0.235 kg

Offer Sustainability

One Sastanasmy		
Sustainable offer status	Green Premium product	
RoHS	Compliant - since 0825 - Schneider Electric declaration of conformity	
REACh	Reference not containing SVHC above the threshold	
Product environmental profile	Available 🔁 Download Product Environmental	
Product end of life instructions	Need no specific recycling operations	

