

# Product data sheet

Specifications



## TeSys K changeover contactor , 4P , AC,1 ≤ 440 V 20 A , 72 V DC coil

LP5K090045SW3

ⓘ Discontinued

### Main

Range	TeSys
Product Name	TeSys K
Product Or Component Type	Changeover contactor
Device Short Name	LP5K
Device Application	Control
Contactor Application	Resistive load
Utilisation Category	AC-1
Device Presentation	Preassembled with reversing power busbar
Poles Description	4P
Power Pole Contact Composition	4 NO
[Ue] Rated Operational Voltage	Power circuit: 690 V AC 50/60 Hz
[Ie] Rated Operational Current	20 A (at <50 °C) at ≤ 440 V AC AC-1 for power circuit 16 A (at <70 °C) at 690 V AC AC-1 for power circuit
Control Circuit Type	DC low consumption
[Uc] Control Circuit Voltage	72 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	110 A AC for power circuit conforming to NF C 63-110 110 A AC for power 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 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
[Icw] Rated Short-Time Withstand Current	90 A 50 °C - 1 s for power circuit 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
Associated Fuse Rating	25 A gG at ≤ 440 V for power circuit 25 A aM for power circuit
Average Impedance	3 mOhm - Ith 20 A 50 Hz for power circuit

Disclaimer: 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

[Ui] Rated Insulation Voltage	Power circuit: 600 V conforming to UL 508 Power circuit: 690 V conforming to IEC 60947-4-1 Power circuit: 600 V conforming to CSA C22.2 No 14
Electrical Durability	0.18 Mcycles 20 A AC-1 at Ue <= 440 V
Interlocking Type	Mechanical
Mounting Support	Plate Rail
Standards	IEC 60947 VDE 0660 NF C 63-110 BS 5424
Product Certifications	CB Scheme CCC UL CSA EAC CE UKCA
Connections - Terminals	Solder pins - busbar cross section: 1.5 x 0.9 mm
Operating Time	10...20 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	5 Mcycles
Maximum Operating Rate	3600 cyc/h

## Complementary

Coil Technology	Built-in bidirectional peak limiting diode suppressor
Control Circuit Voltage Limits	Operational: 0.7...1.30 Uc (at <50 °C) Drop-out: 0.1...0.7 Uc (at <50 °C)
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

## Environment

Ip Degree Of Protection	IP20 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
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 conforming to IEC 60068-2-27 Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Vibrations contactor closed: 4 Gn, 5...300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5...300 Hz conforming to IEC 60068-2-6 Shocks contactor opened, on X axis: 10 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor opened, on Y axis: 6 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed, on X axis: 15 Gn for 11 ms conforming to IEC 60068-2-27 Shocks contactor closed, on Y axis: 10 Gn for 11 ms conforming to IEC 60068-2-27
Height	58 mm

Width	90 mm
Depth	57 mm
Net Weight	0.49 kg

## Packing Units

Unit Type Of Package 1	PCE
Number Of Units In Package 1	1

## Contractual warranty

Warranty	18 months
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