# Product data sheet Characteristics

## LP5K0910EW3

TeSys K reversing contactor - 3P - AC-3 <= 440 V 9 A - 1 NO - 48 V DC coil





Range	TeSys
Product name	TeSys K
Product or component type	Reversing contactor
Device short name	LP5K
Device application	Control
Contactor application	Resistive load Motor control
Utilisation category	AC-1 AC-4 AC-3
Device presentation	Preassembled with reversing power busbar
Poles description	3P
Power pole contact composition	3 NO
[Ue] rated operational voltage	Power circuit: 690 V AC 50/60 Hz Signalling circuit: <= 690 V AC 50/60 Hz
[le] 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 9 A at <= 440 V AC AC-3 for power circuit
Motor power kW	2.2 KW 220230 V AC 50/60 Hz 4 KW 380415 V AC 50/60 Hz 4 KW 440 V AC 50/60 Hz 4 KW 480 V AC 50/60 Hz 4 KW 500600 V AC 50/60 Hz 4 kW 660690 V AC 50/60 Hz
Control circuit type	DC low consumption
[Uc] control circuit voltage	48 V DC
Auxiliary contact composition	1 NO
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[lth] conventional free air thermal current	20 A (at 50 °C) for power circuit 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
[Icw] rated short-time withstand current	90 A 122 °F (50 °C) - 1 s power circuit 85 A 122 °F (50 °C) - 5 s power circuit 80 A 122 °F (50 °C) - 10 s power circuit 60 A 122 °F (50 °C) - 30 s power circuit 45 A 122 °F (50 °C) - 1 min power circuit 40 A 122 °F (50 °C) - 3 min power circuit 80 A - 1 s signalling circuit 90 A - 500 ms signalling circuit 110 A - 100 ms signalling circuit 20 A 122 °F (50 °C) - >= 15 min power 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

[Ui] rated insulation voltage	Power circuit: 600 V conforming to UL 508 Power circuit 690 V 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
Electrical durability	0.18 Mcycles 20 A AC-1 <= 440 V 1.3 Mcycles 9 A AC-3 <= 440 V
Interlocking type	Mechanical
Mounting support	Plate Rail
Standards	IEC 60947 VDE 0660 BS 5424 NF C 63-110
Product certifications	CSA UL
Connections - terminals	Screw clamp terminals 1 0.000.01 in² (1.5 4 mm²)solid Screw clamp terminals 1 0.000.01 in² (0.75 4 mm²)flexible without cable end Screw clamp terminals 1 0.000.00 in² (0.34 2.5 mm²)flexible with cable end Screw clamp terminals 2 0.000.01 in² (1.5 4 mm²)solid Screw clamp terminals 2 0.000.01 in² (0.75 4 mm²)flexible without cable end Screw clamp terminals 2 0.000.00 in² (0.34 1.5 mm²)flexible with cable end
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	1020 ms coil de-energisation and NO opening 3040 ms coil energisation and NO closing
Safety reliability level	B10d = 1369863 cycles contactor with nominal load EN/ISO 13849-1 B10d = 20000000 cycles contactor with mechanical load 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 0.71.30 Uc 122 °F (50 °C)) Drop-out 0.10.7 Uc 122 °F (50 °C))
Inrush power in W	1.8 W 68 °F (20 °C))
Hold-in power consumption in W	1.8 W 68 °F (20 °C)
Heat dissipation	1.8 W
Auxiliary contacts type	Type instantaneous 1 NO
Minimum switching current	5 mA signalling circuit
Minimum switching voltage	17 V signalling circuit
Non overlap distance	0.02 in (0.5 mm)
Insulation resistance	> 10 MOhm signalling circuit

#### Environment

IP degree of protection	IP20 VDE 0106	
Protective treatment	TC IEC 60068 TC DIN 50016	
Ambient air temperature for operation	-13122 °F (-2550 °C)	
Ambient air temperature for storage	-58176 °F (-5080 °C)	
Operating altitude	2000 m without derating	
Flame retardance	V1 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 axis15 Gn for 11 ms IEC 60068-2-27 Shocks contactor opened, on Z axis10 Gn for 11 ms IEC 60068-2-27 Vibrations contactor closed4 Gn, 5300 Hz IEC 60068-2-6 Vibrations contactor opened2 Gn, 5300 Hz IEC 60068-2-6 Shocks contactor opened, on X axis10 Gn for 11 ms IEC 60068-2-27 Shocks contactor opened, on Y axis6 Gn for 11 ms IEC 60068-2-27 Shocks contactor closed, on X axis15 Gn for 11 ms IEC 60068-2-27 Shocks contactor closed, on Y axis10 Gn for 11 ms IEC 60068-2-27	
Height	2.28 in (58 mm)	
Maximum Width	3.54 in (90 mm)	
Depth	2.24 in (57 mm)	
Net Weight	1.08 lb(US) (0.49 kg)	

#### Ordering and shipping details

0 11 0	
Category	22322 - CTR,K-LINE,DC,OPEN,REV
Discount Schedule	l12
GTIN	03389110501841
Nbr. of units in pkg.	1
Package weight(Lbs)	1.08 lb(US) (0.49 kg)
Returnability	No
Country of origin	FR

### Packing Units

Unit Type of Package 1	PCE	
Package 1 Height	2.36 in (6 cm)	
Package 1 width	2.44 in (6.2 cm)	
Package 1 Length	3.62 in (9.2 cm)	

#### Offer Sustainability

Green Premium product	
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 www.P65Warnings.ca.gov	
☑REACh Declaration	
Yes	
Compliant EEU RoHS Declaration	
Yes	
Yes	
€Yes	
☑ China RoHS Declaration	
Product Environmental Profile	
☑ End Of Life Information	
The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.	

Warranty 18 months