



Main

Range	TeSys
Product name	TeSys K
Product or component type	Changeover contactor
Device short name	LP2K
Device application	Control
Contactor application	Resistive load
Utilisation category	AC-1
Device presentation	Preamsembled 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 standard
[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	144 A AC for power circuit conforming to NF C 63-110 144 A AC for power circuit conforming to IEC 60947
Rated breaking capacity	110 A at 440 V conforming to IEC 60947 80 A at 500 V conforming to IEC 60947 70 A at 660...690 V conforming to IEC 60947
[Icw] rated short-time withstand current	115 A 50 °C - 1 s for power circuit 105 A 50 °C - 5 s for power circuit 100 A 50 °C - 10 s for power circuit 75 A 50 °C - 30 s for power circuit 55 A 50 °C - 1 min for power circuit 50 A 50 °C - 3 min for power circuit 25 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
[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	0.3 Mcycles 20 A AC-1 at $U_e \leq 440$ V
Interlocking type	Mechanical
Mounting support	Plate Rail
Standards	VDE 0660 IEC 60947 BS 5424 NF C 63-110
Product certifications	UL CSA
Connections - terminals	Screw clamp terminals 1 cable(s) 1.5...4 mm ² solid Screw clamp terminals 1 cable(s) 0.75...4 mm ² flexible without cable end Screw clamp terminals 1 cable(s) 0.34...2.5 mm ² flexible with cable end Screw clamp terminals 2 cable(s) 1.5...4 mm ² solid Screw clamp terminals 2 cable(s) 0.75...4 mm ² flexible without cable end Screw clamp terminals 2 cable(s) 0.34...1.5 mm ² 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	30...40 ms coil energisation and NO closing 10 ms coil de-energisation and NO opening
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

Control circuit voltage limits	Operational: 0.8...1.15 U_c (at <50 °C) Drop-out: 0.1...0.75 U_c (at <50 °C)
Inrush power in W	3 W (at 20 °C)
Hold-in power consumption in W	3 W at 20 °C
Heat dissipation	3 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
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
Product weight	0.48 kg

Offer Sustainability

REACH Regulation	REACH Declaration
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REACH free of SVHC	Yes
EU RoHS Directive	Compliant EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes
China RoHS Regulation	China RoHS declaration Product out of China RoHS scope. Substance declaration for your information
Circularity Profile	No need of specific recycling operations

Contractual warranty

Warranty	18 months
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