Product data sheet

Specifications

TeSys K reversing contactor , 3P , AC-3 <= 440 V 12 A , 1 NO , 48 V DC coil

LP2K12105ED

Discontinued on: Jan 26, 2021

Discontinued

Main

Range	TeSys
Product name	TeSys K
Product or component type	Reversing contactor
Device short name	LP2K
Device application	Control
Contactor application	Resistive load Motor control
Utilisation category	AC-4 AC-3 AC-1
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
[Ie] rated operational current	20 A (at <122 °F (50 °C)) at <= 440 V AC AC-1 for power circuit 16 A (at <158 °F (70 °C)) at 690 V AC AC-1 for power circuit 12 A at <= 440 V AC AC-3 for power circuit
Motor power kW	4 kW 480 V AC 50/60 Hz 4 kW 500...600 V AC 50/60 Hz 4 kW 660...690 V AC 50/60 Hz 3 kW 220...230 V AC 50/60 Hz 5.5 kW 380...415 V AC 50/60 Hz 5.5 kW 440 V AC 50/60 Hz
Control circuit type	DC standard
[Uc] control circuit voltage	48 V DC
Auxiliary contact composition	1 NO
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[Ith] conventional free air thermal current	20 A (at 122 °F (50 °C)) for power circuit 10 A (at 122 °F (50 °C)) for signalling circuit
Irms rated making capacity	110 A AC for signalling circuit conforming to IEC 60947 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 122 °F (50 °C) - 1 s for power circuit 105 A 122 °F (50 °C) - 5 s for power circuit 100 A 122 °F (50 °C) - 10 s for power circuit 75 A 122 °F (50 °C) - 30 s for power circuit 55 A 122 °F (50 °C) - 1 min for power circuit 50 A 122 °F (50 °C) - 3 min for power circuit 80 A - 1 s for signalling circuit 90 A - 500 ms for signalling circuit 110 A - 100 ms for signalling circuit 25 A 122 °F (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 10 A gG for signalling circuit conforming to IEC 60947 10 A gG for signalling circuit conforming to VDE 0660
Average impedance	3 mOhm - Ith 20 A 50 Hz for power circuit
[Ui] rated insulation voltage	Power circuit 600 V UL 508 Power circuit 690 V IEC 60947-4-1 Signalling circuit 690 V IEC 60947-4-1 Signalling circuit 690 V IEC 60947-5-1 Signalling circuit 600 V UL 508 Power circuit 600 V CSA C22.2 No 14 Signalling circuit 600 V CSA C22.2 No 14
Electrical durability	0.3 Mcycles 20 A AC-1 <= 440 V 1.3 Mcycles 12 A AC-3 <= 440 V
Interlocking type	Mechanical
Mounting support	Plate Rail
Standards	EN/IEC 60947-4-1 GB/T 14048.4 UL 60947-4-1 CSA C22.2 No 60947-4-1 JIS C8201-4-1
Product certifications	CB Scheme CCC UL CSA EAC CE UKCA
Connections - terminals	solder pins 1.5 x 0.9 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 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

Control circuit voltage limits	Operational: 0.8...1.15 Uc (at <122 °F (50 °C)) Drop-out: 0.1...0.75 Uc (at <122 °F (50 °C))
Inrush power in W	3 W 68 °F (20 °C))
Hold-in power consumption in W	3 W 68 °F (20 °C)
Heat dissipation	3 W
Auxiliary contacts type	Instantaneous 1 NO
Minimum switching current	5 mA for signalling circuit
Minimum switching voltage	17 V for signalling circuit
Non overlap distance	0.02 in (0.5 mm)

Insulation resistance	> 10 MOhm for signalling circuit

Environment

IP degree of protection	IP20 VDE 0106
Protective treatment	TC IEC 60068 TC DIN 50016
Ambient air temperature for operation	-13…122 °F (-25…50 °C)
Ambient air temperature for storage	-58…176 °F (-50…80 °C)
Operating altitude	2000 m without derating
Flame retardance	V1 UL 94 Requirement 2 NF F 16-101 Requirement 2 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, 5...300 Hz IEC 60068-2-6 Vibrations contactor opened2 Gn, 5...300 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	2.3 in (58 mm)
Width	3.5 in (90 mm)
Depth	2.2 in (57 mm)
Net weight	1.06 lb(US) (0.48 kg)

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.4 in (6 cm)
Package 1 Width	2.4 in (6.2 cm)
Package 1 Length	3.6 in (9.2 cm)
Package 1 Weight	18.3 oz (520 g)

Contractual warranty

Warranty (in months)	18

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

Environmental Data explained >

How we assess product sustainability >

Environmental footprint

Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances

EU RoHS Directive	Compliant

Use Longer

Lifetime extension

Repair	No

Use Again

Repack and remanufacture

WEEE Label	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins