Product data sheet Characteristics

LP2K09004BD

TeSys K changeover contactor - 4P - AC-1 <= 440 V 20 A - 24 V DC coil





Main

IVIAIII	
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	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
[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
Control circuit type	DC standard
[Uc] control circuit voltage	24 V DC
[Uimp] rated impulse withstand voltage	8 kV
Overvoltage category	III
[lth] 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 220230 V conforming to IEC 60947 110 A at 380400 V conforming to IEC 60947 70 A at 660690 V conforming to IEC 60947
[lcw] 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 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
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 IEC 60947-4-1 Power circuit: 600 V conforming to CSA C22.2 No 14
Electrical durability	0.18 Mcycles 20 A AC-1 <= 440 V
Interlocking type	Mechanical
Mounting support	Rail Plate
Standards	IEC 60947 BS 5424 NF C 63-110 VDE 0660
Product certifications	UL CSA

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	3040 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: 0.81.15 Uc (at <50 °C) Drop-out: 0.10.75 Uc (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

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	1.06 lb(US) (0.48 kg)

Ordering and shipping details

Category	22322 - CTR,K-LINE,DC,OPEN,REV
Discount Schedule	l12
GTIN	03389110497809
Nbr. of units in pkg.	1
Package weight(Lbs)	1 lb(US) (0.45 kg)
Returnability	No
Country of origin	FR

Packing Units

3	
Unit Type of Package 1	PCE
Package 1 Height	2.36 in (6 cm)
Package 1 width	2.52 in (6.4 cm)
Package 1 Length	3.62 in (9.2 cm)
Unit Type of Package 2	S02
Number of Units in Package 2	20
Package 2 Weight	20.44 lb(US) (9.27 kg)
Package 2 Height	5.91 in (15 cm)
Package 2 width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)

Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	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 Regulation	☑ REACh Declaration
REACh free of SVHC	Yes
EU RoHS Directive	Compliant E EU RoHS Declaration
Toxic heavy metal free	Yes
Mercury free	Yes
RoHS exemption information	₽¥Yes
China RoHS Regulation	☐ China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	☑ End Of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

Contractual warranty

Warranty	18 months
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