Product data sheet

Specifications



TeSys K reversing contactor , 3P , AC-3 <= 440 V 12 A , 1 NC , 250 V DC coil

LP2K1201UD3

(!) Discontinued

Main

| wam | |
|--|--|
| Range | TeSys |
| Product Name | TeSys K |
| Product Or Component Type | Reversing contactor |
| Device Short Name | LP2K |
| Device Application | Control |
| Contactor Application | Motor control Resistive load |
| Utilisation Category | AC-3 AC-4 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 |
| [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 12 A at <= 440 V AC AC-3 for power circuit |
| Motor Power Kw | 4 kW at 480 V AC 50/60 Hz 4 kW at 500600 V AC 50/60 Hz 4 kW at 660690 V AC 50/60 Hz 3 kW at 220230 V AC 50/60 Hz 5.5 kW at 380415 V AC 50/60 Hz 5.5 kW at 440 V AC 50/60 Hz |
| Control Circuit Type | DC standard |
| [Uc] Control Circuit Voltage | 250 V DC |
| Auxiliary Contact Composition | 1 NC |
| [Uimp] Rated Impulse Withstand Voltage | 8 kV |
| Overvoltage Category | III |
| [Ith] 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 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 660690 V conforming to IEC 60947 |

| [Icw] Rated Short-Time Withstand | 115 A 50 °C - 1 s for power circuit |
|----------------------------------|---|
| Current | 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 |
| | 80 A - 1 s for signalling circuit |
| | 90 A - 500 ms for signalling circuit |
| | 110 A - 100 ms for signalling 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 |
| | 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 conforming to UL 508 |
| | Power circuit: 690 V conforming to 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 | 0.3 Mcycles 20 A AC-1 at Ue <= 440 V |
| | 1.3 Mcycles 12 A AC-3 at Ue <= 440 V |
| Interlocking Type | Mechanical |
| Mounting Support | Plate |
| | Rail |
| Standards | BS 5424 |
| | NF C 63-110 |
| | VDE 0660 |
| | IEC 60947 |
| Product Certifications | CB Scheme |
| | CCC |
| | UL |
| | CSA |
| | EAC |
| | CE |
| | UKCA |
| Connections - Terminals | Screw clamp terminals 1 cable(s) 1.54 mm ² solid |
| | Screw clamp terminals 1 cable(s) 0.754 mm ² flexible without cable end |
| | Screw clamp terminals 1 cable(s) 0.704 mm locable without cable ond |
| | Screw clamp terminals 2 cable(s) 1.54 mm ² solid |
| | Screw clamp terminals 2 cable(s) 0.754 mm ² flexible without cable end |
| | Screw clamp terminals 2 cable(s) 0.341.5 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 Finitips NO 2 |
| 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 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: 0.81.15 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 |
|---------------------------|----------------------------------|
| Auxiliary Contacts Type | type instantaneous 1 NC |
| Minimum Switching Current | 5 mA for signalling circuit |
| Minimum Switching Voltage | 17 V for signalling circuit |
| Non Overlap Distance | 0.5 mm |
| Insulation Resistance | > 10 MOhm for signalling circuit |

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 | -2550 °C |
| Ambient Air Temperature For Storage | -5080 °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, 5300 Hz conforming to IEC 60068-2-6 Vibrations contactor opened: 2 Gn, 5300 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 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 | 0.48 kg |

Packing Units

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

Contractual warranty

Warranty

18 months