

# Product data sheet Characteristics

# LC1K09008P7

Device short name

Device application

Contactor application

TeSys K contactor - 4P (2 NO + 2 NC) - AC-1 <= 440 V 20 A - 230 V AC coil





# Main Range TeSys Product or component type Product name TeSys K

LC1K Control

Resistive load

Complementary

| Utilisation category                        | AC-1  |
|---|---|
| Poles description                           | 4P  |
| Power pole contact composition              | 2 NO + 2 NC   |
| [Ue] rated operational voltage              | Power circuit: 690 V AC 50/60 Hz  |
| Control circuit type                        | AC at 50/60 Hz  |
| [Uc] control circuit voltage                | 230 V AC 50/60 Hz   |
| [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  |
| 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   |
| Inrush power in VA                          | 30 VA (at 20 °C)  |
| Hold-in power consumption in VA             | 4.5 VA (at 20 °C)   |
| Heat dissipation                            | 1.3 W   |
| Control circuit voltage limits              | Operational: 0.81.15 Uc (at <50 °C)<br>Drop-out: 0.20.75 Uc (at <50 °C)   |
| Connections - terminals                     | Screw clamp terminals 1 cable(s) 1.54 mm²solid Screw clamp terminals 1 cable(s) 0.754 mm²flexible without cable end Screw clamp terminals 1 cable(s) 0.342.5 mm²flexible with cable end Screw clamp terminals 2 cable(s) 1.54 mm²solid Screw clamp terminals 2 cable(s) 0.754 mm²flexible without cable end Screw clamp terminals 2 cable(s) 0.341.5 mm²flexible with cable end |
| Maximum operating rate                      | 3600 cyc/h  |
| Signalling circuit frequency                | <= 400 Hz   |

| Mounting support         | Rail  |
|--------------------------|---|
|                          | Plate   |
| 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   |
|                          | 1020 ms coil energisation and NO closing  |
|                          | 1525 ms coil de-energisation and NC closing   |
|                          | 515 ms coil energisation and NC 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    | 10 Mcycles  |
| Electrical durability    | 0.18 Mcycles 20 A AC-1 at Ue <= 440 V   |
| Mechanical robustness    | Shocks contactor closed, on X axis: 10 Gn for 11 ms conforming to IEC 60068-2-27  |
|                          | Shocks contactor closed, on Y axis: 15 Gn for 11 ms conforming to IEC 60068-2-27  |
|                          | Shocks contactor closed, on Z axis: 15 Gn for 11 ms conforming to IEC 60068-2-27  |
|                          | Shocks contactor opened, on X axis: 6 Gn for 11 ms conforming to IEC 60068-2-27   |
|                          | Shocks contactor opened, on Y axis: 10 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 |
| Height                   | 58 mm   |
| Width                    | 45 mm   |
| Depth                    | 57 mm   |
| Net weight               | 0.18 kg   |

#### Environment

| Standards                           | BS 5424<br>IEC 60947<br>NF C 63-110  |  |
|-------------------------------------|--|--|
|                                     | VDE 0660   |  |
| Product certifications              | CSA<br>UL  |  |
| IP degree of protection             | IP2x conforming to VDE 0106  |  |
| Protective treatment                | TC conforming to IEC 60068 TC conforming to DIN 50016  |  |
| 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 |  |

## Packing Units

| PCE       |
|-----------|
| 1         |
| 179.133 g |
| 4.8 cm    |
| 6.2 cm    |
| 6.5 cm    |
| S02       |
| 50        |
| 9.217 kg  |
| 15 cm     |
| 30 cm     |
| 40 cm     |
|           |

## Offer Sustainability

| Sustainable offer status   | Green Premium product   |
|----------------------------|---|
| REACh Regulation           | ☑REACh Declaration  |
| REACh free of SVHC         | Yes   |
| EU RoHS Directive          | Compliant <sup>₫</sup> 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

|          | <u> </u>  |
|----------|-----------|
| Warranty | 12 months |