

Product data sheet

Characteristics

LC1K06105T7

TeSys K contactor - 3P(3 NO) - AC-3 - <= 440 V 6 A - 480 V AC coil



Main

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|---|---|
| Range | TeSys |
| Product name | TeSys K |
| Product or component type | Contactor |
| Device short name | LC1K |
| Contactor application | Motor control |
| Utilisation category | AC-3 AC-4 |
| Poles description | 3P |
| Power pole contact composition | 3 NO |
| [Ue] rated operational voltage | <= 690 V AC 50/60 Hz for signalling circuit 690 V AC 50/60 Hz for power circuit |
| [Ie] rated operational current | 6 A at <= 440 V AC AC-3 for power circuit |
| Motor power kW | 3 kW at 660...690 V AC 50/60 Hz 3 kW at 500...600 V AC 50/60 Hz 3 kW at 480 V AC 50/60 Hz 3 kW at 440 V AC 50/60 Hz 2.2 kW at 380...415 V AC 50/60 Hz 1.5 kW at 220...230 V AC 50/60 Hz |
| Control circuit type | AC 50/60 Hz |
| Control circuit voltage | 480 V AC 50/60 Hz |
| Auxiliary contact composition | 1 NO |
| [Uimp] rated impulse withstand voltage | 8 kV |
| Overvoltage category | III |
| [Ith] conventional free air thermal current | 10 A at <= 50 °C for signalling circuit 20 A at <= 50 °C for power circuit |
| Irms rated making capacity | 110 A AC for signalling circuit conforming to IEC 60947 110 A AC for power circuit conforming to IEC 60947 110 A AC for power circuit conforming to NF C 63-110 |
| Rated breaking capacity | 70 A at 660...690 V conforming to IEC 60947 110 A at 380...400 V conforming to IEC 60947 110 A at 220...230 V conforming to IEC 60947 80 A at 500 V conforming to IEC 60947 110 A at 440 V conforming to IEC 60947 110 A at 415 V conforming to IEC 60947 |
| [Icw] rated short-time withstand current | 20 A <= 50 °C >= 15 s power circuit 110 A 100 ms signalling circuit 90 A 500 ms signalling circuit 80 A 1 s signalling circuit 40 A <= 50 °C 3 min power circuit 45 A <= 50 °C 1 min power circuit 60 A <= 50 °C 30 s power circuit 80 A <= 50 °C 10 s power circuit 85 A <= 50 °C 5 s power circuit 90 A <= 50 °C 1 s power circuit |
| Associated fuse rating | 10 A gG for signalling circuit conforming to VDE 0660 10 A gG for signalling circuit conforming to IEC 60947 25 A aM for power circuit 25 A gG at <= 440 V for power circuit |
| Average impedance | 3 mOhm at 50 Hz - Ith 20 A for power circuit |

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| [Ui] rated insulation voltage | 600 V for signalling circuit conforming to CSA C22.2 No 14 600 V for power circuit conforming to CSA C22.2 No 14 600 V for signalling circuit conforming to UL 508 690 V for signalling circuit conforming to IEC 60947-5-1 690 V for signalling circuit conforming to IEC 60947-4-1 690 V for power circuit conforming to IEC 60947-4-1 600 V for power circuit conforming to UL 508 |
| Electrical durability | 1.3 Mcycles 6 A AC-3 at $U_e \leq 440$ V |
| Mounting support | Printed circuit boards |
| Standards | BS 5424 IEC 60947 NF C 63-110 VDE 0660 |
| Product certifications | CSA UL |
| Connections - terminals | Solder pins 1.5 x 0.9 mm |
| Operating time | 10...20 ms coil energisation and NO closing 10...20 ms coil de-energisation and NO opening |
| Safety reliability level | B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1 B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1 |
| Mechanical durability | 10 Mcycles |
| Operating rate | 3600 cyc/h |

Complementary

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|---------------------------------|---|
| Control circuit voltage limits | 0.2...0.75 U_c at ≤ 50 °C drop-out 0.8...1.15 U_c at ≤ 50 °C operational |
| 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 |
| Auxiliary contacts type | Type instantaneous (1 NO) |
| Signalling circuit frequency | ≤ 400 Hz |
| 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 M Ω for signalling circuit |

Environment

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|---------------------------------------|---|
| IP degree of protection | IP2x conforming to VDE 0106 |
| Protective treatment | TC conforming to DIN 50016 TC conforming to IEC 60068 |
| Ambient air temperature for operation | -25...50 °C |
| Ambient air temperature for storage | -50...80 °C |
| Operating altitude | 2000 m without derating in temperature |
| Flame retardance | Requirement 2 conforming to NF F 16-102 Requirement 2 conforming to NF F 16-101 V1 conforming to UL 94 |
| Mechanical robustness | Vibrations contactor opened 2 Gn, 5...300 Hz IEC 60068-2-6 Vibrations contactor closed 4 Gn, 5...300 Hz IEC 60068-2-6 Shocks contactor opened, on Z axis 10 Gn for 11 ms IEC 60068-2-27 Shocks contactor opened, on Y axis 10 Gn for 11 ms IEC 60068-2-27 Shocks contactor opened, on X axis 6 Gn for 11 ms IEC 60068-2-27 Shocks contactor closed, on Z axis 15 Gn for 11 ms IEC 60068-2-27 Shocks contactor closed, on Y axis 15 Gn for 11 ms IEC 60068-2-27 Shocks contactor closed, on X axis 10 Gn for 11 ms IEC 60068-2-27 |
| Height | 58 mm |
| Width | 45 mm |
| Depth | 57 mm |
| Product weight | 0.18 kg |