

# Product data sheet

Specifications



## TeSys K contactor , 3P , AC-3 <= 440 V 9 A , 1 NO aux. , 220...230 V AC coil

LC1K09107M72

❗ Discontinued

### Main

|                                |                                                                                                                                                            |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range Of Product               | TeSys K                                                                                                                                                    |
| Range                          | TeSys                                                                                                                                                      |
| Product Name                   | TeSys K                                                                                                                                                    |
| Device Application             | Control                                                                                                                                                    |
| Product Or Component Type      | Contactor                                                                                                                                                  |
| Device Short Name              | LC1K                                                                                                                                                       |
| Utilisation Category           | AC-1<br>AC-4<br>AC-3                                                                                                                                       |
| Coil Technology                | Built-in bidirectional peak limiting diode suppressor                                                                                                      |
| Poles Description              | 3P                                                                                                                                                         |
| Pole Contact Composition       | 3 NO                                                                                                                                                       |
| [Ie] Rated Operational Current | 20 A (at <50 °C) at <= 440 V AC AC-1 for power circuit<br>9 A at <= 440 V AC AC-3 for power circuit<br>16 A (at <70 °C) at 690 V AC AC-1 for power circuit |
| [Uc] Control Circuit Voltage   | type instantaneous 1 NO                                                                                                                                    |
| Signalling Circuit Frequency   | <= 400 Hz                                                                                                                                                  |
| Non Overlap Distance           | 0.5 mm                                                                                                                                                     |

### Complementary

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Contactor Application          | Resistive load<br>Motor control                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Auxiliary Contact Composition  | 1 NO                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Control Circuit Voltage Limits | Operational: 0.85...1.1 Uc (at <50 °C)<br>Drop-out: 0.2...0.75 Uc (at <50 °C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Control Circuit Type           | AC at 50/60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| [Uc] Control Circuit Voltage   | 220...230 V AC 50/60 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Mechanical Robustness          | Shocks contactor closed, on X axis: 10 Gn for 11 ms conforming to IEC 60068-2-27<br>Shocks contactor closed, on Y axis: 15 Gn for 11 ms conforming to IEC 60068-2-27<br>Shocks contactor closed, on Z axis: 15 Gn for 11 ms conforming to IEC 60068-2-27<br>Shocks contactor opened, on X axis: 6 Gn for 11 ms conforming to IEC 60068-2-27<br>Shocks contactor opened, on Y axis: 10 Gn for 11 ms conforming to IEC 60068-2-27<br>Shocks contactor opened, on Z axis: 10 Gn for 11 ms conforming to IEC 60068-2-27<br>Vibrations contactor closed: 4 Gn, 5...300 Hz conforming to IEC 60068-2-6<br>Vibrations contactor opened: 2 Gn, 5...300 Hz conforming to IEC 60068-2-6 |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

|                                             |                                                                                                                                                                                                                                                                          |
|---------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standards                                   | EN/IEC 60947-4-1<br>GB/T 14048.4<br>UL 60947-4-1<br>CSA C22.2 No 60947-4-1<br>JIS C8201-4-1                                                                                                                                                                              |
| Protective Treatment                        | TC conforming to IEC 60068<br>TC conforming to DIN 50016                                                                                                                                                                                                                 |
| Overvoltage Category                        | III                                                                                                                                                                                                                                                                      |
| Product Certifications                      | CB Scheme<br>CCC<br>UL<br>CSA<br>EAC<br>CE<br>UKCA                                                                                                                                                                                                                       |
| Operating Altitude                          | 2000 m without derating                                                                                                                                                                                                                                                  |
| [Ith] Conventional Free Air Thermal Current | 20 A (at 50 °C) for power circuit<br>10 A (at 50 °C) for signalling circuit                                                                                                                                                                                              |
| Irms Rated Making Capacity                  | 110 A AC for power circuit conforming to NF C 63-110<br>110 A AC for power circuit conforming to IEC 60947<br>110 A AC for signalling circuit conforming to IEC 60947                                                                                                    |
| Rated Breaking Capacity                     | 110 A at 415 V conforming to IEC 60947<br>110 A at 440 V conforming to IEC 60947<br>80 A at 500 V conforming to IEC 60947<br>110 A at 220...230 V conforming to IEC 60947<br>110 A at 380...400 V conforming to IEC 60947<br>70 A at 660...690 V conforming to IEC 60947 |
| Associated Fuse Rating                      | 25 A gG at <= 440 V for power circuit<br>25 A aM for power circuit<br>10 A gG for signalling circuit conforming to IEC 60947<br>10 A gG for signalling circuit conforming to VDE 0660                                                                                    |
| Average Impedance                           | 3 mOhm - Ith 20 A 50 Hz for power circuit                                                                                                                                                                                                                                |
| Inrush Power In Va                          | 30 VA (at 20 °C)                                                                                                                                                                                                                                                         |
| Hold-In Power Consumption In Va             | 4.5 VA (at 20 °C)                                                                                                                                                                                                                                                        |
| Operating Time                              | 10...20 ms coil de-energisation and NO opening<br>10...20 ms coil energisation and NO closing                                                                                                                                                                            |
| Safety Reliability Level                    | B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1<br>B10d = 20000000 cycles contactor with mechanical load conforming to EN/ISO 13849-1                                                                                                     |
| Maximum Operating Rate                      | 3600 cyc/h                                                                                                                                                                                                                                                               |
| Minimum Switching Current                   | 5 mA for signalling circuit                                                                                                                                                                                                                                              |
| Minimum Switching Voltage                   | 17 V for signalling circuit                                                                                                                                                                                                                                              |
| Insulation Resistance                       | > 10 MOhm for signalling circuit                                                                                                                                                                                                                                         |
| Height                                      | 58 mm                                                                                                                                                                                                                                                                    |
| Width                                       | 45 mm                                                                                                                                                                                                                                                                    |
| Depth                                       | 57 mm                                                                                                                                                                                                                                                                    |
| Compatibility Code                          | LC1K                                                                                                                                                                                                                                                                     |

## Environment

|                  |                                                                                                                                                                                                      |
|------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Motor Power Kw   | 4 kW at 480 V AC 50/60 Hz<br>4 kW at 500...600 V AC 50/60 Hz<br>4 kW at 660...690 V AC 50/60 Hz<br>2.2 kW at 220...230 V AC 50/60 Hz<br>4 kW at 380...415 V AC 50/60 Hz<br>4 kW at 440 V AC 50/60 Hz |
| Heat Dissipation | 1.3 W                                                                                                                                                                                                |

|                  |                                                                                                              |
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| Flame Retardance | V1 conforming to UL 94<br>Requirement 2 conforming to NF F 16-101<br>Requirement 2 conforming to NF F 16-102 |
|------------------|--------------------------------------------------------------------------------------------------------------|

## Packing Units

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

## Contractual warranty

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| Warranty | 18 months |
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