

# LC1K06017F72

TeSys K contactor - 3P(3 NO) - AC-3 - ≤ 440 V 6 A - 110 V AC coil



## Main

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

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

|                               |                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Ui] rated insulation voltage | 600 V for signalling circuit conforming to CSA C22.2 No 14<br>600 V for power circuit conforming to CSA C22.2 No 14<br>600 V for signalling circuit conforming to UL 508<br>690 V for signalling circuit conforming to IEC 60947-5-1<br>690 V for signalling circuit conforming to IEC 60947-4-1<br>690 V for power circuit conforming to IEC 60947-4-1<br>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              | Plate<br>Rail                                                                                                                                                                                                                                                                                                                                                                                           |
| Standards                     | BS 5424<br>IEC 60947<br>NF C 63-110<br>VDE 0660                                                                                                                                                                                                                                                                                                                                                         |
| Product certifications        | CSA<br>UL                                                                                                                                                                                                                                                                                                                                                                                               |
| Connections - terminals       | Faston terminals 1 6.35 mm<br>Faston terminals 2 2.8 mm                                                                                                                                                                                                                                                                                                                                                 |
| Operating time                | 10...20 ms coil energisation and NO closing<br>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<br>B10d = 1369863 cycles contactor with nominal load conforming to EN/ISO 13849-1                                                                                                                                                                                                                                    |
| Mechanical durability         | 10 Mcycles                                                                                                                                                                                                                                                                                                                                                                                              |
| Operating rate                | 3600 cyc/h                                                                                                                                                                                                                                                                                                                                                                                              |

## Complementary

|                                 |                                                                                           |
|---------------------------------|-------------------------------------------------------------------------------------------|
| Coil technology                 | Built-in bidirectional peak limiting diode suppressor                                     |
| Control circuit voltage limits  | 0.2...0.75 $U_c$ at $\leq 50$ °C drop-out<br>0.8...1.15 $U_c$ at $\leq 50$ °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 NC)                                                                 |
| Signalling circuit frequency    | $\leq 400$ 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 MOhm for signalling circuit                                                          |

## Environment

|                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| IP degree of protection               | IP2x conforming to VDE 0106                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Protective treatment                  | TC conforming to DIN 50016<br>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<br>Requirement 2 conforming to NF F 16-101<br>V1 conforming to UL 94                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Mechanical robustness                 | Vibrations contactor opened 2 Gn, 5...300 Hz IEC 60068-2-6<br>Vibrations contactor closed 4 Gn, 5...300 Hz IEC 60068-2-6<br>Shocks contactor opened, on Z axis 10 Gn for 11 ms IEC 60068-2-27<br>Shocks contactor opened, on Y axis 10 Gn for 11 ms IEC 60068-2-27<br>Shocks contactor opened, on X axis 6 Gn for 11 ms IEC 60068-2-27<br>Shocks contactor closed, on Z axis 15 Gn for 11 ms IEC 60068-2-27<br>Shocks contactor closed, on Y axis 15 Gn for 11 ms IEC 60068-2-27<br>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 |