



### Main

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| Range of product                       | TeSys K  |
| Range                                  | TeSys  |
| Product name                           | TeSys K  |
| Product or component type              | Reversing contactor  |
| Device short name                      | LC2K   |
| Device application                     | Control  |
| Contactors application                 | Resistive load<br>Motor control  |
| Utilisation category                   | AC-1<br>AC-4<br>AC-3   |
| Device presentation                    | Preassembled with reversing power busbar   |
| Poles description                      | 3P   |
| Pole contact composition               | 3 NO   |
| [Ue] rated operational voltage         | 690 V AC 50/60 Hz for power circuit<br>$\leq$ 690 V AC 50/60 Hz for signalling circuit   |
| [Ie] rated operational current         | 9 A at $\leq$ 440 V AC AC-3 for power circuit<br>20 A ( $\leq$ 50 °C) at $\leq$ 440 V AC AC-1 for power circuit<br>16 A ( $\leq$ 70 °C) at 690 V AC AC-1 for power circuit                           |
| Motor power kW                         | 4 kW at 380...415 V AC 50/60 Hz<br>4 kW at 440 V AC 50/60 Hz<br>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 |
| Control circuit type                   | AC 50/60 Hz  |
| Control circuit voltage                | 110 V AC 50/60 Hz  |
| Auxiliary contact composition          | 1 NO   |
| [Uimp] rated impulse withstand voltage | 8 kV   |
| Overvoltage category                   | III  |

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

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| [I <sub>th</sub> ] conventional free air thermal current | 20 A at ≤ 50 °C for power circuit<br>10 A at ≤ 50 °C for signalling circuit  |
| I <sub>rms</sub> 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   |
| [I <sub>cw</sub> ] rated short-time withstand current    | 90 A ≤ 50 °C 1 s power circuit<br>85 A ≤ 50 °C 5 s power circuit<br>80 A ≤ 50 °C 10 s power circuit<br>60 A ≤ 50 °C 30 s power circuit<br>45 A ≤ 50 °C 1 min power circuit<br>40 A ≤ 50 °C 3 min power circuit<br>80 A 1 s signalling circuit<br>90 A 500 ms signalling circuit<br>110 A 100 ms signalling circuit<br>20 A ≤ 50 °C ≥ 15 s power circuit  |
| 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 at 50 Hz - I <sub>th</sub> 20 A for power circuit   |
| [U <sub>i</sub> ] rated insulation voltage               | 690 V for signalling circuit conforming to IEC 60947-4-1<br>690 V for signalling circuit conforming to IEC 60947-5-1<br>600 V for signalling circuit conforming to UL 508<br>600 V for power circuit conforming to CSA C22.2 No 14<br>600 V for signalling circuit conforming to CSA C22.2 No 14<br>690 V for power circuit conforming to IEC 60947-4-1<br>600 V for power circuit conforming to UL 508  |
| Electrical durability                                    | 0.18 Mcycles 20 A AC-1 at U <sub>e</sub> ≤ 440 V<br>1.3 Mcycles 9 A AC-3 at U <sub>e</sub> ≤ 440 V   |
| Interlocking type  | Mechanical   |
| Mounting support   | Plate<br>Rail  |
| Standards  | VDE 0660<br>NF C 63-110<br>IEC 60947<br>BS 5424  |
| Product certifications                                   | CSA<br>UL  |
| Connections - terminals                                  | Screw clamp terminals 1 cable(s) 1.5...4 mm <sup>2</sup> - cable stiffness: solid<br>Screw clamp terminals 1 cable(s) 0.75...4 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Screw clamp terminals 1 cable(s) 0.34...2.5 mm <sup>2</sup> - cable stiffness: flexible - with cable end<br>Screw clamp terminals 2 cable(s) 1.5...4 mm <sup>2</sup> - cable stiffness: solid<br>Screw clamp terminals 2 cable(s) 0.75...4 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Screw clamp terminals 2 cable(s) 0.34...1.5 mm <sup>2</sup> - cable stiffness: flexible - with cable end |
| Tightening torque  | 1.3 N.m - on screw clamp terminals - with screwdriver Philips No 2<br>1.3 N.m - on screw clamp terminals - with screwdriver flat Ø 6 mm  |
| 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   |
| Mechanical durability                                    | 5 Mcycles  |
| Operating rate   | 3600 cyc/h   |

## Complementary

|                                 |   |
|---------------------------------|---|
| Control circuit voltage limits  | 0.2...0.75 U <sub>c</sub> at ≤ 50 °C drop-out<br>0.8...1.15 U <sub>c</sub> 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 MOhm for signalling circuit |

## Environment

|                                       |   |
|---------------------------------------|---|
| IP degree of protection               | IP2x conforming to VDE 0106   |
| Protective treatment                  | TC conforming to IEC 60068<br>TC conforming to DIN 50016  |
| Ambient air temperature for operation | -25...50 °C   |
| Ambient air temperature for storage   | -50...80 °C   |
| Operating altitude                    | 2000 m without derating derating in temperature   |
| 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  |
| Mechanical robustness                 | Shocks contactor closed, on X axis 10 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 Z axis 15 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 opened, on Y axis 10 Gn for 11 ms IEC 60068-2-27<br>Shocks contactor opened, on Z axis 10 Gn for 11 ms IEC 60068-2-27<br>Vibrations contactor closed 4 Gn, 5...300 Hz IEC 60068-2-6<br>Vibrations contactor opened 2 Gn, 5...300 Hz IEC 60068-2-6 |
| Height                                | 58 mm   |
| Width                                 | 90 mm   |
| Depth                                 | 57 mm   |
| Product weight                        | 0.39 kg   |

## Offer Sustainability

|                                  |   |
|----------------------------------|---|
| Sustainable offer status         | Green Premium product   |
| RoHS (date code: YYWW)           | Compliant - since 0706 - Schneider Electric declaration of conformity<br><a href="#">Schneider Electric declaration of conformity</a> |
| REACH                            | Reference not containing SVHC above the threshold<br><a href="#">Reference not containing SVHC above the threshold</a>                |
| Product environmental profile    | Available<br><a href="#">Product environmental</a>  |
| Product end of life instructions | Available<br><a href="#">End of life manual</a>   |

## Contractual warranty

|                 |           |
|-----------------|-----------|
| Warranty period | 18 months |
|-----------------|-----------|