# LC2K12107M7

TeSys K reversing contactor - 3P(3 NO) -AC-3- <= 440 V 12 A - 220...230 VAC coil





#### Main

| Mairi                                       |   |
|---|---|
| Range                                       | TeSys   |
| Product name                                | TeSys K   |
| Product or component type                   | Reversing contactor   |
| Device short name                           | LC2K  |
| Contactor application                       | Motor control<br>Resistive load   |
| Utilisation category                        | AC-1<br>AC-3<br>AC-4  |
| 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><= 690 V AC 50/60 Hz for signalling circuit  |
| [le] rated operational current              | 20 A (<= 50 °C) at <= 440 V AC AC-1 for power circuit 16 A (<= 70 °C) at 690 V AC AC-1 for power circuit 12 A at <= 440 V AC AC-3 for power circuit   |
| Motor power kW                              | 3 kW at 220230 V AC 50/60 Hz<br>4 kW at 480 V AC 50/60 Hz<br>4 kW at 500600 V AC 50/60 Hz<br>4 kW at 660690 V AC 50/60 Hz<br>5.5 kW at 380415 V AC 50/60 Hz<br>5.5 kW at 440 V AC 50/60 Hz  |
| Control circuit type                        | AC 50/60 Hz   |
| Control circuit voltage                     | 220230 V AC 50/60 Hz  |
| Auxiliary contact composition               | 1 NO  |
| [Uimp] rated impulse withstand voltage      | 8 kV  |
| Overvoltage category                        | III   |
| [lth] 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                  | 144 A at 690 V AC for power circuit conforming to IEC 60947 144 A at 690 V AC for power circuit conforming to NF C 63-110 110 A AC for signalling circuit conforming to IEC 60947   |
| Rated breaking capacity                     | 110 A at 440 V conforming to IEC 60947<br>80 A at 500 V conforming to IEC 60947<br>70 A at 660690 V conforming to IEC 60947   |
| [lcw] rated short-time withstand current    | 80 A 1 s signalling circuit 90 A 500 ms signalling circuit 110 A 100 ms signalling circuit 115 A <= 50 °C 1 s power circuit 105 A <= 50 °C 5 s power circuit 100 A <= 50 °C 10 s power circuit 75 A <= 50 °C 30 s power circuit 55 A <= 50 °C 1 min power circuit 50 A <= 50 °C 3 min power circuit 25 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<br>60947<br>10 A gG for signalling circuit conforming to VDE<br>0660   |

| Average impadence             | 2 mOhm at 50 Hz. Ith 20 A far navyar airavit                                 |
|-------------------------------|--|
| Average impedance             | 3 mOhm at 50 Hz - Ith 20 A for power circuit                                 |
| [Ui] rated insulation voltage | 690 V for power circuit conforming to IEC 60947-4-1                          |
|                               | 600 V for power circuit conforming to UL 508                                 |
|                               | 690 V for signalling circuit conforming to IEC 60947-4-1                     |
|                               | 690 V for signalling circuit conforming to IEC 60947-5-1                     |
|                               | 600 V for signalling circuit conforming to UL 508                            |
|                               | 600 V for power circuit conforming to CSA C22.2<br>No 14                     |
|                               | 600 V for signalling circuit conforming to CSA                               |
|                               | C22.2 No 14  |
| Electrical durability         | 0.3 Mcycles 20 A AC-1 at Ue <= 440 V<br>1.3 Mcycles 12 A AC-3 at Ue <= 440 V |
|                               | •  |
| Interlocking type             | Mechanical   |
| Mounting support              | Plate  |
|                               | Rail   |
| Standards                     | BS 5424  |
|                               | IEC 60947<br>NF C 63-110   |
|                               | VDE 0660   |
| Product certifications        | CSA  |
|                               | UL   |
| Connections - terminals       | Faston terminals 1 6.35 mm   |
|                               | Faston terminals 2 2.8 mm  |
| Operating time                | 1020 ms coil de-energisation and NO opening                                  |
|                               | 1020 ms coil energisation and NO closing                                     |
| 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         | 5 Mcycles  |
| Operating rate                | 3600 cyc/h   |
|                               | <del></del>  |

### Complementary

| Control circuit voltage limits  | 0.20.75 Uc at <= 50 °C drop-out<br>0.81.15 Uc 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 TC conforming to DIN 50016  |
| Ambient air temperature for operation | -2550 °C   |
| Ambient air temperature for storage   | -5080 °C   |
| Operating altitude                    | 2000 m without derating derating in temperature  |
| Flame retardance                      | V1 conforming to UL 94 Requirement 2 conforming to NF F 16-101 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 Shocks contactor closed, on Y axis 15 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 opened, on X axis 6 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 Z axis 10 Gn for 11 ms IEC 60068-2-27 |



| Height         | 58 mm   |
|----------------|---------|
| Width          | 90 mm   |
| Depth          | 57 mm   |
| Product weight | 0.39 kg |

## Offer Sustainability

| Sustainable offer status         | Green Premium product   |
|----------------------------------|---|
| RoHS                             | Compliant - since 0711 - Schneider Electric declaration of conformity |
| REACh                            | Reference not containing SVHC above the threshold                     |
| Product environmental profile    | Available   |
| Product end of life instructions | Need no specific recycling operations                                 |

