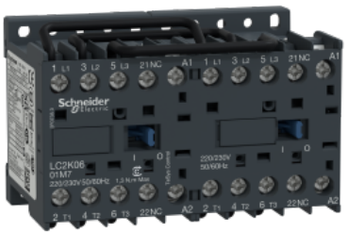
# Product data sheet

Specifications



## TeSys K reversing contactor , 3P , AC-3 <= 440 V 6 A , 1 NC , 115 V AC coil

LC2K0601FE7

## Main

| | |
|---|---|
| **Range** | TeSys |
| **Product name** | TeSys K |
| **Product or component type** | Reversing contactor |
| **Device short name** | LC2K |
| **Device application** | Control |
| **Contactor application** | Motor control |
| **Utilisation category** | AC-4<br>AC-3 |
| **Device presentation** | Preassembled with reversing power busbar |
| **Poles description** | 3P |
| **Power pole contact composition** | 3 NO |
| **[Ue] rated operational voltage** | Power circuit: 690 V AC 50/60 Hz<br>Signalling circuit: <= 690 V AC 50/60 Hz |
| **[Ie] rated operational current** | 6 A at <= 440 V AC AC-3 for power circuit |
| **Motor power kW** | 1.5 kW at 220...230 V AC 50/60 Hz<br>2.2 kW at 380...415 V AC 50/60 Hz<br>3 kW at 440 V AC 50/60 Hz<br>3 kW at 480 V AC 50/60 Hz<br>3 kW at 500...600 V AC 50/60 Hz<br>3 kW at 660...690 V AC 50/60 Hz |
| **Control circuit type** | AC at 50/60 Hz |
| **[Uc] control circuit voltage** | 115 V AC 50/60 Hz |
| **Auxiliary contact composition** | 1 NC |
| **[Uimp] rated impulse withstand voltage** | 8 kV |
| **Overvoltage category** | III |
| **[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 |

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|---|---|
| **[Icw] rated short-time withstand current** | 90 A 50 °C - 1 s for power circuit<br>85 A 50 °C - 5 s for power circuit<br>80 A 50 °C - 10 s for power circuit<br>60 A 50 °C - 30 s for power circuit<br>45 A 50 °C - 1 min for power circuit<br>40 A 50 °C - 3 min for power circuit<br>80 A - 1 s for signalling circuit<br>90 A - 500 ms for signalling circuit<br>110 A - 100 ms for signalling circuit<br>20 A 50 °C - >= 15 min for 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 - Ith 20 A 50 Hz for power circuit |
| **[Ui] rated insulation voltage** | Power circuit: 600 V conforming to UL 508<br>Power circuit: 690 V conforming to IEC 60947-4-1<br>Signalling circuit: 690 V conforming to IEC 60947-4-1<br>Signalling circuit: 690 V conforming to IEC 60947-5-1<br>Signalling circuit: 600 V conforming to UL 508<br>Power circuit: 600 V conforming to CSA C22.2 No 14<br>Signalling circuit: 600 V conforming to CSA C22.2 No 14 |
| **Electrical durability** | 1.3 Mcycles 6 A AC-3 at Ue <= 440 V |
| **Interlocking type** | Mechanical |
| **Mounting support** | Plate<br>Rail |
| **Standards** | VDE 0660<br>IEC 60947<br>NF C 63-110<br>BS 5424 |
| **Product certifications** | UL<br>CSA<br>UKCA |
| **Connections - terminals** | Screw clamp terminals 1 cable(s) 1.5…4 mm²solid<br>Screw clamp terminals 1 cable(s) 0.75…4 mm²flexible without cable end<br>Screw clamp terminals 1 cable(s) 0.34…2.5 mm²flexible with cable end<br>Screw clamp terminals 2 cable(s) 1.5…4 mm²solid<br>Screw clamp terminals 2 cable(s) 0.75…4 mm²flexible without cable end<br>Screw clamp terminals 2 cable(s) 0.34…1.5 mm²flexible 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<br>1.3 N.m - on screw clamp terminals - with screwdriver pozidriv No 2 |
| **Operating time** | 10...20 ms coil energisation and NO closing<br>10...20 ms coil de-energisation and NO opening |
| **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 |
| **Maximum operating rate** | 3600 cyc/h |

## Complementary

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|---|---|
| **Control circuit voltage limits** | Operational: 0.8...1.15 Uc (at <50 °C)<br>Drop-out: 0.2...0.75 Uc (at <50 °C) |
| **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** | <= 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

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|---|---|
| **IP degree of protection** | IP20 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 |
| **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 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 |
| **Height** | 58 mm |
| **Width** | 90 mm |
| **Depth** | 57 mm |
| **Net weight** | 0.39 kg |

## Packing Units

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|---|---|
| **Unit Type of Package 1** | PCE |
| **Number of Units in Package 1** | 1 |
| **Package 1 Weight** | 360.0 g |
| **Package 1 Height** | 6.0 cm |
| **Package 1 width** | 6.5 cm |
| **Package 1 Length** | 9.2 cm |
| **Unit Type of Package 2** | S02 |
| **Number of Units in Package 2** | 25 |
| **Package 2 Weight** | 9.488 kg |
| **Package 2 Height** | 15.0 cm |
| **Package 2 width** | 30.0 cm |
| **Package 2 Length** | 40.0 cm |

## Offer Sustainability

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|---|---|
| **Sustainable offer status** | Green Premium product |
| **REACh Regulation** | REACh Declaration |
| **REACh free of SVHC** | Yes |
| **EU RoHS Directive** | Compliant<br>EU RoHS Declaration |
| **Toxic heavy metal free** | Yes |
| **Mercury free** | Yes |
| **RoHS exemption information** | Yes |
| **China RoHS Regulation** | China RoHS declaration<br>Pro-active China RoHS declaration (out of China RoHS legal scope) |

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| **Environmental Disclosure** | Product Environmental Profile |
| **Circularity Profile** | End of Life Information |
| **WEEE** | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

## Contractual warranty

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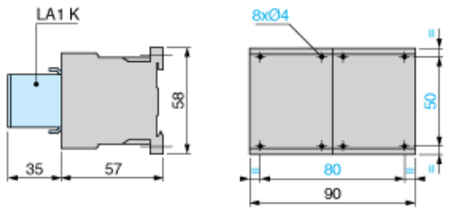
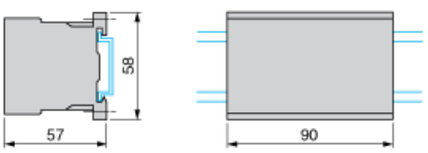
|---|---|
| **Warranty** | 18 months |

## Dimensions

### Reversing Contactors LC2 K, LP2 K, LP5 K: Mounting on Panel

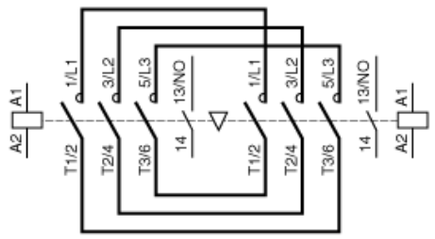



### Reversing Contactors LC2 K, LP2 K, LP5 K: Mounting on Rail AM1 DP200 or AM1 DE200 (35 mm)



## Wiring

### 3-Pole Reversing Contactors with Screw Clamp Connections: 3P + N/O




### 3-Pole Reversing Contactors with Screw Clamp Connections: 3P + N/C