



### Main

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| Range of product                    | TeSys K thermal overload relays                                                                                                                                                                     |
| Product or component type           | Non differential thermal overload relay                                                                                                                                                             |
| Device short name                   | LR7K                                                                                                                                                                                                |
| Relay application                   | Motor protection                                                                                                                                                                                    |
| Product compatibility               | LC1K<br>LP1K<br>LC7K<br>LP4K                                                                                                                                                                        |
| Network type                        | AC<br>DC                                                                                                                                                                                            |
| Overload tripping class             | Class 10A conforming to IEC 60947-4-1                                                                                                                                                               |
| Thermal protection adjustment range | 1.8...2.6 A                                                                                                                                                                                         |
| [Ui] rated insulation voltage       | 600 V power circuit conforming to CSA C22.2 No 14<br>750 V power circuit conforming to VDE 0110 group C<br>690 V power circuit conforming to IEC 60947<br>690 V power circuit conforming to BS 4941 |

### Complementary

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
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| Network frequency                           | <= 400 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Mounting support                            | Under contactor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Auxiliary contact composition               | 1 NO + 1 NC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| [Ith] conventional free air thermal current | 6 A for signalling circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| [Ue] rated operational voltage              | 250 V DC DC-13 for signalling circuit<br>690 V AC AC-15 for signalling circuit<br><= 690 V for power circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Associated fuse rating                      | 6 A gG for signalling circuit conforming to IEC 60947<br>6 A gG for signalling circuit conforming to VDE 0660                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| [Uimp] rated impulse withstand voltage      | 6 kV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Power dissipation per pole                  | 2 W                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Local signalling                            | Trip indicator (yellow)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Control type                                | Selector switch manual or automatic for reset mode<br>Blue pushbutton stop and manual reset<br>Red pushbutton trip test function                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Connections - terminals                     | Screw clamp terminals 2 cable(s) 0.34...1.5 mm <sup>2</sup> - cable stiffness: flexible - with 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) 0.75...4 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Screw clamp terminals 1 cable(s) 0.75...4 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Screw clamp terminals 2 cable(s) 1.5...4 mm <sup>2</sup> - cable stiffness: solid<br>Screw clamp terminals 1 cable(s) 1.5...4 mm <sup>2</sup> - cable stiffness: solid |
| Tightening torque                           | 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 Philips No 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Height                                      | 58 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Width                                       | 45 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Depth                                       | 65 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Product weight                              | 0.145 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

## Environment

|                                       |                                                                                                                                                                                                                                                                              |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standards                             | BS 4941<br>IEC 60947<br>NF C 63-650<br>VDE 0660                                                                                                                                                                                                                              |
| Product certifications                | CSA<br>UL                                                                                                                                                                                                                                                                    |
| Protective treatment                  | TC conforming to DIN 50016<br>TC conforming to IEC 60068                                                                                                                                                                                                                     |
| IP degree of protection               | IP2x conforming to IEC 60529                                                                                                                                                                                                                                                 |
| Ambient air temperature for operation | -30...60 °C with derating conforming to IEC 60947<br>-20...55 °C without derating conforming to IEC 60947                                                                                                                                                                    |
| Ambient air temperature for storage   | -40...70 °C                                                                                                                                                                                                                                                                  |
| Operating altitude                    | 2000 m without derating                                                                                                                                                                                                                                                      |
| Fire resistance                       | 850 °C conforming to IEC 60695-2-1                                                                                                                                                                                                                                           |
| 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 NC contact 2 Gn, 5...300 Hz conforming to IEC 60068-2-6<br>Vibrations NO contact 2 Gn, 5...300 Hz conforming to IEC 60068-2-6<br>Shocks NC contact 10 Gn for 11 ms conforming to IEC 60068-2-27<br>Shocks NO contact 10 Gn for 11 ms conforming to IEC 60068-2-27 |

## Contractual warranty

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| Period | 18 months |
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