

# Product datasheet

Specifications



## TeSys K - differential thermal overload relays - 0.36...0.54 A - class 10A

LR2K0304

### Main

|                                     |                                                                                                                                                                                                         |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Range                               | TeSys                                                                                                                                                                                                   |
| Product name                        | TeSys LRK                                                                                                                                                                                               |
| Product or component type           | Differential thermal overload relay                                                                                                                                                                     |
| Device short name                   | LR2K                                                                                                                                                                                                    |
| Relay application                   | Motor protection                                                                                                                                                                                        |
| Product compatibility               | LP1K<br>LC7K<br>LP4K<br>LC1K                                                                                                                                                                            |
| Network type                        | AC<br>DC                                                                                                                                                                                                |
| Thermal overload class              | Class 10A conforming to IEC 60947-4-1                                                                                                                                                                   |
| Thermal protection adjustment range | 0.36...0.54 A                                                                                                                                                                                           |
| [Ui] rated insulation voltage       | Power circuit: 690 V conforming to BS 4941<br>Power circuit: 690 V conforming to IEC 60947<br>Power circuit: 750 V conforming to VDE 0110 group C<br>Power circuit: 600 V conforming to CSA C22.2 No 14 |

### Complementary

|                                             |                                                                                                               |
|---------------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Network frequency                           | <= 400 Hz                                                                                                     |
| Mounting support                            | Under contactor<br>Plate, with specific accessories<br>Rail, with specific accessories                        |
| Auxiliary contact composition               | 1 NO + 1 NC                                                                                                   |
| [Ith] conventional free air thermal current | 6 A for signalling circuit                                                                                    |
| [Ue] rated operational voltage              | <= 690 V for power circuit<br>690 V AC AC-15 for signalling circuit<br>250 V DC DC-13 for signalling circuit  |
| Associated fuse rating                      | 6 A gG for signalling circuit conforming to VDE 0660<br>6 A gG for signalling circuit conforming to IEC 60947 |
| [Uimp] rated impulse withstand voltage      | 6 kV                                                                                                          |
| Power dissipation per pole                  | 2 W                                                                                                           |
| Phase failure sensitivity                   | Yes conforming to IEC 60947-4-1                                                                               |
| Local signalling                            | Trip indicator (yellow)                                                                                       |

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Control type            | Red push-button: trip test function<br>Blue push-button: stop and manual reset<br>selector switch: manual or automatic reset                                                                                                                                                                                                                                                                                     |
| Connections - terminals | Screw clamp terminals 1 cable(s) 1.5...4 mm²solid<br>Screw clamp terminals 2 cable(s) 1.5...4 mm²solid<br>Screw clamp terminals 1 cable(s) 0.75...4 mm²flexible without cable end<br>Screw clamp terminals 2 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) 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                                                                                                                                                                                                   |
| Height                  | 58 mm                                                                                                                                                                                                                                                                                                                                                                                                            |
| Width                   | 45 mm                                                                                                                                                                                                                                                                                                                                                                                                            |
| Depth                   | 65 mm                                                                                                                                                                                                                                                                                                                                                                                                            |
| Net weight              | 0.145 kg                                                                                                                                                                                                                                                                                                                                                                                                         |

## Environment

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

## Packing Units

|                              |          |
|------------------------------|----------|
| Unit Type of Package 1       | PCE      |
| Number of Units in Package 1 | 1        |
| Package 1 Weight             | 156.0 g  |
| Package 1 Height             | 8.5 cm   |
| Package 1 width              | 7.2 cm   |
| Package 1 Length             | 4.8 cm   |
| Unit Type of Package 2       | S02      |
| Number of Units in Package 2 | 41       |
| Package 2 Weight             | 6.742 kg |
| Package 2 Height             | 15 cm    |
| Package 2 width              | 30 cm    |
| Package 2 Length             | 40 cm    |

Offer Sustainability

|                            |                                                                                                                             |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                       |
| REACH Regulation           | <a href="#">REACH Declaration</a>                                                                                           |
| REACH free of SVHC         | Yes                                                                                                                         |
| EU RoHS Directive          | Compliant<br><a href="#">EU RoHS Declaration</a>                                                                            |
| Mercury free               | Yes                                                                                                                         |
| RoHS exemption information | <a href="#">Yes</a>                                                                                                         |
| China RoHS Regulation      | <a href="#">China RoHS declaration</a><br>Product out of China RoHS scope. Substance declaration for your information       |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>                                                                               |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

Contractual warranty

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