

# Product datasheet

Specifications



## TeSys LRD thermal overload relays - 48...65 A - class 10A

LRD3359

### Main

|                                     |  |
|-------------------------------------|--|
| Range                               | TeSys  |
| Product name                        | TeSys LRD<br>TeSys Deca  |
| Product or component type           | Differential thermal overload relay  |
| Device short name                   | LRD  |
| Relay application                   | Motor protection   |
| Product compatibility               | LC1D80<br>LC1D95   |
| Network type                        | AC<br>DC   |
| Thermal overload class              | Class 10A conforming to IEC 60947-4-1  |
| Thermal protection adjustment range | 48...65 A  |
| [Ui] rated insulation voltage       | Power circuit: 1000 V conforming to IEC 60947-4-1<br>Power circuit: 600 V conforming to CSA<br>Power circuit: 600 V conforming to UL |

### Complementary

|  |  |
|--|--|
| Network frequency  | 0...400 Hz   |
| Mounting support   | Plate, with specific accessories<br>Rail, with specific accessories<br>Under contactor       |
| Tripping threshold                                       | 1.14 +/- 0.06 I <sub>r</sub> conforming to IEC 60947-4-1                                     |
| Auxiliary contact composition                            | 1 NO + 1 NC  |
| [I <sub>th</sub> ] conventional free air thermal current | 5 A for signalling circuit   |
| Permissible current                                      | 0.72 A at 500 V AC-15 for signalling circuit<br>0.06 A at 440 V DC-13 for signalling circuit |
| [U <sub>e</sub> ] rated operational voltage              | 1000 V AC 0...400 Hz for power circuit conforming to IEC 60947-4-1                           |
| Associated fuse rating                                   | 4 A gG for signalling circuit<br>4 A BS for signalling circuit                               |
| [U <sub>imp</sub> ] rated impulse withstand voltage      | 6 kV conforming to IEC 60947-1   |
| Phase failure sensitivity                                | Tripping current 130 % of I <sub>r</sub> on two phase, the last one at 0                     |
| Control type   | Red push-button: stop<br>Blue push-button: reset   |

|                                 |   |
|---------------------------------|---|
| <b>Temperature compensation</b> | -20...60 °C   |
| <b>Connections - terminals</b>  | Power circuit: screw clamp terminals 1 cable(s) 4...35 mm <sup>2</sup> flexible without cable end<br>Power circuit: screw clamp terminals 1 cable(s) 4...35 mm <sup>2</sup> flexible with cable end<br>Power circuit: screw clamp terminals 1 cable(s) 4...35 mm <sup>2</sup> solid without cable end<br>Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> flexible without cable end<br>Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> flexible with cable end<br>Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> solid without cable end |
| <b>Tightening torque</b>        | Control circuit: 1.7 N.m - on screw clamp terminals<br>Power circuit: 9 N.m - on screw clamp terminals  |
| <b>Height</b>                   | 81 mm   |
| <b>Width</b>                    | 70 mm   |
| <b>Depth</b>                    | 115 mm  |
| <b>Net weight</b>               | 0.51 kg   |

## Environment

|  |  |
|--|--|
| <b>Climatic withstand</b>                    | conforming to IACS E10   |
| <b>IP degree of protection</b>               | IP20 conforming to IEC 60529   |
| <b>Ambient air temperature for operation</b> | -20...60 °C without derating conforming to IEC 60947-4-1   |
| <b>Ambient air temperature for storage</b>   | -60...70 °C  |
| <b>Flame retardance</b>                      | V1 conforming to UL 94   |
| <b>Mechanical robustness</b>                 | Vibrations: 6 Gn conforming to IEC 60068-2-6<br>Shocks: 15 Gn for 11 ms conforming to IEC 60068-2-7  |
| <b>Dielectric strength</b>                   | 2.2 kV at 50 Hz conforming to IEC 60947-1  |
| <b>Standards</b>                             | EN/IEC 60947-4-1<br>EN/IEC 60947-5-1<br>UL 60947-4-1<br>UL 60947-5-1<br>CSA C22.2 No 60947-4-1<br>CSA C22.2 No 60947-5-1<br>GB/T 14048.4<br>GB/T 14048.5<br>EN 50495 |
| <b>Product certifications</b>                | IEC<br>UL<br>CSA<br>CCC<br>EAC<br>ATEX INERIS<br>UKCA  |

## Packing Units

|                                     |           |
|-------------------------------------|-----------|
| <b>Unit Type of Package 1</b>       | PCE       |
| <b>Number of Units in Package 1</b> | 1         |
| <b>Package 1 Height</b>             | 8.000 cm  |
| <b>Package 1 Width</b>              | 12.000 cm |
| <b>Package 1 Length</b>             | 8.500 cm  |
| <b>Package 1 Weight</b>             | 490.000 g |
| <b>Unit Type of Package 2</b>       | S02       |
| <b>Number of Units in Package 2</b> | 12        |
| <b>Package 2 Height</b>             | 15.000 cm |
| <b>Package 2 Width</b>              | 30.000 cm |
| <b>Package 2 Length</b>             | 40.000 cm |
| <b>Package 2 Weight</b>             | 6.232 kg  |
| <b>Unit Type of Package 3</b>       | P06       |

|                                     |            |
|-------------------------------------|------------|
| <b>Number of Units in Package 3</b> | 192        |
| <b>Package 3 Height</b>             | 75.000 cm  |
| <b>Package 3 Width</b>              | 60.000 cm  |
| <b>Package 3 Length</b>             | 80.000 cm  |
| <b>Package 3 Weight</b>             | 109.860 kg |

## Offer Sustainability

|                                   |   |
|-----------------------------------|---|
| <b>Sustainable offer status</b>   | Green Premium product   |
| <b>REACH Regulation</b>           | <a href="#">REACH Declaration</a>   |
| <b>REACH free of SVHC</b>         | Yes   |
| <b>EU RoHS Directive</b>          | Compliant<br><a href="#">EU RoHS Declaration</a>  |
| <b>Toxic heavy metal free</b>     | Yes   |
| <b>Mercury free</b>               | Yes   |
| <b>China RoHS Regulation</b>      | <a href="#">China RoHS declaration</a><br>Pro-active China RoHS declaration (out of China RoHS legal scope) |
| <b>RoHS exemption information</b> | <a href="#">Yes</a>   |
| <b>Environmental Disclosure</b>   | <a href="#">Product Environmental Profile</a>   |
| <b>Circularity Profile</b>        | <a href="#">End of Life Information</a>   |

## Contractual warranty

|                 |           |
|-----------------|-----------|
| <b>Warranty</b> | 18 months |
|-----------------|-----------|

## Recommended replacement(s)