

# Product data sheet

Specifications



## Thermal overload relay, TeSys LRD,Deca, 5.5...8 A, class 10A

LRD12

### Main

|  |   |
|--|---|
| <b>Range</b>                               | TeSys<br>TeSys Deca   |
| <b>Product name</b>                        | TeSys LRD<br>TeSys Deca   |
| <b>Product or component type</b>           | Differential thermal overload relay   |
| <b>Device short name</b>                   | LRD   |
| <b>Relay application</b>                   | Motor protection  |
| <b>Product compatibility</b>               | LC1D18<br>LC1D25<br>LC1D32<br>LC1D12<br>LC1D09<br>LC1D38  |
| <b>Network type</b>                        | DC<br>AC  |
| <b>Thermal overload class</b>              | Class 10A conforming to IEC 60947-4-1   |
| <b>Thermal protection adjustment range</b> | 5.5...8 A   |
| <b>[Ui] rated insulation voltage</b>       | Power circuit: 600 V conforming to CSA<br>Power circuit: 600 V conforming to UL<br>Power circuit: 690 V conforming to IEC 60947-4-1 |

### Complementary

|   |  |
|---|--|
| <b>Network frequency</b>                                      | 0...400 Hz   |
| <b>Mounting support</b>                                       | Plate, with specific accessories<br>Rail, with specific accessories<br>Under contactor     |
| <b>Tripping threshold</b>                                     | 1.14 +/- 0.06 I <sub>r</sub> conforming to IEC 60947-4-1                                   |
| <b>Auxiliary contact composition</b>                          | 1 NO + 1 NC  |
| <b>[I<sub>th</sub>] conventional free air thermal current</b> | 5 A for signalling circuit   |
| <b>Permissible current</b>                                    | 1.5 A at 240 V AC-15 for signalling circuit<br>0.1 A at 250 V DC-13 for signalling circuit |
| <b>[U<sub>e</sub>] rated operational voltage</b>              | 690 V AC 0...400 Hz for power circuit conforming to IEC 60947-4-1                          |
| <b>Associated fuse rating</b>                                 | 4 A gG for signalling circuit<br>4 A BS for signalling circuit                             |
| <b>[U<sub>imp</sub>] rated impulse withstand voltage</b>      | 6 kV   |

|                                  |   |
|----------------------------------|---|
| <b>Phase failure sensitivity</b> | Tripping current 130 % of I <sub>r</sub> on two phase, the last one at 0  |
| <b>Control type</b>              | Red push-button: stop<br>Blue push-button: reset  |
| <b>Temperature compensation</b>  | -20...60 °C   |
| <b>Connections - terminals</b>   | 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<br>Power circuit: screw clamp terminals 1 cable(s) 1.5...10 mm <sup>2</sup> flexible without cable end<br>Power circuit: screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> flexible with cable end<br>Power circuit: screw clamp terminals 1 cable(s) 1...6 mm <sup>2</sup> solid |
| <b>Tightening torque</b>         | Control circuit: 1.7 N.m - on screw clamp terminals<br>Power circuit: 1.7 N.m - on screw clamp terminals  |
| <b>Height</b>                    | 66 mm   |
| <b>Width</b>                     | 45 mm   |
| <b>Depth</b>                     | 70 mm   |
| <b>Net weight</b>                | 0.124 kg  |

## Environment

|  |  |
|--|--|
| <b>Protective treatment</b>                  | TH conforming to IEC 60068   |
| <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>                   | 1.89 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>BV<br>RINA<br>DNV-GL<br>LROS (Lloyds register of shipping)<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 Weight</b>             | 146 g  |
| <b>Package 1 Height</b>             | 5 cm   |
| <b>Package 1 width</b>              | 7.7 cm |
| <b>Package 1 Length</b>             | 9 cm   |
| <b>Unit Type of Package 2</b>       | S02    |
| <b>Number of Units in Package 2</b> | 24     |

|                              |          |
|------------------------------|----------|
| Package 2 Weight             | 3.81 kg  |
| Package 2 Height             | 15 cm    |
| Package 2 width              | 30 cm    |
| Package 2 Length             | 40 cm    |
| Unit Type of Package 3       | P06      |
| Number of Units in Package 3 | 384      |
| Package 3 Weight             | 69.54 kg |
| Package 3 Height             | 80 cm    |
| Package 3 width              | 80 cm    |
| Package 3 Length             | 60 cm    |

## Offer Sustainability

|                            |   |
|----------------------------|---|
| Sustainable offer status   | Green Premium product   |
| REACH Regulation           | <a href="#">REACH Declaration</a>   |
| 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>   |
| Circularity Profile        | <a href="#">End of Life Information</a>   |
| WEEE                       | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins   |
| California proposition 65  | WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |

## Contractual warranty

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