

# LRD21L

Thermal overload relay, TeSys Deca, 690VAC, 12 to 18A, 1NO+1NC, class 20, for D18 to D38, screw clamp



## Main

|                                     |   |
|-------------------------------------|---|
| Range                               | TeSys<br>TeSys Deca   |
| 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               | LC1D25<br>LC1D18<br>LC1D32<br>LC1D38  |
| Network type                        | DC<br>AC  |
| Thermal overload class              | Class 20 conforming to IEC 60947-4-1  |
| Thermal protection adjustment range | 12... 18 A  |
| [Ui] rated insulation voltage       | 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

|  |   |
|--|---|
| 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                                      | 3 A at 120 V AC-15 for signalling circuit<br>0.22 A at 125 V DC-13 for signalling circuit   |
| [U <sub>e</sub> ] rated operational voltage              | 690 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  |
| 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  |
| Temperature compensation                                 | -20...60 °C   |
| Connections - terminals                                  | 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<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 without cable end |
| Tightening torque  | Control circuit: 1.7 N.m - on screw clamp terminals<br>Power circuit: 1.7 N.m - on screw clamp terminals  |
| Height   | 66 mm   |

|            |          |
|------------|----------|
| Width      | 45 mm    |
| Depth      | 76 mm    |
| Net weight | 0.144 kg |

## Environment

|                                       |  |
|---------------------------------------|--|
| Climatic withstand                    | Conforming to IACS E10   |
| IP degree of protection               | IP20 conforming to IEC 60529   |
| Ambient air temperature for operation | -20...60 °C without derating conforming to IEC 60947-4-1   |
| Ambient air temperature for storage   | -60...70 °C  |
| Mechanical robustness                 | Shocks: 15 Gn for 11 ms conforming to IEC 60068-2-7<br>Vibrations: 3 GN conforming to IEC 60068-2-6                                  |
| Dielectric strength                   | 1.89 kV at 50 Hz conforming to IEC 60947-1   |
| Standards                             | 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>EN 50495 |
| Product certifications                | IEC[RETURN]UL[RETURN]CSA[RETURN]EAC[RETURN]ABS[RETURN]ATEX<br>INERIS[RETURN]UKCA   |

## Packing Units

|                              |           |
|------------------------------|-----------|
| Unit Type of Package 1       | PCE       |
| Number of Units in Package 1 | 1         |
| Package 1 Height             | 8.3 cm    |
| Package 1 Width              | 7.2 cm    |
| Package 1 Length             | 4.5 cm    |
| Package 1 Weight             | 174.0 g   |
| Unit Type of Package 2       | S02       |
| Number of Units in Package 2 | 24        |
| Package 2 Height             | 15.0 cm   |
| Package 2 Width              | 30.0 cm   |
| Package 2 Length             | 40.0 cm   |
| Package 2 Weight             | 4.624 kg  |
| Unit Type of Package 3       | P12       |
| Number of Units in Package 3 | 768       |
| Package 3 Height             | 80.0 cm   |
| Package 3 Width              | 75.0 cm   |
| Package 3 Length             | 120.0 cm  |
| Package 3 Weight             | 111.36 kg |

## Offer Sustainability

|                            |   |
|----------------------------|---|
| Sustainable offer status   | Green Premium product   |
| REACH Regulation           | <a href="#">REACH Declaration</a>   |
| EU RoHS Directive          | Compliant with Exemptions   |
| Mercury free               | Yes   |
| China RoHS Regulation      | <a href="#">China RoHS Declaration</a>  |
| RoHS exemption information | <a href="#">Yes</a>   |
| 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 |

## Contractual warranty

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