



### Main

|                                     |                                                                                                                                      |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| Range                               | TeSys                                                                                                                                |
| Product name                        | TeSys LRD                                                                                                                            |
| Product or component type           | Differential thermal overload relay                                                                                                  |
| Device short name                   | LRD                                                                                                                                  |
| Relay application                   | Motor protection                                                                                                                     |
| Product compatibility               | LC1D95<br>LC1D80                                                                                                                     |
| Network type                        | AC<br>DC                                                                                                                             |
| Thermal overload class              | Class 10A conforming to IEC 60947-4-1                                                                                                |
| Thermal protection adjustment range | 80...104 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                               |

|                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| [Uimp] rated impulse withstand voltage | IEC 60947-1 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                | 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 |
| Tightening torque                      | Control circuit: 1.7 N.m - on screw clamp terminals<br>Power circuit: 9 N.m - on screw clamp terminals                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Height                                 | 81 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Width                                  | 70 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Depth                                  | 115 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Net weight                             | 0.51 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

## Environment

|                                       |                                                                                                                                                                      |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Protective treatment                  | TH conforming to IEC 60068                                                                                                                                           |
| 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                                                                                                                                                          |
| Flame retardance                      | V1 conforming to UL 94                                                                                                                                               |
| Mechanical robustness                 | Vibrations: 6 Gn conforming to IEC 60068-2-6<br>Shocks: 15 Gn for 11 ms conforming to IEC 60068-2-7                                                                  |
| Dielectric strength                   | 2.2 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>GB/T 14048.4<br>GB/T 14048.5<br>EN 50495 |
| Product certifications                | IEC<br>UL<br>CSA<br>CCC<br>EAC<br>ATEX INERIS                                                                                                                        |

## Packing Units

|                              |          |
|------------------------------|----------|
| Unit Type of Package 1       | PCE      |
| Number of Units in Package 1 | 1        |
| Package 1 Weight             | 549 g    |
| Package 1 Height             | 7.8 cm   |
| Package 1 width              | 8.6 cm   |
| Package 1 Length             | 12 cm    |
| Unit Type of Package 2       | S02      |
| Number of Units in Package 2 | 12       |
| Package 2 Weight             | 6.917 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 | 192      |

|                  |            |
|------------------|------------|
| Package 3 Weight | 122.363 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>                                                                           |
| REACH free of SVHC         | Yes                                                                                                         |
| EU RoHS Directive          | Compliant<br><a href="#">EU RoHS Declaration</a>                                                            |
| Toxic heavy metal free     | Yes                                                                                                         |
| Mercury free               | Yes                                                                                                         |
| RoHS exemption information | <a href="#">Yes</a>                                                                                         |
| China RoHS Regulation      | <a href="#">China RoHS declaration</a><br>Pro-active China RoHS declaration (out of China RoHS legal scope) |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>                                                               |
| Circularity Profile        | <a href="#">End of Life Information</a>                                                                     |

### Contractual warranty

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