



## 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               | LC1D150                                           |
| Network type                        | DC<br>AC                                          |
| Thermal protection adjustment range | 110...140 A                                       |
| [Ui] rated insulation voltage       | Power circuit: 1000 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                                                                                                                                                                                                                                                    |
| [I <sub>th</sub> ] conventional free air thermal current | 5 A for signalling circuit                                                                                                                                                                                                                                                                                  |
| Permissible current                                      | 0.06 A at 440 V DC-13 for signalling circuit<br>0.12 A at 600 V AC-15 for signalling circuit                                                                                                                                                                                                                |
| [U <sub>e</sub> ] rated operational voltage              | 690 V AC 0...400 Hz                                                                                                                                                                                                                                                                                         |
| [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                                  | Power circuit: screw clamp terminals 1 cable(s) 4...35 mm <sup>2</sup> flexible with 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 |

|                   |                                                                                                                                                                                                                                                                                                          |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                   | 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) 4...50 mm <sup>2</sup> flexible without cable end<br>Power circuit: screw clamp terminals 1 cable(s) 4...50 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                                                                                                                                                                                                   |
| Depth             | 132 mm                                                                                                                                                                                                                                                                                                   |
| Net weight        | 0.9 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                   | 6 kV at 50 Hz conforming to IEC 60255-5                                                                       |
| Standards                             | UL 508<br>CSA C22.2 No 14<br>ATEX D 94/9/CE<br>IEC 60947-4-1<br>EN 60947-4-1<br>IEC 60947-5-1<br>EN 60947-5-1 |
| Product certifications                | RINA<br>LROS (Lloyds register of shipping)<br>BV<br>GOST<br>DNV<br>ATEX INERIS<br>CCC<br>GL                   |

## Offer Sustainability

|                            |                                                                                                             |
|----------------------------|-------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                       |
| 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 |
|----------|-----------|