



## 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>LC1D32<br>LC1D12<br>LC1D18<br>LC1D38<br>LC1D09                                                                            |
| Network type                        | DC<br>AC                                                                                                                            |
| Thermal overload class              | Class 10A conforming to IEC 60947-4-1                                                                                               |
| Thermal protection adjustment range | 1...1.6 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 Ir conforming to IEC 60947-4-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Auxiliary contact composition               | 1 NO + 1 NC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| [Ith] 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| [Ue] 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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| [Uimp] rated impulse withstand voltage      | 6 kV                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Phase failure sensitivity                   | Tripping current 130 % of Ir 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      | 70 mm    |
| Net weight | 0.124 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                                                                                                                                                          |
| 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                   | 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>GB/T 14048.4<br>GB/T 14048.5<br>EN 50495 |
| Product certifications                | IEC[RETURN]UL[RETURN]CSA[RETURN]CCC[RETURN]EAC[RETURN]BV[RETURN]RINA[RET<br>GL[RETURN]LROS (Lloyds register of shipping)[RETURN]ATEX<br>INERIS[RETURN]UKCA           |

## Packing Units

|                              |           |
|------------------------------|-----------|
| Unit Type of Package 1       | PCE       |
| Number of Units in Package 1 | 1         |
| Package 1 Height             | 4.900 cm  |
| Package 1 Width              | 7.700 cm  |
| Package 1 Length             | 8.800 cm  |
| Package 1 Weight             | 141.900 g |
| Unit Type of Package 2       | S02       |
| Number of Units in Package 2 | 24        |
| Package 2 Height             | 15.000 cm |
| Package 2 Width              | 30.000 cm |
| Package 2 Length             | 40.000 cm |
| Package 2 Weight             | 3.649 kg  |

## Offer Sustainability

|                            |                                                                                                                                   |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                             |
| REACH Regulation           |  <a href="#">REACH Declaration</a>             |
| EU RoHS Directive          | Compliant  <a href="#">EU RoHS Declaration</a> |
| Toxic heavy metal free     | Yes                                                                                                                               |
| 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 |
|----------|-----------|