



### Main

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|-------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Range                               | TeSys                                                                                                                            |
| Product name                        | TeSys LRD                                                                                                                        |
| Product or component type           | Differential thermal overload relay                                                                                              |
| Device short name                   | LRD                                                                                                                              |
| Relay application                   | Motor protection                                                                                                                 |
| Product compatibility               | LC1D09<br>LC1D12<br>LC1D18<br>LC1D25<br>LC1D32<br>LC1D38                                                                         |
| Network type                        | AC<br>DC                                                                                                                         |
| Overload tripping class             | Class 20 conforming to IEC 60947-4-1                                                                                             |
| Thermal protection adjustment range | 1...1.6 A                                                                                                                        |
| [Ui] rated insulation voltage       | 690 V power circuit conforming to IEC 60947-4-1<br>600 V power circuit conforming to UL<br>600 V power circuit conforming to CSA |

### Complementary

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Network frequency                           | 0...400 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Mounting support                            | Under contactor<br>Rail with specific accessories<br>Plate with specific accessories                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Tripping threshold                          | 1.14 +/- 0.06 Ir conforming to IEC 60947-4-1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| [Ith] conventional free air thermal current | 5 A for signalling circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Permissible current                         | 0.22 A at 125 V DC-13 for signalling circuit<br>3 A at 120 V AC-15 for signalling circuit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| [Ue] rated operational voltage              | 690 V AC 0...400 Hz                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Associated fuse rating                      | 6 A BS88<br>4 A gG<br>2 A aM                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| [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                                | Blue push-button for reset mode<br>Red push-button stop                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Temperature compensation                    | -20...60 °C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Connections - terminals                     | Power circuit : screw clamp terminals 1 cable(s) 1...6 mm <sup>2</sup> - cable stiffness: solid - without cable end<br>Power circuit : screw clamp terminals 1 cable(s) 1...4 mm <sup>2</sup> - cable stiffness: flexible - with cable end<br>Power circuit : screw clamp terminals 1 cable(s) 1.5...10 mm <sup>2</sup> - cable stiffness: flexible - without cable end<br>Control circuit : screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> - cable stiffness: solid - without cable end<br>Control circuit : screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> - cable stiffness: flexible - with cable end<br>Control circuit : screw clamp terminals 2 cable(s) 1...2.5 mm <sup>2</sup> - cable stiffness: flexible - without cable end |
| Tightening torque                           | Power circuit : 1.7 N.m - on screw clamp terminals<br>Control circuit : 1.7 N.m - on screw clamp terminals                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Width                                       | 45 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Depth                                       | 76.1 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Product weight                              | 0.144 kg                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

## Environment

|                                       |                                                                                                               |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------|
| Standards                             | ATEX D 94/9/CE<br>EN 60947-4-1<br>EN 60947-5-1<br>IEC 60947-4-1<br>IEC 60947-5-1<br>UL 508<br>CSA C22.2 No 14 |
| Product certifications                | ABS<br>ATEX INERIS<br>CSA<br>UL<br>EAC                                                                        |
| 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                                                                                                   |
| Fire resistance                       | 850 °C conforming to IEC 60695-2-1                                                                            |
| Mechanical robustness                 | Vibrations 3 Gn IEC 60068-2-6<br>Shocks 15 Gn for 11 ms IEC 60068-2-7                                         |
| Dielectric strength                   | 6 kV at 50 Hz conforming to IEC 60255-5                                                                       |

## Offer Sustainability

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|----------------------------------|---------------------------------------|
| Sustainable offer status         | Not Green Premium product             |
| Product environmental profile    | Available                             |
| Product end of life instructions | Need no specific recycling operations |