

# Product data sheet

Specifications



Thermal overload relay, TeSys  
Deca, 690VAC, 12 to 18A,  
1NO+1NC, class 10A, EverLink  
BTR screw connectors

LRD318

## 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               | LC1D40A<br>LC1D50A<br>LC1D65A                                                                                                       |
| Network type                        | DC<br>AC                                                                                                                            |
| Thermal overload class              | Class 10A 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 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                         | 0.95 A at 380 V AC-15 for signalling circuit<br>0.06 A at 440 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                                                                                  |

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

|                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connections - terminals | Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm² flexible without cable end<br>Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm² flexible with cable end<br>Control circuit: screw clamp terminals 2 cable(s) 1...2.5 mm² solid without cable end<br>Power circuit: EverLink BTR screw connectors 1 cable(s) 1...35 mm² flexible without cable end<br>Power circuit: EverLink BTR screw connectors 1 cable(s) 1...35 mm² flexible with cable end<br>Power circuit: EverLink BTR screw connectors 1 cable(s) 1...35 mm² solid without cable end |
| Tightening torque       | Control circuit: 1.7 N.m - on screw clamp terminals<br>Power circuit: 5 N.m - on EverLink BTR screw connectors                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Height                  | 70 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Width                   | 55 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Depth                   | 123 mm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Net weight              | 0.375 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                 | Shocks: 15 Gn for 11 ms conforming to IEC 60068-2-7<br>Vibrations: 4 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>GB/T 14048.4<br>GB/T 14048.5<br>EN 50495 |
| Product certifications                | IEC<br>UL<br>CSA<br>CCC<br>EAC<br>DNV-GL<br>RMRS<br>EU-RO MR<br>LROS (Lloyds register of shipping)<br>ATEX INERIS<br>UKCA                                            |

## Packing Units

|                              |           |
|------------------------------|-----------|
| Unit Type of Package 1       | PCE       |
| Number of Units in Package 1 | 1         |
| Package 1 Height             | 6.300 cm  |
| Package 1 Width              | 10.500 cm |
| Package 1 Length             | 13.800 cm |
| Package 1 Weight             | 392.000 g |
| Unit Type of Package 2       | S02       |

|                              |           |
|------------------------------|-----------|
| Number of Units in Package 2 | 13        |
| Package 2 Height             | 15.000 cm |
| Package 2 Width              | 30.000 cm |
| Package 2 Length             | 40.000 cm |
| Package 2 Weight             | 5.388 kg  |

## Contractual warranty

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

Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

| Environmental footprint          |                                               |
|----------------------------------|-----------------------------------------------|
| Total lifecycle Carbon footprint | 4                                             |
| Environmental Disclosure         | <a href="#">Product Environmental Profile</a> |

Use Better

| Materials and Substances               |                                                                                                                                                                                                                                                                  |
|----------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Packaging made with recycled cardboard | Yes                                                                                                                                                                                                                                                              |
| Packaging without single use plastic   | Yes                                                                                                                                                                                                                                                              |
| <a href="#">EU RoHS Directive</a>      | Compliant                                                                                                                                                                                                                                                        |
| REACH Regulation                       | <a href="#">REACH Declaration</a>                                                                                                                                                                                                                                |
| California proposition 65              | <b>WARNING:</b> This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |

Use Again

| Repack and remanufacture        |                                                                                                                                                                                                                 |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| End of life manual availability | <a href="#">End of Life Information</a>                                                                                                                                                                         |
| Take-back                       | No                                                                                                                                                                                                              |
| WEEE Label                      |  The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |

Technical Illustration

Assembly's dimensions

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