

Product datasheet

Specifications



Thermal overload relay, Easy TeSys Protect, 5.5...8A, class 10A

LRE12

Main

| | |
|---------------------------|--|
| Range | Easy TeSys |
| Range of product | Easy TeSys Protect |
| Product or component type | Differential thermal overload relay |
| Device short name | LRE |
| Relay application | Motor protection |
| Phase failure sensitivity | Tripping current 130 % of I _r on two phase, the last one at 0 conforming to IEC 60947-4-1 |
| Colour | Grey (RAL 7011) |

Complementary

| | |
|--|--|
| Product compatibility | LC1E09...38 |
| Network type | AC |
| Network frequency | 50...60 Hz |
| Mounting support | Under contactor Plate, with specific accessories Rail, with specific accessories |
| Thermal overload class | Class 10A conforming to IEC 60947-4-1 |
| Signalling function | Relay trip indicator |
| Thermal protection adjustment range | 5.5...8 A |
| Tripping threshold | 1.14 +/- 0.06 I _r conforming to IEC 60947-4-1 |
| Mechanical robustness | Shocks: 6 Gn for 11 ms conforming to IEC 60068-2-7 Vibrations: 3 GN conforming to IEC 60068-2-6 |
| Auxiliary contact composition | 1 NO + 1 NC |
| [I _{th}] conventional free air thermal current | 5 A for signalling circuit |
| [U _e] rated operational voltage | <= 690 V AC |
| Associated fuse rating | 20 A gG for power circuit 12 A aM for power circuit 5 A gG for signalling circuit |
| [U _i] rated insulation voltage | 690 V conforming to IEC 60947-4-1 |
| [U _{imp}] rated impulse withstand voltage | 6 kV |
| Local signalling | Trip indicator |
| Control type | Push-button red stop: Push-button green reset: |
| Temperature compensation | -20...60 °C |

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

| | |
|--------------------------------------|---|
| Connections - terminals | Power circuit: screw clamp terminals 1 1.5...6 mm ² - cable stiffness: flexible without cable end Power circuit: screw clamp terminals 1 1...4 mm ² - cable stiffness: flexible with cable end Power circuit: screw clamp terminals 1 1...6 mm ² - cable stiffness: solid without cable end Signalling circuit: screw clamp terminals 2 1...2.5 mm ² - cable stiffness: flexible without cable end Signalling circuit: screw clamp terminals 2 1...2.5 mm ² - cable stiffness: flexible with cable end Signalling circuit: screw clamp terminals 2 1...2.5 mm ² - cable stiffness: solid without cable end |
| Recommended tightening torque | Power circuit: 1.7 N.m - on screw clamp terminals Signalling circuit: 1.7 N.m - on screw clamp terminals |
| Height | 44.5 mm |
| Width | 45 mm |
| Depth | 70 mm |
| Net weight | 0.13 kg |

Environment

| | |
|--|---|
| Standards | IEC 60947-4-1 IEC 60947-5-1 |
| Product certifications | 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 -20...70 °C with derating |
| Ambient air temperature for storage | -60...80 °C |
| Fire resistance | 850 °C conforming to IEC 60068-2-1 |
| Dielectric strength | 6 kV at 50 Hz conforming to IEC 60255-5 |
| Electromagnetic compatibility | Surge withstand: 6 kV conforming to IEC 60801-5 |

Packing Units

| | |
|-------------------------------------|-----------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 5.300 cm |
| Package 1 Width | 8.000 cm |
| Package 1 Length | 8.200 cm |
| Package 1 Weight | 146.000 g |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 33 |
| Package 2 Height | 15.000 cm |
| Package 2 Width | 30.000 cm |
| Package 2 Length | 40.000 cm |
| Package 2 Weight | 5.170 kg |

Contractual warranty

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

Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO₂ products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

[Learn more about Green Premium >](#)

[Guide to assess a product's sustainability >](#)



Transparency RoHS/REACH

Well-being performance

Reach Free Of Svhc

Mercury Free

Rohs Exemption Information Yes

Certifications & Standards

Reach Regulation [REACH Declaration](#)

Eu Rohs Directive Compliant with Exemptions

China Rohs Regulation [China RoHS declaration](#)
Product out of China RoHS scope. Substance declaration for your information

Environmental Disclosure [Product Environmental Profile](#)

Weee The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

Circularity Profile [End of Life Information](#)

Offer Marketing Illustration

Product benefits / Features



Easy TeSys Thermal Overload Relays
Range Accessories

Contact blocks

Auxiliary contact

Mounting accessories

Manual starter enclosure

Manual starter padlocking

The image displays a collection of accessories for Easy TeSys Thermal Overload Relays. At the top left is a main relay unit with three red terminals. Below it are several accessories: two contact blocks, one auxiliary contact, a set of mounting accessories, two manual starter enclosures, and a manual starter padlocking device.

Offer Marketing Illustration

Product benefits / Features

Easy TeSys Thermal Overload Relays



Designed for the essential

Delivers the best balance between performance and budget without any compromise on quality



Easy choice and application

Easier to install, order and understand, and operate with multi-standard screws



Extended flexibility

Larger number of solutions covered with an extended product range



Offer Marketing Illustration

Product benefits / Features



The image shows a Schneider Easy TeSys Thermal Overload Relay (LRE12) against a green circular background. The relay is a dark grey rectangular unit with three orange terminal studs on top. The front panel features a 'STOP' button, a 'RESET' button, and a 'TRIP' indicator. The text 'Easy TeSys Schneider Protect' and 'LRE 12' is visible on the front. Below the relay, there are three terminal blocks labeled '2n', '4n', and '6n'.

Easy TeSys Thermal Overload Relays

Technical Benefits

- Protecting A.C. circuits and motors from overloads, phase failure, long starting times, and prolonged stalled rotor conditions.
- Include automatic compensation for ambient temperature variations.
- 4 width sizes available to cover all ratings; from 45 mm (up to 38 A) to 242 mm (up to 630 A)
- Compensated relays with manual or automatic reset and relay trip indicator
- Terminal block for separate mounting

Technical Illustration

Assembly's dimensions

