

Product datasheet

Specifications



Thermal overload relay, Easy TeSys Protect, 4...6A, class 10A

LRE10

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 | LC1E06...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 | 4...6 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 | 16 A gG for power circuit 8 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 60947-5-1 IEC 60947-4-1 |
| 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 | 5.500 cm |
| Package 1 Width | 8.200 cm |
| Package 1 Length | 8.700 cm |
| Package 1 Weight | 145.000 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 | 5.145 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.

[How this information helps you >](#)

Environmental footprint

| | |
|---|----|
| Carbon footprint (kg.eq.CO2 per CR, Total Life cycle) | 43 |
|---|----|

[Environmental Disclosure](#)

[Product Environmental Profile](#)

Use Better

Materials and Substances

| | |
|--|-----|
| Packaging made with recycled cardboard | Yes |
|--|-----|

| | |
|--------------------------------------|----|
| Packaging without single use plastic | No |
|--------------------------------------|----|

| | |
|-----------------------------------|-----------|
| EU RoHS Directive | Compliant |
|-----------------------------------|-----------|

| | |
|------------------|-----------------------------------|
| REACH Regulation | REACH Declaration |
|------------------|-----------------------------------|

| | |
|-----------------------|--|
| China RoHS Regulation | China RoHS declaration |
|-----------------------|--|

Use Again

Repack and remanufacture

[Circularity Profile](#)

[End of Life Information](#)

WEEE



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

Take-back

No

Offer Marketing Illustration

Product benefits / Features

Easy TeSys
Thermal Overload Relays

LRE10



Network type
AC

Thermal protection adjustment range
50...60 Hz

Tripping threshold
1.14 +/- 0.06 I_r

Auxiliary contact composition
1 NO + 1 NC

Offer Marketing Illustration

Product benefits / Features



The image shows a Schneider Easy TeSys Thermal Overload Relay (LRE10) 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 10' 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

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, a black relay unit is shown against a green circular background. Below it, the text 'Easy TeSys Thermal Overload Relays' is written in a large, dark font, with 'Range Accessories' in a smaller green font underneath. The accessories are arranged in two rows. The first row contains 'Contact blocks' (a white rectangular component) and an 'Auxiliary contact' (a vertical white component). The second row contains 'Mounting accessories' (a stack of white metal brackets), 'Manual starter enclosure' (two white rectangular enclosures), and 'Manual starter padlocking' (a yellow padlock and its associated mounting hardware).

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



Technical Illustration

Assembly's dimensions

