

Product datasheet

Specifications



Easy TeSys differential thermal overload relay 5.5...8 A - 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

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
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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
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Environmental Disclosure

[Product Environmental Profile](#)

Use Better

Materials and Substances

Packaging made with recycled cardboard	Yes
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Packaging without single use plastic	No
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EU RoHS Directive	Compliant
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REACH Regulation	REACH Declaration
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China RoHS Regulation	China RoHS declaration
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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



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' are visible on the front. Below the relay, there are labels for '2h', '4h', and '6h'.

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



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



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 Range Accessories' is displayed. The accessories are arranged in three rows: the first row shows 'Contact blocks' and an 'Auxiliary contact'; the second row shows 'Mounting accessories', 'Manual starter enclosure' (two units), and 'Manual starter padlocking' (two units).

Technical Illustration

Assembly's dimensions

