

Product datasheet

Specifications



Easy TeSys differential thermal overload relay 37...50 A - class 10A

LRE357

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

Complementary

Product compatibility	LC1E50...95
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	37...50 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	100 A gG for power circuit 63 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

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	<p>Signalling circuit: screw clamp terminals 2 1...2.5 mm² - cable stiffness: flexible without cable end</p> <p>Signalling circuit: screw clamp terminals 2 1...2.5 mm² - cable stiffness: flexible with cable end</p> <p>Signalling circuit: screw clamp terminals 2 1...2.5 mm² - cable stiffness: solid without cable end</p> <p>Power circuit: screw clamp terminals 1 4...35 mm² - cable stiffness: flexible without cable end</p> <p>Power circuit: screw clamp terminals 1 4...35 mm² - cable stiffness: flexible with cable end</p> <p>Power circuit: screw clamp terminals 1 4...35 mm² - cable stiffness: solid without cable end</p>
Recommended tightening torque	<p>Power circuit: 9 N.m - on screw clamp terminals</p> <p>Signalling circuit: 1.7 N.m - on screw clamp terminals</p>
Height	54 mm
width	70 mm
Depth	113 mm
Net weight	0.46 kg

Environment

Standards	<p>IEC 60947-4-1</p> <p>IEC 60947-5-1</p>
Product certifications	EAC
Protective treatment	TH conforming to IEC 60068
IP degree of protection	IP20 conforming to IEC 60529
Ambient air temperature for operation	<p>-20...60 °C without derating conforming to IEC 60947-4-1</p> <p>-20...70 °C with derating</p>
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	8 cm
Package 1 Width	9 cm
Package 1 Length	12.5 cm
Package 1 Weight	484 g
Unit Type of Package 2	S02
Number of Units in Package 2	9
Package 2 Height	15 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	4.742 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.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

Environmental footprint

Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	4
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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 with Exemptions
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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

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
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 main relay unit is shown against a green circular background. Below it, several accessory components are arranged in two rows. The first row includes 'Contact blocks' and an 'Auxiliary contact'. The second row includes 'Mounting accessories', 'Manual starter enclosure' (two units), and 'Manual starter padlocking' (two units).

Offer Marketing Illustration

Product benefits / Features



The image shows a Schneider Easy TeSys Thermal Overload Relay (LRE357). It is a dark grey, rectangular device with three orange terminal screws on top. The front panel features a red emergency stop button, a manual reset button, and a relay 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



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

