# **Product datasheet**

Specification





# Thermal overload relay, Easy TeSys Protect, 51-81A, class 10A

LRE480

### 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 Ir on two phase, the last one at 0 conforming to IEC 60947-4-1	

## Complementary

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Product compatibility	LC1E120630	
Network type	AC	
Network frequency	5060 Hz	
Mounting support	Under contactor Plate	
Thermal overload class	Class 10A conforming to IEC 60947-4-1	
Signalling function Relay trip indicator		
Thermal protection adjustment 5881 A range		
Tripping threshold	1.14 +/- 0.06 Ir conforming to IEC 60947-4-1	
Mechanical robustness	Ness 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	
[Ith] conventional free air thermal 5 A for signalling circuit current		
[Ue] rated operational voltage	<= 690 V AC	
Associated fuse rating	125 A gG for power circuit 100 A aM for power circuit 5 A gG for signalling circuit	
[Ui] rated insulation voltage	690 V conforming to IEC 60947-4-1	
[Uimp] rated impulse withstand voltage	6 kV	
Local signalling	Trip indicator	
Control type	Push-button red stop: Push-button green reset:	
Temperature compensation	-2060 °C	
Connection pitch	34.8 mm	

Connections - terminals	Signalling circuit: screw clamp terminals 2 12.5 mm² - cable stiffness: flexible without cable end Signalling circuit: screw clamp terminals 2 12.5 mm² - cable stiffness: flexible with cable end Signalling circuit: screw clamp terminals 2 12.5 mm² - cable stiffness: solid without cable end Power circuit: bars - busbar cross section: 3 x 18 mm Power circuit: lugs	
Recommended tightening torque	Power circuit: 27.5 N.m - on bars M8 Power circuit: 27.5 N.m - on lugs M8 Signalling circuit: 1.7 N.m - on screw clamp terminals	
Height	141 mm	
Width	180 mm	
Depth	134 mm	
net weight	2.2 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	IP00 conforming to IEC 60529	
Ambient air temperature for operation	re for -2060 °C without derating conforming to IEC 60947-4-1 -2070 °C with derating	
Ambient air temperature for storage	-6080 °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	16.4 cm
Package 1 Width	17.7 cm
Package 1 Length	29.0 cm
Package 1 Weight	1.876 kg
Unit Type of Package 2	S03
Number of Units in Package 2	2
Package 2 Height	30.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	6.488 kg
Unit Type of Package 3	P06
Number of Units in Package 3	8
Package 3 Height	80.0 cm
Package 3 Width	80.0 cm

Package 3 Length	60.0 cm
Package 3 Weight	26.36 kg

## **Contractual warranty**

Warranty 18 months

## Sustainability Green Premium\*

**Green Premium<sup>TM</sup> label** is Schneider Electric's commitment to delivering products with best-inclass environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> 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

<b>②</b>	Reach Free Of Svhc	
<b>⊘</b>	Toxic Heavy Metal Free	
<b>⊘</b>	Mercury Free	
<b>⊘</b>	Rohs Exemption Information	Yes

#### **Certifications & Standards**

Reach Regulation	REACh Declaration
Eu Rohs Directive	Compliant EU RoHS Declaration
China Rohs Regulation	China RoHS declaration
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

2 July 2024