Product datasheet

Specifications

electronic overload relay for motor TeSys - 1.2...7 A - 48 V AC/DC

LR97D07E

Discontinued on: 9 Jul 2020

Discontinued

Main

Device short name	LR97
Product or component type	Electronic overcurrent relay
Device application	Protection
Relay application	Locked rotor, mechanical jamming I > 3 x Isetting Sensitivity to phase failure Overload Imax > Isetting
Product compatibility	LC1D09...D38
Network type	DC AC
[Us] rated supply voltage	48 V AC/DC
Thermal protection adjustment range	1.2…7 A
[Ue] rated operational voltage	600 V AC 50/60 Hz for power circuit conforming to CSA 600 V AC 50/60 Hz for power circuit conforming to UL 690 V AC 50/60 Hz for power circuit conforming to IEC 60947-4-1
Quantity per set	Set of 10

Complementary

Network frequency	50...60 Hz
Mounting support	Direct on contactor Rail
Tripping threshold	1.2...6 A
Surge withstand	6 kV conforming to IEC 61000-4-5
Contacts type and composition	1 C/O
[Ith] conventional free air thermal current	3 A for control circuit
Protection type	BS fuse 3 A - for control circuit GB2 circuit breaker 3 A - for control circuit GG fuse 3 A - for control circuit
Maximum power	28 W at 110 V DC conforming to IEC 60947 28 W at 220 V DC conforming to IEC 60947 55 W at 24 V DC conforming to IEC 60947 55 W at 48 V DC conforming to IEC 60947 140 VA at 48 V AC conforming to IEC 60947 360 VA at 110 V AC conforming to IEC 60947 360 VA at 220 V AC conforming to IEC 60947 70 VA at 24 V AC conforming to IEC 60947
[Ui] rated insulation voltage	Power circuit: 600 V conforming to CSA Power circuit: 600 V conforming to UL Power circuit: 690 V conforming to IEC 60947-4-1

[Uimp] rated impulse withstand voltage	6 kV
Phase failure sensitivity	< 3 s
Reset	Automatic reset 120 s fixed Electrical by interruption of power supply for minimum 0.1 s Manual reset
Time range	0.2...10 s - O-time knob 0.3...10 s - O-time knob 0.5..30 s - D-time knob
Signalling function	2 LEDs
Connections - terminals	Control circuit: cable 1 x 1…25 mm²flexible with cable end Control circuit: cable 1 x 1…25 mm²flexible without cable end Power circuit: cable 1 x 1…4 mm²flexible with cable end Power circuit: cable 1 x 1.5…10 mm²flexible without cable end Power circuit: lug-clamp 1 x 1…4 mm²flexible with cable end Power circuit: lug-clamp 1 x 1.5…10 mm²flexible without cable end Control circuit: cable 2 x 1…25 mm²flexible with cable end Control circuit: cable 2 x 1…25 mm²flexible without cable end Control circuit: lug-clamp 1 x 1…25 mm²flexible with cable end Control circuit: lug-clamp 1 x 1…25 mm²flexible without cable end Control circuit: lug-clamp 2 x 1…25 mm²flexible with cable end Control circuit: lug-clamp 2 x 1…25 mm²flexible without cable end
Tightening torque	Control circuit: 0.6...1.2 N.m on lug-clamp Power circuit: 2 N.m on cable
Height	67.5 mm
Width	45 mm
Depth	67.5 mm
Net weight	0.172 kg

Environment

Standards	IEC 60255-6 IEC 60947
Product certifications	UL CSA GOST
Protective treatment	TH conforming to IEC 60068
IP degree of protection	IP20 conforming to IEC 60529
Ambient air temperature for operation	-25…60 °C conforming to IEC 60947-4-1
Ambient air temperature for storage	-30…80 °C
Operating altitude	2000 m
Fire resistance	850 °C conforming to IEC 60695-2-1
Shock resistance	15 gn 11 ms conforming to IEC 60068-2-7
Vibration resistance	4 gn conforming to IEC 60068-2-6
Dielectric strength	2 V 50 Hz conforming to IEC 60255-5
Resistance to electrostatic discharge	6 kV in indirect mode 8 kV in air
Resistance to radiated fields	10 V/m level 3
Resistance to fast transients	2 kV
Disturbance radiated/conducted	10 V conforming to EN 61000-4-6 Class A conforming to EN 55011

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	5.300 cm
Package 1 Width	7.200 cm
Package 1 Length	7.700 cm
Package 1 Weight	180.000 g
Unit Type of Package 2	S02
Number of Units in Package 2	24
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	4.580 kg
Unit Type of Package 3	P06
Number of Units in Package 3	384
Package 3 Height	75.000 cm
Package 3 Width	80.000 cm
Package 3 Length	60.000 cm
Package 3 Weight	81.280 kg

Contractual warranty

Warranty (in months)	18

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

Total lifecycle Carbon footprint	**59 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**3 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0.2 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**55 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0.3 kg CO2 eq.**
Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**No**
SCIP Number	**99e36f9f-1e4f-4e3a-a849-bdda6ef53eb9**
EU RoHS Directive	Compliant By Exemption
REACh Regulation	Reference contains Substances of Very High Concern above the threshold

Use Longer

Lifetime extension

Repair	**No**

Use Again

Repack and remanufacture

Recyclability potential, in %	**31**
End of life manual availability	End of Life Information
Take-back	**Nej**
WEEE Label	**The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins**