

# Product datasheet

Specifications



## Electronic overcurrent relay, TeSys LR97D, 200 to 240VAC, 20 to 38A, 1C/O

LR97D38M7

### Main

Range	TeSys
Product name	TeSys D
Device short name	LR97
product or component type	Electronic overcurrent relay
relay application	Overload $I_{max} > I_{setting}$ Sensitivity to phase failure Locked rotor, mechanical jamming $I > 3 \times I_{setting}$
Product compatibility	LC1D25...D38
Network type	AC
[Us] rated supply voltage	200...240 V AC
Thermal protection adjustment range	20...38 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	20...34 A
Surge withstand	6 kV conforming to IEC 61000-4-5
Contacts type and composition	1 C/O
[I <sub>th</sub> ] 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
[U <sub>imp</sub> ] rated impulse withstand voltage	6 kV

<b>Phase failure sensitivity</b>	< 3 s
<b>Reset</b>	Automatic reset 120 s fixed Electrical by interruption of power supply for minimum 0.1 s Manual reset
<b>Time range</b>	0.2...10 s - O-time knob 0.3...10 s - O-time knob 0.5...30 s - D-time knob
<b>Signalling function</b>	2 LEDs
<b>Connections - terminals</b>	Control circuit: cable 1 x 1...25 mm <sup>2</sup> flexible with cable end Control circuit: cable 1 x 1...25 mm <sup>2</sup> flexible without cable end Control circuit: cable 2 x 1...25 mm <sup>2</sup> flexible without cable end Control circuit: lug-clamp 1 x 1...25 mm <sup>2</sup> flexible with cable end Control circuit: lug-clamp 1 x 1...25 mm <sup>2</sup> flexible without cable end Control circuit: lug-clamp 2 x 1...25 mm <sup>2</sup> flexible with cable end Control circuit: lug-clamp 2 x 1...25 mm <sup>2</sup> flexible without cable end Control circuit: cable 2 x 1...25 mm <sup>2</sup> Power circuit: cable 1 x 1...6 mm <sup>2</sup> flexible without cable end Power circuit: cable 1 x 2.5...10 mm <sup>2</sup> flexible with cable end Power circuit: lug-clamp 1 x 1...6 mm <sup>2</sup> flexible without cable end Power circuit: lug-clamp 1 x 2.5...10 mm <sup>2</sup> flexible with cable end
<b>Tightening torque</b>	Control circuit: 0.6...1.2 N.m on lug-clamp Power circuit: 2 N.m on cable
<b>Height</b>	67.5 mm
<b>Width</b>	45 mm
<b>Depth</b>	67.5 mm
<b>net weight</b>	0.172 kg

## Environment

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

## Packing Units

<b>Unit Type of Package 1</b>	PCE
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<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	5.500 cm
<b>Package 1 Width</b>	7.500 cm
<b>Package 1 Length</b>	8.000 cm
<b>Package 1 Weight</b>	190.000 g
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	24
<b>Package 2 Height</b>	15.000 cm
<b>Package 2 Width</b>	30.000 cm
<b>Package 2 Length</b>	40.000 cm
<b>Package 2 Weight</b>	4.820 kg
<b>Unit Type of Package 3</b>	P06
<b>Number of Units in Package 3</b>	384
<b>Package 3 Height</b>	75.000 cm
<b>Package 3 Width</b>	80.000 cm
<b>Package 3 Length</b>	60.000 cm
<b>Package 3 Weight</b>	85.120 kg

## Contractual warranty

<b>Warranty</b>	18 months
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## Sustainability


**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class 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.

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[Guide to assess a product's sustainability >](#)

## Well-being performance

 Mercury Free

 Rohs Exemption Information [Yes](#)

**Reach Regulation** [REACH Declaration](#)

**Eu Rohs Directive** Compliant with Exemptions

**China Rohs Regulation** [China RoHS declaration](#)  
Product out of China RoHS scope. Substance declaration for your information

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