

## Product data sheet

### Characteristics

## LR97D25M7

electronic overload relay for motor TeSys -  
5...25 A - 200...240 V AC



### Main

Range	TeSys
Product name	TeSys D
Device short name	LR97
Product or component type	Electronic overcurrent relay
Relay application	Overload $I_{max} > I_{setting}$ Locked rotor, mechanical jamming $I > 3 \times I_{setting}$ Sensitivity to phase failure
Product compatibility	LC1D09...D38
Network type	AC
[Us] rated supply voltage	200...240 V AC
Thermal protection adjustment range	5...25 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	5...21 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 mm <sup>2</sup> flexible with cable end Control circuit: cable 1 x 1...25 mm <sup>2</sup> flexible without cable end Power circuit: cable 1 x 1...4 mm <sup>2</sup> flexible with cable end Power circuit: cable 1 x 1.5...10 mm <sup>2</sup> flexible without cable end Power circuit: lug-clamp 1 x 1...4 mm <sup>2</sup> flexible with cable end Power circuit: lug-clamp 1 x 1.5...10 mm <sup>2</sup> flexible without cable end Control circuit: cable 2 x 1...25 mm <sup>2</sup> flexible with 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
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	CSA[RETURN]UL[RETURN]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	5.5 cm
Package 1 Width	7.2 cm
Package 1 Length	7.7 cm
Package 1 Weight	195.0 g
Unit Type of Package 2	S02
Number of Units in Package 2	24
Package 2 Height	15.0 cm
Package 2 Width	30.0 cm
Package 2 Length	40.0 cm
Package 2 Weight	5.135 kg
Unit Type of Package 3	PAL
Number of Units in Package 3	384
Package 3 Height	77.0 cm
Package 3 Width	80.0 cm
Package 3 Length	60.0 cm
Package 3 Weight	85.668 kg

## Offer Sustainability

REACH Regulation	 <a href="#">REACH Declaration</a>
EU RoHS Directive	Compliant with Exemptions
Mercury free	Yes
China RoHS Regulation	 <a href="#">China RoHS Declaration</a>
RoHS exemption information	 <a href="#">Yes</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

## Contractual warranty

Warranty	18 months
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