

# LR97D07M7

electronic overload relay for motor TeSys -  
1.2...7 A - 200...240 V AC



## Main

Range of product	TeSys
Device short name	LR97
Product or component type	Electronic overcurrent relay
Relay application	Locked rotor, mechanical jamming $I > 3 \times I_{setting}$ Overload $I_{max} > I_{setting}$ Sensitivity to phase failure
Product compatibility	LC1D09...D38
Network type	AC
[Us] rated supply voltage	200...240 V AC
Thermal protection adjustment range	1.2...7 A
[Ue] rated operational voltage	690 V AC 50/60 Hz for power circuit conforming to IEC 60947-4-1 600 V AC 50/60 Hz for power circuit conforming to UL 600 V AC 50/60 Hz for power circuit conforming to CSA
Quantity per set	Set of 10

## Complementary

Network frequency	50...60 Hz
Mounting support	Rail Direct on contactor
Tripping threshold	1.2...6 A
Surge withstand	6 kV conforming to IEC 61000-4-5
Contacts type and composition	1 NC 1 NO
[Ith] conventional free air thermal current	3 A for control circuit
Protection type	GG fuse 3 A - for control circuit GB2 circuit breaker 3 A - for control circuit BS fuse 3 A - for control circuit
Maximum power	70 VA at 24 V AC conforming to IEC 60947 360 VA at 220 V AC conforming to IEC 60947 360 VA at 110 V AC conforming to IEC 60947 140 VA at 48 V AC conforming to IEC 60947 55 W at 48 V DC conforming to IEC 60947 55 W at 24 V DC conforming to IEC 60947 28 W at 220 V DC conforming to IEC 60947 28 W at 110 V DC conforming to IEC 60947
[Ui] rated insulation voltage	690 V power circuit conforming to IEC 60947-4-1 600 V power circuit conforming to UL 600 V power circuit conforming to CSA
[Uimp] rated impulse withstand voltage	6 kV
Phase failure sensitivity	< 3 s
Reset	Manual reset Electrical by interruption of power supply for minimum 0.1 s Automatic reset 120 s fixed
Time range	0.5...30 s - D-time knob 0.3...10 s - O-time knob 0.2...10 s - O-time knob
Signalling function	2 LEDs

The information provided in this documentation contains general descriptions and/or technical characteristics of the performance of the products contained herein. 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. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Connections - terminals	Control circuit: lug-clamp 2 cable 1...25 mm <sup>2</sup> - cable stiffness: flexible - without cable end Control circuit: lug-clamp 2 cable 1...25 mm <sup>2</sup> - cable stiffness: flexible - with cable end Control circuit: lug-clamp 1 cable 1...25 mm <sup>2</sup> - cable stiffness: flexible - without cable end Control circuit: lug-clamp 1 cable 1...25 mm <sup>2</sup> - cable stiffness: flexible - with cable end Control circuit: cable 2 cable 1...25 mm <sup>2</sup> - cable stiffness: flexible - without cable end Control circuit: cable 2 cable 1...25 mm <sup>2</sup> - cable stiffness: flexible - with cable end Power circuit: lug-clamp 1 cable 1.5...10 mm <sup>2</sup> - cable stiffness: flexible - without cable end Power circuit: lug-clamp 1 cable 1...4 mm <sup>2</sup> - cable stiffness: flexible - with cable end Power circuit: cable 1 cable 1.5...10 mm <sup>2</sup> - cable stiffness: flexible - without cable end Power circuit: cable 1 cable 1...4 mm <sup>2</sup> - cable stiffness: flexible - with cable end Control circuit: cable 1 cable 1...25 mm <sup>2</sup> - cable stiffness: flexible - without cable end Control circuit: cable 1 cable 1...25 mm <sup>2</sup> - cable stiffness: flexible - with cable end
Tightening torque	Power circuit: 2 N.m - on cable Control circuit: 0.6...1.2 N.m - on lug-clamp
Height	67.5 mm
Width	45 mm
Depth	67.5 mm
Product weight	0.172 kg

## Environment

Standards	IEC 60255-6 IEC 60947
Product certifications	CSA GOST UL
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 at 50 Hz conforming to IEC 60255-5
Resistance to electrostatic discharge	8 kV in air 6 kV in indirect mode
Resistance to radiated fields	10 V/m level 3
Resistance to fast transients	2 kV
Disturbance radiated/conducted	Class A conforming to EN 55011 10 V conforming to EN 61000-4-6

## Contractual warranty

Period	18 months
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