Product datasheet
Characteristics

LR97D38F7
electronic overload relay for motor TeSys - 20...38 A - 100...120 V AC

Main

Range	TeSys
Product name	TeSys D
Device short name	LR97
Product or component type	Electronic overcurrent relay
Relay application	Overload Imax > Isetting Locked rotor, mechanical jamming I > 3 x Isetting Sensitivity to phase failure
Product compatibility	LC1D25...D38
Network type	AC
[Us] rated supply voltage	100...120 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
[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

Disclaimer: 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

[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 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 Control circuit: cable 2 x 1…25 mm² Power circuit: cable 1 x 1…6 mm²flexible without cable end Power circuit: cable 1 x 2.5…10 mm²flexible with cable end Power circuit: lug-clamp 1 x 1…6 mm²flexible without cable end Power circuit: lug-clamp 1 x 2.5…10 mm²flexible with 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	GOST CSA 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 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

Offer Sustainability

REACh Regulation	REACh Declaration
EU RoHS Directive	Compliant EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	Yes

China RoHS Regulation	China RoHS declaration Product out of China RoHS scope. Substance declaration for your information
Circularity Profile	End of Life Information
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