Product datasheet
Characteristics

LR97D07B
electronic overload relay for motor TeSys - 1.2...7 A - 24 V AC/DC

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 Overload Imax > Isetting Sensitivity to phase failure
Product compatibility	LC1D09...D38
Network type	AC DC
[Us] rated supply voltage	24 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	600 V power circuit conforming to CSA 600 V power circuit conforming to UL 690 V power circuit 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 cable 1...25 mm² - cable stiffness: flexible - with cable end Control circuit : cable 1 cable 1...25 mm² - cable stiffness: flexible - without cable end Power circuit : cable 1 cable 1...4 mm² - cable stiffness: flexible - with cable end Power circuit : cable 1 cable 1.5...10 mm² - cable stiffness: flexible - without cable end

	Power circuit : lug-clamp 1 cable 1...4 mm² - cable stiffness: flexible - with cable end Power circuit : lug-clamp 1 cable 1.5...10 mm² - cable stiffness: flexible - without cable end Control circuit : cable 2 cable 1...25 mm² - cable stiffness: flexible - with cable end Control circuit : cable 2 cable 1...25 mm² - cable stiffness: flexible - without cable end Control circuit : lug-clamp 1 cable 1...25 mm² - cable stiffness: flexible - with cable end Control circuit : lug-clamp 1 cable 1...25 mm² - cable stiffness: flexible - without cable end Control circuit : lug-clamp 2 cable 1...25 mm² - cable stiffness: flexible - with cable end Control circuit : lug-clamp 2 cable 1...25 mm² - cable stiffness: 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
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	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