Product data sheet Characteristics

LR97D015B

electronic overload relay for motor TeSys - 0.3...1.5 A - 24 V AC/DC

Main

Commercial Status	Commercialised
Range of product	TeSys
Device short name	LR97
Product or component type	Electronic overcurrent relay
Relay application	Locked rotor, mechanical jamming I > 3 x Isetting Overload Imax > Isetting Sensitivity to phase failure
Product compatibility	LC1D09D38
Network type	AC DC
[Us] rated supply voltage	24 V AC/DC
Thermal protection adjustment range	0.31.5 A
Quantity per set	Set of 10

Complementary

Complementary	
Network frequency	5060 Hz
Mounting support	Rail Direct on contactor
Tripping threshold	0.31.3 A
Surge withstand	6 kV conforming to IEC 61000-4-5
Contacts type and composition	1 NC 1 NO
[lth] 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	<3s
Reset	Manual reset Electrical by interruption of power supply for minimum 0.1 s Automatic reset 120 s fixed
Time range	0.530 s - D-time knob 0.310 s - O-time knob 0.210 s - O-time knob
Signalling function	2 LEDs

Connections - terminals	Power circuit: lug-clamp 1 cable 1.510 mm² - cable stiffness: flexible - without
	cable end
	Power circuit: lug-clamp 1 cable 14 mm² - cable stiffness: flexible - with cable
	end Power circuit: cable 1 cable 1.510 mm² - cable stiffness: flexible - without cable end
	Power circuit: cable 1 cable 14 mm² - cable stiffness: flexible - with cable end Control circuit: lug-clamp 2 cable 2.5 mm² - cable stiffness: flexible - without cable end
	Control circuit: lug-clamp 2 cable 1.5 mm ² - cable stiffness: flexible - with cable end
	Control circuit: lug-clamp 1 cable 0.75 mm² - cable stiffness: flexible - without cable end
	Control circuit: lug-clamp 1 cable 0.34 mm ² - cable stiffness: flexible - with cable end
	Control circuit: cable 1 cable 2.5 mm ² - cable stiffness: flexible - without cable end Control circuit: cable 1 cable 125 mm ² - cable stiffness: flexible - without cable end Control circuit: cable 1 cable 125 mm ² - cable stiffness: flexible - with cable end
Tighte size (see	
Tightening torque	Power circuit: 2 N.m - on cable Control circuit: 0.61.2 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	-2560 °C conforming to IEC 60947-4-1
Ambient air temperature for storage	-3080 °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

Contractual warranty

Resistance to fast transients

Disturbance radiated/conducted

Period	18 months

Class A conforming to EN 55011 10 V conforming to EN 61000-4-6

2 kV

