Product data sheet
Characteristics

LR97D38B
Electronic overcurrent relay, TeSys LR97D, 24VAC/DC, 20 to 38A, 1C/O



Main

Device short name	LR97
Product or component type	Electronic overcurrent relay
Device application	Protection
Relay application	Sensitivity to phase failure Overload Imax > Isetting Locked rotor, mechanical jamming I > 3 x Isetting
Product compatibility	LC1D25...D38
Network type	DC AC
[Us] rated supply voltage	24 V AC/DC
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
[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	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	5.300 Cm
Package 1 Width	7.000 Cm
Package 1 Length	7.700 Cm
Package 1 Weight	173.000 G
Unit Type of Package 2	S02
Number of Units in Package 2	24
Package 2 Height	15.000 Cm
Package 2 Width	30.000 Cm
Package 2 Length	40.000 Cm
Package 2 Weight	4.637 Kg

Offer Sustainability

Recyclability potential, in %	31
Total lifecycle Carbon footprint	45 kg CO2 eq.
Carbon footprint of the manufacturing phase [A1 to A3]	3.4521967376080767
Carbon footprint of the manufacturing phase [A1 to A3]	3 kg CO2 eq.
Carbon footprint of the distribution phase [A4]	0.18008653405172098
Carbon footprint of the distribution phase [A4]	0.2 kg CO2 eq.
Carbon footprint of the installation phase [A5]	0.0013804297519658371
Carbon footprint of the installation phase [A5]	0 kg CO2 eq.
Carbon footprint of the use phase [B2, B3, B4, B6]	41.57609048049472
Carbon footprint of the use phase [B2, B3, B4, B6]	42 kg CO2 eq.
Mercury free	Yes
Sustainable packaging	No
Carbon footprint of the end-of-life phase [C1 to C4]	0.24864970382261098
Carbon footprint of the end-of-life phase [C1 to C4]	0.2 kg CO2 eq.
Environmental Disclosure	Product Environmental Profile
Total lifecycle Carbon footprint	45
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	No
SCIP Number	99e36f9f-1e4f-4e3a-a849-bdda6ef53eb9
REACh Regulation	Reference contains Substances of Very High Concern above the threshold
EU RoHS Directive	Compliant By Exemption
End of life manual availability	End Of Life Information
Take-back	No
WEEE Label	The product must be disposed on European Union markets following specific waste collection a

Contractual warranty

Warranty (in months)	18

Product Life Status : Commercialised