

Product datasheet

Specifications



electronic overload relay for motor TeSys - 5...25 A - 24 V AC/DC

Local distributor code: 387271154 LR97D25B

Main

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| Device short name | LR97 |
| Product or component type | Electronic overcurrent relay |
| Device application | Protection |
| Relay application | Overload $I_{max} > I_{setting}$ Locked rotor, mechanical jamming $I > 3 \times I_{setting}$ Sensitivity to phase failure |
| Product compatibility | LC1D09...D38 |
| Network type | AC DC |
| [Us] rated supply voltage | 24 V AC/DC |
| Thermal protection adjustment range | 5...25 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

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|---|---|
| Network frequency | 50...60 Hz |
| Mounting support | Direct on contactor Rail |
| Tripping threshold | 5...21 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 |

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| [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 mm ² flexible with cable end Control circuit: cable 1 x 1...25 mm ² flexible without cable end Power circuit: cable 1 x 1...4 mm ² flexible with cable end Power circuit: cable 1 x 1.5...10 mm ² flexible without cable end Power circuit: lug-clamp 1 x 1...4 mm ² flexible with cable end Power circuit: lug-clamp 1 x 1.5...10 mm ² flexible without cable end Control circuit: cable 2 x 1...25 mm ² flexible with cable end Control circuit: cable 2 x 1...25 mm ² flexible without cable end Control circuit: lug-clamp 1 x 1...25 mm ² flexible with cable end Control circuit: lug-clamp 1 x 1...25 mm ² flexible without cable end Control circuit: lug-clamp 2 x 1...25 mm ² flexible with cable end Control circuit: lug-clamp 2 x 1...25 mm ² 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 |
| Net weight | 0.172 kg |

Environment

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| Standards | IEC 60947 IEC 60255-6 |
| Product certifications | UL GOST CSA |
| 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

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| Unit Type of Package 1 | PCE |
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| Number of Units in Package 1 | 1 |
| Package 1 Weight | 177.0 g |
| Package 1 Height | 5.2 cm |
| Package 1 width | 7.7 cm |
| Package 1 Length | 7.2 cm |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 24 |
| Package 2 Weight | 4.703 kg |
| Package 2 Height | 15 cm |
| Package 2 width | 30 cm |
| Package 2 Length | 40 cm |
| Unit Type of Package 3 | PAL |
| Number of Units in Package 3 | 384 |
| Package 3 Weight | 83.748 kg |
| Package 3 Height | 77 cm |
| Package 3 width | 80 cm |
| Package 3 Length | 60 cm |

Offer Sustainability

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| REACH Regulation | REACH Declaration |
| REACH free of SVHC | Yes |
| 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

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| Warranty | 18 months |
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