



Main

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|-------------------------------------|-----------------------------------|
| Range | TeSys |
| Product name | TeSys LRF |
| Device short name | LR9F |
| Product or component type | Electronic thermal overload relay |
| Relay application | Motor protection |
| Product compatibility | LC1F225...LC1F500 |
| Network type | AC |
| Thermal overload class | Class 10 IEC 60947-4 |
| Thermal protection adjustment range | 200...330 A |

Complementary

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| Network frequency | 50/60 Hz |
| Supply voltage limits | 17...32 V |
| Mounting support | Direct on contactor Plate |
| Tripping threshold | 1.12 +/- 0.06 I _n tripping IEC 60947-4-1 |
| Surge withstand | 4 kV IEC 61000-4-5 |
| Contacts type and composition | 1 NO + 1 NC |
| [I _{th}] conventional free air thermal current | 5 A control circuit |
| [U _e] rated operational voltage | 1000 V AC 50/60 Hz power circuit VDE 0110 group C |
| [U _i] rated insulation voltage | Power circuit 1000 V AC IEC 60947-4 |
| [U _{imp}] rated impulse withstand voltage | 8 kV IEC 60947-1 |
| Phase failure sensitivity | Tripping in 4 s +/- 20 % IEC 60947-4-1 |
| Reset | Manual reset on front relay |
| Control type | Dial white full-load current adjustment Test button red Push-button red reset |

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

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|------------------------------|---|
| | Push-button stop |
| Local signalling | Trip indicator |
| Temperature compensation | -4...158 °F (-20...70 °C) |
| Current consumption | <= 5 mA no-load |
| Switching capacity for alarm | 0...150 mA |
| Maximum voltage drop | <2.5 V closed state |
| Connections - terminals | Control circuit screw clamp terminals 1 0.00...0.00 in ² (0.75...2.5 mm ²) flexible - with cable end Control circuit screw clamp terminals 1 0.00...0.00 in ² (0.75...2.5 mm ²) solid Control circuit screw clamp terminals 1 0.00...0.01 in ² (0.75...4 mm ²) flexible - without cable end Control circuit screw clamp terminals 2 0.00...0.00 in ² (1...1.5 mm ²) flexible - with cable end Control circuit screw clamp terminals 2 0.00...0.00 in ² (1...2.5 mm ²) flexible - without cable end Control circuit screw clamp terminals 2 0.00 in ² (1 mm ²) solid Power circuit lugs-ring terminals M10 |
| Tightening torque | Control circuit 1.2 N.m screw clamp terminals Power circuit 35 N.m screw clamp terminals |
| Height | 5.39 in (136.8 mm) |
| Width | 5.91 in (150 mm) |
| Depth | 5.02 in (127.6 mm) |
| Net weight | 5.11 lb(US) (2.32 kg) |

Environment

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|---------------------------------------|---|
| Standards | VDE 0660 IEC 60947-4-1 EN 60947-4-1 IEC 60255-17 IEC 60255-8 |
| Product certifications | UL CSA |
| Protective treatment | TH |
| IP degree of protection | IP20 conforming to IEC 60529 IP20 conforming to VDE 0106 |
| Ambient air temperature for operation | -4...131 °F (-20...55 °C) IEC 60255-8 |
| Ambient air temperature for storage | -40...185 °F (-40...85 °C) |
| Operating altitude | <= 2000 m without derating |
| Fire resistance | 1562 °F (850 °C) IEC 60695-2-1 |
| Mechanical robustness | Shocks 13 Gn for 11 ms IEC 60068-2-7 Vibrations 5...300 Hz2 Gn IEC 60068-2-6 |
| Dielectric strength | 6 kV 50 Hz IEC 255-5 |
| Electromagnetic compatibility | Resistance to electrostatic discharge 6 kV in indirect mode IEC 61000-4-2 Resistance to electrostatic discharge 8 kV in air IEC 61000-4-2 Radiated radio-frequency electromagnetic field immunity test 10 V/m IEC 61000-4-3 Fast transients immunity test 2 kV IEC 61000-4-4 |

Packing Units

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|------------------------------|--------------------------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Weight | 4.16 lb(US) (1.887 kg) |
| Package 1 Height | 7.09 in (18 cm) |
| Package 1 width | 7.68 in (19.5 cm) |
| Package 1 Length | 7.87 in (20 cm) |
| Unit Type of Package 2 | P06 |
| Number of Units in Package 2 | 36 |
| Package 2 Weight | 178.42 lb(US) (80.93 kg) |
| Package 2 Height | 31.50 in (80 cm) |
| Package 2 width | 31.50 in (80 cm) |
| Package 2 Length | 23.62 in (60 cm) |

Offer Sustainability

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|----------------------------|---|
| Sustainable offer status | Green Premium product |
| 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 |
| Environmental Disclosure | Product Environmental Profile |
| 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 |
| PVC free | Yes |

Contractual warranty

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| Warranty | 18 months |
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