



Price\* : 298.00 USD



### Main

|                                     |                                   |
|-------------------------------------|-----------------------------------|
| Range                               | TeSys                             |
| Product name                        | TeSys LRF                         |
| Device short name                   | LR9F                              |
| Product or component type           | Electronic thermal overload relay |
| Relay application                   | Motor protection                  |
| Product compatibility               | LC1F115...LC1F185                 |
| Network type                        | AC                                |
| Thermal overload class              | Class 20 IEC 60947-4              |
| Thermal protection adjustment range | 30...50 A                         |

### Complementary

|                                             |                                                            |
|---------------------------------------------|------------------------------------------------------------|
| Network frequency                           | 50/60 Hz                                                   |
| Mounting support                            | Direct on contactor<br>Plate                               |
| Tripping threshold                          | 1.12 +/- 0.06 In tripping IEC 60947-4-1                    |
| Surge withstand                             | 4 kV IEC 61000-4-5                                         |
| Contacts type and composition               | 1 NO + 1 NC                                                |
| [Ith] conventional free air thermal current | 5 A control circuit                                        |
| [Ue] rated operational voltage              | 1000 V AC 50/60 Hz power circuit VDE 0110 group C          |
| [Ui] rated insulation voltage               | Power circuit 1000 V AC IEC 60947-4                        |
| [Uimp] 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<br>Test button Red |

\* Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

|                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                              | Push-button Red reset<br>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 <sup>2</sup> (0.75...2.5 mm <sup>2</sup> ) flexible - with cable end<br>Control circuit screw clamp terminals 1 0.00...0.00 in <sup>2</sup> (0.75...2.5 mm <sup>2</sup> ) solid<br>Control circuit screw clamp terminals 1 0.00...0.01 in <sup>2</sup> (0.75...4 mm <sup>2</sup> ) flexible - without cable end<br>Control circuit screw clamp terminals 2 0.00...0.00 in <sup>2</sup> (1...1.5 mm <sup>2</sup> ) flexible - with cable end<br>Control circuit screw clamp terminals 2 0.00...0.00 in <sup>2</sup> (1...2.5 mm <sup>2</sup> ) flexible - without cable end<br>Control circuit screw clamp terminals 2 0.00 in <sup>2</sup> (1 mm <sup>2</sup> ) solid<br>Power circuit lugs-ring terminals M6 |
| Tightening torque            | Control circuit 1.2 N.m screw clamp terminals<br>Power circuit 10 N.m screw clamp terminals                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Height                       | 3.78 in (96 mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Width                        | 4.53 in (115 mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Depth                        | 4.86 in (123.5 mm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Net Weight                   | 1.95 lb(US) (0.885 kg)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

## Environment

|                                       |                                                                                                                                                                                                                                                                                       |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standards                             | IEC 60947-4-1<br>IEC 60255-17<br>IEC 60255-8<br>EN 60947-4-1<br>VDE 0660                                                                                                                                                                                                              |
| Product certifications                | CSA<br>UL<br>UKCA                                                                                                                                                                                                                                                                     |
| Protective treatment                  | TH                                                                                                                                                                                                                                                                                    |
| IP degree of protection               | IP20 conforming to IEC 60529<br>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                    | <= 6561.68 ft (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<br>Vibrations 5...300 Hz 2 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<br>Resistance to electrostatic discharge 8 kV in air IEC 61000-4-2<br>Radiated radio-frequency electromagnetic field immunity test 10 V/m IEC 61000-4-3<br>Fast transients immunity test 2 kV IEC 61000-4-4 |

## Ordering and shipping details

|                       |                                    |
|-----------------------|------------------------------------|
| Category              | 22334 - CONTACTOR,F-LINE,OVERLOADS |
| Discount Schedule     | I12                                |
| GTIN                  | 03389110640168                     |
| Nbr. of units in pkg. | 1                                  |
| Package weight(Lbs)   | 3.14 oz (89 g)                     |
| Returnability         | No                                 |
| Country of origin     | FR                                 |

## Packing Units

|                        |                   |
|------------------------|-------------------|
| Unit Type of Package 1 | PCE               |
| Package 1 Height       | 5.31 in (13.5 cm) |
| Package 1 width        | 4.21 in (10.7 cm) |

|                  |                   |
|------------------|-------------------|
| Package 1 Length | 6.06 in (15.4 cm) |
|------------------|-------------------|

## Offer Sustainability

|                            |                                                                                                                                                                                                                                                           |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sustainable offer status   | Green Premium product                                                                                                                                                                                                                                     |
| California proposition 65  | WARNING: This product can expose you to chemicals including: Antimony oxide & Antimony trioxide, which is known to the State of California to cause cancer. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a> |
| REACH Regulation           | <a href="#">REACH Declaration</a>                                                                                                                                                                                                                         |
| EU RoHS Directive          | Compliant<br><a href="#">EU RoHS Declaration</a>                                                                                                                                                                                                          |
| Mercury free               | Yes                                                                                                                                                                                                                                                       |
| RoHS exemption information | <a href="#">Yes</a>                                                                                                                                                                                                                                       |
| China RoHS Regulation      | <a href="#">China RoHS declaration</a><br>Product out of China RoHS scope. Substance declaration for your information.                                                                                                                                    |
| Environmental Disclosure   | <a href="#">Product Environmental Profile</a>                                                                                                                                                                                                             |
| Circularity Profile        | <a href="#">End of Life Information</a>                                                                                                                                                                                                                   |
| 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

|          |           |
|----------|-----------|
| Warranty | 18 months |
|----------|-----------|