



### Main

|                                     |  |
|-------------------------------------|--|
| Range                               | TeSys  |
| Product name                        | TeSys D  |
| Device short name                   | LR97   |
| Product or component type           | Electronic overcurrent relay   |
| Relay application                   | Sensitivity to phase failure<br>Overload $I_{max} > I_{setting}$<br>Locked rotor, mechanical jamming $I > 3 \times I_{setting}$  |
| Product compatibility               | LC1D09...D38   |
| Network type                        | AC   |
| [Us] rated supply voltage           | 200...240 V AC   |
| Thermal protection adjustment range | 0.3...1.5 A  |
| [Ue] rated operational voltage      | 600 V AC 50/60 Hz for power circuit conforming to CSA<br>600 V AC 50/60 Hz for power circuit conforming to UL<br>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<br>Rail   |
| Tripping threshold                          | 0.3...1.3 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<br>GB2 circuit breaker 3 A - for control circuit<br>GG fuse 3 A - for control circuit   |
| Maximum power                               | 28 W at 110 V DC conforming to IEC 60947<br>28 W at 220 V DC conforming to IEC 60947<br>55 W at 24 V DC conforming to IEC 60947<br>55 W at 48 V DC conforming to IEC 60947<br>140 VA at 48 V AC conforming to IEC 60947<br>360 VA at 110 V AC conforming to IEC 60947<br>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<br>Power circuit: 600 V conforming to UL<br>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<br>Electrical by interruption of power supply for minimum 0.1 s<br>Manual reset  |
| Time range                             | 0.2...10 s - O-time knob<br>0.3...10 s - O-time knob<br>0.5..30 s - D-time knob  |
| Signalling function                    | 2 LEDs   |
| Connections - terminals                | Control circuit: cable 1 x 1...25 mm <sup>2</sup> flexible with cable end<br>Control circuit: cable 1 x 1...25 mm <sup>2</sup> flexible without cable end<br>Power circuit: cable 1 x 1...4 mm <sup>2</sup> flexible with cable end<br>Power circuit: cable 1 x 1.5...10 mm <sup>2</sup> flexible without cable end<br>Power circuit: lug-clamp 1 x 1...4 mm <sup>2</sup> flexible with cable end<br>Power circuit: lug-clamp 1 x 1.5...10 mm <sup>2</sup> flexible without cable end<br>Control circuit: cable 2 x 1...25 mm <sup>2</sup> flexible with cable end<br>Control circuit: cable 2 x 1...25 mm <sup>2</sup> flexible without cable end<br>Control circuit: lug-clamp 1 x 1...25 mm <sup>2</sup> flexible with cable end<br>Control circuit: lug-clamp 1 x 1...25 mm <sup>2</sup> flexible without cable end<br>Control circuit: lug-clamp 2 x 1...25 mm <sup>2</sup> flexible with cable end<br>Control circuit: lug-clamp 2 x 1...25 mm <sup>2</sup> flexible without cable end |
| Tightening torque                      | Control circuit: 0.6...1.2 N.m on lug-clamp<br>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<br>IEC 60947  |
| Product certifications                | CSA<br>UL<br>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<br>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<br>Class A conforming to EN 55011 |

## Offer Sustainability

|                   |  |
|-------------------|--|
| 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       |
| 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 |

### Contractual warranty

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