

# Product datasheet

Specifications



## Electronic overcurrent relay, TeSys LR97D, 200 to 240VAC, 20 to 38A, 1C/O

LR97D38M7

### Main

|                                     |  |
|-------------------------------------|--|
| Range                               | TeSys  |
| Product Name                        | TeSys D  |
| Device Short Name                   | LR97   |
| Product Or Component Type           | Electronic overcurrent relay   |
| Relay Application                   | Overload $I_{max} > I_{setting}$<br>Sensitivity to phase failure<br>Locked rotor, mechanical jamming $I > 3 \times I_{setting}$  |
| Product Compatibility               | LC1D25...D38   |
| Network Type                        | AC   |
| [Us] Rated Supply Voltage           | 200...240 V AC   |
| Thermal Protection Adjustment Range | 20...38 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                          | 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<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<br>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  |

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

|                           |   |
|---------------------------|---|
| 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 mm²flexible with cable end<br>Control circuit: cable 1 x 1...25 mm²flexible without cable end<br>Control circuit: cable 2 x 1...25 mm²flexible without cable end<br>Control circuit: lug-clamp 1 x 1...25 mm²flexible with cable end<br>Control circuit: lug-clamp 1 x 1...25 mm²flexible without cable end<br>Control circuit: lug-clamp 2 x 1...25 mm²flexible with cable end<br>Control circuit: lug-clamp 2 x 1...25 mm²flexible without cable end<br>Control circuit: cable 2 x 1...25 mm²<br>Power circuit: cable 1 x 1...6 mm²flexible without cable end<br>Power circuit: cable 1 x 2.5...10 mm²flexible with cable end<br>Power circuit: lug-clamp 1 x 1...6 mm²flexible without cable end<br>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<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 60947<br>IEC 60255-6  |
| Product Certifications                | CSA<br>GOST<br>UL   |
| 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 |

## Packing Units

|                        |     |
|------------------------|-----|
| Unit Type Of Package 1 | PCE |
|------------------------|-----|

|                              |           |
|------------------------------|-----------|
| Number Of Units In Package 1 | 1         |
| Package 1 Height             | 5.500 cm  |
| Package 1 Width              | 7.500 cm  |
| Package 1 Length             | 8.000 cm  |
| Package 1 Weight             | 190.000 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             | 4.820 kg  |
| Unit Type Of Package 3       | P06       |
| Number Of Units In Package 3 | 384       |
| Package 3 Height             | 75.000 cm |
| Package 3 Width              | 80.000 cm |
| Package 3 Length             | 60.000 cm |
| Package 3 Weight             | 85.120 kg |

## Contractual warranty

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

## Sustainability

**Green Premium™ label** is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> products.

**Guide to assessing product sustainability** is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

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## Well-being performance

|  |   |
|--|---|
|  Mercury Free               |   |
|  Rohs Exemption Information | <a href="#">Yes</a>   |
| Reach Regulation   | <a href="#">REACH Declaration</a>   |
| Eu Rohs Directive  | Compliant with Exemptions   |
| China Rohs Regulation  | <a href="#">China RoHS declaration</a><br>Product out of China RoHS scope. Substance declaration for your information       |
| Weee   | The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins |