**Characteristics**

**Earth-leakage relay RH99M with manual reset**

- **Range**: 0.03..30 A
- **Time delay**: 0..4.5 s
- **Supply voltage**: 240 V

**Main**

- **Range**: Vigirex
- **Range of product**: Vigirex
- **Device short name**: RH99M
- **Product or component type**: Residual current protection relay
- **Range compatibility**: Vigirex RH TOA earth leakage current sensor, Vigirex RH A earth leakage current sensor
- **Relay application**: Residual current protection relay

**Complementary**

- **Earthing system**: IT, TT, TN-S
- **[Us] rated supply voltage**: 220...240 V AC at 50/60 Hz, 220...240 V AC at 400 Hz
- **Power consumption in VA**: 4 VA
- **Type of measurement**: Earth fault current internal measurement 80...100 %
- **Residual earth-leakage time delay adjustment type**: Instantaneous 0.03 A, Adjustable 9 settings 0.03...30 A 0..4.5 s
- **Test function**: Local, Remote test
- **Monitoring**: Electronics (continuous), Power supply (continuous), Relay/sensor link (continuous)
- **[Ithe] conventional enclosed thermal current**: 8 A
- **Minimum load**: 10 mA at 12 V
- **Product weight**: 0.3 kg
- **Mechanical robustness**: IK protection 2 joules IK07 conforming to EN 50102, IP protection IP20 conforming to IEC 60529, IP protection IP30 conforming to IEC 60529, IP protection IP40 conforming to IEC 60529, Vibrations 13.2...100 Hz 0.7 g, Vibrations 2...13.2 Hz +/- 1 mm, Fire resistance conforming to IEC 60695-2-1
- **Earth-leakage protection class**: Class A si, Class AC

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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.
<table>
<thead>
<tr>
<th><strong>Overvoltage category</strong></th>
<th>IV</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Tamperproof of settings</strong></td>
<td>Protected by sealable cover</td>
</tr>
<tr>
<td><strong>Mounting support</strong></td>
<td>DIN rail</td>
</tr>
<tr>
<td><strong>Height</strong></td>
<td>97 mm</td>
</tr>
<tr>
<td><strong>Width</strong></td>
<td>54 mm</td>
</tr>
<tr>
<td><strong>Depth</strong></td>
<td>74 mm</td>
</tr>
<tr>
<td><strong>9 mm pitches</strong></td>
<td>6</td>
</tr>
</tbody>
</table>
| **Connections - terminals** | Terminal block auxiliary power supply 0.2...2.5 mm² flexible AWG 24...AWG 12  
Screw terminal auxiliary power supply 0.2...2.5 mm² rigid AWG 24...AWG 12  
Screw terminal fault 0.2...2.5 mm² flexible AWG 24...AWG 12  
Screw terminal fault 0.2...4 mm² rigid AWG 24...AWG 12  
Screw terminal relay test and fault reset 0.14...1 mm² flexible AWG 26...AWG 16  
Screw terminal relay test and fault reset 0.14...1.5 mm² rigid AWG 26...AWG 16  
Screw terminal sensor 0.14...1 mm² flexible AWG 26...AWG 16  
Screw terminal sensor 0.14...1.5 mm² rigid AWG 26...AWG 16  
Screw terminal voltage presence 0.2...2.5 mm² flexible AWG 24...AWG 12  
Screw terminal voltage presence 0.2...4 mm² rigid AWG 24...AWG 12  
Terminal block auxiliary power supply 0.25...2.5 mm² flexible AWG 24...AWG 12  
Screw terminal fault 0.25...2.5 mm² flexible AWG 24...AWG 12  
Screw terminal relay test and fault reset 0.25...0.5 mm² flexible AWG 26...AWG 16  
Screw terminal relay test and fault reset 0.25...0.5 mm² rigid AWG 26...AWG 16  
Screw terminal sensor 0.25...0.5 mm² flexible AWG 26...AWG 16  
Screw terminal sensor 0.25...0.5 mm² rigid AWG 26...AWG 16  
Screw terminal voltage presence 0.25...2.5 mm² flexible AWG 24...AWG 12  
Screw terminal voltage presence 0.25...2.5 mm² rigid AWG 24...AWG 12 |
| **Wire stripping length** | Auxiliary power supply : 7 mm top  
Relay test and fault reset : 5 mm bottom  
Sensor : 5 mm top  
Fault : 8 mm bottom  
Voltage presence : 8 mm bottom |
| **Tightening torque** | Auxiliary power supply : 0.6 N.m top  
Fault : 0.6 N.m bottom  
Relay test and fault reset : 0.25 N.m bottom  
Sensor : 0.25 N.m top  
Voltage presence : 0.6 N.m bottom |
| **Environment** | **Ambient air temperature for operation** | -35...70 °C |
| | **Ambient air temperature for storage** | -55...85 °C |
| | **Electromagnetic compatibility** | Conducted and radiated emissions : B conforming to CISPR 11  
Conducted radio-frequency immunity test : 3 conforming to IEC 61000-4-6  
Electrostatic discharge immunity test : 4 conforming to IEC 61000-4-2  
High-energy conducted susceptibility : 4 conforming to IEC 61000-4-5  
Low-energy conducted susceptibility : 4 conforming to IEC 61000-4-4  
Radiated susceptibility : 3 conforming to IEC 61000-4-3 |
| | **Electrical shock protection class** | Class II |
| **Contractual warranty** | **Warranty period** | 18 months |