



### Main

|                              |   |
|------------------------------|---|
| Range of product             | Zelio Control   |
| Product or component type    | Modular measurement and control relays                  |
| Relay type                   | Multifunction control relay                             |
| Product specific application | For 3-phase supply                                      |
| Relay name                   | RM17TA  |
| Relay monitored parameters   | Phase failure detection<br>Asymmetry<br>Phase sequence  |
| Time delay type              | Adjustable 0.1...10 s, +/- 10 % of the full scale value |
| Switching capacity in VA     | 1250 VA   |
| Measurement range            | 183...528 V AC  |

### Complementary

|                                |   |
|--------------------------------|---|
| Reset time                     | 1500 ms for time delay                        |
| Maximum switching voltage      | 250 V AC<br>250 V DC                          |
| Minimum switching current      | 10 mA at 5 V DC                               |
| Maximum switching current      | 5 A AC<br>5 A DC                              |
| Supply voltage limits          | 183...528 V AC                                |
| Control circuit voltage limits | - 12 % + 10 % Un                              |
| Power consumption in VA        | <= 22 VA at 400 V AC 50 Hz                    |
| Control circuit frequency      | 50...60 Hz +/- 10 %                           |
| Output contacts                | 1 C/O   |
| Nominal output current         | 5 A   |
| Hysteresis                     | 2 %   |
| Run-up delay at power-up       | <= 650 ms                                     |
| Measuring cycle                | <= 150 ms measurement cycle as true rms value |
| Threshold adjustment voltage   | -2...-12 % in the range 208 V AC              |

|                                   |  |
|-----------------------------------|--|
|                                   | +2...+17 % in the range 480 V AC<br>-2...-17 % in the range 220 V AC<br>2...20 % of Un selected  |
| Voltage range                     | 208...480 V phase to phase   |
| Adjustment of asymmetry threshold | 5...15 % of Un selected  |
| Repeat accuracy                   | 0.5 % for input and measurement circuit<br>3 % for time delay  |
| Measurement error                 | < 0.05 %/°C with temperature variation<br>< 1 % over the whole range with voltage variation  |
| Phase failure sensitivity         | 0.7 Un   |
| Response time                     | < 200 ms in the event of a fault   |
| Marking                           | CE   |
| Overvoltage category              | III conforming to IEC 60664-1  |
| Insulation resistance             | > 500 MOhm at 500 V DC conforming to IEC 60255-5<br>> 500 MOhm at 500 V DC conforming to IEC 60664-1   |
| [Ui] rated insulation voltage     | 400 V conforming to IEC 60664-1  |
| Supply frequency                  | 50/60 Hz +/- 10 %  |
| Operating position                | Any position without   |
| Connections - terminals           | Screw terminals 1 x 0.5...1 x 4 mm <sup>2</sup> - AWG 20...AWG 11, solid cable without cable end<br>Screw terminals 2 x 0.5...2 x 2.5 mm <sup>2</sup> - AWG 20...AWG 14, solid cable without cable end<br>Screw terminals 1 x 0.2...1 x 2.5 mm <sup>2</sup> - AWG 24...AWG 12, flexible cable with cable end<br>Screw terminals 2 x 0.2...2 x 1.5 mm <sup>2</sup> - AWG 24...AWG 16, flexible cable with cable end |
| Tightening torque                 | 0.6...1 N.m conforming to IEC 60947-1  |
| Housing material                  | Self-extinguishing plastic   |
| Local signalling                  | LED green for power ON<br>LED yellow for relay ON  |
| Mounting support                  | 35 mm symmetrical DIN rail conforming to EN/IEC 60715  |
| Electrical durability             | 100000 cycles  |
| Mechanical durability             | <= 30000000 cycles   |
| Operating rate                    | <= 360 operations/hour under full load   |
| Utilisation category              | AC-12 conforming to IEC 60947-5-1<br>AC-13 conforming to IEC 60947-5-1<br>AC-14 conforming to IEC 60947-5-1<br>AC-15 conforming to IEC 60947-5-1<br>DC-12 conforming to IEC 60947-5-1<br>DC-13 conforming to IEC 60947-5-1   |
| Safety reliability data           | MTTFd = 502.2 years<br>B10d = 470000   |
| Width                             | 17.5 mm  |
| Product weight                    | 0.13 kg  |

## Environment

|                                       |   |
|---------------------------------------|---|
| Electromagnetic compatibility         | Emission standard for industrial environments conforming to EN/IEC 61000-6-4<br>Emission standard for residential, commercial and light-industrial environments conforming to EN/IEC 61000-6-3<br>Immunity for industrial environments conforming to EN/IEC 61000-6-2 |
| Standards                             | EN/IEC 60255-1  |
| Product certifications                | GOST<br>CSA<br>C-Tick<br>UL<br>GL   |
| Directives                            | 89/336/EEC - electromagnetic compatibility<br>73/23/EEC - low voltage directive   |
| Ambient air temperature for storage   | -40...70 °C   |
| Ambient air temperature for operation | -20...50 °C   |
| Relative humidity                     | 95 % at 55 °C conforming to IEC 60068-2-30  |
| Vibration resistance                  | 0.35 mm (f = 5...57.6 Hz) conforming to IEC 60068-2-6<br>1 gn (f = 57.6...150 Hz) conforming to IEC 60255-21-1  |
| Shock resistance                      | 15 gn for 11 ms conforming to IEC 60255-21-1  |

|                            |  |
|----------------------------|--|
| IP degree of protection    | IP20 (terminals) conforming to IEC 60529<br>IP30 (casing) conforming to IEC 60529                    |
| Pollution degree           | 3 conforming to IEC 60664-1  |
| Dielectric test voltage    | 2 kV 1 min AC 50 Hz conforming to IEC 60255-5<br>2 kV 1 min AC 50 Hz conforming to IEC 60664-1       |
| Non-dissipating shock wave | 4 kV conforming to IEC 60255-5<br>4 kV conforming to IEC 60664-1<br>4 kV conforming to IEC 61000-4-5 |

### Offer Sustainability

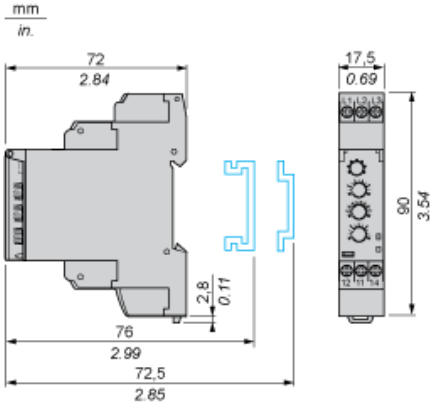
|                                  |   |
|----------------------------------|---|
| Sustainable offer status         | Green Premium product   |
| RoHS (date code: YYWW)           | Compliant - since 0701 - Schneider Electric declaration of conformity<br><a href="#">Schneider Electric declaration of conformity</a> |
| REACH                            | Reference not containing SVHC above the threshold<br><a href="#">Reference not containing SVHC above the threshold</a>                |
| Product environmental profile    | Available<br><a href="#">End of life manual</a>   |
| Product end of life instructions | Available   |

### Contractual warranty

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

Multifunction 3-Phase Supply Control Relays

Dimensions and Mounting

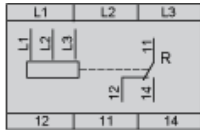


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Multifunction 3-Phase Supply Control Relays

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Wiring Diagram



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## Function Diagram

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Phase Sequence Control, Phase Failure Detection ( $U$  measured  $< 0.7 \times$  nominal supply voltage), and Asymmetry Detection

### Legend

Tt Time delay after crossing of threshold

L1, L2, L3 Phases of the supply voltage monitored

A Asymmetry threshold

H Hysteresis

11-12, 11-14 Output relay connections

Relay status: black color = energized.