## RM17TE00
multifunction control relay RM17-TE - range 183..528 V AC

### Main

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Range of product</td>
<td>Zelio Control</td>
</tr>
<tr>
<td>Product or component type</td>
<td>Modular measurement and control relays</td>
</tr>
<tr>
<td>Relay type</td>
<td>Multifunction control relay</td>
</tr>
<tr>
<td>Product specific application</td>
<td>For 3-phase supply</td>
</tr>
<tr>
<td>Relay name</td>
<td>RM17TE</td>
</tr>
<tr>
<td>Relay monitored parameters</td>
<td>Undervoltage and overvoltage in window mode</td>
</tr>
<tr>
<td></td>
<td>Asymmetry</td>
</tr>
<tr>
<td></td>
<td>Phase sequence</td>
</tr>
<tr>
<td></td>
<td>Phase failure detection</td>
</tr>
<tr>
<td>Time delay</td>
<td>Adjustable 0.1…10 s, +/- 10 % of the full scale value</td>
</tr>
<tr>
<td>Switching capacity in VA</td>
<td>1250 VA</td>
</tr>
<tr>
<td>Measurement range</td>
<td>208..480 V voltage AC</td>
</tr>
</tbody>
</table>

### Complementary

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reset time</td>
<td>1500 ms time delay</td>
</tr>
<tr>
<td>Maximum switching voltage</td>
<td>250 V AC</td>
</tr>
<tr>
<td></td>
<td>250 V DC</td>
</tr>
<tr>
<td>Minimum switching current</td>
<td>10 mA at 5 V DC</td>
</tr>
<tr>
<td>Maximum switching current</td>
<td>5 A AC</td>
</tr>
<tr>
<td></td>
<td>5 A DC</td>
</tr>
<tr>
<td>Supply voltage limits</td>
<td>183…528 V AC</td>
</tr>
<tr>
<td>Control circuit voltage limits</td>
<td>- 12 % + 10 % Un</td>
</tr>
<tr>
<td>Power consumption in VA</td>
<td>0…22 VA at 400 V AC 50 Hz</td>
</tr>
<tr>
<td>Control circuit frequency</td>
<td>50…60 Hz +/- 10 %</td>
</tr>
<tr>
<td>Output contacts</td>
<td>1 C/O</td>
</tr>
<tr>
<td>Nominal output current</td>
<td>5 A</td>
</tr>
<tr>
<td>Measurement voltage limits</td>
<td>183…528 V AC</td>
</tr>
<tr>
<td>Hysteresis</td>
<td>2 %</td>
</tr>
<tr>
<td>Delay at power up</td>
<td>650 ms</td>
</tr>
</tbody>
</table>
**Maximum measuring cycle**
150 ms measurement cycle as true rms value

**Threshold adjustment voltage**
-2...-17 % in the range 220 V AC
+2...+17 % in the range 480 V AC
-2...-12 % in the range 208 V AC
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
3 % for time delay

**Measurement error**
< 0.05 %/°C with temperature variation
< 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
> 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 mm² (AWG 20...AWG 11) solid without cable end
Screw terminals, 2 x 0.5...2 x 2.5 mm² (AWG 20...AWG 14) solid without cable end
Screw terminals, 1 x 0.2...1 x 2.5 mm² (AWG 24...AWG 12) flexible with cable end
Screw terminals, 2 x 0.2...2 x 1.5 mm² (AWG 24...AWG 16) flexible with cable end

** Tightening torque**
0.6…1 N.m conforming to IEC 60947-1

**Housing material**
Self-extinguishing plastic

**Local signalling**
LED (green)power ON:
LED (yellow)relay ON:

**Mounting support**
35 mm symmetrical DIN rail conforming to EN/IEC 60715

**Electrical durability**
100000 cycles

**Mechanical durability**
3000000 cycles

**Operating rate**
<= 360 operations/hour full load

**Utilisation category**
AC-12 conforming to IEC 60947-5-1
AC-13 conforming to IEC 60947-5-1
AC-14 conforming to IEC 60947-5-1
AC-15 conforming to IEC 60947-5-1
DC-12 conforming to IEC 60947-5-1
DC-13 conforming to IEC 60947-5-1

**Safety reliability data**
MTTFd = 502.2 years
B10d = 470000

**Width**
17.5 mm

**Net weight**
0.13 kg

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**Environment**

**Electromagnetic compatibility**
Emission standard for industrial environments conforming to EN/IEC 61000-6-4
Emission standard for residential, commercial and light-industrial environments conforming to EN/IEC 61000-6-3
Immunity for industrial environments conforming to EN/IEC 61000-6-2

**Standards**
EN/IEC 60255-1

**Product certifications**
GOST
C-Tick
CSA
UL
GL

**Directives**
89/336/EEC - electromagnetic compatibility
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
### Shock resistance
1 gn (f= 57.6…150 Hz) conforming to IEC 60255-21-1

### IP degree of protection
15 gn for 11 ms conforming to IEC 60255-21-1
IP20 (terminals) conforming to IEC 60529
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
2 kV, 1 min AC 50 Hz conforming to IEC 60664-1

### Non-dissipating shock wave
4 kV conforming to IEC 60255-5
4 kV conforming to IEC 60664-1
4 kV conforming to IEC 61000-4-5

### Offer Sustainability
<table>
<thead>
<tr>
<th>Sustainable offer status</th>
<th>Green Premium product</th>
</tr>
</thead>
<tbody>
<tr>
<td>REACh Regulation</td>
<td>REACh Declaration</td>
</tr>
<tr>
<td>EU RoHS Directive</td>
<td>Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration</td>
</tr>
<tr>
<td>Mercury free</td>
<td>Yes</td>
</tr>
<tr>
<td>RoHS exemption information</td>
<td>Yes</td>
</tr>
<tr>
<td>China RoHS Regulation</td>
<td>China RoHS declaration</td>
</tr>
<tr>
<td>Environmental Disclosure</td>
<td>Product Environmental Profile</td>
</tr>
<tr>
<td>Circularity Profile</td>
<td>End of Life Information</td>
</tr>
<tr>
<td>WEEE</td>
<td>The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins</td>
</tr>
</tbody>
</table>

### Contractual warranty
<table>
<thead>
<tr>
<th>Warranty</th>
<th>18 months</th>
</tr>
</thead>
</table>
Multifunction 3-Phase Supply Control Relays

Dimensions and Mounting
Multifunction 3-Phase Supply Control Relays

Wiring Diagram

```
<table>
<thead>
<tr>
<th>L1</th>
<th>L2</th>
<th>L3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>R</th>
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<tbody>
<tr>
<td>4</td>
</tr>
</tbody>
</table>
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| 12 | 11 | 14 |
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Function Diagrams

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

Control of Overvoltage and Undervoltage in Window Mode

Legend
A Asymmetry threshold (adjustable from 5...15% of the nominal supply voltage)
Tt Time delay after crossing of threshold (adjustable on front panel)
H Hysteresis
U> Overvoltage threshold
U< Undervoltage threshold
L1, L2, L3 Phases of the supply voltage monitored
11-12, 11-14 Output relay connections (refer to Connections and Schema)
Relay status: black color = energized.