



Main

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| Range of Product | Harmony Control Relays |
| Product or Component Type | 3-phase control relay |
| Relay Type | Multifunction control relay |
| Product Specific Application | For 3-phase supply |
| Relay name | RM17TE |
| Relay monitored parameters | Undervoltage and overvoltage in window mode Asymmetry Phase sequence Phase failure detection |
| Time delay | Adjustable 0.1...10 s, +/- 10 % of the full scale value |
| Switching capacity in VA | 1250 VA |
| Measurement range | 208...480 V voltage AC |
| Contacts type and composition | 1 C/O |
| [Uc] control circuit voltage | 208...480 V |

Complementary

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|-----------------------------------|---|
| Reset time | 1500 ms time delay |
| Maximum switching voltage | 250 V AC 250 V DC |
| Minimum switching current | 10 mA 5 V DC |
| Maximum switching current | 5 A AC 5 A DC |
| Supply voltage limits | 183...528 V AC |
| Control circuit voltage limits | - 12 % + 10 % Un |
| Power consumption in VA | 0...22 VA 400 V AC 50 Hz |
| Control circuit frequency | 50...60 Hz +/- 10 % |
| Output contacts | 1 C/O |
| Nominal output current | 5 A |
| Measurement voltage limits | 183...528 V AC |
| Hysteresis | 2 % |
| Delay at power up | 650 ms |
| 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 % input and measurement circuit 3 % 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 |

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| Overvoltage category | III IEC 60664-1 |
| Insulation resistance | > 500 MOhm 500 V DC IEC 60255-5 > 500 MOhm 500 V DC IEC 60664-1 |
| [Ui] rated insulation voltage | 400 V IEC 60664-1 |
| Supply frequency | 50/60 Hz +/- 10 % |
| Operating position | Any position without derating |
| Connections - terminals | Screw terminals, 1 x 0.5...1 x 4 mm ² AWG 20...AWG 11) solid without cable end Screw terminals, 2 x 0.5...2 x 2.5 mm ² AWG 20...AWG 14) solid without cable end Screw terminals, 1 x 0.2...1 x 2.5 mm ² AWG 24...AWG 12) flexible with cable end Screw terminals, 2 x 0.2...2 x 1.5 mm ² AWG 24...AWG 16) flexible with cable end |
| Tightening torque | 5.31...8.85 lbf.in (0.6...1 N.m) IEC 60947-1 |
| Housing material | Self-extinguishing plastic |
| Local signalling | For power ON LED (green) For relay ON LED (yellow) |
| 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 full load |
| Utilisation category | AC-12 IEC 60947-5-1 AC-13 IEC 60947-5-1 AC-14 IEC 60947-5-1 AC-15 IEC 60947-5-1 DC-12 IEC 60947-5-1 DC-13 IEC 60947-5-1 |
| Safety reliability data | MTTFd = 502.2 years B10d = 470000 |
| Width | 0.69 in (17.5 mm) |
| Product Weight | 0.29 lb(US) (0.13 kg) |

Environment

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|---------------------------------------|---|
| Electromagnetic compatibility | Emission standard for industrial environments EN/IEC 61000-6-4 Emission standard for residential, commercial and light-industrial environments EN/IEC 61000-6-3 Immunity for industrial environments 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...158 °F (-40...70 °C) |
| Ambient air temperature for operation | -4...122 °F (-20...50 °C) |
| Relative humidity | 95 % 131 °F (55 °C) IEC 60068-2-30 |
| Vibration resistance | 0.35 mm 5...57.6 Hz)IEC 60068-2-6 1 gn 57.6...150 Hz)IEC 60255-21-1 |
| Shock resistance | 15 gn 11 ms IEC 60255-21-1 |
| IP degree of protection | IP20 IEC 60529 terminals) IP30 IEC 60529 casing) |
| Pollution degree | 3 IEC 60664-1 |
| Dielectric test voltage | 2 KV AC 50 Hz, 1 min IEC 60255-5 2 kV AC 50 Hz, 1 min IEC 60664-1 |
| Non-dissipating shock wave | 4 KV IEC 60255-5 4 KV IEC 60664-1 4 kV IEC 61000-4-5 |

Ordering and shipping details

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|-------------------|--------------------------------------|
| Category | 22380-RELAYS-MEASUREMENT (RM17-RM35) |
| Discount Schedule | CP2 |
| GTIN | 3389119405058 |
| Returnability | Yes |
| Country of origin | ID |

Packing Units

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|------------------------------|-------------------------|
| Unit Type of Package 1 | PCE |
| Number of Units in Package 1 | 1 |
| Package 1 Height | 1.06 in (2.7 cm) |
| Package 1 Width | 3.03 in (7.7 cm) |
| Package 1 Length | 3.78 in (9.6 cm) |
| Package 1 Weight | 3.25 oz (92.0 g) |
| Unit Type of Package 2 | S02 |
| Number of Units in Package 2 | 48 |
| Package 2 Height | 5.91 in (15.0 cm) |
| Package 2 Width | 11.81 in (30.0 cm) |
| Package 2 Length | 15.75 in (40.0 cm) |
| Package 2 Weight | 10.88 lb(US) (4.936 kg) |

Offer Sustainability

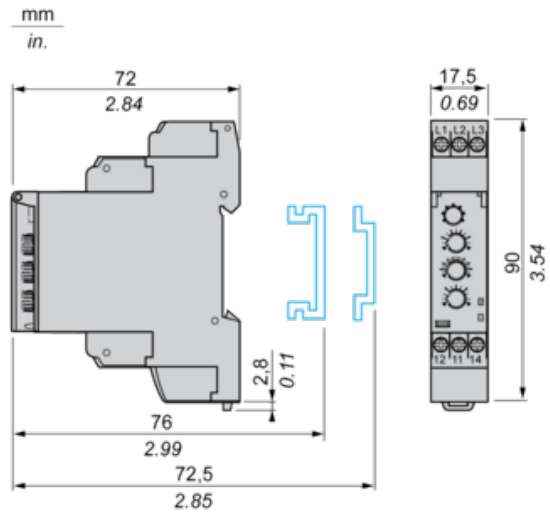
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| Sustainable offer status | Green Premium product |
| California proposition 65 | WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov |
| REACH Regulation | REACH Declaration |
| EU RoHS Directive | Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration |
| Mercury free | Yes |
| China RoHS Regulation | China RoHS Declaration |
| RoHS exemption information | Yes |
| Environmental Disclosure | Product Environmental Profile |
| Circularity Profile | End Of Life Information |

Contractual warranty

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| Warranty | 18 months |
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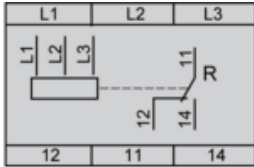
Multifunction 3-Phase Supply Control Relays

Dimensions and Mounting



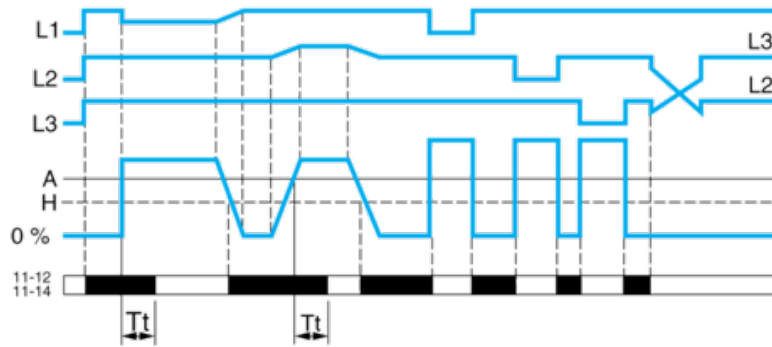
Multifunction 3-Phase Supply Control Relays

Wiring Diagram

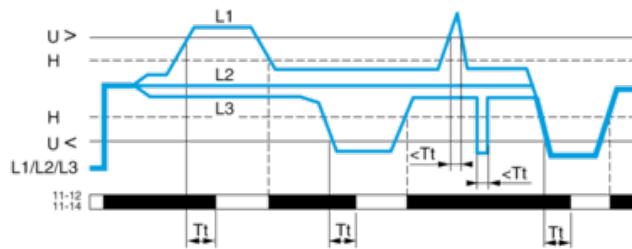


Function Diagrams

Phase Sequence Control, Phase Failure Detection ($U_{\text{measured}} < 0.7 \times \text{nominal supply voltage}$) and Asymmetry Detection



Control of Overvoltage and Undervoltage in Window Mode



Legend

- A Asymmetry threshold (adjustable from 5...15% of the nominal supply voltage)
- T_t 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.