



Main

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

Reset time	1500 ms time delay
Maximum switching voltage	250 V AC 250 V DC
Minimum switching current	10 mA at 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 at 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 % 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 MΩ at 500 V DC conforming to IEC 60255-5 >> 500 MΩ 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 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	0.6...1 N.m conforming to IEC 60947-1
Housing material	Self-extinguishing plastic
Local signalling	LED (green) for power ON 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 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

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 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 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

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	89 g
Package 1 Height	2.7 cm
Package 1 width	7.7 cm
Package 1 Length	9.6 cm
Unit Type of Package 2	S02
Number of Units in Package 2	48
Package 2 Weight	5.017 kg
Package 2 Height	15 cm
Package 2 width	30 cm
Package 2 Length	40 cm

Offer Sustainability

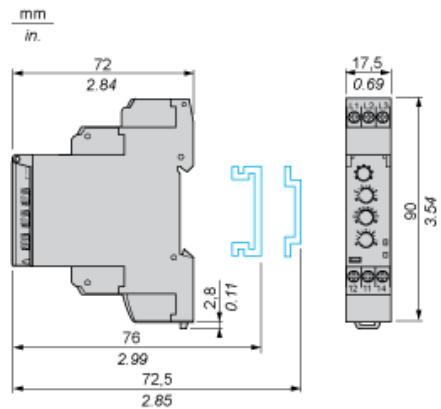
Sustainable offer status	Green Premium product
REACH Regulation	<input checked="" type="checkbox"/> REACH Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <input checked="" type="checkbox"/> EU RoHS Declaration
Mercury free	Yes
RoHS exemption information	<input checked="" type="checkbox"/> Yes
China RoHS Regulation	<input checked="" type="checkbox"/> China RoHS Declaration
Environmental Disclosure	<input checked="" type="checkbox"/> Product Environmental Profile
Circularity Profile	<input checked="" type="checkbox"/> End Of Life Information

Contractual warranty

Warranty	18 months
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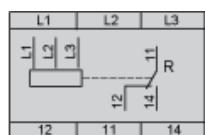
Multifunction 3-Phase Supply Control Relays

Dimensions and Mounting



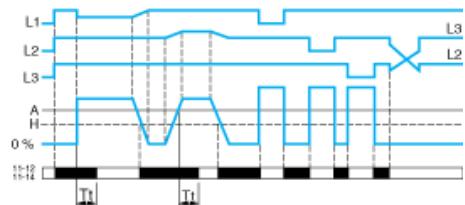
Multifunction 3-Phase Supply Control Relays

Wiring Diagram

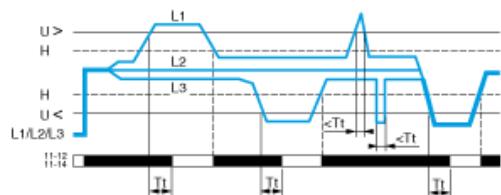


Function Diagrams

Phase Sequence Control, Phase Failure Detection (U 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.