

# Product data sheet

Specifications



Harmony, 3 phase supply control relay, range 208 to 480 VAC, sequence, phase failure, phase imbalance, voltage

RM17TE00

Product availability: Stock - Normally stocked in distribution facility

## Main

Range of Product	Harmony Control Relays
Relay Type	Multifunction control relay
Product or Component Type	3-phase control relay
Relay name	RM17TE
Relay monitored parameters	Undervoltage and overvoltage in window mode Asymmetry Phase sequence Phase failure detection
Measurement range	208...480 V AC
time delay	Adjustable 0.1...10 s, +/- 10 % of the full scale value Tt- time delay upon fault
Output contacts	1 C/O
nominal output current	5 A
Contacts type and composition	1 C/O
[Uc] control circuit voltage	208...480 V
Product Specific Application	For 3-phase supply

## Complementary

[Un] rated nominal voltage	, self-powered
Supply voltage limits	183...528 V AC
Reset time	1500 ms time delay
Maximum switching voltage	250 V AC 250 V DC
Switching capacity in VA	1250 VA
Minimum switching current	10 mA 5 V DC
Maximum switching current	5 A AC 5 A DC
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 %
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

Price is "List Price" and may be subject to a trade discount – check with your local distributor or retailer for actual price.

<b>Threshold adjustment voltage</b>	2...20 % of Un selected -2...-17 % in the range 220 V AC +2...+10 % in the range 480 V AC -2...-12 % in the range 208 V AC
<b>Voltage range</b>	208...480 V phase to phase
<b>Adjustment of asymmetry threshold</b>	5...15 % of Un selected
<b>Repeat accuracy</b>	0.5 % input and measurement circuit 3 % time delay
<b>Measurement error</b>	< 0.05 %/°C with temperature variation < 1 % over the whole range with voltage variation
<b>Phase failure sensitivity</b>	0.7 Un
<b>Response time</b>	< 200 ms (in the event of a fault)
<b>Insulation resistance</b>	> 500 MOhm 500 V DC IEC 60255-5 > 500 MOhm 500 V DC IEC 60664-1
<b>[U<sub>i</sub>] rated insulation voltage</b>	400 V IEC 60664-1
<b>Supply frequency</b>	50/60 Hz +/- 10 %
<b>Operating position</b>	Any position without derating
<b>Connections - terminals</b>	Screw terminals, 1 x 0.5...1 x 4 mm <sup>2</sup> AWG 20...AWG 11) solid without cable end Screw terminals, 2 x 0.5...2 x 2.5 mm <sup>2</sup> AWG 20...AWG 14) solid without cable end Screw terminals, 1 x 0.2...1 x 2.5 mm <sup>2</sup> AWG 24...AWG 12) flexible with cable end Screw terminals, 2 x 0.2...2 x 1.5 mm <sup>2</sup> AWG 24...AWG 16) flexible with cable end
<b>Tightening torque</b>	5.3...8.9 lbf.in (0.6...1 N.m) IEC 60947-1
<b>Housing material</b>	Self-extinguishing plastic
<b>Local signalling</b>	LED (green) for power ON LED (yellow) for relay ON
<b>Mounting support</b>	35 mm symmetrical DIN rail conforming to IEC 60715
<b>Electrical durability</b>	100000 cycles
<b>Mechanical durability</b>	30000000 cycles
<b>Operating rate</b>	<= 360 operations/hour full load
<b>Utilisation category</b>	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
<b>Safety reliability data</b>	MTTFd = 502.2 years B10d = 470000
<b>Width</b>	0.7 in (17.5 mm)
<b>Net Weight</b>	0.29 lb(US) (0.13 kg)
<b>Control Type</b>	Without test button

## Environment

<b>Electromagnetic compatibility</b>	Emission standard for industrial environments conforming to IEC 61000-6-4 Emission standard for residential, commercial and light-industrial environments conforming to IEC 61000-6-3 Immunity for industrial environments conforming to IEC 61000-6-2
<b>Standards</b>	IEC 60255-1
<b>Product Certifications</b>	GOST C-tick CSA UL GL

<b>Marking</b>	CE
<b>Directives</b>	89/336/EEC - electromagnetic compatibility 73/23/EEC - low voltage directive
<b>Ambient Air Temperature for Storage</b>	-40...158 °F (-40...70 °C)
<b>Ambient air temperature for operation</b>	-4...122 °F (-20...50 °C)
<b>Relative humidity</b>	95 % 131 °F (55 °C) IEC 60068-2-30
<b>Vibration resistance</b>	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
<b>Shock resistance</b>	15 gn 11 ms IEC 60255-21-1
<b>IP degree of protection</b>	IP20 IEC 60529 terminals) IP30 IEC 60529 casing)
<b>Pollution degree</b>	3 IEC 60664-1
<b>Overvoltage category</b>	III conforming to IEC 60664-1
<b>Dielectric test voltage</b>	2 kV AC 50 Hz, 1 min IEC 60255-5 2 kV AC 50 Hz, 1 min IEC 60664-1
<b>Non-dissipating shock wave</b>	4 kV IEC 60255-5 4 kV IEC 60664-1 4 kV IEC 61000-4-5

## Ordering and shipping details

<b>Category</b>	US10CP222380
<b>Discount Schedule</b>	0CP2
<b>GTIN</b>	3389119405058
<b>Returnability</b>	Yes
<b>Country of origin</b>	US

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	1.06 in (2.700 cm)
<b>Package 1 Width</b>	3.03 in (7.700 cm)
<b>Package 1 Length</b>	3.78 in (9.600 cm)
<b>Package 1 Weight</b>	3.245 oz (92.000 g)
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	48
<b>Package 2 Height</b>	5.91 in (15.000 cm)
<b>Package 2 Width</b>	11.81 in (30.000 cm)
<b>Package 2 Length</b>	15.75 in (40.000 cm)
<b>Package 2 Weight</b>	10.362 lb(US) (4.700 kg)

## Contractual warranty

<b>Warranty</b>	18 months
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## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

### Environmental footprint

Carbon footprint (kg CO2 eq, Total Life cycle)	98
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## Use Better

### Materials and Substances

Packaging made with recycled cardboard	Yes
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Packaging without single use plastic	Yes
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<a href="#">EU RoHS Directive</a>	Pro-active compliance (Product out of EU RoHS legal scope)
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SCIP Number	Ba9cbb5b-722a-41d2-b7d0-f60d5f3f104d
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REACH Regulation	<a href="#">REACH Declaration</a>
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California proposition 65	<b>WARNING:</b> 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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
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## Use Again

### Repack and remanufacture

Take-back	No
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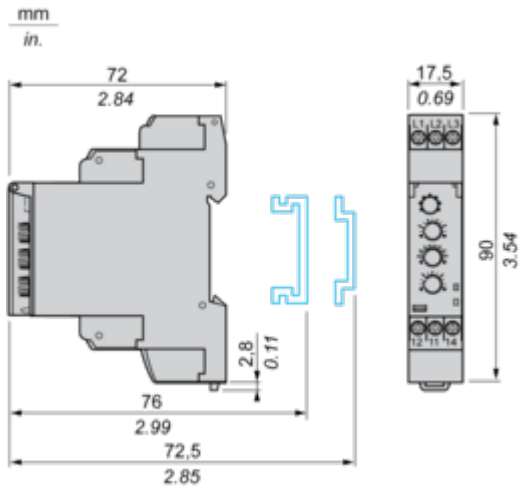
WEEE	 The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.
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Dimensions Drawings

Multifunction 3-Phase Supply Control Relays

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Dimensions and Mounting

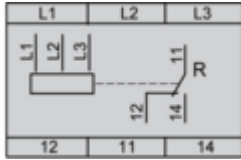


Connections and Schema

Multifunction 3-Phase Supply Control Relays

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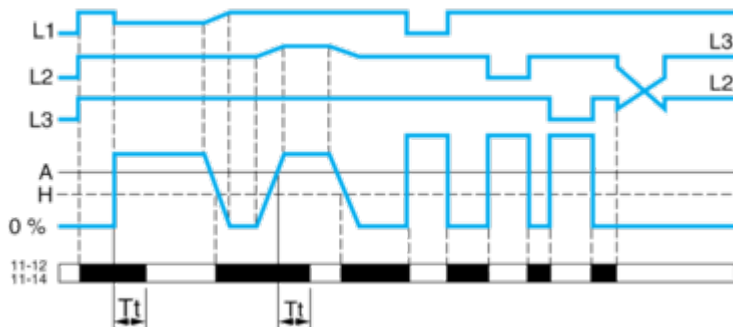
Wiring Diagram



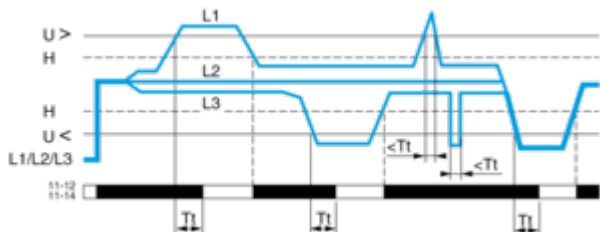
Technical Description

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



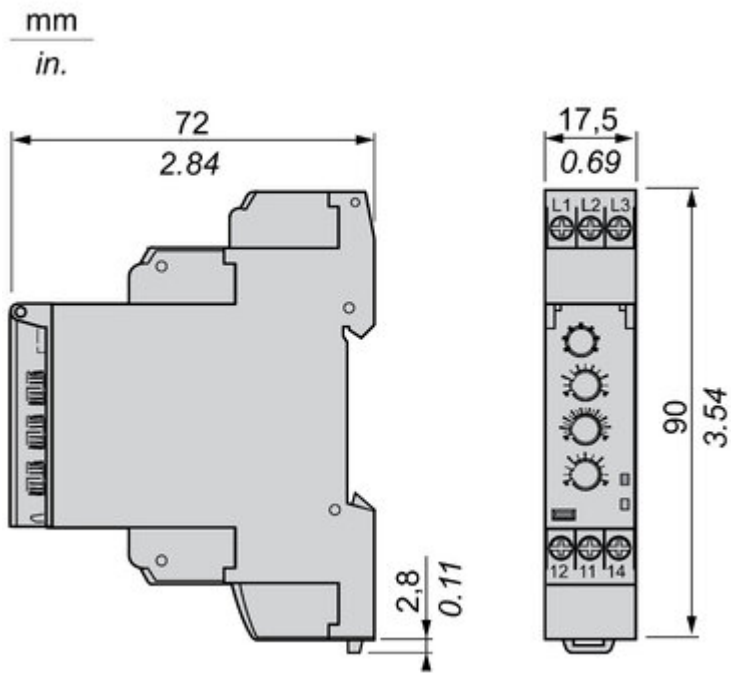
Legend

- 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.

Technical Illustration

Dimensions

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Offer Marketing Illustration

Product benefits / Features

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The infographic features a central image of a Harmony Control Relay with terminals labeled A1+, A2, T2, T1, and T4. It is surrounded by five circular icons: crossed wrench and screwdriver, a hand holding a lightning bolt, a screwdriver, a leaf, and a leaf with a circular arrow. The background is a solid green color.

### Features

#### Harmony Control Relay

- Wide monitoring parameters** (phase, current, voltage, liquid level, frequency, speed, temperature, and pump control) to meet your application needs.
- True RMS measurement** that minimizes the possibility of unexpected trips from highly polluted networks (except RM17TG and RM22TG)
- Green Premium labelled products**, promising compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO<sub>2</sub> product
- Experience** unprecedented accuracy, predictive maintenance, and superior security.
- Compatible with a wide range of applications**, such as hoisting, packaging, lifts, textile, pumping, and water.

Offer Marketing Illustration

Product benefits / Features

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## Technical Benefits

### Harmony Control Relay

Compliant with IEC 60255-1 standard, and a wide array of product certifications such as UL, CE, CSA, EAC.

Different product width to meet your needs:  
17.5 mm/0.69 in.,  
22.5 mm/0.88 in.,  
35 mm/1.38 in.

Diagnostic button to check downstream circuit immediately, shorten the commission and troubleshooting time

Dust and unintended human intervention avoided thanks to the IP50 lead-sealable settings protection cover.

A Dial-Pointer LED indicator that enhances ease of operation in difficult environments such as dusty or low-light conditions



Image of product / Alternate images

Alternative

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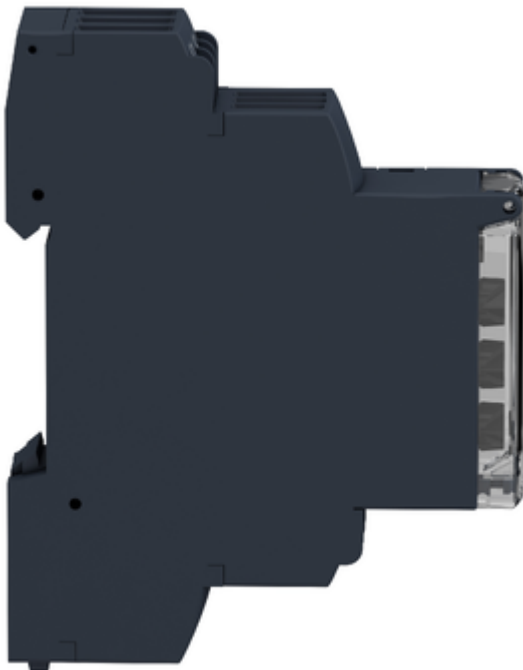






Image of product in real life situation

