

# Product datasheet

Specifications



## Modular multifunction 3-phase supply control relay, 5 A, 1 CO, 208...480 V AC

Local distributor code:

391960231

RM17TU00

**EAN Code: 3389119405096**

### Main

Range of product	Harmony Control Relays
Relay type	Multifunction control relay
Product or component type	3-phase control relay
Relay name	RM17TU
Relay monitored parameters	Undervoltage detection Phase sequence Phase failure detection
Measurement range	208...480 V AC
Time delay type	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

[Us] rated supply 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 at 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 at 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

<b>Threshold adjustment voltage</b>	2...20 % of Un selected -2...-12 % in the range 208 V AC -2...-17 % in the range 220 V AC
<b>Voltage range</b>	208...480 V phase to phase
<b>Repeat accuracy</b>	0.5 % for input and measurement circuit 3 % for 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 at 500 V DC conforming to IEC 60255-5 > 500 MOhm at 500 V DC conforming to IEC 60664-1
<b>[Ui] rated insulation voltage</b>	400 V conforming to 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>	0.6...1 N.m conforming to 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 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
<b>Safety reliability data</b>	MTTFd = 502.2 years B10d = 470000
<b>Width</b>	17.5 mm
<b>Net weight</b>	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>	GL GOST UL C-Tick CSA
<b>Marking</b>	CE

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

## Packing Units

<b>Unit Type of Package 1</b>	PCE
<b>Number of Units in Package 1</b>	1
<b>Package 1 Height</b>	2.800 cm
<b>Package 1 Width</b>	8.000 cm
<b>Package 1 Length</b>	9.600 cm
<b>Package 1 Weight</b>	86.000 g
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	48
<b>Package 2 Height</b>	15.000 cm
<b>Package 2 Width</b>	30.000 cm
<b>Package 2 Length</b>	40.000 cm
<b>Package 2 Weight</b>	4.708 kg

## Logistical informations

<b>Country of origin</b>	ID
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## 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

Total lifecycle Carbon footprint	99
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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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## Use Again

### Repack and remanufacture

Recyclability potential, in %	13
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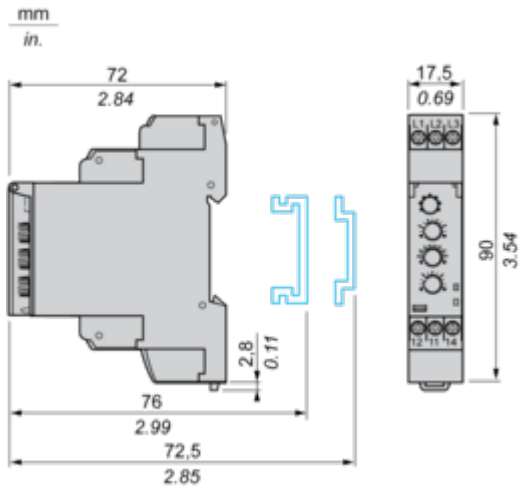
Take-back	No
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Dimensions Drawings

Multifunction 3-Phase Supply Control Relays

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Dimensions and Mounting

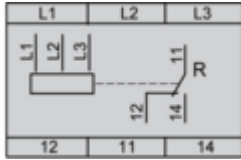


## Connections and Schema

### Multifunction 3-Phase Supply Control Relays

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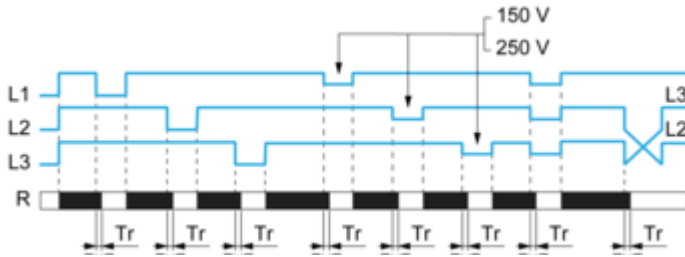
#### Wiring Diagram



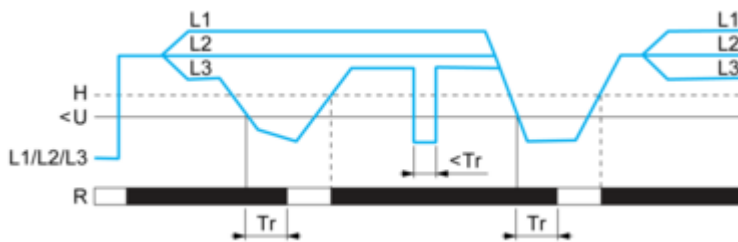
Technical Description

Function Diagrams

Phase Sequence Control and Phase failure Detection



Undervoltage Control



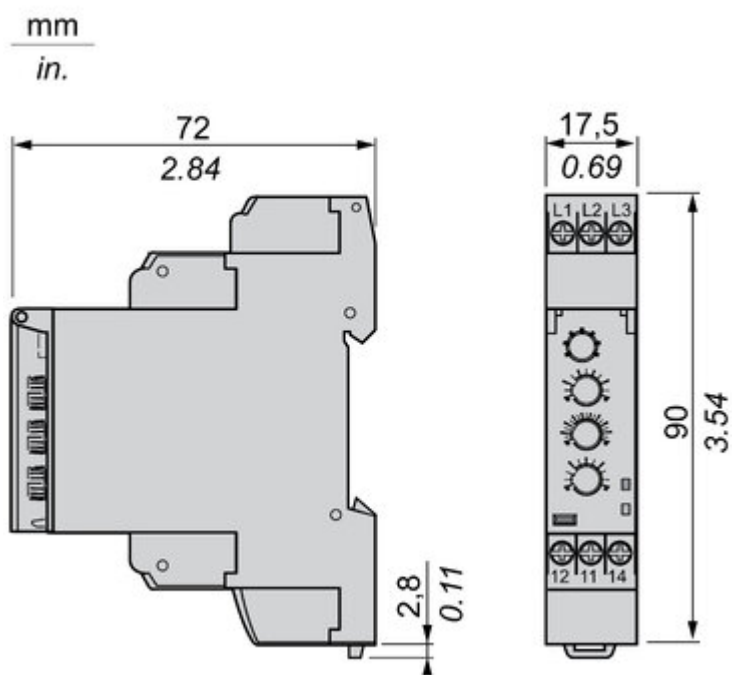
Legend

- Tr : Response time after cross the threshold
- U< : Undervoltage threshold
- L1, L2, L3 : Phases of the supply voltage monitored
- R : Relay output 11-12/11-14, 21-22/21-24
- H : Hysteresis
- Relay status : black color = energized.

Technical Illustration

Dimensions

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Offer Marketing Illustration

Product benefits / Features

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## 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)





Experience unprecedented accuracy, predictive maintenance, and superior security.



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



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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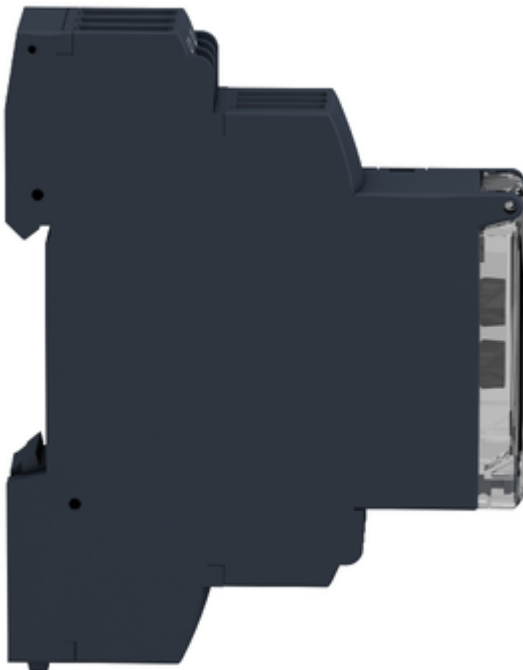






Image of product in real life situation

