

Product datasheet

Specifications



Modular 1-phase voltage control relay, 5 A, 1 CO, 20...80 V AC/DC

Local distributor code:

389834858

RM17UBE16

EAN Code: 3389119405157

Main

Range of product	Harmony Control Relays
Relay type	Voltage control relay
Product or component type	Voltage control relay
Product specific application	For single-phase and DC supply
Relay name	RM17UBE
Relay monitored parameters	Overvoltage and undervoltage detection
time delay	Adjustable 0.1...10 s, 0 + 10 % Tt- time delay upon fault
Switching capacity in VA	1250 VA
Measurement range	20...80 V AC/DC
Contacts type and composition	1 C/O

Complementary

Reset time	1500 ms time delay
Maximum switching voltage	250 V AC/DC
Minimum switching current	10 mA at 5 V DC
Maximum switching current	5 A AC/DC
Supply voltage limits	15...100 V AC/DC
Power consumption in VA	0...3.9 VA AC
Maximum power consumption in W	1.6 W DC
Control circuit frequency	50...60 Hz +/- 10 %
Immunity to microbreaks	20 ms
Output contacts	1 C/O
Nominal output current	5 A
Hysteresis	5 % fixed of threshold setting
Measurement accuracy	+/- 10 % of the full scale value
Polarity	Non reversible polarity on DC supply
delay at power up	1000 ms DC 500 ms AC
Maximum measuring cycle	150 ms measurement cycle as true rms value
Repeat accuracy	+/- 0.5 % for input and measurement circuit +/- 1 % for time delay

Measurement error	< 1 % over the whole range with voltage variation 0.2 %/°C with temperature variation
Quality labels	CE
Insulation resistance	> 500 MOhm at 500 V DC conforming to IEC 60255-5 > 500 MOhm at 500 V DC conforming to IEC 60664-1
Operating position	Any position without derating
Local signalling	LED (green) for power ON LED (yellow) for relay ON
Overvoltage category	III conforming to IEC 60664-1
[U_i] rated insulation voltage	250 V conforming to IEC 60664-1 400 V conforming to IEC 60664-1
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...2 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
Mounting support	35 mm symmetrical DIN rail conforming to 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 DC-14 conforming to IEC 60947-5-1
[U_n] rated nominal voltage	, self-powered
Safety reliability data	MTTFd = 502.2 years B10d = 470000
Control type	Without test button
Width	17.5 mm
Net weight	0.08 kg

Environment

Electromagnetic compatibility	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 NF EN/IEC 61000-6-2
Ambient air temperature for operation	-20...50 °C
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	5 gn conforming to IEC 60068-2-27
Standards	IEC 60255-6
Product certifications	C-Tick GOST GL CSA UL
Ambient air temperature for storage	-40...70 °C

Relative humidity	95 % at 55 °C conforming to IEC 60068-2-30
IP degree of protection	IP20 (terminals) conforming to IEC 60529 IP30 (casing) conforming to IEC 60529
Pollution degree	3 conforming to IEC 60664-1
Directives	73/23/EEC - low voltage directive 89/336/EEC - electromagnetic compatibility
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 Height	2.700 cm
Package 1 Width	7.800 cm
Package 1 Length	9.600 cm
Package 1 Weight	83.000 g
Unit Type of Package 2	S02
Number of Units in Package 2	48
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	4.463 kg

Logistical informations

Country of origin	ID
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Contractual warranty

Warranty	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	31
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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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EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
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REACH Regulation	REACH Declaration
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Use Again

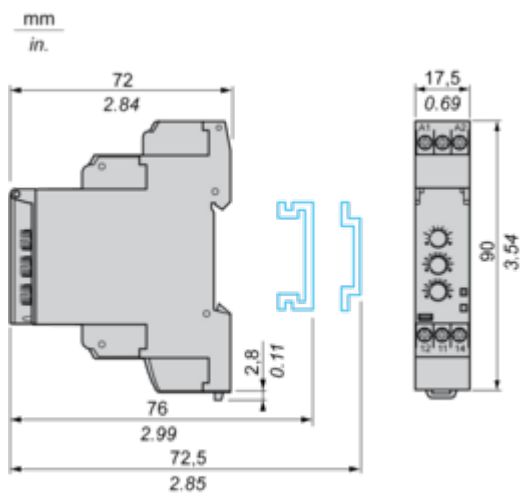
Repack and remanufacture

Take-back	No
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Dimensions Drawings

Single-Phase and DC Voltage Control Relays

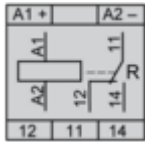
Dimensions and Mounting



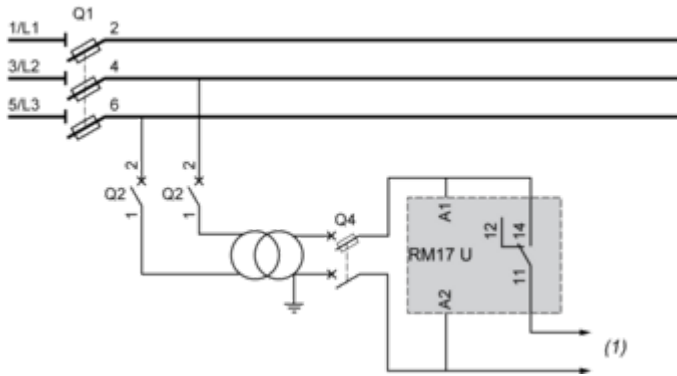
Connections and Schema

Single-Phase and DC Voltage Control Relays

Wiring Diagram



Application Scheme

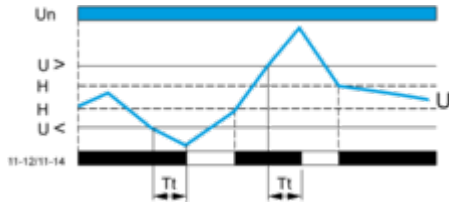


(1) To sensitive loads

Technical Description

Function Diagram

Control of Overvoltage and Undervoltage in Window Mode

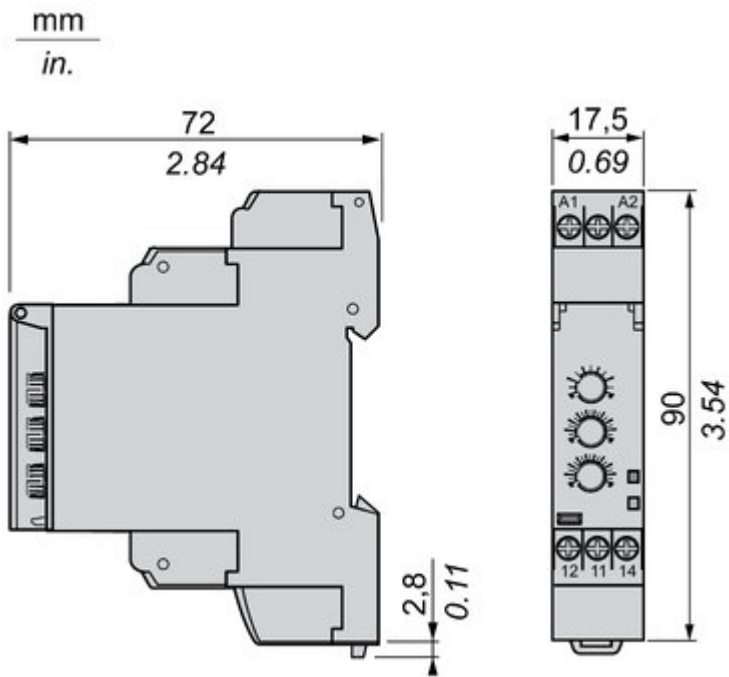


Legend

- Tt Time delay after crossing of threshold
- Un Nominal supply voltage
- U Monitored supply voltage
- H Hysteresis
- U> Overvoltage threshold
- U< Undervoltage threshold
- 11-12, 11-14 Output relay connections
- Relay status: black color = energized.

Technical Illustration

Dimensions



Offer Marketing Illustration

Product benefits / Features

Features

Harmony Control Relay


Wide monitoring parameters (phase, current, voltage, liquid level, frequency, speed, temperature, and pump control) to meet your application needs.


Experience unprecedented accuracy, predictive maintenance, and superior security.




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-CO₂ product


Compatible with a wide range of applications, such as hoisting, packaging, lifts, textile, pumping, and water.

Offer Marketing Illustration

Product benefits / Features

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

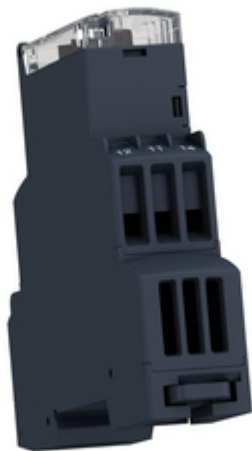
Dust and unintended human intervention avoided thanks to the IP50 lead-sealable settings protection cover.

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





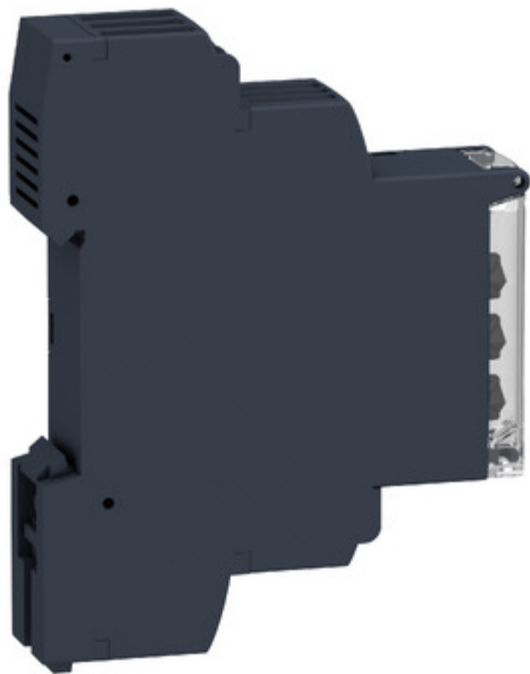


Image of product in real life situation

