

# Product data sheet

Specifications



voltage control relay, Harmony Control Relays, 5A, 1CO, overvoltage and undervoltage detection, 20...80V AC DC

RM17UBE16

**Product availability:** Non-Stock - Not normally stocked in distribution facility

## 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 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 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 % input and measurement circuit +/- 1 % time delay

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

<b>Measurement error</b>	< 1 % over the whole range with voltage variation 0.2 %/°C with temperature variation
<b>Quality labels</b>	CE
<b>Insulation resistance</b>	> 500 MΩ 500 V DC IEC 60255-5 > 500 MΩ 500 V DC IEC 60664-1
<b>Operating position</b>	Any position without derating
<b>Local signalling</b>	LED (green) for power ON LED (yellow) for relay ON
<b>Overvoltage category</b>	III conforming to IEC 60664-1
<b>[Ui] rated insulation voltage</b>	250 V IEC 60664-1 400 V IEC 60664-1
<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...2 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>Mounting support</b>	35 mm symmetrical DIN rail conforming to IEC 60715
<b>Electrical durability</b>	100000 cycles
<b>Mechanical durability</b>	3000000 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 DC-14 IEC 60947-5-1
<b>[Un] rated nominal voltage</b>	, self-powered
<b>Safety reliability data</b>	MTTFd = 502.2 years B10d = 470000
<b>Control Type</b>	Without test button
<b>Width</b>	0.7 in (17.5 mm)
<b>Product Weight</b>	0.18 lb(US) (0.08 kg)

## 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 NF EN/IEC 61000-6-2
<b>Ambient air temperature for operation</b>	-4...122 °F (-20...50 °C)
<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>	5 gn IEC 60068-2-27
<b>Standards</b>	IEC 60255-6
<b>Product Certifications</b>	C-tick GOST GL CSA UL
<b>Ambient Air Temperature for Storage</b>	-40...158 °F (-40...70 °C)

Relative humidity	95 % 131 °F (55 °C) IEC 60068-2-30
IP degree of protection	IP20 IEC 60529 terminals) IP30 IEC 60529 casing)
Pollution degree	3 IEC 60664-1
Directives	73/23/EEC - low voltage directive 89/336/EEC - electromagnetic compatibility
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

Category	US10CP222380
Discount Schedule	OCP2
GTIN	3389119405157
Returnability	Yes
Country of origin	ID

## Packing Units

Unit Type of Package 1	PCE
Nbr. of units in pkg.	1
Package 1 Height	1.06 in (2.700 cm)
Package 1 Width	3.07 in (7.800 cm)
Package 1 Length	3.78 in (9.600 cm)
Package weight(Lbs)	2.928 oz (83.000 g)
Unit Type of Package 2	S02
Number of Units in Package 2	48
Package 2 Height	5.91 in (15.000 cm)
Package 2 Width	11.81 in (30.000 cm)
Package 2 Length	15.75 in (40.000 cm)
Package 2 Weight	9.839 lb(US) (4.463 kg)

## 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

Carbon footprint (kg CO2 eq, Total Life cycle)

31

## Use Better

### Materials and Substances

Packaging made with recycled cardboard Yes

Packaging without single use plastic Yes

[EU RoHS Directive](#) Pro-active compliance (Product out of EU RoHS legal scope)

SCIP Number 5e3fdf99-611b-4d07-ad17-6eba84ab488b

REACH Regulation [REACH Declaration](#)

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](#)

## Use Again

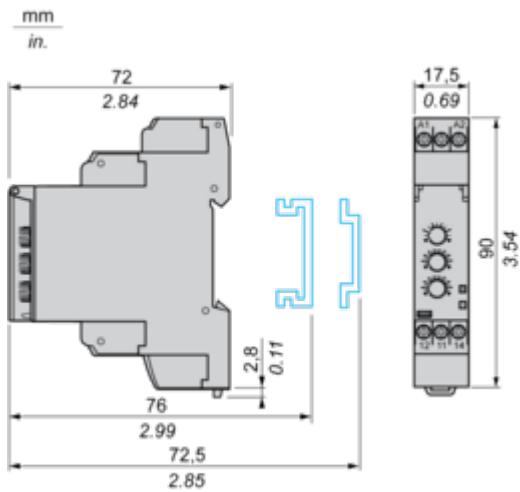
### Repack and remanufacture

Take-back No

## Dimensions Drawings

Single-Phase and DC Voltage Control Relays

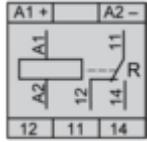
## Dimensions and Mounting

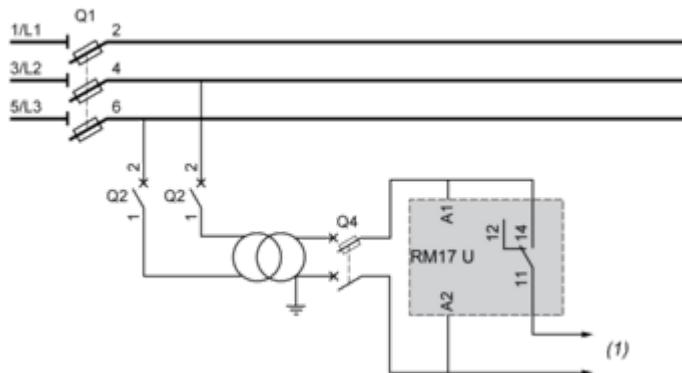


## Connections and Schema

Single-Phase and DC Voltage Control Relays

## Wiring Diagram



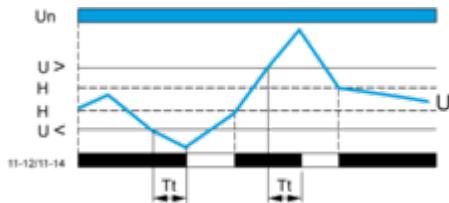
Application Scheme

(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

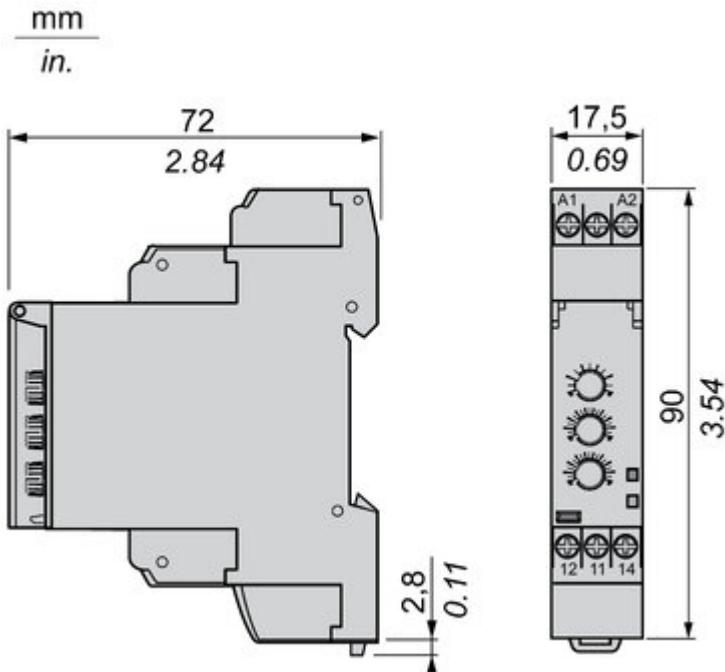
U< Undervoltage threshold

11-12, 11-14 Output relay connections

**Relay status:** black color = energized.

## Technical Illustration

## Dimensions

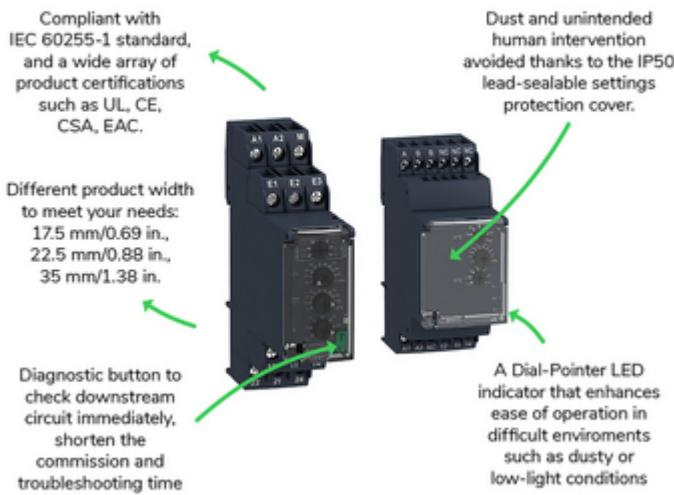


## Offer Marketing Illustration

## Product benefits / Features

## Technical Benefits

## Harmony Control Relay



## 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.

**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.

Image of product / Alternate images

Alternative

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Image of product in real life situation

