

## Product data sheet

### Characteristics

# RM17UBE15

Harmony Control Relays, Modular 1-phase voltage control relay, 5 A, 1 CO, 65...260 V AC/DC



### Main

Range of product	Harmony Control Relays
Product or component type	Voltage control relay
Relay type	Voltage control relay
Product specific application	For single-phase and DC supply
Relay name	RM17UBE
Relay monitored parameters	Self-powered Overvoltage and undervoltage detection
Time delay	Adjustable 0.1...10 s, 0 + 10 % on crossing the threshold
Switching capacity in VA	1250 VA
Minimum switching current	10 mA at 5 V DC
Maximum switching current	5 A AC/DC
Power consumption in VA	0...3 VA AC
Measurement range	65...260 V voltage AC/DC
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
Contacts type and composition	1 C/O

### Complementary

Reset time	1500 ms time delay
Maximum switching voltage	250 V AC/DC
[Us] rated supply voltage	110...240 V AC/DC 50/60 Hz +/- 10 %
Supply voltage limits	50...270 V AC/DC
Maximum power consumption in W	1 W DC
Immunity to microbreaks	20 ms
Control circuit frequency	50...60 Hz +/- 10 %
Output contacts	1 C/O
Nominal output current	5 A
Maximum measuring cycle	150 ms measurement cycle as true rms value
Hysteresis	3 % fixed of threshold setting
Delay at power up	1000 Ms DC 500 ms AC
Measurement accuracy	+/- 10 % of the full scale 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
Polarity	Non reversible polarity on DC supply
Quality labels	CE
Overvoltage category	III conforming to IEC 60664-1
Insulation resistance	> 500 MOhm at 500 V DC conforming to IEC 60255-5 > 500 MOhm at 500 V DC conforming to IEC 60664-1
[Ui] rated insulation voltage	250 V conforming to IEC 60664-1 400 V conforming to IEC 60664-1
Operating position	Any position without derating
Connections - terminals	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
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
Safety reliability data	B10d = 470000 MTTFd = 502.2 years
Width	17.5 mm
Net weight	0.08 kg
Functionality	Overvoltage and undervoltage detection
Compatibility code	RM17

## 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 NF EN/IEC 61000-6-2
Standards	EN/IEC 60255-6
Product certifications	UL GL GOST C-Tick CSA
Directives	73/23/EEC - low voltage directive 89/336/EEC - electromagnetic compatibility
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	5 gn conforming to IEC 60068-2-27
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 Height	2.800 cm
Package 1 Width	7.800 cm
Package 1 Length	9.700 cm
Package 1 Weight	88.000 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	4.756 kg

## Offer Sustainability

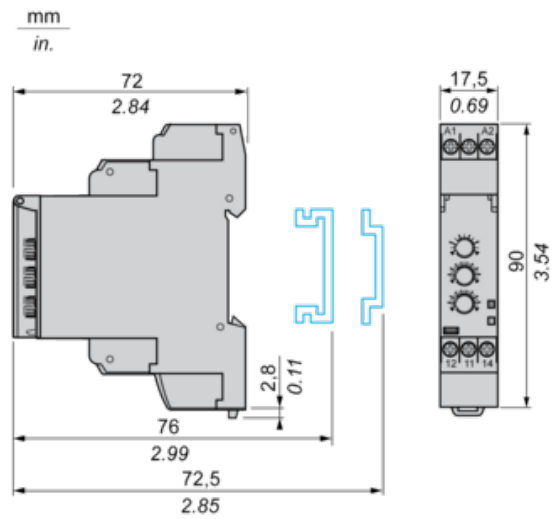
Sustainable offer status	Green Premium product
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
RoHS exemption information	<a href="#">Yes</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

## Contractual warranty

Warranty	18 months
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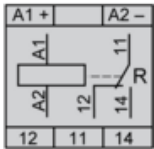
## Single-Phase and DC Voltage Control Relays

### Dimensions and Mounting

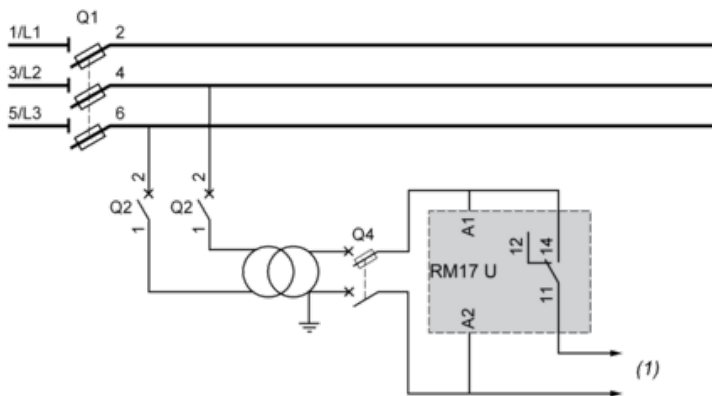


## Single-Phase and DC Voltage Control Relays

### Wiring Diagram



### Application Scheme



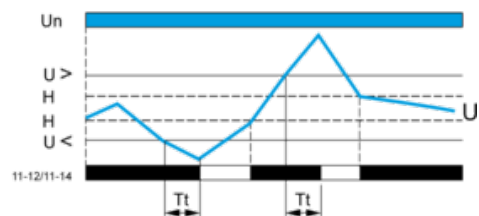
(1) To sensitive loads

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Function Diagram

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Control of Overvoltage and Undervoltage in Window Mode



Legend

$T_t$  Time delay after crossing of threshold

$U_n$  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.