

# Product data sheet

Specifications



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

RM17UAS15

### 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	RM17UAS
Relay monitored parameters	Overvoltage or undervoltage detection Self-powered
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 50/60 Hz 65...260 V voltage 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

<b>Maximum measuring cycle</b>	150 ms measurement cycle as true rms value
<b>Hysteresis</b>	5...20 % of threshold setting
<b>Delay at power up</b>	1000 ms DC 500 ms AC
<b>Measurement accuracy</b>	+/- 10 % of the full scale value
<b>Repeat accuracy</b>	+/- 0.5 % for input and measurement circuit +/- 1 % for time delay
<b>Measurement error</b>	< 1 % over the whole range with voltage variation 0.2 %/°C with temperature variation
<b>Polarity</b>	Non reversible polarity on DC supply
<b>Quality labels</b>	CE
<b>Overvoltage category</b>	III conforming to IEC 60664-1
<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>	250 V conforming to IEC 60664-1 400 V conforming to IEC 60664-1
<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...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>	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 EN/IEC 60715
<b>Electrical durability</b>	100000 cycles
<b>Mechanical durability</b>	30000000 cycles
<b>Operating rate</b>	<= 360 operations/hour full load
<b>Width</b>	17.5 mm
<b>Net weight</b>	0.08 kg
<b>Compatibility code</b>	RM17

## Environment

<b>Electromagnetic compatibility</b>	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
<b>Standards</b>	EN/IEC 60255-6
<b>Product certifications</b>	GL UL GOST CSA C-Tick
<b>Directives</b>	89/336/EEC - electromagnetic compatibility 73/23/EEC - low voltage directive
<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>	5 gn conforming to IEC 60068-2-27

<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>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>	2.6 cm
<b>Package 1 Width</b>	8.0 cm
<b>Package 1 Length</b>	9.4 cm
<b>Package 1 Weight</b>	90.0 g
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	48
<b>Package 2 Height</b>	15.0 cm
<b>Package 2 Width</b>	30.0 cm
<b>Package 2 Length</b>	40.0 cm
<b>Package 2 Weight</b>	4.809 kg

## Offer Sustainability

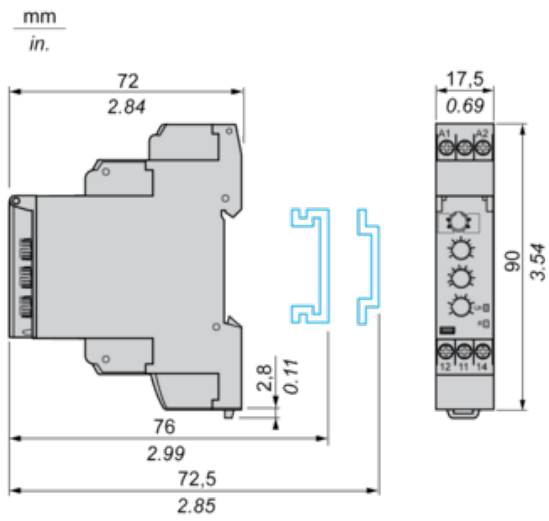
<b>Sustainable offer status</b>	Green Premium product
<b>REACH Regulation</b>	<a href="#">REACH Declaration</a>
<b>EU RoHS Directive</b>	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
<b>Mercury free</b>	Yes
<b>China RoHS Regulation</b>	<a href="#">China RoHS declaration</a>
<b>RoHS exemption information</b>	<a href="#">Yes</a>
<b>Environmental Disclosure</b>	<a href="#">Product Environmental Profile</a>
<b>Circularity Profile</b>	<a href="#">End of Life Information</a>
<b>WEEE</b>	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
<b>California proposition 65</b>	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 <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>

## Contractual warranty

<b>Warranty</b>	18 months
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## Single-Phase and DC Voltage Control Relays

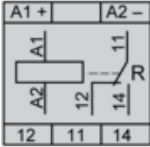
### Dimensions and Mounting



Single-Phase and DC Voltage Control Relays

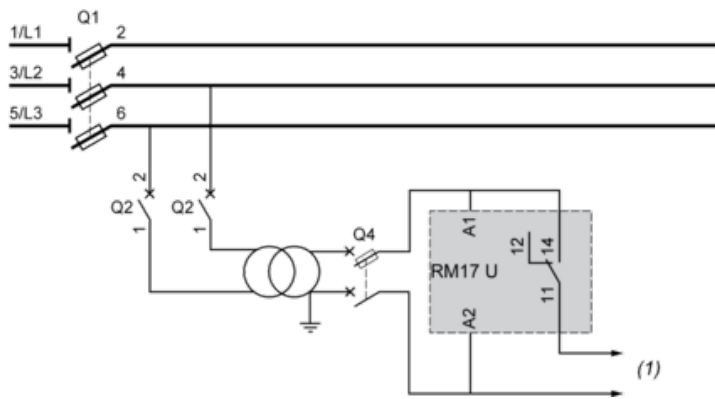
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**Wiring Diagram**



## Application Scheme

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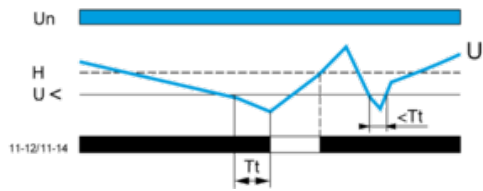


(1) To sensitive loads

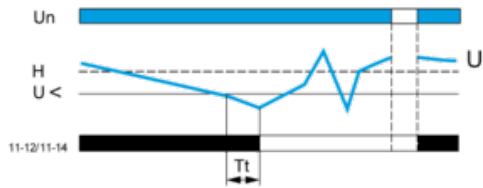
**Function Diagrams**

**Undervoltage Control**

Without memory ("No Memory" mode)

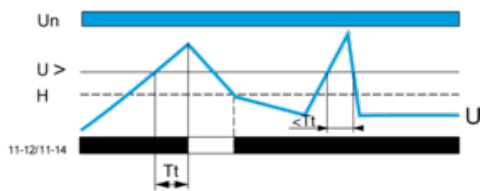


With memory ("Memory" mode)

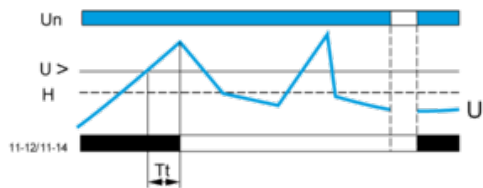


**Overvoltage Control**

Without memory ("No Memory" mode)



With memory ("Memory" 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 (refer to Connections and Schema)

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

**NOTE:** In "Memory" mode, the relay opens when crossing of the threshold is detected and then stays in that position. The power supply voltage must be switched off to reset the product.

**Recommended replacement(s)**