

# Product data sheet

Specifications



## voltage control relay, Harmony Control Relays, 5A, 2CO, 0.05...5V AC DC , 24..240V AC DC

RM35UA11MW

### Main

Range of product	Harmony Control Relays
Relay type	Multifunction voltage control relay
Product or component type	Voltage control relay
Relay name	RM35UA
Relay monitored parameters	Overvoltage or undervoltage detection
time delay	Adjustable 0.3...30 s, 0 + 10 % Tt- time delay upon fault
Switching capacity in VA	1250 VA
Measurement range	0.05...5 V AC/DC
Contacts type and composition	2 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
operating voltage tolerance	- 15 % + 10 % Un
Supply voltage limits	20.4...264 V AC/DC
Power consumption in VA	0...3.5 VA AC
Maximum power consumption in W	0.6 W DC
Control circuit frequency	40...70 Hz +/- 10 %
Immunity to microbreaks	10 ms
Resistance across terminals	30 mOhm at E2-M terminals 5 mOhm at E1-M terminals 50 mOhm at E3-M terminals
Output contacts	2 C/O
nominal output current	5 A
Hysteresis	5...50 % of threshold setting
Measurement accuracy	+/- 10 % of the full scale value
Polarity	Non reversible polarity on DC supply
delay at power up	600 ms
Maximum measuring cycle	30 ms measurement cycle as true rms value

<b>Repeat accuracy</b>	+/- 0.5 % for input and measurement circuit +/- 2 % for time delay
<b>Measurement error</b>	+/- 0.05 %/°C with temperature variation < 1 % over the whole range with voltage variation
<b>Sensitivity scale</b>	0.05...0.5 V E1-M terminals 0.3...3 V E2-M terminals 0.5...5 V E3-M terminals
<b>Threshold setting</b>	10...100 %
<b>Quality labels</b>	CE
<b>Insulation resistance</b>	> 500 MOhm at 500 V DC between supply and relay output conforming to IEC 60255-5 > 500 MOhm at 500 V DC between measurement and relay output conforming to IEC 60664-1 > 1 MOhm at 500 V DC between supply and measurement conforming to IEC 60255-5 > 500 MOhm at 500 V DC between supply and relay output conforming to IEC 60664-1 > 500 MOhm at 500 V DC between measurement and relay output conforming to IEC 60255-5 > 1 MOhm at 500 V DC between supply and measurement conforming to 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 conforming to IEC 60664-1 600 V conforming to 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>	0.6...1 N.m conforming to 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>	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 DC-14 conforming to IEC 60947-5-1
<b>[Un] rated nominal voltage</b>	24...240 V AC/DC 50/60 Hz, non self-powered
<b>Safety reliability data</b>	B10d = 290000 MTTFd = 308.2 years
<b>Control type</b>	Without test button
<b>Width</b>	35 mm
<b>Net weight</b>	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
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<b>Ambient air temperature for operation</b>	-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 conforming to IEC 60068-2-27
<b>Standards</b>	IEC 60255-6
<b>Product certifications</b>	GOST CSA GL UL C-Tick
<b>Ambient air temperature for storage</b>	-40...70 °C
<b>Relative humidity</b>	95 % at 55 °C conforming to IEC 60068-2-30
<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>Directives</b>	73/23/EEC - low voltage directive 89/336/EEC - electromagnetic compatibility
<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>	4.500 cm
<b>Package 1 Width</b>	9.600 cm
<b>Package 1 Length</b>	7.800 cm
<b>Package 1 Weight</b>	140.000 g
<b>Unit Type of Package 2</b>	S03
<b>Number of Units in Package 2</b>	48
<b>Package 2 Height</b>	30.000 cm
<b>Package 2 Width</b>	30.000 cm
<b>Package 2 Length</b>	40.000 cm
<b>Package 2 Weight</b>	7.475 kg

## 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	50
Environmental Disclosure	<a href="#">Product Environmental Profile</a>

## Use Better

### Materials and Substances

Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
<a href="#">EU RoHS Directive</a>	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	5e3fdf99-611b-4d07-ad17-6eba84ab488b
California proposition 65	<b>WARNING:</b> 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="#">www.P65Warnings.ca.gov</a>

## Use Again

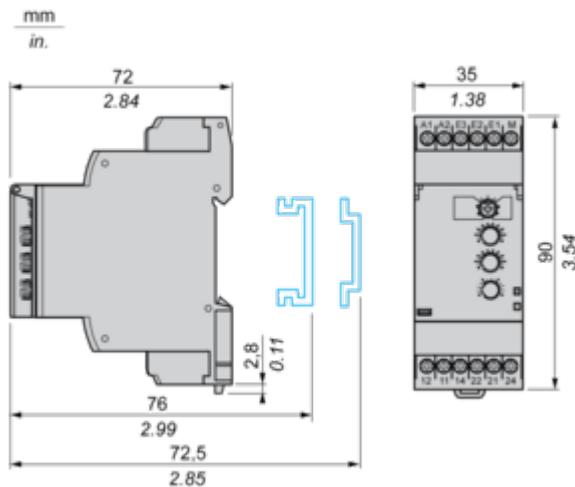
### Repack and remanufacture

End of life manual availability	<a href="#">End of Life Information</a>
Take-back	No

## Dimensions Drawings

Multifunction Voltage Control Relays

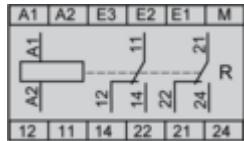
## Dimensions and Mounting



## Connections and Schema

## **Multifunction Voltage Control Relays**

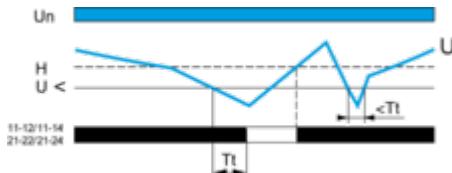
## Wiring Diagram



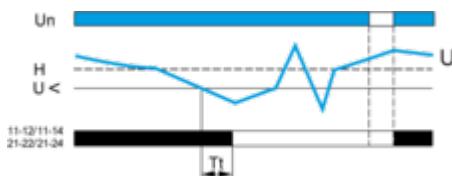
## Technical Description

Function Diagrams**Undervoltage Control**

Without memory ("No Memory" mode)



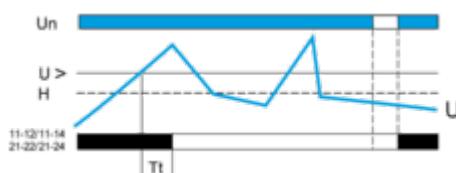
With memory ("Memory" mode)

**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, 21-22/21-24 Output relay connections

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.

## Technical Illustration

## Dimensions

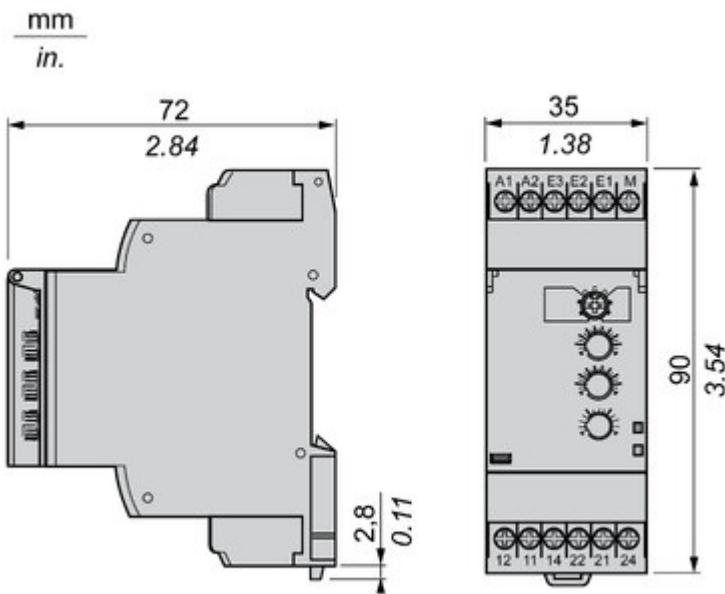


Image of product / Alternate images

Alternative

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