

# Product data sheet

Specifications



## voltage control relay, Harmony Control Relays, 8A, 2CO, 80...300V AC DC, 110...240V AC DC

RM22UB34

### Main

Range of product	Harmony Control Relays
Relay type	Voltage control relay
Product or component type	Voltage control relay
Network number of phases	1 phase
Supply circuit type	AC/DC
Relay name	RM22UA
Relay monitored parameters	Overvoltage and undervoltage detection
time delay	Adjustable 0.1...30 s, +/- 10 % of the full scale value Tt- time delay upon fault
Switching capacity in VA	2000 VA
Measurement range	80...300 V AC/DC
Contacts type and composition	2 C/O

### Complementary

Reset time	1500 ms at maximum voltage
Maximum switching voltage	250 V AC
Minimum switching current	10 mA at 5 V DC
Maximum switching current	8 A AC
Supply voltage limits	60...280 V AC
Power consumption in VA	5 VA AC
Maximum power consumption in W	2 W DC
Immunity to microbreaks	20 ms
Output contacts	2 C/O
nominal output current	8 A
Hysteresis	5 % fixed of threshold setting
delay at power up	600 ms
Maximum measuring cycle	250 ms measurement cycle as true rms value
Repeat accuracy	+/- 0.5 % for input and measurement circuit +/- 2 % for time delay
Measurement error	< 1 % over the whole range with voltage variation 0.2 %/°C with temperature variation
Response time	<= 500 ms
Insulation resistance	> 100 MΩ at 500 V DC

<b>Overvoltage category</b>	III conforming to IEC 60664-1
<b>Connections - terminals</b>	Screw terminals, 2 x 0.5...2 x 2.5 mm <sup>2</sup> (AWG 20...AWG 14) solid without cable end Screw terminals, 2 x 0.2...2 x 1.5 mm <sup>2</sup> (AWG 24...AWG 16) flexible with cable end Screw terminals, 1 x 0.5...1 x 3.3 mm <sup>2</sup> (AWG 20...AWG 12) solid without cable end Screw terminals, 1 x 0.2...1 x 2.5 mm <sup>2</sup> (AWG 24...AWG 14) 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 DIN rail conforming to IEC 60715
<b>Electrical durability</b>	100000 cycles
<b>Mechanical durability</b>	10000000 cycles
<b>Utilisation category</b>	AC-15 conforming to IEC 60947-5-1 DC-13 conforming to IEC 60947-5-1 AC-1 conforming to IEC 60947-4-1 DC-1 conforming to IEC 60947-4-1
<b>[Un] rated nominal voltage</b>	110...240 V AC/DC 50/60 Hz, non self-powered
<b>Safety reliability data</b>	MTTFd = 433.7 years B10d = 400000
<b>Contacts material</b>	Cadmium free
<b>Control type</b>	With test button
<b>Width</b>	22.5 mm
<b>Product weight</b>	0.09 kg

## Environment

<b>Electromagnetic compatibility</b>	Immunity for residential, commercial and light-industrial environments conforming to IEC 61000-6-1 Immunity for industrial environments conforming to IEC 61000-6-2 Emission standard for residential, commercial and light-industrial environments conforming to IEC 61000-6-3 Emission standard for industrial environments conforming to IEC 61000-6-4 Electrostatic discharge - test level: 6 kV level 3 (contact discharge) conforming to IEC 61000-4-2 Electrostatic discharge - test level: 8 kV level 3 (air discharge) conforming to IEC 61000-4-2 Radiated radio-frequency electromagnetic field immunity test - test level: 10 V/m level 3 conforming to IEC 61000-4-3 Electrical fast transient/burst immunity test - test level: 4 kV level 4 (direct) conforming to IEC 61000-4-4 Electrical fast transient/burst immunity test - test level: 2 kV level 4 (capacitive coupling) conforming to IEC 61000-4-4 Surge immunity test - test level: 4 kV level 4 (common mode) conforming to IEC 61000-4-5 Surge immunity test - test level: 2 kV level 4 (differential mode) conforming to IEC 61000-4-5 Conducted and radiated emissions class B group 1 conforming to CISPR 11 Conducted and radiated emissions class B conforming to CISPR 22
<b>Ambient air temperature for operation</b>	-20...50 °C at 60 Hz -20...60 °C at 50 Hz
<b>Standards</b>	IEC 60255-1
<b>Product certifications</b>	CCC CE CSA EAC UL GL RCM
<b>Ambient air temperature for storage</b>	-40...70 °C
<b>Relative humidity</b>	93...97 % at 25...55 °C conforming to IEC 60068-2-30

<b>Vibration resistance</b>	0.075 mm (f= 10...58.1 Hz) not in operation conforming to IEC 60068-2-6 1 gn (f= 10...58.1 Hz) not in operation conforming to IEC 60068-2-6 0.035 mm (f= 58.1...150 Hz) in operation conforming to IEC 60068-2-6 0.5 gn (f= 58.1...150 Hz) in operation conforming to IEC 60068-2-6
<b>Shock resistance</b>	15 gn (duration = 11 ms) for not in operation conforming to IEC 60068-2-27 5 gn (duration = 11 ms) for in operation conforming to IEC 60068-2-27
<b>IP degree of protection</b>	IP20 (terminals) conforming to IEC 60529 IP40 (housing) conforming to IEC 60529 IP50 (front panel) conforming to IEC 60529
<b>Pollution degree</b>	3 conforming to IEC 60664-1
<b>Dielectric test voltage</b>	2.5 kV, 1 min AC 50 Hz conforming to IEC 60255-27

## 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>	8.2 cm
<b>Package 1 Length</b>	9.5 cm
<b>Package 1 Weight</b>	104.0 g
<b>Unit Type of Package 2</b>	S02
<b>Number of Units in Package 2</b>	40
<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>	4.58 kg
<b>Unit Type of Package 3</b>	P06
<b>Number of Units in Package 3</b>	640
<b>Package 3 Height</b>	80.0 cm
<b>Package 3 Width</b>	80.0 cm
<b>Package 3 Length</b>	60.0 cm
<b>Package 3 Weight</b>	86.18 kg



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 **43**

Environmental Disclosure [Product Environmental Profile](#)

## 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

End of life manual availability [End of Life Information](#)

Take-back **No**

## Dimensions Drawings

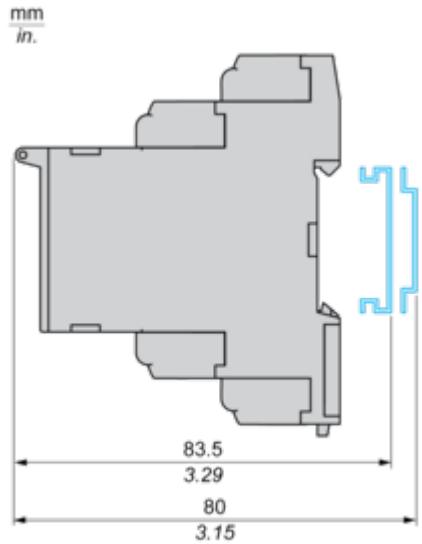
## Dimensions



## Mounting and Clearance

Mounting and Clearance

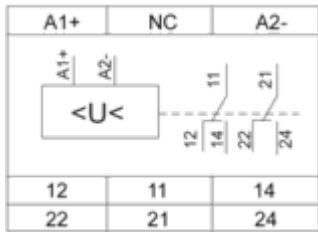
## Rail Mounting



## Connections and Schema

Voltage Control Relay

## Wiring Diagram



A1+,A2- : Voltage to be monitored

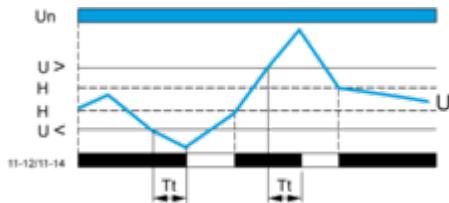
11-14,12 : 1st C/O contact of output relay

21-24,22 : 2nd C/O contact of output relay

## 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

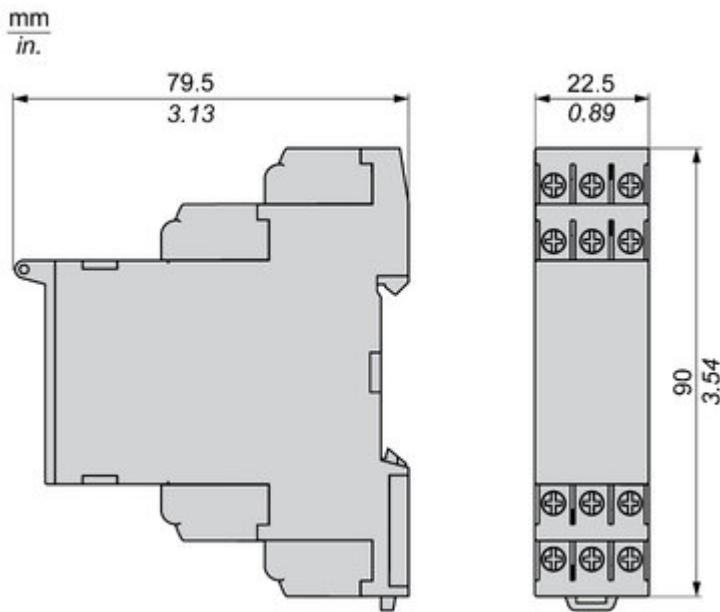


Image of product / Alternate images

## Alternative

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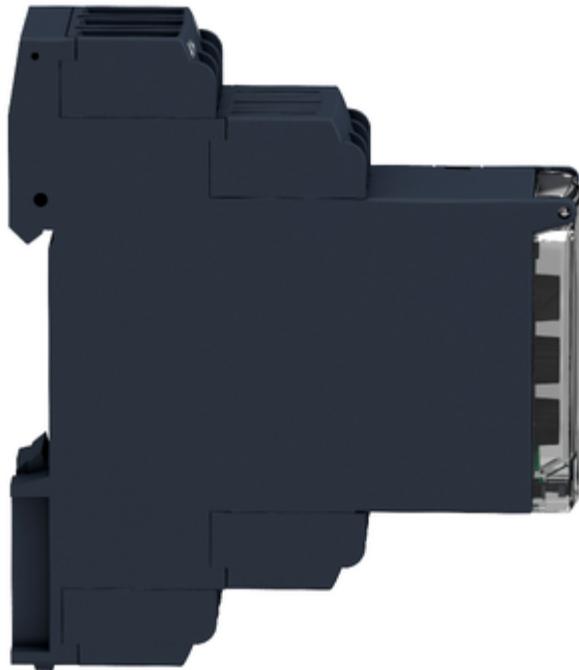


Image of product in real life situation

