Product datasheet

Specifications



multifunction voltage control relay RM35-U - range 15..600 V

Local distributor code:

389835019 RM35UA13MW

EAN Code: 3389119405317

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
Control type	Without test button
Contacts type and composition	2 C/O

Complementary

[Us] rated supply voltage	24...240 V AC/DC 50/60 Hz, non self-powered
Supply voltage limits	20.4…264 V AC/DC
Power consumption in VA	0…3.5 VA AC
Measurement range	15...600 V AC/DC
Maximum measuring cycle	30 ms measurement cycle as true rms value
Hysteresis	5…50 % of threshold setting
Repeat accuracy	+/- 0.5 % for input and measurement circuit +/- 2 % for time delay
Measurement error	+/- 0.05 %/°C with temperature variation < 1 % over the whole range with voltage variation
Time delay type	Adjustable 0.3...30 s, 0 + 10 % Tt- time delay upon fault
Setting accuracy of time delay	10 %
Reset time	1500 ms time delay
Power on delay	600 ms
Output contacts	2 C/O
nominal output current	5 A
Maximum switching voltage	250 V AC/DC
Switching capacity in VA	1250 VA
Minimum switching current	10 mA at 5 V DC
Maximum switching current	5 A AC/DC
Electrical durability	100000 cycles
Mechanical durability	30000000 cycles
operating voltage tolerance	- 15 % + 10 % Un

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Maximum power consumption in W	0.6 W DC
Control circuit frequency	40...70 Hz +/- 10 %
Resistance across terminals	150 mOhm at E1-M terminals 300 mOhm at E2-M terminals 600 mOhm at E3-M terminals
Measurement accuracy	+/- 10 % of the full scale value
Polarity	Non reversible polarity on DC supply
Quality labels	CE
Threshold setting	10...100 %

Environment

Electromagnetic compatibility	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
Standards	IEC 60255-6
Product certifications	GOST UL GL C-Tick CSA
Directives	73/23/EEC - low voltage directive 89/336/EEC - electromagnetic compatibility
Ambient air temperature for storage	-40…70 °C -40…70 °C
Ambient air temperature for operation	-20…50 °C
Relative humidity	95 % at 55 °C conforming to IEC 60068-2-30
IP degree of protection	IP20 (terminals) conforming to IEC 60529 IP30 (casing) conforming to IEC 60529
Pollution degree	3 conforming to IEC 60664-1
Overvoltage category	III conforming to IEC 60664-1
Dielectric test voltage	2 kV, 1 min AC 50 Hz conforming to IEC 60255-5
Insulation resistance	> 500 MOhm at 500 V DC between supply and relay output conforming to IEC 60255-5
[Ui] rated insulation voltage	250 V conforming to IEC 60664-1
Operating position	Any position without derating
Connections - terminals	Screw terminals, 1 x 0.5...1 x 4 mm² (20 AWG...11 AWG) solid without cable end Screw terminals, 2 x 0.5...2 x 2.5 mm² (20 AWG...14 AWG) solid without cable end Screw terminals, 1 x 0.2...2 x 2.5 mm² (24 AWG...12 AWG) flexible with cable end Screw terminals, 2 x 0.2...2 x 1.5 mm² (24 AWG...16 AWG) flexible with cable end
Tightening torque	0.6…1 N.m conforming to IEC 60947-1
Housing material	Polycarbonate
Local signalling	LED (green) for power ON LED (yellow) for relay ON
Mounting support	35 mm symmetrical DIN rail conforming to IEC 60715
Reliability data	B10d = 290000 MTTFd = 308.2 years
Height	90 mm 88.9 mm

Width	35 mm 35.6 mm
Depth	72 mm 71.1 mm
Net weight	0.13 kg 0.13 kg

Packing Units

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	4.5 cm
Package 1 Width	7.8 cm
Package 1 Length	9.6 cm
Package 1 Weight	136.0 g
Unit Type of Package 2	S03
Number of Units in Package 2	48
Package 2 Height	30 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	7.271 kg

Logistical informations

Country of origin	ID

Contractual warranty

Warranty (in months)	18

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	**64 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**2 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**62 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0 kg CO2 eq.**
Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**Yes**
SCIP Number	**5e3fdf99-611b-4d07-ad17-6eba84ab488b**
EU RoHS Directive	Compliant By Exemption
REACh Regulation	Reference contains Substances of Very High Concern above the threshold

Use Again

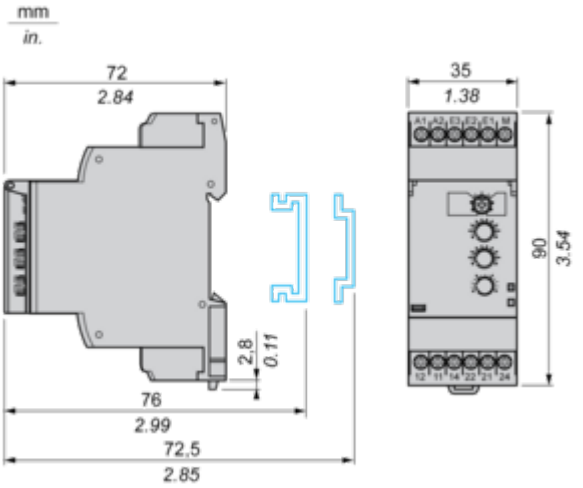
Repack and remanufacture

Recyclability potential, in %	**8**
End of life manual availability	End of Life Information
Take-back	**No**

Dimensions Drawings

Multifunction Voltage Control Relays

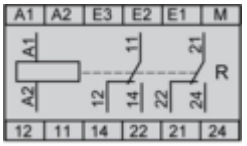
Dimensions and Mounting



Connections and Schema

Multifunction Voltage Control Relays

Wiring Diagram

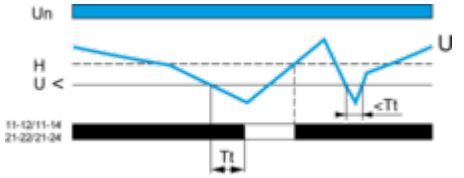


Technical Description

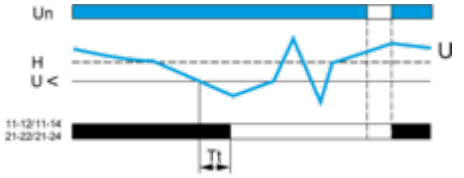
Function Diagrams

Undervoltage Control

Without memory ("No Memory" mode)

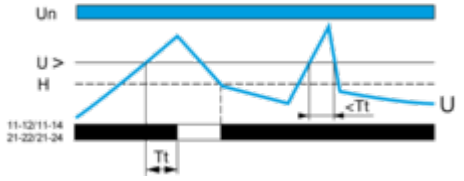


With memory ("Memory" mode)

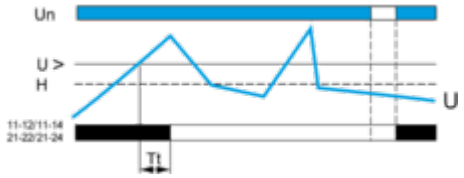


Overvoltage Control

Without memory ("No Memory" mode)



With memory ("Memory" mode)



Legend

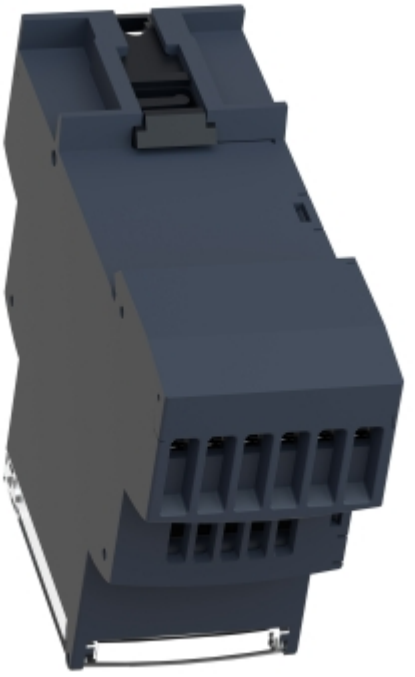
Tt Time delay after crossing of threshold
Un Nominal supply voltage
U Monitored supply voltage
H Hysteresis
U> Overvoltage threshold
U< Undervoltage threshold
11-12/11-14, 21-22/21-24 Output relay connections
Relay status: black color = energized.

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.

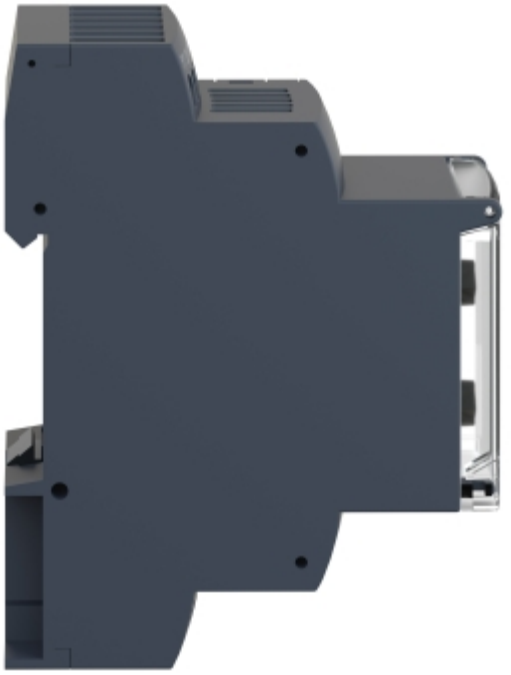
Image of product / Alternate images

Alternative






RM35TM250MW
T1 T2 Y1 L1 L2 L3
PTC DIN 44081
A1 A2 11 14 21 24
LISTED
Use copper conductors only




Y1 12V 12V E1 E2 0V
Under
Value
Range
Ti
Schneider
A1 A2 12 11 14

