### Product data sheet Characteristics

## RM35UA13MW multifunction voltage control relay RM35-U range 15..600 V





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Range of product	Zelio Control
Product or component type	Modular measurement and control relays
Relay type	Multifunction voltage control relay
Relay name	RM35UA
Relay monitored para- meters	Overvoltage or undervoltage detection
Time delay	Adjustable 0.330 s, 0 + 10 % on crossing the threshold
Switching capacity in VA	1250 VA
Minimum switching cur- rent	10 mA at 5 V DC
Maximum switching cur- rent	5 A AC/DC
Power consumption in VA	03.5 VA AC
Measurement range	15600 V voltage
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

#### Complementary

Complementary	
Reset time	1500 ms time delay
Maximum switching voltage	250 V AC/DC
[Us] rated supply voltage	24240 V AC/DC, 50/60 Hz +/- 10 %
Supply voltage limits	20.4264 V AC/DC
Power consumption in W	<= 0.6 W DC
Immunity to microbreaks	10 ms
Control circuit frequency	4070 Hz +/- 10 %
Resistance across terminals	150 mOhm E1-M terminals 300 mOhm E2-M terminals 600 mOhm E3-M terminals
Output contacts	2 C/O
Nominal output current	5 A
Measuring cycle	<= 30 ms measurement cycle as true rms value
Hysteresis	550 % of threshold setting
Measurement accuracy	+/- 10 % of the full scale value
Repeat accuracy	+/- 0.5 % input and measurement circuit +/- 2 % time delay
Measurement error	+/- 0.05 %/°C with temperature variation < 1 % over the whole range with voltage variation
Polarity	Non reversible polarity on DC supply
Sensitivity scale	15150 V E1-M terminals 30300 V E2-M terminals 60600 V E3-M terminals
Threshold setting	10100 %



Quality labels	CE
Overvoltage category	III conforming to IEC 60664-1
Overvoltage category         Insulation resistance         [Ui] rated insulation voltage         Operating voltage tolerance         Operating position         Connections - terminals	<ul> <li>&gt; 500 MOhm at 500 V DC between supply and relay output conforming to IEC 60255-5</li> <li>&gt; 500 MOhm at 500 V DC between measurement and relay output conforming to IEC 60664-1</li> <li>&gt; 1 MOhm at 500 V DC between supply and measurement conforming to IEC 60255-5</li> <li>&gt; 500 MOhm at 500 V DC between supply and relay output conforming to IEC 60664-1</li> <li>&gt; 500 MOhm at 500 V DC between measurement and relay output conforming to IEC 60255-5</li> <li>&gt; 500 MOhm at 500 V DC between measurement and relay output conforming to IEC 60664-1</li> <li>&gt; 500 MOhm at 500 V DC between supply and measurement conforming to IEC 60255-5</li> <li>&gt; 1 MOhm at 500 V DC between supply and measurement conforming to IEC 60664-1</li> <li>250 V conforming to IEC 60664-1</li> <li>600 V conforming to IEC 60664-1</li> <li>- 15 % + 10 % Un</li> <li>Any position without</li> <li>Screw terminals 1 x 0.51 x 4 mm<sup>2</sup> - AWG 20AWG 11, solid cable without cable end</li> <li>Screw terminals 2 x 0.52 x 2.5 mm<sup>2</sup> - AWG 20AWG 14, solid cable without cable end</li> </ul>
	Screw terminals 2 x 0.22 x 1.5 mm <sup>2</sup> - AWG 24AWG 16, flexible cable with cable end Screw terminals 1 x 0.22 x 2.5 mm <sup>2</sup> - AWG 24AWG 12, flexible cable with cable end
Tightening torque	5.318.85 lbf.in (0.61 N.m) conforming to IEC 60947-1
Housing material	Self-extinguishing plastic
Local signalling	LED green power ON LED yellow 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 under full load
Safety reliability data	B10d = 290000 MTTFd = 308.2 years
Width	1.38 in (35 mm)
Product weight	0.18 lb(US) (0.08 kg)
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	C-Tick GL CSA GOST UL
Directives	89/336/EEC - electromagnetic compatibility 73/23/EEC - low voltage directive
Ambient air temperature for storage	-40158 °F (-4070 °C)
Ambient air temperature for operation	-4122 °F (-2050 °C)
Relative humidity	95 % at 131 °F (55 °C) conforming to IEC 60068-2-30
Vibration resistance	0.35 mm (f = 557.6 Hz) conforming to IEC 60068-2-6 1 gn (f = 57.6150 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 AC 50 Hz, 1 min conforming to IEC 60255-5 2 kV AC 50 Hz, 1 min 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

#### Ordering and shipping details

Category	22380 - RELAYS-MEASUREMENT (RM17-RM35)
Discount Schedule	CP2
GTIN	00785901671732
Nbr. of units in pkg.	1
Package weight(Lbs)	0.29999999999999999999
Returnability	Y
Country of origin	ID

#### Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 0701 - Schneider Electric declaration of conformity
REACh	Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Available
California proposition 65	WARNING: This product can expose you to chemicals including:
Substance 1	Lead and lead compounds, which is known to the State of California to cause can- cer and birth defects or other reproductive harm.
More information	For more information go to www.p65warnings.ca.gov

#### Contractual warranty

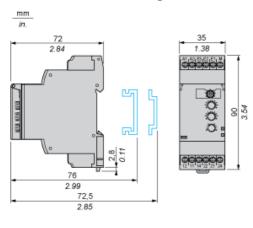
Warranty period

18 months

## RM35UA13MW

#### Multifunction Voltage Control Relays

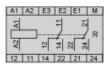
#### **Dimensions and Mounting**



## RM35UA13MW

Multifunction Voltage Control Relays

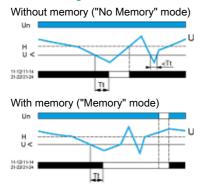
#### Wiring Diagram



## RM35UA13MW

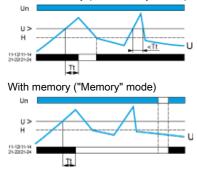
#### **Function Diagrams**

#### Undervoltage Control



#### **Overvoltage Control**

Without memory ("No 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.

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Schneider Electric: RM35UA13MW