



## Main

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 parameters	Overvoltage or undervoltage detection
Time delay	Adjustable 0.3...30 s, 0 + 10 % on crossing the threshold
Switching capacity in VA	1250 VA
Minimum switching current	10 mA 5 V DC
Maximum switching current	5 A AC/DC
Power consumption in VA	0...3.5 VA AC
Measurement range	15...600 V voltage
Utilisation category	AC-12 IEC 60947-5-1 AC-13 IEC 60947-5-1 AC-14 IEC 60947-5-1 AC-15 IEC 60947-5-1 DC-12 IEC 60947-5-1 DC-13 IEC 60947-5-1 DC-14 IEC 60947-5-1

## Complementary

Reset time	1500 ms time delay
Maximum switching voltage	250 V AC/DC
[Us] rated supply voltage	24...240 V AC/DC 50/60 Hz +/- 10 %
Supply voltage limits	20.4...264 V AC/DC
Maximum power consumption in W	0.6 W DC
Immunity to microbreaks	10 ms
Control circuit frequency	40...70 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
Maximum measuring cycle	30 ms measurement cycle as true rms value
Hysteresis	5...50 % threshold setting
Delay at power up	600 ms
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	15...150 V E1-M terminals 30...300 V E2-M terminals 60...600 V E3-M terminals
Threshold setting	10...100 %

Quality labels	CE
Overvoltage category	III IEC 60664-1
Insulation resistance	> 500 MOhm 500 V DC between supply and relay output IEC 60255-5 > 500 MOhm 500 V DC between measurement and relay output IEC 60664-1 > 1 MOhm 500 V DC between supply and measurement IEC 60255-5 > 500 MOhm 500 V DC between supply and relay output IEC 60664-1 > 500 MOhm 500 V DC between measurement and relay output IEC 60255-5 > 1 MOhm 500 V DC between supply and measurement IEC 60664-1
[Ui] rated insulation voltage	250 V IEC 60664-1 600 V IEC 60664-1
Operating voltage tolerance	- 15 % + 10 % Un
Operating position	Any position without derating
Connections - terminals	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
Tightening torque	5.31...8.85 lbf.in (0.6...1 N.m) IEC 60947-1
Housing material	Self-extinguishing plastic
Local signalling	LED (green) for power ON Relay ON LED yellow)
Mounting support	35 mm symmetrical DIN rail EN/IEC 60715
Electrical durability	100000 cycles
Mechanical durability	30000000 cycles
Operating rate	<= 360 operations/hour full load
Safety reliability data	B10d = 290000 MTTFd = 308.2 years
Maximum Width	1.38 in (35 mm)
Net Weight	0.18 lb(US) (0.08 kg)
Compatibility code	RM3

## Environment

Electromagnetic compatibility	Emission standard for industrial environments EN/IEC 61000-6-4 Emission standard for residential, commercial and light-industrial environments EN/IEC 61000-6-3 Immunity for industrial environments NF EN/IEC 61000-6-2
Standards	EN/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...158 °F (-40...70 °C)
Ambient air temperature for operation	-4...122 °F (-20...50 °C)
Relative humidity	95 % 131 °F (55 °C) IEC 60068-2-30
Vibration resistance	0.35 mm 5...57.6 Hz)IEC 60068-2-6 1 gn 57.6...150 Hz)IEC 60255-21-1
Shock resistance	5 gn IEC 60068-2-27
IP degree of protection	IP20 IEC 60529 terminals) IP30 IEC 60529 casing)
Pollution degree	3 IEC 60664-1
Dielectric test voltage	2 KV AC 50 Hz, 1 min IEC 60255-5 2 kV AC 50 Hz, 1 min IEC 60664-1
Non-dissipating shock wave	4 KV IEC 60255-5 4 KV IEC 60664-1 4 kV 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)	0.3 lb(US) (0.14 kg)
Returnability	Yes
Country of origin	ID

## Packing Units

Package 1 Height	0.770 dm
Package 1 width	0.970 dm
Package 1 Length	0.470 dm

## Offer Sustainability

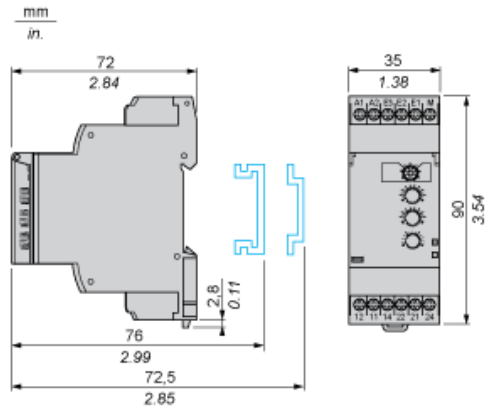
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins.

## Contractual warranty

Warranty	18 months
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Multifunction Voltage Control Relays

Dimensions and Mounting

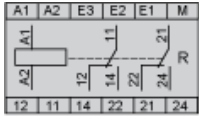


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## Multifunction Voltage Control Relays

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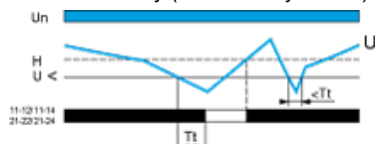
### Wiring Diagram



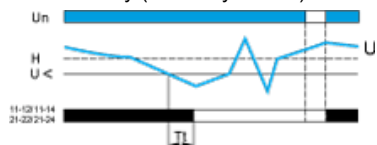
Function Diagrams

Undervoltage Control

Without memory ("No Memory" mode)



With memory ("Memory" mode)

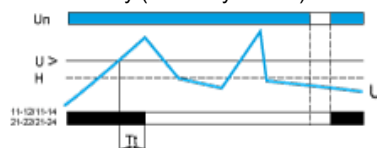


Overvoltage Control

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.