Product datasheet Characteristics

RM35UA13MW

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



Main

1 A & 2 2 A		
12 11 12		
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 type	Adjustable 0.330 s, 0 + 10 % on crossing the threshold	
Switching capacity in VA	1250 VA	
Minimum switching current	10 mA at 5 V DC	
Maximum switching current	5 A AC/DC	
Power consumption in VA	<= 3.5 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-14 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		
Reset time	1500 ms for 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	

Complementary

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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	
Run up delay at power up	<= 600 ms	
Measurement accuracy	+/- 10 % of the full scale value	
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	
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	
Insulation resistance	 > 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 measurement and relay output conforming to IEC 60255-5 > 1 MOhm at 500 V DC between supply and measurement conforming to IEC 6064-1 > 1 MOhm at 500 V DC between supply and measurement conforming to IEC 6064-1 	
[Ui] rated insulation voltage	250 V conforming to IEC 60664-1 600 V conforming to IEC 60664-1	
Control circuit voltage limits	- 15 % + 10 % Un	
Operating position	Any position without derating	
Connections - terminals	Screw terminals 1 x 0.51 x 4 mm ² - AWG 20AWG 11, solid cable without cable end Screw terminals 2 x 0.52 x 2.5 mm ² - AWG 20AWG 14, solid cable without cable end Screw terminals 2 x 0.22 x 1.5 mm ² - AWG 24AWG 16, flexible cable with cable end Screw terminals 1 x 0.22 x 2.5 mm ² - AWG 24AWG 12, flexible cable with cable end	
Tightening torque	0.61 N.m conforming to IEC 60947-1	
Housing material	Self-extinguishing plastic	
Local signalling	LED green for power ON LED yellow for relay ON	
Mounting support	35 mm symmetrical DIN rail conforming to EN/IEC 60715	
Electrical durability	100000 cycles	
Mechanical durability	<= 3000000 cycles	
Operating rate	<= 360 operations/hour under full load	
Safety reliability data	B10d = 290000 MTTFd = 308.2 years	
Width	35 mm	
Product weight	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	UL GOST CSA GL C-Tick
Directives	89/336/EEC - electromagnetic compatibility 73/23/EEC - low voltage directive
Ambient air temperature for storage	-4070 °C
Ambient air temperature for operation	-2050 °C

Relative humidity	95 % at 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		

Offer Sustainability

Sustainable offer status Green Premium product		
RoHS (date code: YYWW)	Compliant - since 0701 - Schneider Electric declaration of conformity	
	Schneider Electric declaration of conformity	
REACh	Reference not containing SVHC above the threshold	
	Reference not containing SVHC above the threshold	
Product environmental profile	Available	
	Product environmental	
Product end of life instructions	Available	
	Product environmental	

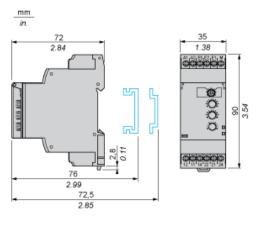
Contractual warranty

Warranty period 18 months				
	Warranty period	18 months		

RM35UA13MW

Multifunction Voltage Control Relays

Dimensions and Mounting



RM35UA13MW

Connections and Schema

Multifunction Voltage Control Relays

Wiring Diagram

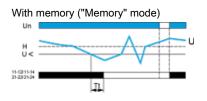


RM35UA13MW

Function Diagrams

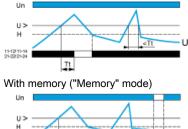
Undervoltage Control

Without memory ("No Memory" mode)



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&It; 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.