# **RM17UBE16**

voltage control relay RM17-U - range 20..80 V AC





#### Main

Range of product	Zelio Control
Product or component type	Modular measurement and control relays
Relay type	Voltage control relay
Product specific application	For single-phase and DC supply
Relay name	RM17UBE
Relay monitored parameters	Overvoltage and undervoltage detection Self-powered
Time delay type	Adjustable 0.110 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	<= 3.9 VA AC
Measurement range	2080 V voltage AC 50/60 Hz 2080 V voltage DC
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 for time delay
Maximum switching voltage	250 V AC/DC
[Us] rated supply voltage	2448 V AC/DC, 50/60 Hz +/- 10 %
Supply voltage limits	15100 V AC/DC
Power consumption in W	<= 1.6 W DC
Immunity to microbreaks	20 ms
Control circuit frequency	5060 Hz +/- 10 %
Output contacts	1 C/O
Nominal output current	5 A
Measuring cycle	<= 150 ms measurement cycle as true rms value
Hysteresis	3 % fixed of threshold setting
Run up delay at power up	<= 100 ms DC <= 500 ms AC
Measurement accuracy	+/- 10 % of the full scale value
Repeat accuracy	+/- 0.5 % for input and measurement circuit +/- 1 % for time delay
Measurement error	< 1 % over the whole range with voltage variation 0.2 %/°C with temperature variation
Polarity	Non reversible polarity on DC supply
Quality labels	CE
Overvoltage category	III conforming to IEC 60664-1
Insulation resistance	> 500 MOhm at 500 V DC conforming to IEC 60255-5 > 500 MOhm at 500 V DC conforming to IEC 60664-1
[Ui] rated insulation voltage	250 V conforming to IEC 60664-1 400 V conforming to IEC 60664-1
Operating position	Any position without derating
Connections - terminals	Screw terminals 1 x 0.51 x 4 mm² - AWG 20AWG 11, solid cable without cable end

	Screw terminals 2 x 0.52 x 2.5 mm <sup>2</sup> - AWG 20AWG 14, solid cable without cable end 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	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	<= 30000000 cycles
Operating rate	<= 360 operations/hour under full load
Safety reliability data	MTTFd = 502.2 years B10d = 470000
Width	17.5 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	CSA C-Tick GL GOST UL
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
REACh	Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Available

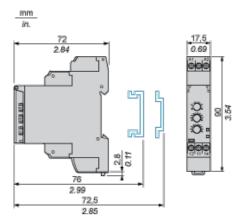
### Contractual warranty

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Warranty period	18 months

# Single-Phase and DC Voltage Control Relays

**Dimensions and Mounting** 



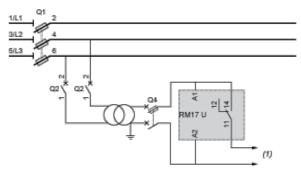


## **Single-Phase and DC Voltage Control Relays**

### **Wiring Diagram**



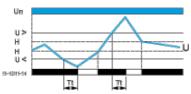
## **Application Scheme**



(1) To sensitive loads

# **Function Diagram**

### Control of Overvoltage and Undervoltage in Window Mode



#### Legend

 $\ensuremath{\mathbf{Tt}}$  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.