RM17UBE16

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





Main

Range of product	Harmony Control Relays
Product or component type	Voltage control relay
Relay type	Voltage control relay
Product specific application	For single-phase and DC supply
Relay name	RM17UBE
Relay monitored parameters	Self-powered Overvoltage and undervoltage detection
Time delay	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	03.9 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
Contacts type and composition	1 C/O

Complementary

Polarity	Non reversible polarity on DC supply	
Measurement error	< 1 % over the whole range with voltage variation 0.2 %/°C with temperature variation	
Repeat accuracy	+/- 0.5 % for input and measurement circuit +/- 1 % for time delay	
Measurement accuracy	+/- 10 % of the full scale value	
Delay at power up	1000 Ms DC 500 ms AC	
Hysteresis	3 % fixed of threshold setting	
Maximum measuring cycle	150 ms measurement cycle as true rms value	
Nominal output current	5 A	
Output contacts	1 C/O	
Control circuit frequency	5060 Hz +/- 10 %	
Immunity to microbreaks	20 ms	
Maximum power consumption in W	1.6 W DC	
Supply voltage limits	15100 V AC/DC	
[Us] rated supply voltage	2448 V AC/DC 50/60 Hz +/- 10 %	
Maximum switching voltage	250 V AC/DC	
Reset time	1500 ms time delay	

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 without cable end Screw terminals, 2 x 0.52 x 2.5 mm² (AWG 20AWG 14) solid without cable end Screw terminals, 1 x 0.22 x 2.5 mm² (AWG 24AWG 12) flexible with cable end Screw terminals, 2 x 0.22 x 1.5 mm² (AWG 24AWG 16) flexible 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 full load
Safety reliability data	MTTFd = 502.2 years B10d = 470000
Width	17.5 mm
Net weight	0.08 kg
Functionality	Overvoltage and undervoltage detection
Compatibility code	RM17

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
	GOST
	GL
	CSA
	UL
Directives	73/23/EEC - low voltage directive
	89/336/EEC - electromagnetic compatibility
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, 1 min AC 50 Hz conforming to IEC 60255-5
	2 kV, 1 min AC 50 Hz 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

Packing Units

•	
Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Weight	89 g
Package 1 Height	2.7 cm
Package 1 width	7.8 cm
Package 1 Length	9.6 cm
Package 1 Weight Package 1 Height Package 1 width	2.7 cm 7.8 cm

Unit Type of Package 2	S02	
Number of Units in Package 2	48	
Package 2 Weight	4.927 kg	
Package 2 Height	15 cm	
Package 2 width	30 cm	
Package 2 Length	40 cm	

Offer Sustainability

Sustainable offer status	Green Premium product
REACh Regulation	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) EPEU RoHS Declaration
Mercury free	Yes
RoHS exemption information	€Yes
China RoHS Regulation	China RoHS Declaration
Environmental Disclosure	Product Environmental Profile
Circularity Profile	End Of Life Information
WEEE	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins

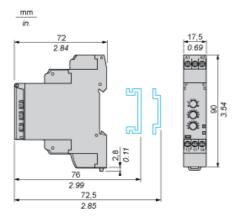
Contractual warranty

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Warranty	18 months

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Single-Phase and DC Voltage Control Relays

Dimensions and Mounting



Product data sheet Connections and Schema

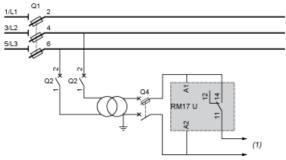
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Single-Phase and DC Voltage Control Relays

Wiring Diagram



Application Scheme



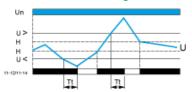
(1) To sensitive loads

Product data sheet Technical Description

RM17UBE16

Function Diagram

Control of Overvoltage and Undervoltage in Window 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 Output relay connections

Relay status: black color = energized.