Product datasheet

Specifications

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

RM17UBE16

Main

Range Of Product	Harmony Control Relays
Relay Type	Voltage control relay
Product Or Component 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 0.1...10 s, 0 + 10 % Tt- time delay upon fault
Switching Capacity In Va	1250 VA
Measurement Range	20...80 V AC/DC
Contacts Type And Composition	1 C/O

Complementary

Reset Time	1500 ms time delay
Maximum Switching Voltage	250 V AC/DC
Minimum Switching Current	10 mA at 5 V DC
Maximum Switching Current	5 A AC/DC
Supply Voltage Limits	15…100 V AC/DC
Power Consumption In Va	0…3.9 VA AC
Maximum Power Consumption In W	1.6 W DC
Control Circuit Frequency	50...60 Hz +/- 10 %
Immunity To Microbreaks	20 ms
Output Contacts	1 C/O
Nominal Output Current	5 A
Hysteresis	3 % fixed of threshold setting
Measurement Accuracy	+/- 10 % of the full scale value
Polarity	Non reversible polarity on DC supply
Delay At Power Up	1000 ms DC 500 ms AC
Maximum Measuring Cycle	150 ms measurement cycle as true rms value
Repeat Accuracy	+/- 0.5 % for input and measurement circuit +/- 1 % for time delay

Price is “List Price” and may be subject to a trade discount – check with your local distributor or retailer for actual price.

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Measurement Error	< 1 % over the whole range with voltage variation 0.2 %/°C with temperature variation
Quality Labels	CE
Insulation Resistance	> 500 MOhm at 500 V DC conforming to IEC 60255-5 > 500 MOhm at 500 V DC conforming to IEC 60664-1
Operating Position	Any position without derating
Local Signalling	LED (green) for power ON LED (yellow) for relay ON
Overvoltage Category	III conforming to IEC 60664-1
[Ui] Rated Insulation Voltage	250 V conforming to IEC 60664-1 400 V conforming to IEC 60664-1
Connections - Terminals	Screw terminals, 1 x 0.5...1 x 4 mm² (AWG 20...AWG 11) solid without cable end Screw terminals, 2 x 0.5...2 x 2.5 mm² (AWG 20...AWG 14) solid without cable end Screw terminals, 1 x 0.2...2 x 2.5 mm² (AWG 24...AWG 12) flexible with cable end Screw terminals, 2 x 0.2...2 x 1.5 mm² (AWG 24...AWG 16) flexible with cable end
Tightening Torque	0.6…1 N.m conforming to IEC 60947-1
Housing Material	Self-extinguishing plastic
Mounting Support	35 mm symmetrical DIN rail conforming to IEC 60715
Electrical Durability	100000 cycles
Mechanical Durability	30000000 cycles
Operating Rate	<= 360 operations/hour full load
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
[Un] Rated Nominal Voltage	, self-powered
Safety Reliability Data	MTTFd = 502.2 years B10d = 470000
Control Type	Without test button
Width	17.5 mm
Net Weight	0.08 kg

Environment

Electromagnetic Compatibility	Emission standard for industrial environments conforming to IEC 61000-6-4 Emission standard for residential, commercial and light-industrial environments conforming to IEC 61000-6-3 Immunity for industrial environments conforming to NF EN/IEC 61000-6-2
Ambient Air Temperature For Operation	-20…50 °C
Vibration Resistance	0.35 mm (f= 5…57.6 Hz) conforming to IEC 60068-2-6 1 gn (f= 57.6…150 Hz) conforming to IEC 60255-21-1
Shock Resistance	5 gn conforming to IEC 60068-2-27
Standards	IEC 60255-6
Product Certifications	C-Tick GOST GL CSA UL
Ambient Air Temperature For Storage	-40…70 °C

Relative Humidity	95 % at 55 °C conforming to IEC 60068-2-30
Ip Degree Of Protection	IP20 (terminals) conforming to IEC 60529 IP30 (casing) conforming to IEC 60529
Pollution Degree	3 conforming to IEC 60664-1
Directives	73/23/EEC - low voltage directive 89/336/EEC - electromagnetic compatibility
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 Height	2.700 cm
Package 1 Width	7.800 cm
Package 1 Length	9.600 cm
Package 1 Weight	83.000 g
Unit Type Of Package 2	S02
Number Of Units In Package 2	48
Package 2 Height	15.000 cm
Package 2 Width	30.000 cm
Package 2 Length	40.000 cm
Package 2 Weight	4.463 kg

Contractual warranty

Warranty	18 months

Sustainability

Green Premium™ label is Schneider Electric's commitment to delivering products with best-in-class environmental performance. Green Premium promises compliance with the latest regulations, transparency on environmental impacts, as well as circular and low-CO_2 products.

Guide to assessing product sustainability is a white paper that clarifies global eco-label standards and how to interpret environmental declarations.

Learn more about Green Premium >

Guide to assess a product's sustainability >

Transparency

RoHS/REACh

Well-being performance

Mercury Free	
Rohs Exemption Information	Yes

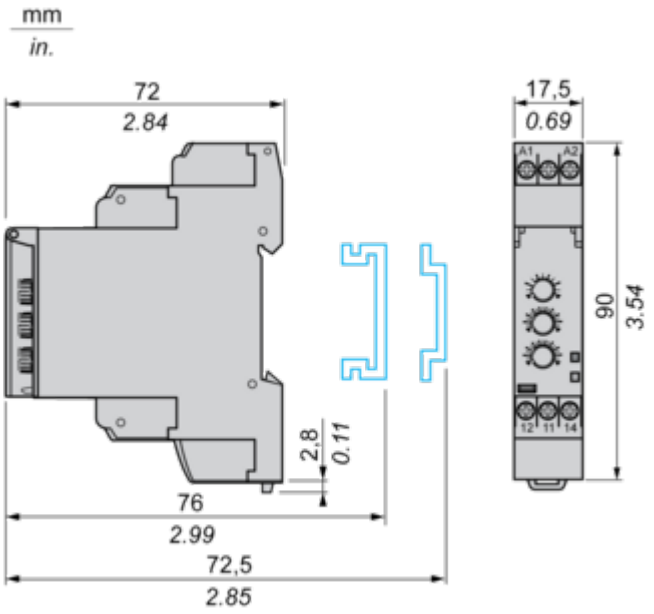
Certifications & Standards

Reach Regulation	REACh Declaration
Eu Rohs Directive	Pro-active compliance (Product out of EU RoHS legal scope)
China Rohs Regulation	China RoHS declaration
Environmental Disclosure	Product Environmental Profile
Weee	The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins
Circularity Profile	End of Life Information

Dimensions Drawings

Single-Phase and DC Voltage Control Relays

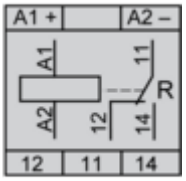
Dimensions and Mounting



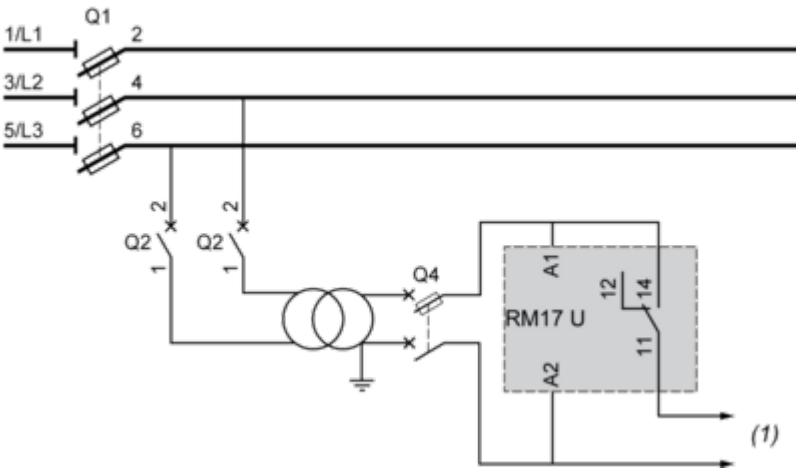
Connections and Schema

Single-Phase and DC Voltage Control Relays

Wiring Diagram



Application Scheme

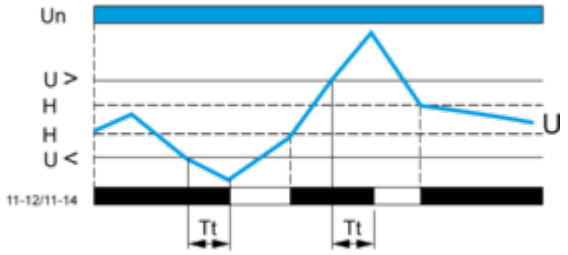


(1) To sensitive loads

Technical Description

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.