RM17UBE16

Harmony, Modular 1-phase voltage control relay, 5 A, 1 CO, 20...80 V AC/DC





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 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 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
Contacts type and composition	1 C/O

Complementary

Polarity Quality labels	Non reversible polarity on DC supply CE	
Polarity	·	
Measurement error	< 1 % over the whole range with voltage variation 0.2 %/°C with temperature variation	
Repeat accuracy	+/- 0.5 % input and measurement circuit +/- 1 % time delay	
Measurement accuracy	+/- 10 % of the full scale value	·
Delay at power up	1000 Ms DC 500 ms AC	
Hysteresis	3 % fixed 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 IEC 60664-1
Insulation resistance	> 500 MOhm 500 V DC IEC 60255-5 > 500 MOhm 500 V DC IEC 60664-1
[Ui] rated insulation voltage	250 V IEC 60664-1 400 V 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	5.318.85 lbf.in (0.61 N.m) IEC 60947-1
Housing material	Self-extinguishing plastic
Local signalling	For power ON LED (green) For relay ON LED (yellow)
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	0.69 in (17.5 mm)
Net Weight	0.18 lb(US) (0.08 kg)
Functionality	Overvoltage and undervoltage detection
Compatibility code	RM17

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	C-tick
	GOST
	GL
	CSA
	UL
Directives	73/23/EEC - low voltage directive
	89/336/EEC - electromagnetic compatibility
Ambient Air Temperature for Storage	-40158 °F (-4070 °C)
Ambient air temperature for operation	-4122 °F (-2050 °C)
Relative humidity	95 % 131 °F (55 °C) IEC 60068-2-30
Vibration resistance	0.35 mm 557.6 Hz)IEC 60068-2-6
	1 gn 57.6150 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	3389119405157
Nbr. of units in pkg.	1
Package weight(Lbs)	3.14 oz (89 g)
Returnability	No
Country of origin	ID

Packing Units

5	
Unit Type of Package 1	PCE
Package 1 Height	1.06 in (2.7 cm)
Package 1 width	3.07 in (7.8 cm)
Package 1 Length	3.78 in (9.6 cm)
Unit Type of Package 2	S02
Number of Units in Package 2	48
Package 2 Weight	10.86 lb(US) (4.927 kg)
Package 2 Height	5.91 in (15 cm)
Package 2 width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)

Offer Sustainability

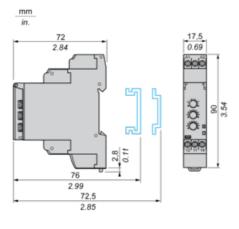
Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov
REACh Regulation	REACh Declaration
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
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	
Warranty	18 months

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Single-Phase and DC Voltage Control Relays

Dimensions and Mounting



Product data sheet Connections and Schema

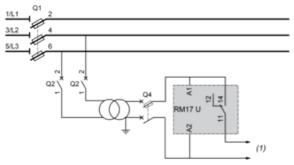
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Single-Phase and DC Voltage Control Relays

Wiring Diagram



Application Scheme



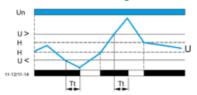
(1) To sensitive loads

Product data sheet Technical Description

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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.