Product datasheet Characteristics

RM22UB34

Voltage control relay 80V...300Vac/dc, 2 C/O



Price*: 102.47 GBP



Main

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Range of product	Zelio Control	
Product or component type	Modular measurement and control relays	
Relay type	Voltage control relay	
Network number of phases	1 phase	
Supply circuit type	DC	
Relay name	RM22UA	
Relay monitored parameters	Overvoltage and undervoltage detection	
Time delay type	Adjustable 0.130 s, +/- 10 % of the full scale value on crossing the threshold Tt	
Switching capacity in VA	2000 VA	
Measurement range	80300 V voltage AC/DC 50/60 Hz	

Complementary

Reset time	1500 ms at maximum voltage	
Maximum switching voltage	250 V AC	
Minimum switching current	10 mA at 5 V DC	
Maximum switching current	8 A AC	
[Us] rated supply voltage	110240 V AC 50/60 Hz	
Supply voltage limits	60280 V AC	
Power consumption in VA	5 VA AC	
Maximum power consumption in W	2 W DC	
Supply voltage frequency	5060 Hz +/- 10 %	
Output contacts	2 C/O	
Nominal output current	8 A	
Hysteresis	550 % adjustable of threshold setting	
Run-up delay at power-up	600 ms	
Maximum measuring cycle	250 ms measurement cycle as true rms value	
Repeat accuracy +/- 0.5 % for input and measurement circuit +/- 2 % for time delay		

Measurement error	< 1 % over the whole range with voltage variation 0.2 %/°C with temperature variation	
Response time	<= 500 ms	
Overvoltage category	III conforming to IEC 60664-1	
Insulation resistance	> 100 MOhm at 500 V DC conforming to IEC 60255-27	
Mounting position	Any position	
Connections - terminals	Screw terminals, 2 x 0.52 x 2.5 mm² (AWG 20AWG 14) solid without cable end Screw terminals, 2 x 0.22 x 1.5 mm² (AWG 24AWG 16) flexible with cable end Screw terminals, 1 x 0.51 x 3.3 mm² (AWG 20AWG 12) solid without cable end Screw terminals, 1 x 0.21 x 2.5 mm² (AWG 24AWG 14) flexible with cable end	
Tightening torque	0.61 N.m conforming to IEC 60947-1	
Housing material	Self-extinguishing plastic	
Status LED	LED (yellow)relay ON: LED (green)power ON:	
Mounting support	35 mm DIN rail conforming to EN/IEC 60715	
Electrical durability	100000 cycles	
Mechanical durability	10000000 cycles	
Utilisation category	AC-15 conforming to IEC 60947-5-1 DC-13 conforming to IEC 60947-5-1 AC-1 conforming to IEC 60947-4-1 DC-1 conforming to IEC 60947-4-1	
Safety reliability data	MTTFd = 433.7 years B10d = 400000	
Contacts material	Cadmium free	
Width	22.5 mm	
Product weight	0.09 kg	

Environment

Immunity to microbreaks	20 ms	
Electromagnetic compatibility	Immunity for residential, commercial and light-industrial environments conforming to EN/IEC 61000-6-1	
	Immunity for industrial environments conforming to EN/IEC 61000-6-2	
	Emission standard for residential, commercial and light-industrial environments conforming to EN/IEC 61000-6-3	
	Emission standard for industrial environments conforming to EN/IEC 61000-6-4	
	Electrostatic discharge - test level: 6 kV level 3 (contact discharge) conforming to IEC 61000-4-2 Electrostatic discharge - test level: 8 kV level 3 (air discharge) conforming to IEC 61000-4-2 Radiated radio-frequency electromagnetic field immunity test - test level: 10 V/m level 3 conforming	
	to IEC 61000-4-3	
	Electrical fast transient/burst immunity test - test level: 4 kV level 4 (direct) conforming to IEC 61000-4-4	
	Electrical fast transient/burst immunity test - test level: 2 kV level 4 (capacitive coupling) conforming to IEC 61000-4-4	
	Surge immunity test - test level: 4 kV level 4 (common mode) conforming to IEC 61000-4-5 Surge immunity test - test level: 2 kV level 4 (differential mode) conforming to IEC 61000-4-5	
	Conducted and radiated emissions class B group 1 conforming to CISPR 11	
	Conducted and radiated emissions class B conforming to CISPR 22	
Standards	EN/IEC 60255-1	
Product certifications	CCC	
	China RoHS	
	CE	
	CSA	
	EAC	
	UL	
	GL	
	RCM	
Ambient air temperature for storage	-4070 °C	
Ambient air temperature for operation	-2050 °C at 60 Hz	
·	-2060 °C at 50 Hz AC/DC	
Relative humidity	9397 % at 2555 °C conforming to IEC 60068-2-30	
Vibration resistance	0.075 mm (f= 1058.1 Hz) not in operation conforming to IEC 60068-2-6	
	1 gn (f= 1058.1 Hz) not in operation conforming to IEC 60068-2-6	
	0.035 mm (f= 58.1150 Hz) in operation conforming to IEC 60068-2-6	
	0.5 gn (f= 58.1150 Hz) in operation conforming to IEC 60068-2-6	

Shock resistance	hock resistance 15 gn (duration = 11 ms) for not in operation conforming to IEC 60068-2-27 5 gn (duration = 11 ms) for in operation conforming to IEC 60068-2-27	
IP degree of protection	IP20 (terminals) conforming to IEC 60529 IP40 (housing) conforming to IEC 60529 IP50 (front panel) conforming to IEC 60529	
Pollution degree	3 conforming to IEC 60664-1	
Dielectric test voltage	2.5 kV, 1 min AC 50 Hz conforming to IEC 60255-27	

Offer Sustainability

Green Premium product	
Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration	
Yes	
Yes	
China RoHS declaration	
Product Environmental Profile	
End of Life Information	
The product must be disposed on European Union markets following specific waste collection and never end up in rubbish bins	

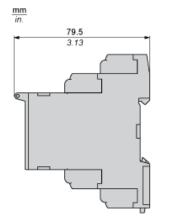
Contractual warranty

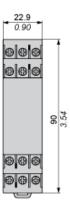
Warranty	18 months	

Product datasheet Dimensions Drawings

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Dimensions



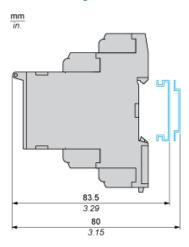


Product datasheet Mounting and Clearance

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Mounting and Clearance

Rail Mounting

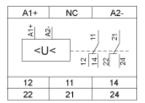


Product datasheet Connections and Schema

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Voltage Control Relay

Wiring Diagram



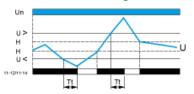
A1+,A2-: Voltage to be monitored E1,E2,E3,M: Voltages to be measured 11-14,12: 1st C/O contact of output relay 21-24,22: 2nd C/O contact of output relay

Product datasheet 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.