# Product datasheet Characteristics

## RM22LG11MT

Level control relay RM22-L - 380..415 V AC - 1 C/



Price\* : 58.08 GBP



### Main

Range of product	Zelio Control	
Product or component type	Modular measurement and control relays	
Relay type	Level control relay	
Relay name	RM22L	
Relay monitored parameters	Detection by resistive probes	
Time delay type	Without	
Switching capacity in VA	2000 VA	
Measurement range	5100 kOhm	

## Complementary

Reset time	1750 ms	
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	380415 V AC 50/60 Hz	
Supply voltage limits	323456.5 V AC	4
Operating limits	- 15 % + 10 % Un	
Power consumption in VA	8 VA AC	
Output contacts	2 C/O	-
Nominal output current	8 A	
Run-up delay at power-up	0.6 s	
Maximum electrode voltage	12 V AC	
Maximum electrode current	1 mA	
Repeat accuracy	+/- 2 % for time delay	-
Measurement error	< 1 % over the whole range with voltage variation 0.05 %/°C with temperature variation	·
Sensitivity scale	5100 kOhm St (Standard Sensitivity)	

Sensitivity adjustment	5100 %
Maximum supply current for sensors	1 mA
Maximum cable distance between devices	1000 m between probe and delay
Cable capacitance	1 nF at HS (High Sensitivity) for probe cable 2.2 nF at St (Standard Sensitivity) for probe cable 4.7 nF at LS (Low Sensitivity) for probe cable
Overvoltage category	III conforming to IEC 60664-1
Insulation resistance	> 100 MOhm at 500 V DC conforming to IEC 60255-27
Insulation	Between supply and measurement
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 = 125.5 years B10d = 120000
Contacts material	Cadmium free
Width	22.5 mm
Product weight	0.1 kg

## Environment

Immunity to microbreaks	100 ms DC 90 ms AC
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	CSA
Product certifications	GL
	RCM
	UL
	China RoHS
	EAC
	CE
	CCC
Ambient air temperature for storage	-4070 °C

nbient 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	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

Sustainable offer status	Green Premium product  Pro-active compliance (Product out of EU RoHS legal scope) EU RoHS Declaration Yes	
EU RoHS Directive		
Mercury free		
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	

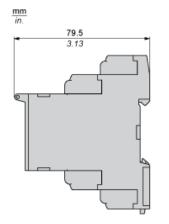
## Contractual warranty

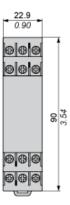
Warranty	18 months	

# Product datasheet Dimensions Drawings

## RM22LG11MT

## Dimensions



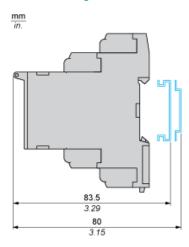


# Product datasheet Mounting and Clearance

## RM22LG11MT

## Mounting and Clearance

## Rail Mounting

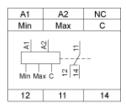


# Product datasheet Connections and Schema

## RM22LG11MT

## Level Control Relay

### Wiring Diagram



A1,A2 : Supply voltage Max : High level Min : Low level

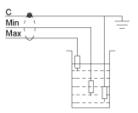
C : References or Tank earth electrode 11-14,12 : 1st C/O contact of output relay

# Product datasheet Connections and Schema

## RM22LG11MT

## Control by Electrodes

### Wiring Diagram



A1,A2 : Supply voltage Max : High level Min : Low level

C : References or Tank earth electrode 11-14,12 : 1st C/O contact of output relay

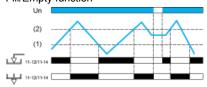
# Product datasheet Technical Description

## RM22LG11MT

## **Function Diagrams**

#### Control of Two Levels

## Fill/Empty function



### Legend

Un Nominal supply voltage

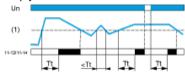
- (1) Min. level
- (2) Max. level

11-12/11-14, 21-22/21-24 Output relay connections

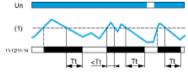
Relay status: black color = energized.

### Control of One Level

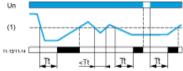
#### Empty function T on



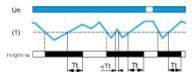
### Empty function T off



#### Fill function T on



#### Fill function T off



### Legend

Tt Time delay after crossing of threshold

Un Supply voltage

(1) Level threshold

11-12/11-14, 21-22/21-24 Output relay connections

Relay status: black color = energized.