## Product datasheet Characteristics

### RE22R1QMQ

### star-delta timing relay - 230VAC/440VAC - 1 C/O



Price\*: 33.53 GBP



#### Main

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Range of product	Zelio Time	
Product or component type	Modular timing relay	
Discrete output type	Relay	- Dud
Device short name	RE22	ert.
Nominal output current	8 A	, J

### Complementary

Contacts type and composition	1 C/O timed contact	
Time delay type	Q	
Time delay range	110 h 10100 h 660 s 110 min 0.11 s 110 s 660 min	
Control type	Rotary knob front panel	
[Us] rated supply voltage	380440 V AC 230240 V AC	
Voltage range	0.851.1 Us	
Supply frequency	5060 Hz +/- 5 %	
Connections - terminals	Screw terminals, 2 x 1.5 mm² with cable end Screw terminals, 2 x 2.5 mm² without cable end	
Tightening torque	0.61 N.m conforming to IEC 60947-1	
Housing material	Self-extinguishing	
Repeat accuracy	+/- 0.5 % conforming to IEC 61812-1	
Temperature drift	+/- 0.05 %/°C	
Voltage drift	+/- 0.2 %/V	
Setting accuracy of time delay	+/- 10 % of full scale at 25 °C conforming to IEC 61812-1	
Control signal pulse width	30 ms	

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Insulation resistance	100 MOhm at 500 V DC conforming to IEC 60664-1	
Recovery time	120 ms on de-energisation	
Immunity to microbreaks	10 ms	
Power consumption in VA	8 VA at 230240 V 17 VA at 380440 V	
Breaking capacity	2000 VA	
Minimum switching current	10 mA at 5 V	
Maximum switching current	8 mA	
Maximum switching voltage	250 V	
Electrical durability	100000 cycles for resistive load, 8 A at 250 V, AC	
Mechanical durability	10000000 cycles	
Rated impulse withstand voltage	5 kV for 1.250 μs conforming to IEC 60664-1 5 kV conforming to IEC 61812-1	
Power on delay	100 ms	
Safety reliability data	B10d = 260000 MTTFd = 273.9 years	
Mounting position	Any position in relation to normal vertical mounting plane	
Mounting support	35 mm DIN rail conforming to EN/IEC 60715	
Status LED	LED green (flashing) for timing in progress LED green (steady) for power ON LED yellow for relay energised	
Width	22.5 mm	
Product weight	0.093 kg	

Environment		
Dielectric strength	2.5 kV for 1 mA/1 minute at 50 Hz conforming to IEC 61812-1	
Standards	EN 61000-6-4 IEC 61812-1 EN 61000-6-1 EN 61000-6-3 EN 61000-6-2	
Directives	2004/108/EC - electromagnetic compatibility 2006/95/EC - low voltage directive	
Product certifications	CULus RCM CSA China RoHS EAC GL CCC	
Ambient air temperature for operation	-2060 °C	
Ambient air temperature for storage	-3060 °C	
IP degree of protection	IP40 housing: conforming to IEC 60529 IP20 terminal block: conforming to IEC 60529 IP40 front face: conforming to IEC 60529	
Vibration resistance	20 m/s² (f= 10150 Hz) conforming to IEC 60068-2-6	
Shock resistance	15 gn for 11 ms conforming to IEC 60068-2-27	
Relative humidity	93 %, without condensation conforming to IEC 60068-2-30	
Electromagnetic compatibility	Electrostatic discharge immunity test - test level: 6 kV level 3 (contact discharge) conforming to EN/ IEC 61000-4-2 Electrostatic discharge immunity test - test level: 8 kV level 3 (air discharge) conforming to EN/IEC 61000-4-2 Fast transients immunity test - test level: 1 kV level 3 (capacitive connecting clip) conforming to IEC 61000-4-4 Fast transients immunity test - test level: 2 kV level 3 (direct contact) conforming to IEC 61000-4-4 Surge immunity test - test level: 1 kV level 3 (differential mode) conforming to IEC 61000-4-5 Surge immunity test - test level: 2 kV level 3 (common mode) conforming to IEC 61000-4-5 Radiated radio-frequency electromagnetic field immunity test - test level: 10 V level 3 (0.1580 MHz) conforming to IEC 61000-4-6	

Electromagnetic field immunity test - test level: 10 V/m level 3 (80 MHz...1 GHz) conforming to IEC 61000-4-3  $\,$ 

Immunity to microbreaks and voltage drops - test level: 30 % (500 ms) conforming to IEC 61000-4-11 Immunity to microbreaks and voltage drops - test level: 100 % (20 ms) conforming to IEC 61000-4-11 Conducted and radiated emissions class B conforming to EN 55022

### Offer Sustainability

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

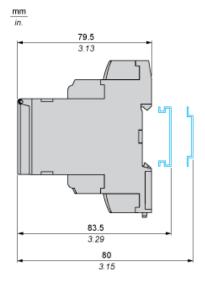
### Contractual warranty

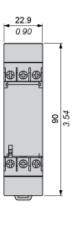
Warranty	18 months	

# Product datasheet Dimensions Drawings

## RE22R1QMQ

### Dimensions

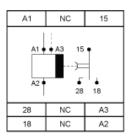




## Product datasheet Connections and Schema

## RE22R1QMQ

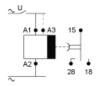
### Internal Wiring Diagram



## Product datasheet Connections and Schema

## RE22R1QMQ

### Wiring Diagram



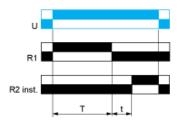
## Product datasheet Technical Description

### RE22R1QMQ

### Star-delta Timing Relay

#### Description

After power-up, the star contact closes instantly and timing T starts, At the end of timing period, the star contact opens. After a t ms pause, the delta contact closes and remains in this position.



t: 20, 40, 60, 80, 100, 120, 140 ms

#### Legend

Relay de-energised

Relay energised

Output open

Output closed

R1: Star contact output
R2: Delta contact output
T: Timing period

t: Delay to switch ON Delta contact output

U: Supply