Product datasheet
Characteristics

RE22R1QMQ
star-delta timing relay - 230VAC/440VAC - 1 C/O

Main

Range of product	Zelio Time
Product or component type	Modular timing relay
Discrete output type	Relay
Device short name	RE22
Nominal output current	8 A

Complementary

Contacts type and composition	1 C/O timed contact
Time delay type	Q
Time delay range	0.1...1 s 1...10 h 1...10 min 1...10 s 10...100 h 6...60 min 6...60 s
Control type	Front panel rotary knob
[Us] rated supply voltage	380...440 V AC 230...240 V AC
Voltage range	0.85...1.1 Us
Supply frequency	50...60 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	0.6...1 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
Minimum pulse duration	30 ms 100 ms (under load)
Insulation resistance	100 MOhm at 500 V DC conforming to IEC 60664-1
Reset time	120 ms (on de-energisation)
Immunity to microbreaks	> 10 ms
Power consumption in VA	8 VA at 230...240 V 17 VA at 380...440 V
Breaking capacity	2000 VA
Minimum switching current	10 mA 5 V
Maximum switching current	8 mA
Maximum switching voltage	250 V
Electrical durability	100000 cycles for 8 A at 250 V AC for resistive load
Mechanical durability	10000000 cycles
[Uimp] rated impulse withstand voltage	5 kV for 1.2...50 µs conforming to IEC 60664-1 5 kV conforming to IEC 61812-1
Delay response	< 100 ms
Safety reliability data	MTTFd = 273.9 years B10d = 260000

Mounting position	Any position in relation to normal vertical mounting plane
Mounting support	35 mm DIN rail conforming to EN/IEC 60715
Status LED	Green LED (flashing) for timing in progress Green LED (steady) for power ON Yellow LED for relay energised
Width	22.5 mm
Product weight	0.093 kg

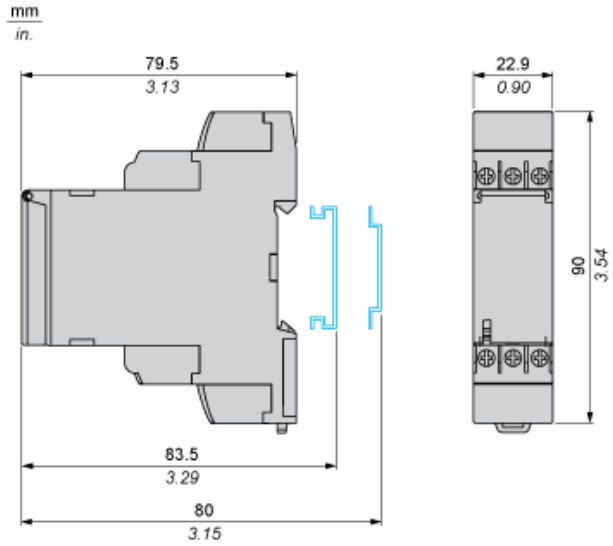
Environment

dielectric strength	2.5 kV for 1 mA/1 minute at 50 Hz conforming to IEC 61812-1
standards	EN 61000-6-1 EN 61000-6-2 EN 61000-6-3 EN 61000-6-4 IEC 61812-1
directives	2004/108/EC - electromagnetic compatibility 2006/95/EC - low voltage directive
product certifications	CCC CE CSA CULus GL RCM EAC China RoHS
ambient air temperature for operation	-20...60 °C
ambient air temperature for storage	-30...60 °C
IP degree of protection	IP20 (terminal block) conforming to IEC 60529 IP40 (housing) conforming to IEC 60529 IP40 (front face) conforming to IEC 60529
vibration resistance	20 m/s² (f = 10...150 Hz) conforming to IEC 60068-2-6
shock resistance	15 gn (duration = 11 ms) conforming to IEC 60068-2-27
relative humidity	93 %, without condensation conforming to IEC 60068-2-30
electromagnetic compatibility	Conducted and radiated emissions, class B conforming to EN 55022 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 - 0.15...80 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

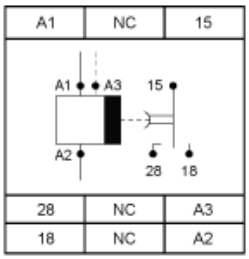
Offer Sustainability

Sustainable offer status	Green Premium product
RoHS (date code: YYWW)	Compliant - since 1650 - Schneider Electric declaration of conformity
REACh	Reference not containing SVHC above the threshold
Product environmental profile	Available
Product end of life instructions	Available

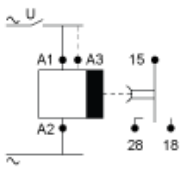
Dimensions



Internal Wiring Diagram



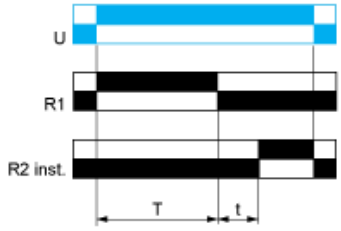
Wiring Diagram



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