

RE22R1QCMU

Star-Delta Timing Relay - 0.05s...300s - 24V DC /
24...240V AC - 1C/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, cadmium free
Time delay type	Qc
Time delay range	0.05...0.5 s 0.1...1 s 0.3...3 s 1...10 s 10...100 s 3...30 s 30...300 s
Control type	Rotary knob Diagnostic button
[Us] rated supply voltage	24 V DC 24...240 V AC at 50/60 Hz
Input voltage	≤ 2.4 V
Voltage range	0.85...1.1 Us
Supply frequency	50...60 Hz (+/- 5 %)
Connections - terminals	Screw terminals : 1 x 0.5...1 x 3.3 mm ² , AWG 20...AWG 12 solid cable without cable end Screw terminals : 2 x 0.5...2 x 2.5 mm ² , AWG 20...AWG 14 solid cable without cable end Screw terminals : 1 x 0.2...1 x 2.5 mm ² , AWG 24...AWG 14 flexible cable with cable end Screw terminals : 2 x 0.2...2 x 1.5 mm ² , AWG 24...AWG 16 flexible cable with 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
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	35 VA at 240 V AC
Power consumption in W	0.6 W at 24 V DC
Switching capacity in VA	2000 VA
Minimum switching current	10 mA 5 V DC
Maximum switching current	8 A
Maximum switching voltage	250 V AC

The information provided in this documentation contains general descriptions and/or technical characteristics of the products contained herein. This information is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications. It is the duty of any such user or integrator to perform the appropriate and complete risk analysis, evaluation and testing of the products with respect to the relevant specific application or use thereof. Neither Schneider Electric Industries SAS nor any of its affiliates or subsidiaries shall be responsible or liable for misuse of the information contained herein.

Electrical durability	100000 cycles for 8 A at 250 V AC-1 100000 cycles for 2 A at 24 V DC-1
Mechanical durability	10000000 cycles
[Uimp] rated impulse withstand voltage	5 kV for 1.2...50 µs conforming to IEC 60664-1
Delay response	< 100 ms
Creepage distance	4 kV/3 conforming to IEC 60664-1
Overvoltage category	III conforming to IEC 60664-1
Safety reliability data	B10d = 270000 MTTFd = 285.3 years
Mounting position	Any position
Mounting support	35 mm DIN rail conforming to EN/IEC 60715
Status LED	Green LED backlight (steady) for dial pointer indication Yellow LED (steady) for output relay energised Yellow LED (fast flashing) for timing in progress and output relay de-energised Yellow LED (slow flashing) for timing in progress and output relay energised
Width	22.5 mm
Product weight	0.08 kg

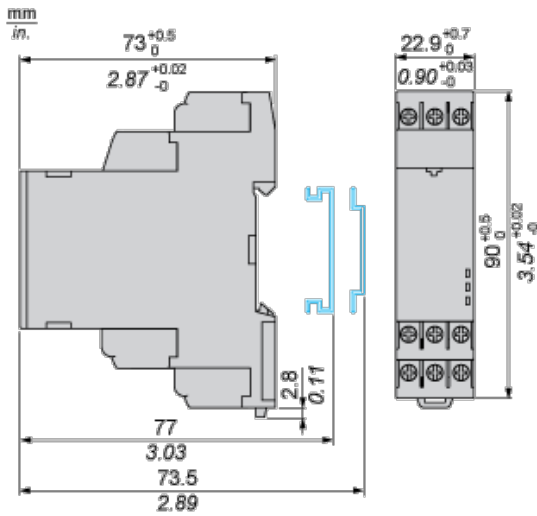
Environment

dielectric strength	2.5 kV for 1 mA/1 minute at 50 Hz between relay output and power supply with basic insulation conforming to IEC 61812-1
standards	IEC 61812-1 UL 508
directives	2004/108/EC - electromagnetic compatibility 2006/95/EC - low voltage directive
product certifications	CCC CE CSA GL UL RCM EAC China RoHS
ambient air temperature for operation	-20...60 °C
ambient air temperature for storage	-40...70 °C
IP degree of protection	IP20 (terminals) conforming to IEC 60529 IP40 (housing) conforming to IEC 60529 IP50 (front face) conforming to IEC 60529
pollution degree	3 conforming to IEC 60664-1
vibration resistance	20 m/s ² (f = 10...150 Hz) conforming to IEC 60068-2-6
shock resistance	15 gn (not operating) (duration = 11 ms) conforming to IEC 60068-2-27 5 gn (in operation) (duration = 11 ms) conforming to IEC 60068-2-27
relative humidity	95 % at 25...55 °C
electromagnetic compatibility	Fast transients immunity test (test level: 1 kV, level 3 - capacitive connecting clip) 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 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 - 80 MHz...1 GHz) conforming to IEC 61000-4-3 Conducted RF disturbances (test level: 10 V, level 3 - 0.15...80 MHz) conforming to IEC 61000-4-6 Fast transient bursts (test level: 2 kV, level 3 - direct contact) conforming to IEC 61000-4-4 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

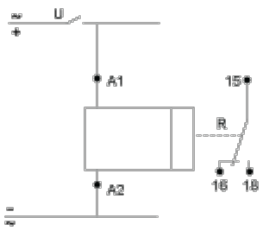
Offer Sustainability

Sustainable offer status	Green Premium product
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Dimensions



Wiring Diagram



Function Qc: Star-Delta Relay (1 CO)

Description

On energisation of power supply, the output R initializes at its initial state such that energizes STAR CONTACTOR + MAIN CONTACTOR and the timing T starts (STAR connection time duration starts). At the end of the timing period T, the output R closes such that deenergizes STAR CONTACTOR and deenergizes the power supply causes t transition time starts. At the end of the transition time, the output R reverts to its initial state such that energizes DELTA CONTACTOR.

Function: 1 Output



t : 50 ms

Legend

Relay de-energised

Relay energised

Output open

Output closed

U - Supply

T - Timing period

t - Delay to switch ON Delta contact output

R1 - Star-Delta contact output