



## 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 3...30 s 10...100 s 30...300 s
Control type	Diagnostic button Rotary knob
[Us] rated supply voltage	24...240 V AC at 50/60 Hz 24 V DC
Release input voltage	<= 2.4 V
Voltage range	0.85...1.1 Us
Supply frequency	50...60 Hz (+/- 5 %)
Connections - terminals	Screw terminals : 2 x 0.2...2 x 1.5 mm <sup>2</sup> , AWG 24...AWG 16 flexible cable with cable end Screw terminals : 1 x 0.2...1 x 2.5 mm <sup>2</sup> , AWG 24...AWG 14 flexible cable with cable end Screw terminals : 2 x 0.5...2 x 2.5 mm <sup>2</sup> , AWG 20...AWG 14 solid cable without cable end Screw terminals : 1 x 0.5...1 x 3.3 mm <sup>2</sup> , AWG 20...AWG 12 solid cable 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
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	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

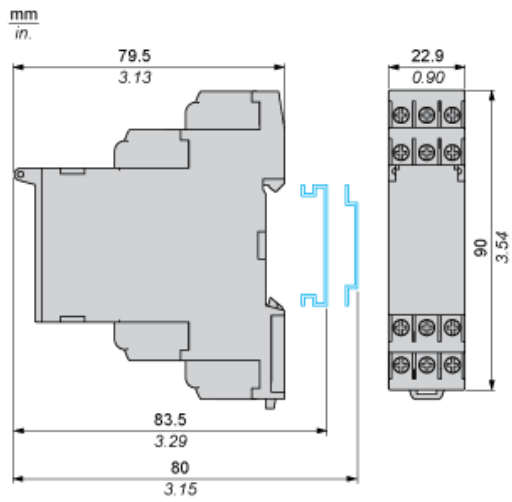
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Electrical durability	100000 cycles for 2 A at 24 V DC-1 100000 cycles for 8 A at 250 V AC-1
Mechanical durability	10000000 cycles
Rated impulse withstand voltage	5 kV for 1.2...50 µs conforming to IEC 60664-1
Power on delay	< 100 ms
Creepage distance	4 kV/3 conforming to IEC 60664-1
Overvoltage category	III conforming to IEC 60664-1
Mounting position	Any position
Mounting support	35 mm DIN rail conforming to EN/IEC 60715
Status LED	Yellow LED (slow flashing) for timing in progress and output relay energised Yellow LED (fast flashing) for timing in progress and output relay de-energised Yellow LED (steady) for output relay energised Green LED backlight (steady) for dial pointer indication
Product weight	0.08 kg

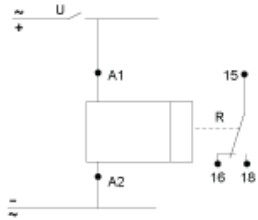
## Environment

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 IP50 (front face) conforming to IEC 60529 IP40 (housing) conforming to IEC 60529
Pollution degree	3 conforming to IEC 60664-1
Vibration resistance	20 m/s <sup>2</sup> (f = 10...150 Hz) conforming to IEC 60068-2-6
Shock resistance	5 gn (in operation) (duration = 11 ms) conforming to IEC 60068-2-27 15 gn (not operating) (duration = 11 ms) conforming to IEC 60068-2-27
Relative humidity	95 % at 25...55 °C
Electromagnetic compatibility	Immunity to microbreaks and voltage drops (test level: 100 % - 20 ms) conforming to IEC 61000-4-11 Immunity to microbreaks and voltage drops (test level: 30 % - 500 ms) conforming to IEC 61000-4-11 Fast transient bursts (test level: 2 kV, level 3 - direct contact) conforming to IEC 61000-4-4 Conducted RF disturbances (test level: 10 V, level 3 - 0.15...80 MHz) conforming to IEC 61000-4-6 Radiated radio-frequency electromagnetic field immunity test (test level: 10 V/m, level 3 - 80 MHz...1 GHz) conforming to IEC 61000-4-3 Electrostatic discharge (test level: 8 kV, level 3 - air discharge) conforming to IEC 61000-4-2 Electrostatic discharge (test level: 6 kV, level 3 - contact discharge) conforming to IEC 61000-4-2 Surge immunity test (test level: 2 kV, level 3 - common mode) conforming to IEC 61000-4-5 Surge immunity test (test level: 1 kV, level 3 - differential mode) conforming to IEC 61000-4-5 Fast transients immunity test (test level: 1 kV, level 3 - capacitive connecting clip) conforming to IEC 61000-4-4

Dimensions



## Wiring Diagram



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Function Qc: Star-Delta Relay (1 CO)

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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

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T Timing period

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t Delay to switch ON Delta contact output

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R1 Star-Delta contact output

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