



Main

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|---------------------------|----------------------|
| 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

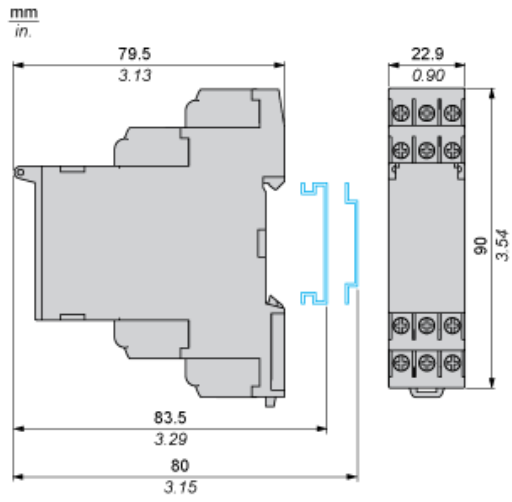
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| Contacts type and composition | 2 C/O timed contact, cadmium free |
| Time delay type | Qt |
| Time delay range | 0.3...3 s 1...10 s 0.05...1 s 3...30 s 10...100 s 30...300 s 3...30 min 30...300 min 3...30 h 30...300 h |
| Control type | Diagnostic button Rotary knob |
| [Us] rated supply voltage | 24...240 V AC/DC at 50/60 Hz |
| 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 ² , AWG 24...AWG 16 flexible cable with 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 0.5...2 x 2.5 mm ² , AWG 20...AWG 14 solid cable without cable end Screw terminals : 1 x 0.5...1 x 3.3 mm ² , 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 | 3 VA at 240 V AC |
| Power consumption in W | 1.5 W at 240 V DC |
| Switching capacity in VA | 2000 VA |
| Minimum switching current | 10 mA 5 V DC |
| Maximum switching current | 8 A |

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| Maximum switching voltage | 250 V AC |
| 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 | 0.105 kg |

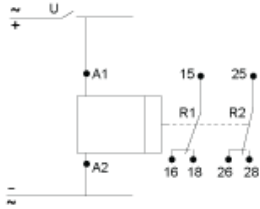
Environment

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|---------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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 | IP50 (front panel) conforming to IEC 60529 IP20 (terminals) conforming to IEC 60529 IP40 (housing) 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 | 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



Function Qt: Star-Delta Relay (2 CO with Split Common)

Description

On energisation of power supply, the output R1 & R2 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 R1 closes such that deenergizes STAR CONTACTOR and causes t transition time starts. At the end of the transition time, the output R2 closes such that energizes DELTA CONTACTOR.

Function: 2 Outputs



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

Legend

Relay de-energised

Relay energised

Output open

Output closed

U Supply

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T Timing period

-

t Delay to switch ON Delta contact output

-

R1 Star contact output

-

R2 Delta contact output

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