## Product data sheet Characteristics

## RE22R1QCMU

Star-Delta Timing Relay - 0.05s...300s - 24V DC / 24...240V AC - 1C/O





#### Main

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Range of product	Zelio Time	
Product or component type	Modular timing relay	in the state of th
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	0.050.5 s 0.11 s 0.33 s 110 s 10100 s 330 s 30300 s	and to be used for determining
Control type	Rotary knob Diagnostic button	
[Us] rated supply voltage	24240 V AC at 50/60 Hz 24 V DC	anbstitute for and
Release input voltage	<= 2.4 V	  
Voltage range	0.851.1 Us	
Supply frequency	5060 Hz (+/- 5 %)	- ter
Connections - terminals	Screw terminals: 1 x 0.51 x 3.3 mm², AWG 20AWG 12 solid cable without cable end Screw terminals: 2 x 0.52 x 2.5 mm², AWG 20AWG 14 solid cable without cable end Screw terminals: 1 x 0.21 x 2.5 mm², AWG 24AWG 14 flexible cable with cable end Screw terminals: 2 x 0.22 x 1.5 mm², AWG 24AWG 16 flexible cable with cable end	sciainer This documentation is not intended
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	
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	
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	
Rated impulse withstand voltage	5 kV for 1.250 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	
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

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	-2060 °C	
Ambient air temperature for storage	-4070 °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/s² (f = 10150 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 2555 °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

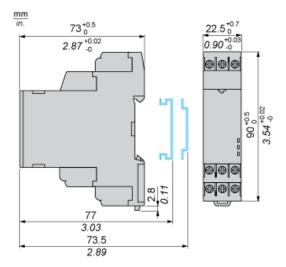
### Offer Sustainability

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

# Product data sheet Dimensions Drawings

## RE22R1QCMU

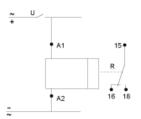
## Dimensions



## Product data sheet Connections and Schema

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## Wiring Diagram



## Product data sheet Technical Description

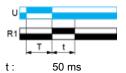
## RE22R1QCMU

### 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



#### 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