Product data sheet Characteristics

RE22R2QEMR

Star-Delta Timing Relay - 0.3s...30s - 24...240V AC/DC - 2C/O





Main

Main		secific user applications
Main Renge of product	Zelio Time	for spe
Range of product		t rets
Product or component type	Modular timing relay	ō
Discrete output type	Relay	D S
Device short name	RE22	of the
Nominal output current	8 A	reliability -
Complementary		tability or reli
Contacts type and composition	2 C/O timed contact cadmium free	ta Dili

Complementary

Contacts type and composition	2 C/O timed contact, cadmium free	
Time delay type	Qe	
Time delay range	0.330 s	
Control type	Rotary knob Diagnostic button	
[Us] rated supply voltage	24240 V AC/DC at 50/60 Hz	
Input voltage	<= 2.4 V	
Voltage range	0.851.1 Us	
Supply frequency	5060 Hz (+/- 5 %)	
Connections - terminals	Screw terminals : 1 x 0.51 x 3.3 mm ² , AWG 20AWG 12 solid cable without cable end Screw terminals : 2 x 0.52 x 2.5 mm ² , AWG 20AWG 14 solid cable without cable end Screw terminals : 1 x 0.21 x 2.5 mm ² , AWG 24AWG 14 flexible cable with cable end Screw terminals : 2 x 0.22 x 1.5 mm ² , AWG 24AWG 16 flexible cable with cable end	
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	



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
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	1000000 cycles
[Uimp] rated impulse withstand voltage	5 kV for 1.250 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 = 320000 MTTFd = 353.8 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	0.09 kg
Time delay type	Qe
Contacts type and composition	2 C/O
Functionality	Star-delta starter timing

Environment

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 UL 508
IEC 61812-1
2004/108/EC - electromagnetic compatibility 2006/95/EC - low voltage directive
CSA CE GL China RoHS UL RCM CCC EAC
-2060 °C
-4070 °C
IP20 (terminals) conforming to IEC 60529 IP40 (housing) conforming to IEC 60529 IP50 (front panel) conforming to IEC 60529
3 conforming to IEC 60664-1
20 m/s ² (f = 10150 Hz) conforming to IEC 60068-2-6
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
95 % at 2555 °C
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

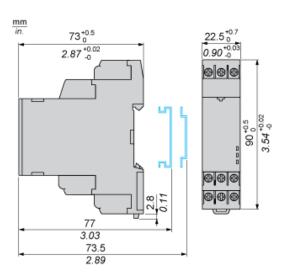
Offer Sustainability

Sustainable offer status	Green Premium product	
RoHS (date code: YYWW)	Compliant - since 1520 - 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 end of life instructions	Available	

Product data sheet Dimensions Drawings

RE22R2QEMR

Dimensions

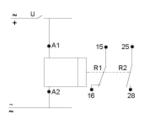


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Product data sheet **Connections and Schema**

RE22R2QEMR

Wiring Diagram



RE22R2QEMR

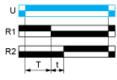
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Function Qe: Star-Delta Relay (1 NC + 1 NO with Split Common)

Description

On energisation of power supply, the output R1 is 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 open Output closed

U - Supply

- T Timing period
- t Delay to switch ON Delta contact output
- R1 Star contact output
- R2 Delta contact output