

single function relay, Harmony Timer Relays, 8A, 2CO, 0.3s…30s, star delta, 24...240V AC DC

RE22R2QEMR

## Main

Range of product	Harmony Timer Relays
Discrete output type	Relay
Product or component type	Modular timing relay
Device short name	RE22
Nominal output current	8 A

# Complementary

Contacts type and composition	2 C/O timed contact, cadmium free
Time delay type	Star-delta
Time delay range	0.330 s
Control type	Rotary knob Diagnostic button
[Us] rated supply voltage	24240 V AC/DC 50/60 Hz
Release 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 mm² (AWG 20AWG 12) solid without cable end Screw terminals, 2 x 0.52 x 2.5 mm² (AWG 20AWG 14) solid without cable end Screw terminals, 1 x 0.21 x 2.5 mm² (AWG 24AWG 14) flexible with cable end Screw terminals, 2 x 0.22 x 1.5 mm² (AWG 24AWG 16) flexible 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
Time delay type	Star-delta - Qe-Star-delta relay (1 NC + 1 NO outputs with split common)
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 at 5 V DC
Maximum switching current	8 A
Maximum switching voltage	250 V AC
Electrical durability	100000 cycles, 8 A at 250 V, AC-1 100000 cycles, 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 = 320000 MTTFd = 353.8 years
Mounting position	Any position
Mounting support	35 mm DIN rail conforming to IEC 60715
Status LED	LED backlight green (steady) for dial pointer indication LED yellow (steady) for output relay energised LED yellow (fast flashing) for timing in progress and output relay de-energised LED yellow (slow flashing) for timing in progress and output relay energised
Function available	Qe-Star-delta relay (1 NC + 1 NO outputs with split common)-2 C/O
Width	22.5 mm
Net weight	0.09 kg
Control type	With test button
Number of functions	1

# **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	2006/95/EC - low voltage directive 2004/108/EC - electromagnetic compatibility
Product certifications	CE CSA GL EAC UL RCM CCC
Ambient air temperature for operation	-2060 °C
Ambient air temperature for storage	-4070 °C
IP degree of protection	IP40 housing: conforming to IEC 60529 IP20 terminals: conforming to IEC 60529 IP50 front panel: 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 for 11 ms conforming to IEC 60068-2-27 5 gn in operation for 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

# **Packing Units**

PCE
1
2.5 cm
8.3 cm
9.6 cm
100.0 g
S02
40
15.0 cm
30.0 cm
40.0 cm
4.388 kg
P06
640
80.0 cm
80.0 cm
60.0 cm
73.38 kg



Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing "Use Better, Use Longer, Use Again" campaign to extend product lifetimes and recyclability.

### Environmental Data explained >

How we assess product sustainability >

☑ Environmental footprint		
Carbon footprint (kg.eq.CO2 per CR, Total Life cycle)	43	

### **Use Better**

<b>⊗</b> Materials and Substances	
Packaging made with recycled cardboard	Yes
Packaging without single use plastic	Yes
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope)
SCIP Number	7bdc2711-0ad2-427c-8ece-532c5e9f09d7
REACh Regulation	REACh Declaration

### **Use Again**

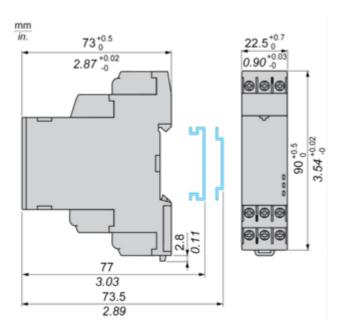
○ Repack and remanufacture		
Take-back	No	

# **Product datasheet**

## RE22R2QEMR

## **Dimensions Drawings**

## **Dimensions**

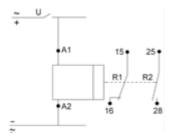


# **Product datasheet**

# RE22R2QEMR

## Connections and Schema

## Wiring Diagram



### **Technical Description**

## 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

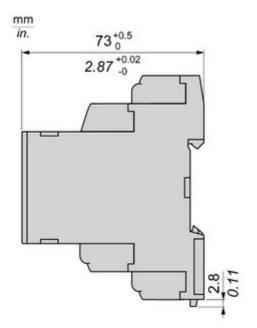
### Legend

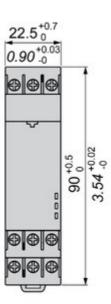
	Relay de-energised
	Relay energised
	Output open
	Output closed
U -	Supply

— Catpat ciccoa	
U -	Supply
T -	Timing period
t -	Delay to switch ON Delta contact output
R1 -	Star contact output
R2 -	Delta contact output

**Technical Illustration** 

### **Dimensions**





## Offer Marketing Illustration

### Product benefits / Features

# **Technical Benefits**

## Harmony Timer Relay



Offer Marketing Illustration

### Product benefits / Features



Image of product / Alternate images

## **Alternative**

