Product datasheet

Specifications



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

Local distributor code:

403002184 RE22R2QEMR

EAN Code: 3606480792588

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	0.3...30 s
Control type	Rotary knob Diagnostic button
[Us] rated supply voltage	24...240 V AC/DC 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, 1 x 0.5...1 x 3.3 mm² (20 AWG...12 AWG) solid without cable end Screw terminals, 2 x 0.5...2 x 2.5 mm² (20 AWG...14 AWG) solid without cable end Screw terminals, 1 x 0.2...1 x 2.5 mm² (24 AWG...14 AWG) flexible with cable end Screw terminals, 2 x 0.2...2 x 1.5 mm² (24 AWG...16 AWG) flexible with cable end
Tightening torque	0.6…1 N.m conforming to IEC 60947-1
Housing material	Polycarbonate
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

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

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 1.2…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
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	-20…60 °C
Ambient air temperature for storage	-40…70 °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= 10…150 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 25…55 °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

Unit Type of Package 1	PCE
Number of Units in Package 1	1
Package 1 Height	2.5 cm
Package 1 Width	8.3 cm
Package 1 Length	9.6 cm
Package 1 Weight	100.0 g
Unit Type of Package 2	S02
Number of Units in Package 2	40
Package 2 Height	15 cm
Package 2 Width	30 cm
Package 2 Length	40 cm
Package 2 Weight	4.388 kg
Unit Type of Package 3	P06
Number of Units in Package 3	640
Package 3 Height	80.0 cm
Package 3 Width	80.0 cm
Package 3 Length	60.0 cm
Package 3 Weight	73.38 kg

Logistical informations

Country of origin	ID

Contractual warranty

Warranty (in months)	18

Environmental Data

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

Total lifecycle Carbon footprint	**43 kg CO2 eq.**
Carbon footprint of the manufacturing phase [A1 to A3]	**2 kg CO2 eq.**
Carbon footprint of the distribution phase [A4]	**0 kg CO2 eq.**
Carbon footprint of the installation phase [A5]	**0 kg CO2 eq.**
Carbon footprint of the use phase [B2, B3, B4, B6]	**41 kg CO2 eq.**
Carbon footprint of the end-of-life phase [C1 to C4]	**0.1 kg CO2 eq.**
Environmental Disclosure	Product Environmental Profile

Use Better

Materials and Substances

Packaging made with recycled cardboard	**Yes**
Packaging without single use plastic	**Yes**
SCIP Number	**7bdc2711-0ad2-427c-8ece-532c5e9f09d7**
EU RoHS Directive	Compliant By Exemption
REACh Regulation	Reference contains Substances of Very High Concern above the threshold

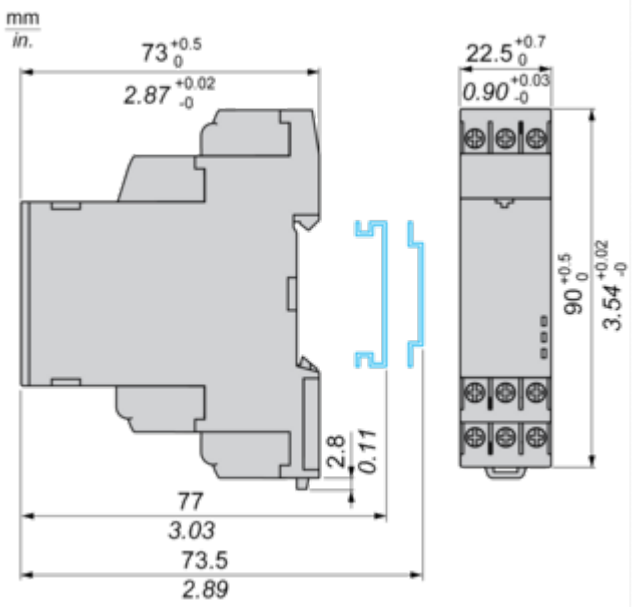
Use Again

Repack and remanufacture

Recyclability potential, in %	**15**
End of life manual availability	End of Life Information
Take-back	**No**

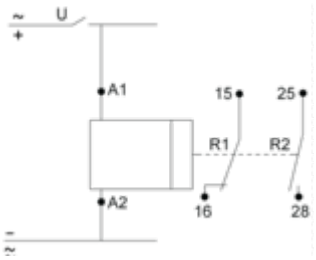
Dimensions Drawings

Dimensions



Connections and Schema

Wiring Diagram



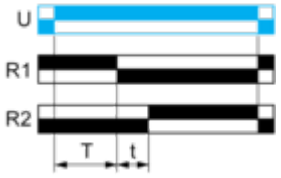
Technical Description

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

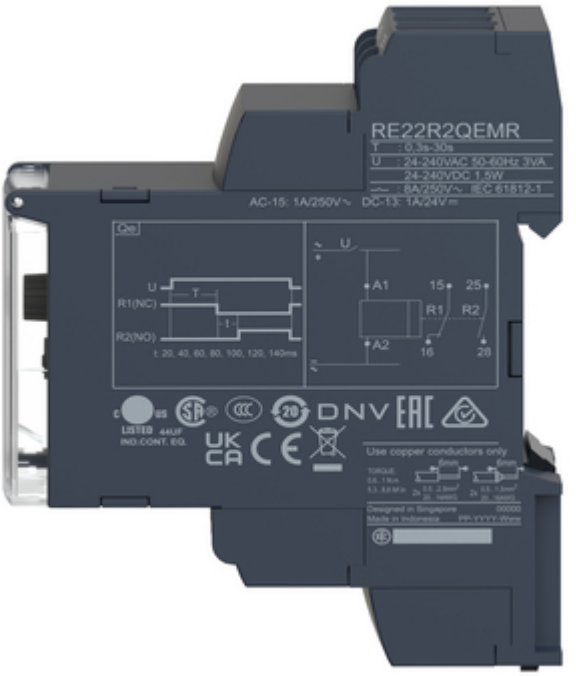
Legend

Relay de-energised
Relay energised
Output open
Output closed

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

Image of product / Alternate images

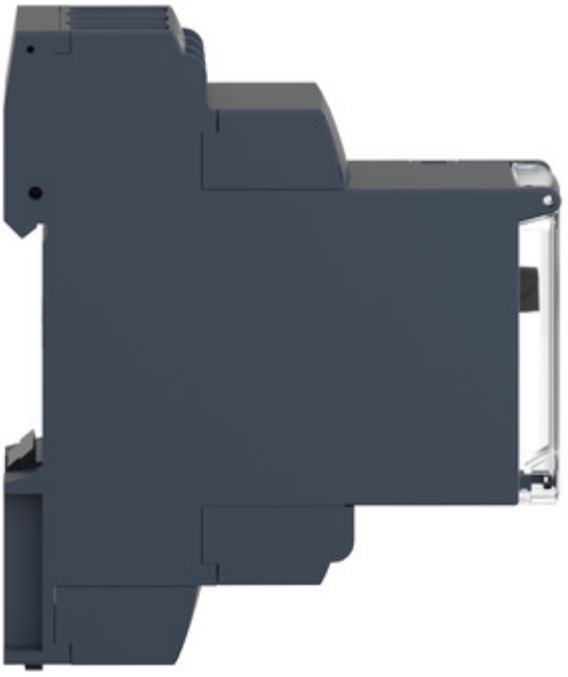
Alternative






RE22R2QEMR
T : 0.3s-30s
U : 24-240VAC 50-60Hz 3VA
24-240VDC 1.5W
8A/250V~ IEC 61812-1
AC-15: 1A/250V~ DC-13: 1A/24V= IEC 60947-5-1
U
R1(NC)
R2(NO)
T
t: 20, 40, 60, 80, 100, 120, 140ms
A1
A2
15
16
18
25
28
R1
R2
DNV·GL
Use copper conductors only
Designed in Singapore
Made in Indonesia






A1
15
25
T: 30s
R2
R1
Schneider
28
16
A2

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