



## Main

Range of Product	Harmony Timer Relays
Product or Component Type	Single function relay
Discrete output type	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	$\leq 2.4$ 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 mm <sup>2</sup> AWG 20...AWG 12) solid without cable end Screw terminals, 2 x 0.5...2 x 2.5 mm <sup>2</sup> AWG 20...AWG 14) solid without cable end Screw terminals, 1 x 0.2...1 x 2.5 mm <sup>2</sup> AWG 24...AWG 14) flexible with cable end Screw terminals, 2 x 0.2...2 x 1.5 mm <sup>2</sup> AWG 24...AWG 16) flexible with cable end
Tightening torque	5.31...8.85 lbf.in (0.6...1 N.m) IEC 60947-1
Housing material	Self-extinguishing
Repeat accuracy	+/- 0.5 % IEC 61812-1
Temperature drift	+/- 0.05 %/°C
Voltage drift	+/- 0.2 %/V
Setting accuracy of time delay	+/- 10 % of full scale 25 °C IEC 61812-1
Insulation resistance	100 MOhm 500 V DC IEC 60664-1
Recovery time	120 ms on de-energisation
Immunity to microbreaks	10 ms
Power consumption in VA	3 VA 240 V AC
Power consumption in W	1.5 W 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, 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 1.2...50 µs IEC 60664-1
Power on delay	100 ms
Creepage distance	4 kV/3 IEC 60664-1

Overvoltage category	III 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)dial pointer indication Yellow LED steady)output relay energised Yellow LED fast flashing)timing in progress and output relay de-energised Yellow LED slow flashing)timing in progress and output relay energised
Width	0.89 in (22.5 mm)
Net Weight	0.20 lb(US) (0.09 kg)

## Environment

Dielectric strength	2.5 kV 1 mA/1 minute 50 Hz between relay output and power supply basic insulation 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	-4...140 °F (-20...60 °C)
Ambient Air Temperature for Storage	-40...158 °F (-40...70 °C)
IP degree of protection	Housing IP40 IEC 60529 Terminals IP20 IEC 60529 Front panel IP50 IEC 60529
Pollution degree	3 IEC 60664-1
Vibration resistance	20 m/s <sup>2</sup> 10...150 Hz)IEC 60068-2-6
Shock resistance	15 gn not operating 11 ms IEC 60068-2-27 5 gn in operation 11 ms IEC 60068-2-27
Relative humidity	95 % 77...131 °F (25...55 °C)
Electromagnetic compatibility	Fast transients immunity test 1 kV capacitive connecting clip)level 3 IEC 61000-4-4 Surge immunity test 1 kV differential mode)level 3 IEC 61000-4-5 Surge immunity test 2 kV common mode)level 3 IEC 61000-4-5 Electrostatic discharge 6 kV contact discharge)level 3 IEC 61000-4-2 Electrostatic discharge 8 kV air discharge)level 3 IEC 61000-4-2 Radiated radio-frequency electromagnetic field immunity test 10 V/m 80 MHz...1 GHz)level 3 IEC 61000-4-3 Conducted RF disturbances 10 V 0.15...80 MHz)level 3 IEC 61000-4-6 Fast transient bursts 2 kV direct contact)level 3 IEC 61000-4-4 Immunity to microbreaks and voltage drops 30 % 500 ms) IEC 61000-4-11 Immunity to microbreaks and voltage drops 100 % 20 ms) IEC 61000-4-11

## Ordering and shipping details

Category	22376 - RELAYS-MEASUREMENT(RM4)
Discount Schedule	CP2
GTIN	3606480792588
Nbr. of units in pkg.	1
Package weight(Lbs)	3.53 oz (100 g)
Returnability	No
Country of origin	ID

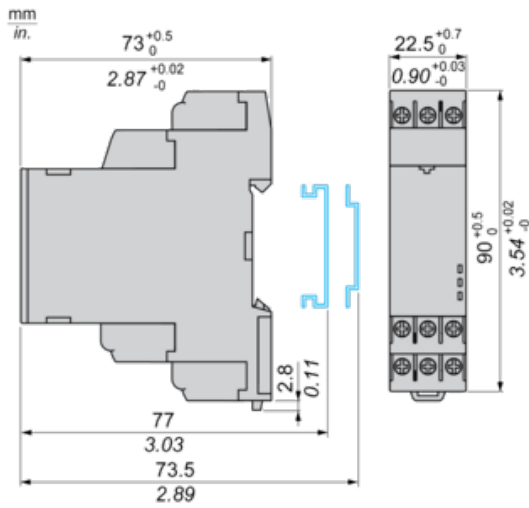
## Packing Units

Unit Type of Package 1	PCE
Package 1 Height	0.98 in (2.5 cm)
Package 1 width	3.27 in (8.3 cm)
Package 1 Length	3.78 in (9.6 cm)
Unit Type of Package 2	S02
Number of Units in Package 2	40
Package 2 Weight	9.67 lb(US) (4.388 kg)
Package 2 Height	5.91 in (15 cm)
Package 2 width	11.81 in (30 cm)
Package 2 Length	15.75 in (40 cm)
Unit Type of Package 3	P06
Number of Units in Package 3	640
Package 3 Weight	161.78 lb(US) (73.38 kg)
Package 3 Height	31.50 in (80 cm)
Package 3 width	31.50 in (80 cm)
Package 3 Length	23.62 in (60 cm)

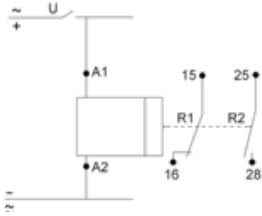
## Offer Sustainability

Sustainable offer status	Green Premium product
California proposition 65	WARNING: This product can expose you to chemicals including: Lead and lead compounds, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to <a href="http://www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>
REACH Regulation	<a href="#">REACH Declaration</a>
EU RoHS Directive	Pro-active compliance (Product out of EU RoHS legal scope) <a href="#">EU RoHS Declaration</a>
Mercury free	Yes
RoHS exemption information	<a href="#">Yes</a>
China RoHS Regulation	<a href="#">China RoHS Declaration</a>
Environmental Disclosure	<a href="#">Product Environmental Profile</a>
Circularity Profile	<a href="#">End Of Life Information</a>

Dimensions



## Wiring Diagram



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