



## Main

Range of Product	Harmony Timer Relays
Product or Component Type	Multifunction relay
Discrete output type	Relay
Device short name	RE22
Nominal output current	8 A

## Complementary

Contacts type and composition	1 C/O timed contact 1 C/O timed or instantaneous contact
Time delay type	Pulse delay Safe-guard Bistable Interval
Time delay range	0.1...1 s 1...10 h 1...10 s 6...60 min 10...100 h 6...60 s 1...10 min
Control type	Rotary knob front panel
[Us] rated supply voltage	24...240 V AC 24 V DC
Voltage range	0.85...1.1 Us
Supply frequency	50...60 Hz +/- 5 %
Connections - terminals	Screw terminals, 2 x 1.5 mm <sup>2</sup> with cable end Screw terminals, 2 x 2.5 mm <sup>2</sup> without 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
Control signal pulse width	30 Ms 100 ms under load
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	50 VA 240 V AC
Power consumption in W	0.7 W 24 V DC
Breaking capacity	2000 VA
Minimum switching current	10 mA 5 V
Maximum switching current	8 mA
Maximum switching voltage	250 V

Electrical durability	100000 cycles for resistive load, 8 A at 250 V, AC
Mechanical durability	10000000 cycles
Rated impulse withstand voltage	5 kV 1.2...50 $\mu$ s IEC 60664-1 5 kV IEC 61812-1
Power on delay	100 ms
Safety reliability data	B10d = 170000 MTTFd = 182.6 years
Mounting position	Any position in relation to normal vertical mounting plane
Mounting support	35 mm DIN rail conforming to EN/IEC 60715
Status LED	Green LED flashing)timing in progress Green LED steady)power ON Yellow LEDrelay 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 IEC 61812-1
Standards	IEC 61812-1 EN 61000-6-1 EN 61000-6-3 EN 61000-6-4 EN 61000-6-2
Directives	2006/95/EC - low voltage directive 2004/108/EC - electromagnetic compatibility
Product Certifications	CSA CCC GL CULus EAC CE RCM
Ambient Air Temperature for Operation	-4...140 °F (-20...60 °C)
Ambient Air Temperature for Storage	-22...140 °F (-30...60 °C)
IP degree of protection	Housing IP40 IEC 60529 Front face IP50 IEC 60529 Terminal block IP20 IEC 60529
Vibration resistance	20 m/s <sup>2</sup> 10...150 Hz)IEC 60068-2-6
Shock resistance	15 gn 11 ms IEC 60068-2-27
Relative humidity	93 %, without condensation IEC 60068-2-30
Electromagnetic compatibility	Electrostatic discharge immunity test 6 kV contact discharge)level 3 EN/IEC 61000-4-2 Electrostatic discharge immunity test 8 kV air discharge)level 3 EN/IEC 61000-4-2 Fast transients immunity test 1 kV capacitive connecting clip)level 3 IEC 61000-4-4 Fast transients immunity test 2 kV direct contact)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 Radiated radio-frequency electromagnetic field immunity test 10 V 0.15...80 MHz)level 3 IEC 61000-4-6 Electromagnetic field immunity test 10 V/m 80 MHz...1 GHz)level 3 IEC 61000-4-3 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	3606480676604
Nbr. of units in pkg.	1
Package weight(Lbs)	3.58 oz (101.42 g)
Returnability	No
Country of origin	ID

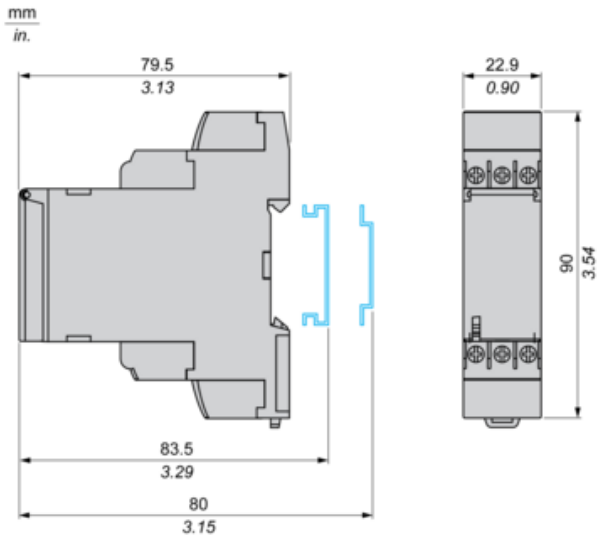
## Packing Units

Unit Type of Package 1	PCE
Package 1 Height	3.54 in (9 cm)
Package 1 width	0.89 in (2.25 cm)
Package 1 Length	3.13 in (7.95 cm)
Unit Type of Package 2	S02
Number of Units in Package 2	40
Package 2 Weight	10.19 lb(US) (4.622 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	199.98 lb(US) (90.709 kg)
Package 3 Height	27.56 in (70 cm)
Package 3 width	23.62 in (60 cm)
Package 3 Length	31.50 in (80 cm)

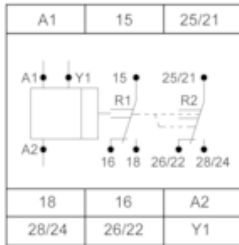
## Offer Sustainability

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>

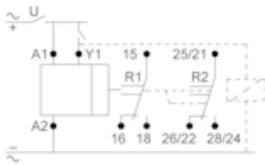
Dimensions



## Internal Wiring Diagram



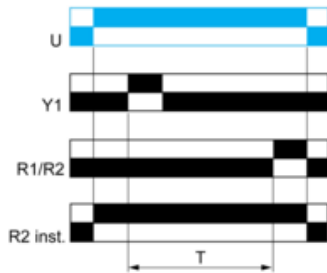
## Wiring Diagram



Function Ad : Pulse Delayed Relay with Control Signal

Description

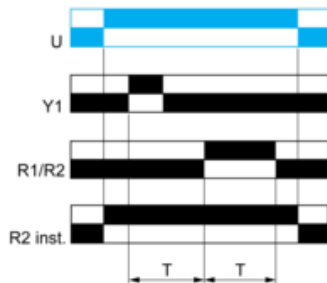
After power-up, pulsing or maintaining of control contact Y1 starts the timing T.  
 At the end of this timing period T, the output R closes.  
 The output relay will be reset the next time control contact Y1 is pulsed or maintained.



Function Ah : Pulse Delayed Relay (Single Cycle) with Control Signal

Description

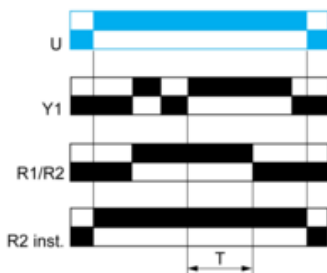
After power-up, pulsing or maintaining of control contact Y1 starts the timing T. A single cycle then starts with 2 timing periods T of equal duration (start with output in rest position).  
 Output relay closes at the end of the first timing period T and reverts to its initial position at the end of the second timing period T.  
 Control contact Y1 must be reset in order to re-start the single flashing cycle.



Function N : Retriggerable Interval Relay with Control Signal On

Description

After power-up and an initial control pulse C, the output relay closes.  
 If the interval between two control pulses C is greater than the set timing period T, timing elapses normally and the output relay closes at the end of the timing period. If the interval is not greater than the set timing period, the output relay remains closed until this condition is met.

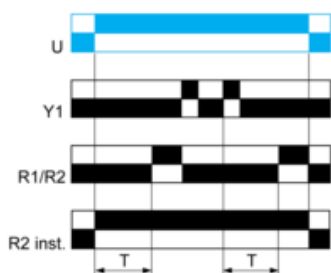


Function O : Retriggerable Interval Delayed Relay with Control Signal On

### Description

An initial timing period T begins on energization. At the end of this timing period, the output relay closes.

As soon as there is a control pulse C, the output relay reverts to its initial state until the interval between two control pulses is less than the value of the set timing period T. Otherwise, the output relay closes at the end of the timing period T.

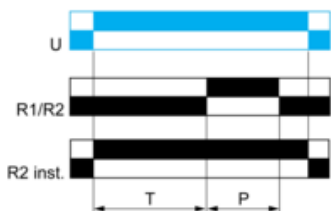


### Function P : Pulse Delayed Relay with Fixed Pulse Length

### Description

The timing period T begins on energization.

At the end of this period, the output relay closes for a fixed time P.

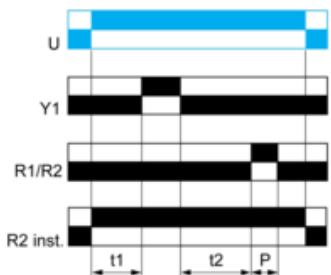


### Function Pt : Pulse Delayed Relay (Summation and Fixed Pulse Length) with Control Signal Off

### Description

On energization, timing period T starts (it can be interrupted by operating the Gate control contact G).

At the end of this period, the output relay closes for a fixed time P.



$$T = t1+t2 \quad P = 500ms$$

### Function TL : Bistable Relay with Control Signal On

### Description

After power-up, pulsing or maintaining of control contact Y1 switches the output on.

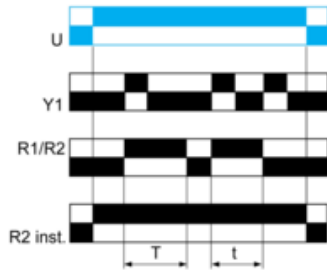
A second pulse on the control contact Y1 switches the output relay off.



## Function Tt :Retriggerable Bistable Relay with Control Signal On

### Description

After power-up, pulsing or maintaining of control contact Y1 switches output relay on and starts timing T. The output switches off at the end of the timing period T or following a second pulse on the control contact Y1.

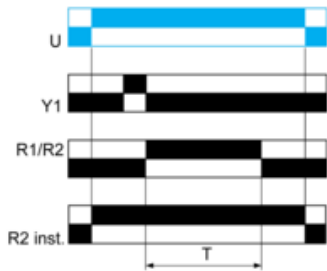


2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.).

## Function W :Interval Relay with Control Signal Off

### Description

After power-up and opening of the control contact, the output(s) close(s) for a timing period T. At the end of this timing period the output(s) revert(s) to its/their initial state.



2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.).

### Legend

- Relay de-energised
- Relay energised
- Output open
- Output closed

Y1 :	Control contact
R1/R2 :	2 timed outputs
R2 inst. :	The second output is instantaneous if the right position is selected
T :	Timing period
U :	Supply