



### Principal

Gama de producto	Relés temporizadores Harmony
Tipo de Producto o Componente	Relé multifunción
Tipo de salida digital	Relé
Nombre Corto del Dispositivo	RE22
Corriente de salida nominal	8 A

### Complementario

Tipo de contactos y composición	1 C/O cont. tempor., sin cadmio
Tipo de tiempo de retraso	Retardo a la puesta en marcha Retraso apagado Retardo a la conexión y a la desconexión Parpadeo simétrico Intervalo
Rango de retardo de tiempo	30...300 s 10...100 s 3...30 s 30...300 min 3...30 min 0.3...3 s 0.05...1 s 30...300 h 1...10 s 3...30 h
Tipo de control	Mando giratorio Botón de diagnóstico Potenciómetro externo
[Us] tensión de alimentación nominal	24 ... 240 V c.a./c.c. 50/60 Hz
Tensión de entrada de liberación	<= 2,4 V
Rango de tensiones	0,85...1,1 Us
Frecuencia de alimentación	50...60 Hz +/- 5 %
Conexiones - terminales	Termin. tornillo, 1 x 0,5 ... 1 x 3,3 mm <sup>2</sup> (AWG 20 ... AWG 12) sólido sin extremo de cable Termin. tornillo, 2 x 0,5 ... 2 x 2,5 mm <sup>2</sup> (AWG 20 ... AWG 14) sólido sin extremo de cable Termin. tornillo, 1 x 0,2...1 x 2,5 mm <sup>2</sup> (AWG 24 ... AWG 14) flexible con extr. cable Termin. tornillo, 2 x 0,2...2 x 1,5 mm <sup>2</sup> (AWG 24 ... AWG 16) flexible con extr. cable
Par de apriete	0,6...1 N.m conforme a IEC 60947-1
Material de carcasa	Autoextinguible
Precisión de repetición	+/- 0,5% conforme a IEC 61812-1
Variación de temperatura	+/- 0,05 %/°C
Variación de tensión	+/-0.2 %/V
Precisión ajuste de temporización	+/- 10 % de escala completa a 25 °C conforme a IEC 61812-1
Ancho de pulso de la señal de control	100 Ms con carga en paralelo 30 ms
Resistencia de aislamiento	100 MOhm a 500 V CC conforme a IEC 60664-1
Tiempo de recuperación	120 ms en desexcitación
Inmunidad a microcortes	10 ms

Consumo	3 VA a 240 V CA
Consumo de potencia en W	1,5 W a 240 V CC
Capacidad de conmutación en VA	2000 VA
Corriente mínima de conmutación	10 mA a 5 V CC
Corriente conmutación máxima	8 A
Tensión de conmutación máxima	250 V CA
Endurancia eléctrica	100000 Ciclos, 8 A a 250 V, AC-1 100000 Ciclos, 2 A a 24 V, DC-1
Endurancia mecánica	10000000 Ciclos
Tensión nominal de resistencia a los impulsos	5 kV para 1,2...50 µs conforme a IEC 60664-1
Retardo de encendido	100 ms
Distancia de desplazamiento	4 kV/3 conforme a IEC 60664-1
Categoría de sobretensión	III conforme a IEC 60664-1
Datos de fiabilidad de seguridad	MTTFd = 205,4 años B10d = 190000
Posición de montaje	Cualquier posición
Soporte de montaje	Perfil DIN 35 mm conforme a EN/IEC 60715
LED de estado	Verde retroiluminación de LED (Fijo) para indicación del puntero de marcación Amarillo LED (Fijo) para relé de salida energizado Amarillo LED (parpadeo rápido) para sincronización en curso y relé de salida desenergizado Amarillo LED (parpadeo lento) para sincronización en curso y relé de salida energizado
Función disponible	A- Power on-delay relay-1 C/O Ac- On-delay and off-delay relay w/ control signal-1 C/O At- Power on-delay relay w/ pause/summation (X1)-1 C/O Aw- Power on-delay relay w/ retrigger/restart-1 C/O Act- On-delay and off-delay relay w/ control signal and pause/summation-1 C/O C- Off-delay relay w/ control signal-1 C/O Ct- Off-delay relay w/ control signal and pause/summation-1 C/O D- Symmetrical flashing relay (starting pulse-off)-1 C/O Dt- Symmetrical flashing relay (starting pulse-off) w/ pause/summation (X1)-1 C/O O Dw- Symmetrical flashing relay (starting pulse-off) w/ retrigger/restart-1 C/O Di- Symmetrical flashing relay (starting pulse-on)-1 C/O Dit- Symmetrical flashing relay (starting pulse-on) w/ pause/summation (X1)-1 C/O O Diw- Symmetrical flashing relay (starting pulse-on) w/ retrigger/restart-1 C/O H- Interval relay-1 C/O Ht- Interval relay w/ pause/summation (X1)-1 C/O Hw- Interval relay w/ retrigger/restart-1 C/O W- Interval relay w/ control signal off-1 C/O Wt- Interval relay w/ control signal off and pause/summation-1 C/O
Ancho	22,5 mm
Peso del producto	0,1 kg

## Entorno

Resistencia dieléctrica	2,5 kV para 1 mA/1 minuto a 50 Hz entre la salida de relé y la fuente de alimentación con aislamiento básico conforme a IEC 61812-1
Normas	IEC 61812-1 UL 508
Directivas	2004/108 / CE - compatibilidad electromagnética 2006/95 / CE - Directiva de baja tensión
Certificaciones de Producto	RCM GL EAC CE CSA CCC UL
Temperatura ambiente de funcionamiento	-20...60 °C
Temperatura ambiente de almacenamiento	-40...70 °C
Grado de protección IP	Envolvente: IP40 conforme a IEC 60529 Cara frontal: IP50 conforme a IEC 60529 Terminales: IP20 conforme a IEC 60529
Grado de contaminación	3 conforme a IEC 60664-1
Resistencia a las vibraciones	20 m/s <sup>2</sup> (f= 10...150 Hz) conforme a IEC 60068-2-6

Resistencia a los choques	15 gn sin funcionamiento para 11 ms conforme a IEC 60068-2-27 5 gn en funcionamiento para 11 ms conforme a IEC 60068-2-27
Humedad relativa	95 % a 25...55 °C
Compatibilidad electromagnética	Prueba de inmunidad ante oscilaciones rápidas - prueba nivel: 1 kV (clic conexión capacitivo)nivel 3 conforme a IEC 61000-4-4 Prueba de inmunidad frente a sobretensión - prueba nivel: 1 kV (modo diferencial)nivel 3 conforme a IEC 61000-4-5 Prueba de inmunidad frente a sobretensión - prueba nivel: 2 kV (modo común)nivel 3 conforme a IEC 61000-4-5 Descarga electrostática - prueba nivel: 6 kV (descarga de contacto)nivel 3 conforme a IEC 61000-4-2 Descarga electrostática - prueba nivel: 8 kV (descarga de aire)nivel 3 conforme a IEC 61000-4-2 Prueba de inmunidad de la radiofrecuencia radiada del campo electromagnético - prueba nivel: 10 V/m (80 MHz ... 1 GHz)nivel 3 conforme a IEC 61000-4-3 Perturbaciones RF conducidas - prueba nivel: 10 V (0,15...80 MHz)nivel 3 conforme a IEC 61000-4-6 Oscilaciones rápidas - prueba nivel: 2 kV (contacto directo)nivel 3 conforme a IEC 61000-4-4 Inmunidad frente a microrrupturas y caídas de tensión - prueba nivel: 0.3 (500 ms) conforme a IEC 61000-4-11 Inmunidad frente a microrrupturas y caídas de tensión - prueba nivel: 1 (20 ms) conforme a IEC 61000-4-11

### Unidades de embalaje

Tipo de unidad de paquete 1	PCE
Número de unidades en el paquete 1	1
Paquete 1 Altura	2,6 cm
Paquete 1 Ancho	8,2 cm
Paquete 1 Longitud	9,5 cm
Paquete 1 Peso	98 g

### Sostenibilidad de la oferta

Estado de oferta sostenible	Producto verde premium
Reglamento REACH	<a href="#">Declaración De REACH</a>
Directiva RoHS UE	Cumplimiento proactivo (producto fuera del alcance de la normativa RoHS UE) <a href="#">Declaración RoHS UE</a>
Sin mercurio	Sí
Normativa de RoHS China	<a href="#">Declaración RoHS China</a>
Información sobre exenciones de RoHS	<a href="#">Sí</a>
Comunicación ambiental	<a href="#">Perfil Ambiental Del Producto</a>
Perfil de circularidad	<a href="#">Información De Fin De Vida Útil</a>

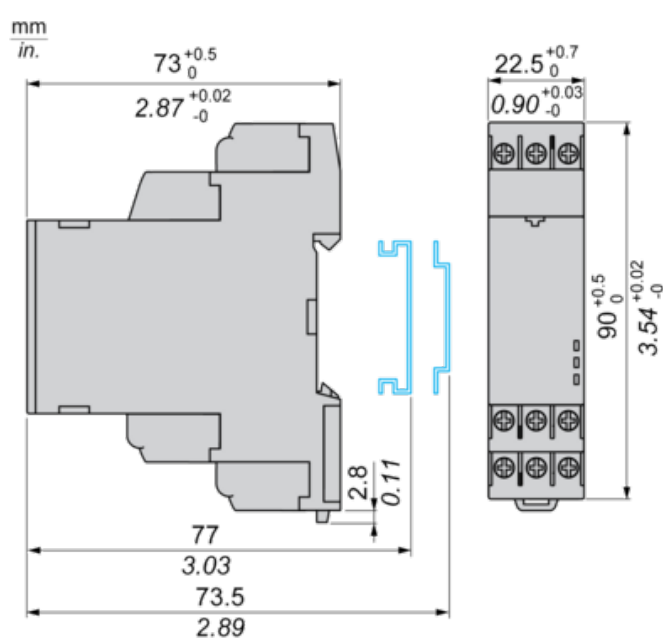
### Garantía contractual

Periodo de garantía	18 Meses
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# Hoja de datos del producto RE22R1MYMR

## Dimensions Drawings

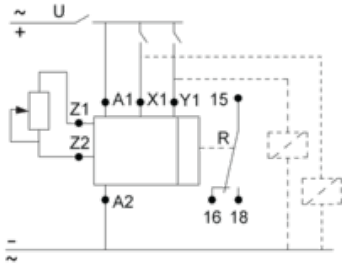
### Dimensions



# Hoja de datos del producto RE22R1MYMR

## Connections and Schema

### Wiring Diagram

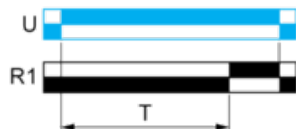


### Function A: Power On-Delay

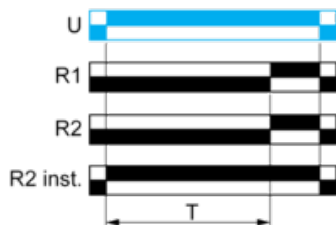
#### Description

On energisation of power supply, the timing period T starts. After timing, the output(s) R close(s). The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

#### Function: 1 Output



#### Function: 2 Outputs



### Function Ac: On-Delay & Off-Delay with Control Signal

#### Description

After energisation of power supply and energization of Y1 causes the timing period T to start.

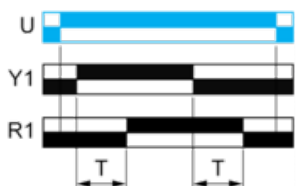
At the end of this timing period, the output(s) R close(s).

When deenergization of Y1, the timing T starts.

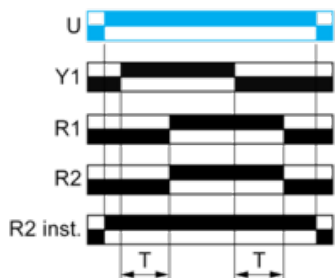
At the end of this timing period T, the output(s) R revert(s) to its/their initial position.

The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

#### Function: 1 Output



#### Function: 2 Outputs

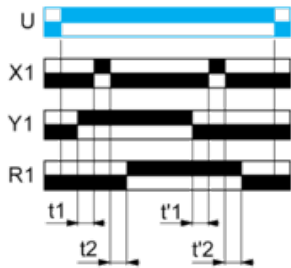


### Function Act: On-Delay & Off-Delay with Control Signal & With Pause / Summation Control

### Description

After energisation of power supply and energization of Y1 causes the timing period T to start and the timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R close(s). When deenergization of Y1, the timing T starts and the timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R revert(s) to its/their initial position. The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

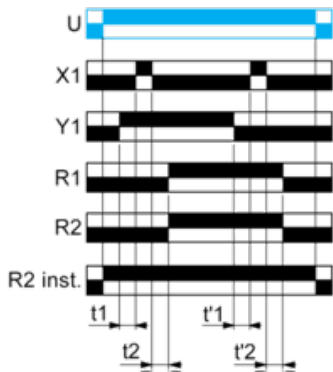
### Function: 1 Output



$$T = t1 + t2 + \dots$$

$$T = t'1 + t'2 + \dots$$

### Function: 2 Outputs



$$T = t1 + t2 + \dots$$

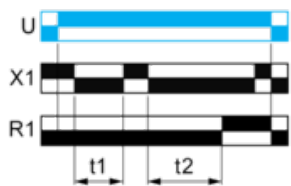
$$T = t'1 + t'2 + \dots$$

### Function At: Power On-Delay with Pause / Summation Control

### Description

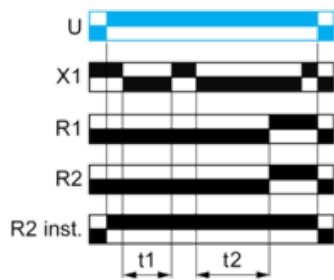
On energisation of power supply, the timing period T starts. Timing can be interrupted / paused each time X1 energizes. Except for RE17\*, RE22R2AMU, RE22R2MMW, RE22R2MMU, RE22R2MJU, timing can be interrupted / paused each time Y1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R close(s). The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

### Function: 1 Output with Pause / Summation Control



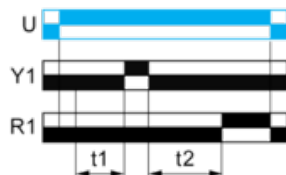
$$T = t1 + t2 + \dots$$

### Function: 2 Outputs with Pause / Summation Control



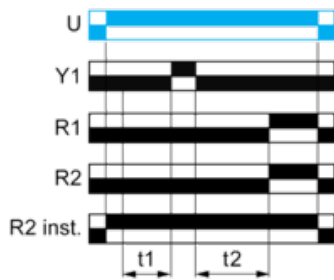
$T = t1 + t2 + \dots$

### Function: 1 Output with Retrigger / Restart Control



$T = t1 + t2 + \dots$

### Function: 2 Outputs with Retrigger / Restart Control



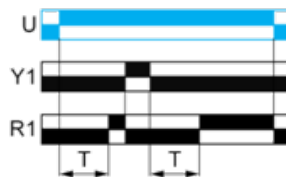
$T = t1 + t2 + \dots$

### Function Aw : Power On-Delay With Retrigger / Restart Control

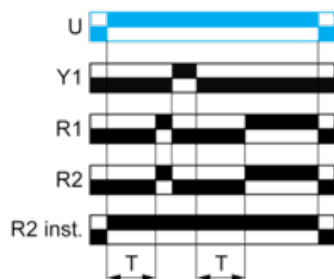
#### Description

On energisation of power supply, the timing period T starts. At the end of the timing period T, the output(s) R close(s). Energization of Y1 makes the output(s) R open(s). Deenergization of Y1 restarts timing period T. At the end of timing period T, the output(s) R close(s). The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST")

#### Function: 1 Output



#### Function: 2 Outputs



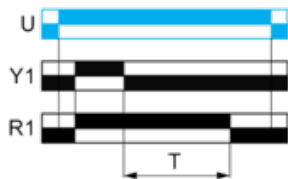
### Function C: Off-Delay Relay with Control Signal



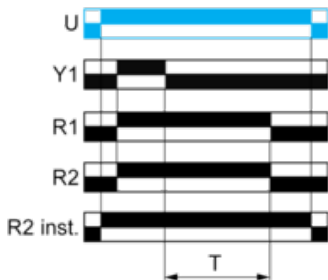
### Description

After energisation of power supply and energization of Y1 causes output(s) R close(s). When Y1 deenergizes, timing T starts. At the end of this timing period T, the output(s) R revert(s) to its/their initial position. The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

#### Function: 1 Output



#### Function: 2 Outputs

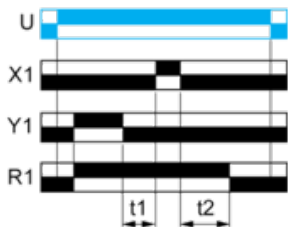


### Function Ct: Off-Delay Relay with Control Signal & With Pause / Summation Control

### Description

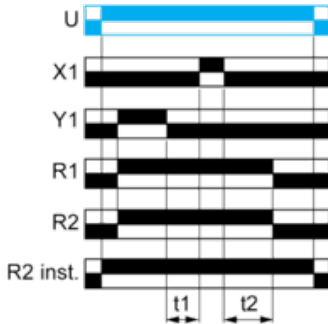
After energisation of power supply and energization of Y1 cause output(s) R close(s). When Y1 deenergizes, timing starts and the timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R revert(s) to its/their initial state. The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

#### Function: 1 Output



$$T = t1 + t2 + \dots$$

#### Function: 2 Outputs



$$T = t1 + t2 + \dots$$

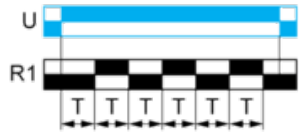
### Function D: Symmetrical Flashing Relay (Starting Pulse Off)

### Description

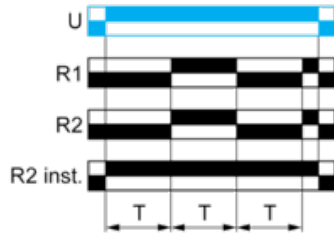
On energisation of power supply, output(s) R starts at its/their initial state for timing duration T then change(s) to output(s) R close(s) for the same timing duration T. This cycle is repeated indefinitely until power supply removal. Specially for RE17\*, RE22R2AMU, RE22R2MMW,

RE22R2MMU, RE22R2MJU, this D function can only be initiated by energizing Y1 permanently. The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

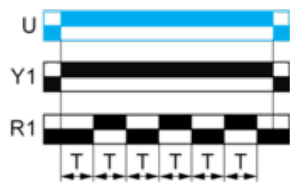
**Function: 1 Output**



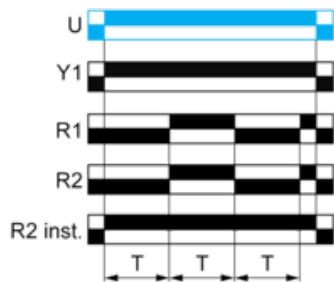
**Function: 2 Outputs**



**Function: 1 Output with Retrigger / Restart Control**



**Function: 2 Output with Retrigger / Restart Control**

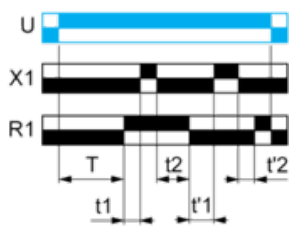


**Function Dt: Symmetrical Flashing Relay (Starting Pulse Off) & With Pause / Summation Control**

**Description**

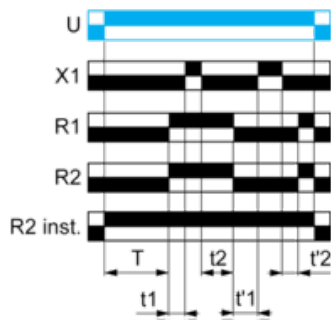
On energisation of power supply, output(s) R starts at its/their initial state for timing duration T and the timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T, then changes to output(s) R close(s). The output(s) R close state will remain for the same timing duration T and the timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R revert(s) to its/their initial state. This cycle is repeated indefinitely until power supply removal. The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

**Function: 1 Output**



$T = t1 + t2 + \dots$   
 $T = t'1 + t'2 + \dots$

### Function: 2 Outputs



$$T = t_1 + t_2 + \dots$$

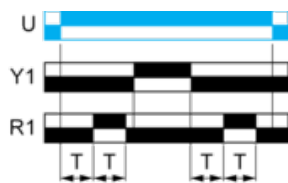
$$T = t'_1 + t'_2 + \dots$$

### Function DW: Symmetrical Flashing Relay (Starting Pulse Off) & With Retrigger / Restart Control

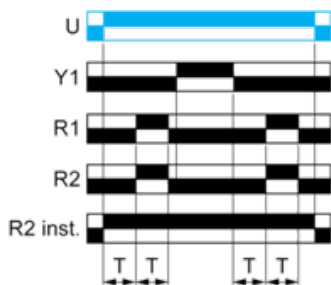
#### Description

On energisation of power supply, output(s) R starts at its/their initial state for timing duration T then change(s) to output(s) R close(s) for the same timing duration T. This cycle is repeated indefinitely until power supply removal. Specially for RE17\*, RE22R2AMU, RE22R2MMW, RE22R2MMU, RE22R2MJU, this D function can only be initiated by energizing Y1 permanently. The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

#### Function: 1 Output



#### Function: 2 Outputs

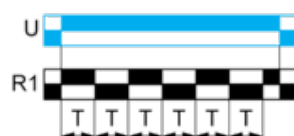


### Function Di: Symmetrical Flashing Relay (Starting Pulse On)

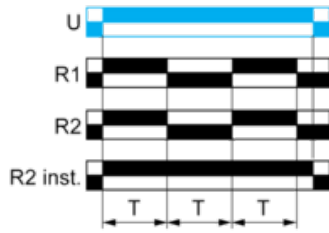
#### Description

On energisation of power supply, output(s) R starts at output(s) R close(s) for timing duration T then revert(s) to its/their initial state for the same timing duration T. This cycle is repeated indefinitely until power supply removal. The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

#### Function: 1 Output



Function: 2 Outputs

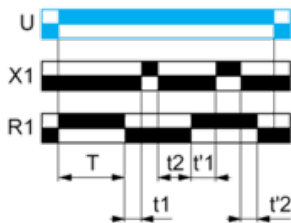


Function Dit: Symmetrical Flashing Relay (Starting Pulse On) & With Pause / Summation Control

Description

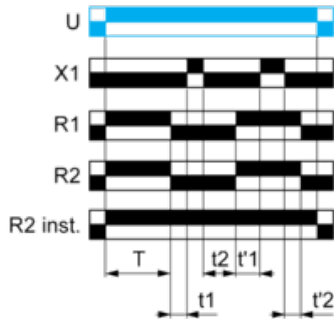
On energisation of power supply, output(s) R starts at output(s) R close(s) for timing duration T and the timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T, then revert(s) to its/their initial state. The output(s) R at initial state will remain for the same timing duration T and the timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R change(s) to close state. This cycle is repeated indefinitely until power supply removal. The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

Function: 1 Output



$T = t_1 + t_2 + \dots$   
 $T = t'_1 + t'_2 + \dots$

Function: 2 Outputs



$T = t_1 + t_2 + \dots$   
 $T = t'_1 + t'_2 + \dots$

Function Diw: Symmetrical Flashing Relay (Starting Pulse On) & With Retrigger / Restart Control

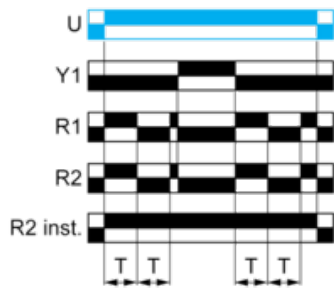
Description

On energisation of power supply, output(s) R starts at output(s) R close(s) for timing duration T then revert(s) to its/their initial state for the same timing duration T. This cycle is repeated indefinitely until power supply removal. At any state of the output(s) R when Y1 energizes, the output(s) R will revert to its/their initial state and followed by Y1 deenergizes then restarts the same operation as described at the beginning. The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

Function: 1 Output



### Function: 2 Outputs



### Function H: Interval Relay

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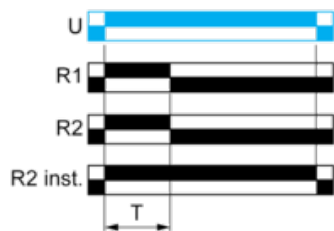
#### Description

On energisation of power supply, output(s) R close(s) and timing period T starts. At the end of the timing period T, the output(s) R revert(s) to its/their initial state. The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

#### Function: 1 Output



#### Function: 2 Outputs



### Function Ht: Interval Relay & With Pause / Summation Control

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#### Description

On energisation of power supply, output(s) R close(s) and timing period T starts.

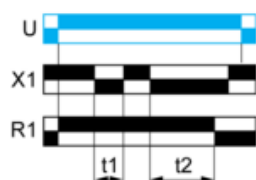
The timing can be interrupted / paused each time X1 energizes.

When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R revert(s) to its/their initial state. Reenergization of X1 will also cause output(s) R close(s) if the time has elapsed and restart the same operation as described at the beginning.

Except for RE17\*, RE22R2MMW, RENF22R2MMW, RE22R2MMU and RE22R2MJU, timing can be interrupted / paused each time Y1 energizes.

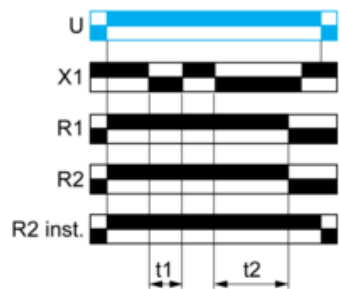
The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

#### Function: 1 Output



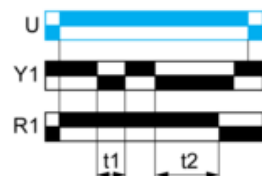
$$T = t1 + t2 + \dots$$

### Function: 2 Outputs



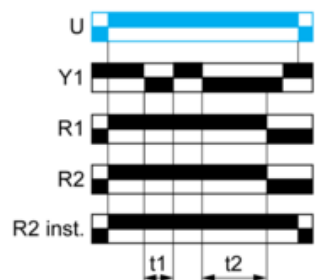
$T = t1 + t2 + \dots$

### Function: 1 Output with Retrigger / Restart Control



$T = t1 + t2 + \dots$

### Function: 2 Outputs with Retrigger / Restart Control



$T = t1 + t2 + \dots$

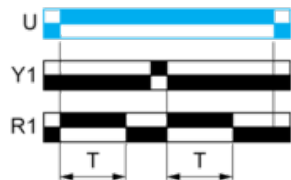
### Function Hw: Interval Relay & with Retrigger / Restart Control

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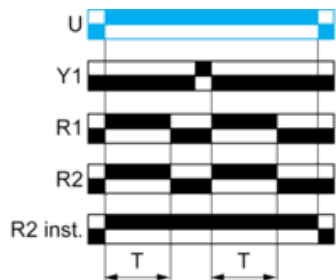
#### Description

On energisation of power supply, output(s) R close(s) and timing period T starts. At the end of the timing period T, the output(s) R revert(s) to its/their initial state. At any state of the output(s) R when Y1 energizes followed by deenergizes, the output(s) R close(s) then restarts the same operation as described at the beginning. The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

### Function: 1 Output



### Function: 2 Outputs



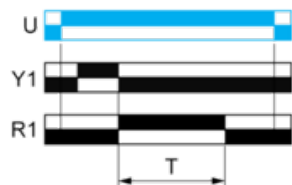
### Function W: Interval Relay with Control Signal Off

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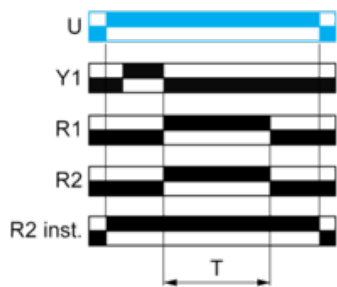
### Description

After energisation of power supply and on energization of Y1 following by deenergization of Y1, the output(s) R close(s) and starts the timing T. At the end of the timing period, the output(s) R revert(s) to its/their initial state. The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

### Function: 1 Output



### Function: 2 Outputs

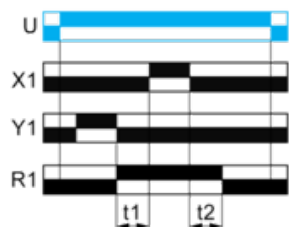


### Function Wt: Interval Relay with Control Signal Off & with Pause / Summation Control

### Description

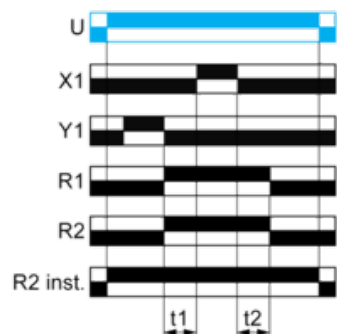
After energisation of power supply and on energization of Y1 following by deenergization of Y1, the output(s) R close(s) and starts the timing T. Timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R revert(s) to its/their initial state. The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

### Function: 1 Output



$$T = t1 + t2 + \dots$$

### Function: 2 Outputs



$$T = t1 + t2 + \dots$$

### Legend

Relay de-energised

Relay energised

Output open

Output closed

U -	Supply
R1/R2 -	2 timed outputs
X1 -	Pause / Summation control
Y1 -	Retrigger / Restart control
R2 inst. -	The second output is instantaneous if the right position is selected
T -	Timing period