



## Hlavní parametry

Řada výrobků	Zelio Time
Typ produktu nebo součásti	Modulární časové relé
Typ diskrétního výstupu	Reléový
Označení přístroje	RE22
Jmenovitý výstupní proud	8 A

## Doplněk

Typ a složení kontaktu	1 V/Z časově zpožděný kontakt, bez kadmia
Typ časového zpoždění	A Ac At Aw C D Di H Ht W Act Ct Dw Hw Wt Dt Dit Diw
Rozsah časového zpoždění	0,05...1 s 0,3...3 s 1...10 s 10...100 s 3...30 h 3...30 min 3...30 s 30...300 h 30...300 min 30...300 s
Typ ovládání	Otočná páčka Diagnostické tlačítko Externí potenciometr
[Us] jmenovité napájecí napětí	24...240 V AC/DC při 50/60 Hz
Vstupní napětí	<= 2,4 V
Rozsah napětí	0,85...1,1 Us
Frekvence sítě	50...60 Hz (+/- 5 %)
Připojení - svorky	Šroubové svorky : 1 x 0,5...1 x 3,3 mm <sup>2</sup> , AWG 20...AWG 12 pevný kabel bez kabelové koncovky Šroubové svorky : 2 x 0,5...2 x 2,5 mm <sup>2</sup> , AWG 20...AWG 14 pevný kabel bez kabelové koncovky Šroubové svorky : 1 x 0,2...1 x 2,5 mm <sup>2</sup> , AWG 24...AWG 14 ohebný kabel s kabelovou koncovkou Šroubové svorky : 2 x 0,2...2 x 1,5 mm <sup>2</sup> , AWG 24...AWG 16 ohebný kabel s kabelovou koncovkou
Kroutící moment	0,6...1 N.m podle IEC 60947-1
Materiál pláště	Samozhášecí
Opakovatelná přesnost	+/- 0,5 % podle IEC 61812-1

Teplotní odchylka	+/- 0,05 %/°C
Odchylka napětí	+/-0,2 %/V
Přesnost nastavení časového zpoždění	+/- 10 % z plného rozsahu při 25 °C podle IEC 61812-1
Minimální délka pulzu	30 ms 100 ms (s paralelní zátěží)
Izolační odpor	100 MΩ při 500 V DC podle IEC 60664-1
Doba resetu	120 ms (na vypnutí)
Odolnost proti mikropřerušením	<= 10 ms
Příkon ve VA	3 VA při 240 V AC
Příkon ve W	1,5 W při 240 V DC
Spínací schopnost ve VA	2000 VA
Minimální spínací proud	10 mA 5 V DC
Maximální spínací proud	8 A
Maximální spínací napětí	250 V AC
Elektrická životnost	100000 cykly pro 8 A při 250 V AC-1 100000 cykly pro 2 A při 24 V DC-1
Mechanická životnost	10000000 cykly
[Uimp] jmenovité impulzní výdržné napětí	5 kV pro 1,2...50 µs podle IEC 60664-1
Zpožděná odezva	< 100 ms
Povrchová vzdálenost	4 kV/3 podle IEC 60664-1
Kategorie přepětí	III podle IEC 60664-1
Data o spolehlivosti bezpečnosti	MTTFd = 205.4 let B10d = 190000
Poloha montáže	Libovolná poloha
Montážní držák	35 mm DIN lišta podle EN/IEC 60715
Signalizace stavu LED	Zelená LED podsvícení (trvalá) pro číselník s ukazatelem Žlutá LED (trvalá) pro napájení výstupního relé Žlutá LED (rychlé blikání) pro probíhá časování a výstupní relé je odpojeno Žlutá LED (pomalé blikání) pro probíhá časování a výstupní relé je napájeno
Šířka	22,5 mm
Hmotnost přístroje	0,1 kg

## Životní prostředí

dielektrická pevnost	2,5 kV pro 1 mA/1 minuta při 50 Hz mezi výstup relé a napájení s základní izolací podle IEC 61812-1
standardy	IEC 61812-1 UL 508
směrnice	2004/108/EC - elektromagnetická kompatibilita 2006/95/EC - směrnice pro nízké napětí
certifikace výrobku	CCC CE CSA GL UL RCM EAC China RoHS
teplota okolního vzduchu pro provoz	-20...60 °C
teplota okolí pro uskladnění	-40...70 °C
stupeň krytí IP	IP20 (svorky) podle IEC 60529 IP40 (skříňka) podle IEC 60529 IP50 (přední strana) podle IEC 60529
stupeň znečištění	3 podle IEC 60664-1
odolnost proti vibracím	20 m/s <sup>2</sup> (f = 10...150 Hz) podle IEC 60068-2-6
odolnost proti otřesům	15 gn (mimo provoz) (doba trvání = 11 ms) podle IEC 60068-2-27 5 gn (za provozu) (doba trvání = 11 ms) podle IEC 60068-2-27
relativní vlhkost	95 % při 25...55 °C
elektromag.kompatibilita	Test odolnosti proti rychlým přechodovým dějům (testovací úroveň: 1 kV, úroveň 3 - kapacitní propojovací spona) podle IEC 61000-4-4 Test odolnosti proti špičkám (testovací úroveň: 1 kV, úroveň 3 - rozdílový režim) podle IEC 61000-4-5 Test odolnosti proti špičkám (testovací úroveň: 2 kV, úroveň 3 - společný režim) podle

IEC 61000-4-5  
 Elektrostatický výboj (testovací úroveň: 6 kV, úroveň 3 - vybíjecí kontakt) podle IEC 61000-4-2  
 Elektrostatický výboj (testovací úroveň: 8 kV, úroveň 3 - odvod vzduchu) podle IEC 61000-4-2  
 Test odolnosti proti vyzařovanému radiofrekvenčnímu elektromagnetickému poli (testovací úroveň: 10 V/m, úroveň 3 - 80 MHz...1 GHz) podle IEC 61000-4-3  
 Rušení RF vedením (testovací úroveň: 10 V, úroveň 3 - 0,15 – 80 MHz) podle IEC 61000-4-6  
 Rychlé elektrické přechodové děje (testovací úroveň: 2 kV, úroveň 3 - přímý kontakt) podle IEC 61000-4-4  
 Odolnost proti mikropřerušením a poklesům napětí (testovací úroveň: 30 % - 500 ms) podle IEC 61000-4-11  
 Odolnost proti mikropřerušením a poklesům napětí (testovací úroveň: 100 % - 20 ms) podle IEC 61000-4-11

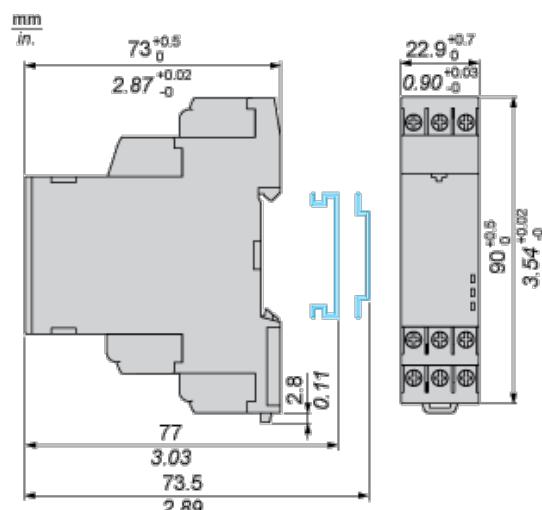
## Nabídka udržitelnosti

udržitelný stav nabídky	Výrobek Green Premium
RoHS	Compliant - since 1650 - Schneider Electric declaration of conformity
REACH	Odkaz neobsahuje SVHC nad mezní hodnotou
dokument o ekologickém profilu	Dostupný
instrukce o ukončení životnosti výrobku	Dostupný

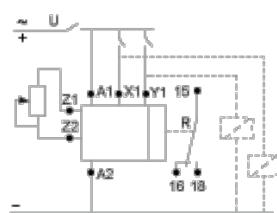
## Contractual warranty

Záruční lhůta	18 měsíců
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## Dimensions



## Wiring Diagram

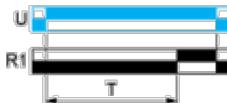


## Function A: Power On-Delay

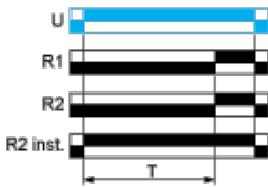
### Description

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.

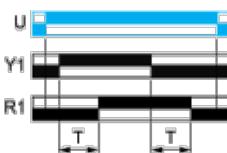
At the end of this timing period, the output(s) R close(s).

When deenergization of Y1, the timing T starts.

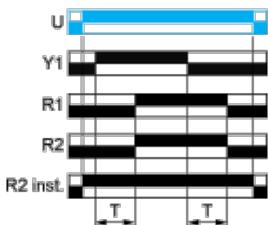
At the end of this timing period T, the output(s) R revert(s) to its/their initial position.

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

#### Function: 1 Output



#### Function: 2 Outputs

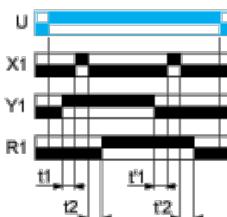


### Function Act: On-Delay & Off-Delay with Control Signal & With Pause / Summation Control

#### 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").

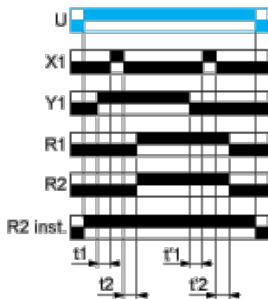
#### Function: 1 Output



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

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

#### Function: 2 Outputs



$T = t1 + t2 + \dots$

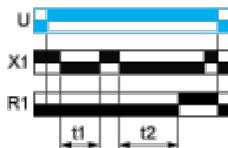
$T = t'1 + t'2 + \dots$

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

### Description

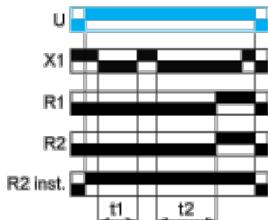
On energisation of power supply, the timing period  $T$  starts. Timing can be interrupted / paused each time  $X1$  energizes. Except for RE17\*, RE22R2AMU, RE22R2MMW, RE22R2MMU, RE22R2MJU, timing can be interrupted / paused each time  $Y1$  energizes. When the cumulative total of time periods elapsed 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



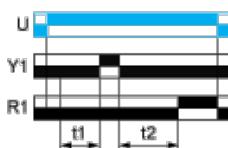
$T = t1 + t2 + \dots$

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



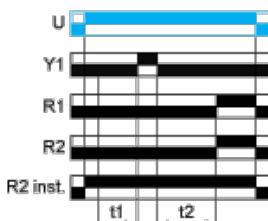
$T = t1 + t2 + \dots$

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



$T = t1 + t2 + \dots$

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



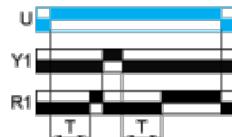
$T = t1 + t2 + \dots$

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

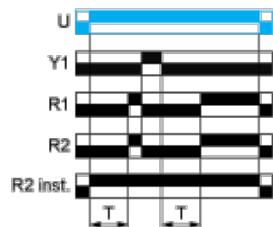
### Description

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

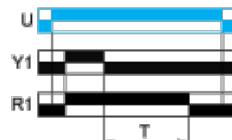


### Function C: Off-Delay Relay with Control Signal

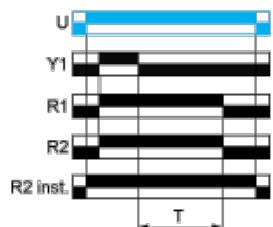
#### Description

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

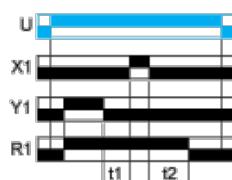


### Function Ct: Off-Delay Relay with Control Signal & With Pause / Summation Control

#### Description

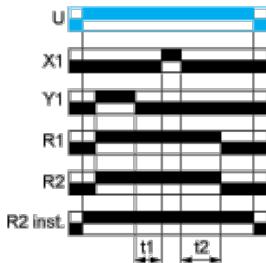
After energisation of power supply and energization of Y1 cause output(s) R close(s). When Y1 deenergizes, timing starts and the timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R revert(s) to its/their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

#### Function: 1 Output



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

#### Function: 2 Outputs



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

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

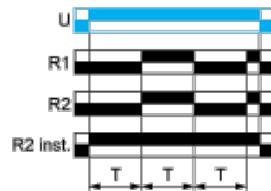
### Description

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").

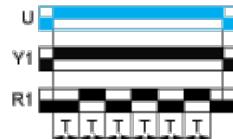
### Function: 1 Output



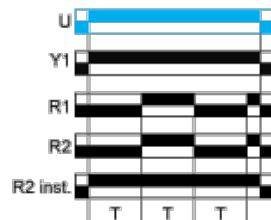
### Function: 2 Outputs



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



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

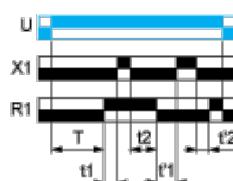


## Function Dt: Symmetrical Flashing Relay (Starting Pulse Off) & With Pause / Summation Control

### 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").

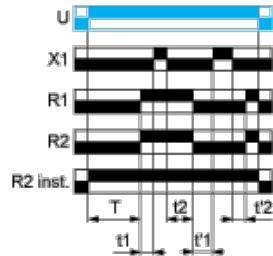
### Function: 1 Output



T = t1 + t2 +...

T = t'1 + t'2 +...

#### Function: 2 Outputs



T = t1 + t2 +...

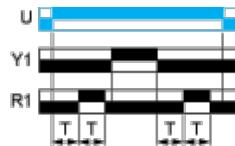
T = t'1 + t'2 +...

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

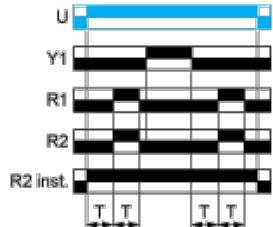
#### Description

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)

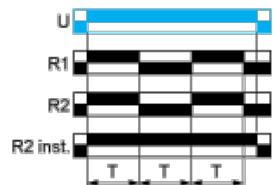
#### Description

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

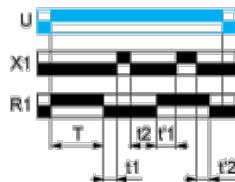


### Function Dit: Symmetrical Flashing Relay (Starting Pulse On) & With Pause / Summation Control

#### 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").

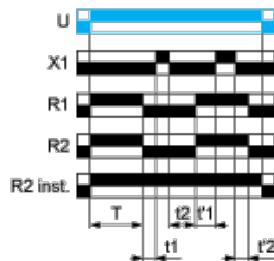
#### Function: 1 Output



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

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

#### Function: 2 Outputs



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

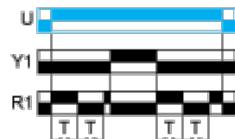
$$T = t'_1 + t'_2 + \dots$$

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

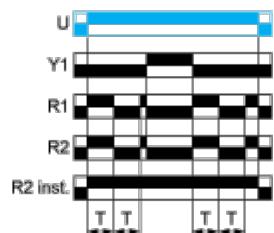
#### Description

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

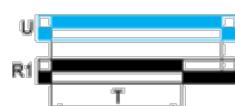


### Function H: Interval Relay

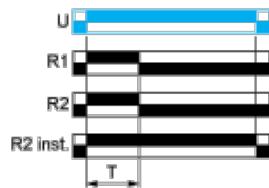
#### Description

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

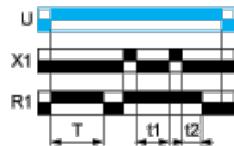


## Function Ht: Interval Relay & With Pause / Summation Control

### Description

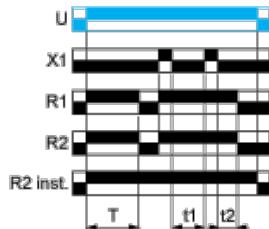
On energisation of power supply, output(s) R close(s) and timing period T starts. The timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R revert(s) to its/their initial state. Reenergization of X1 will 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\*, RE22R2AMU, RE22R2MMW, RE22R2MMU, 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



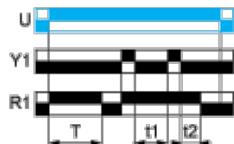
$$T = t_1 + t_2 + \dots$$

### Function: 2 Outputs



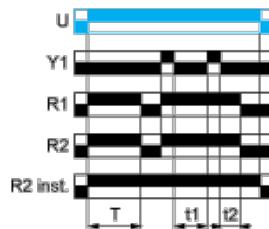
$$T = t_1 + t_2 + \dots$$

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



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

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



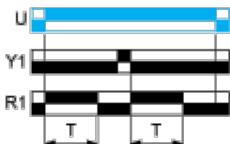
$$T = t_1 + t_2 + \dots$$

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

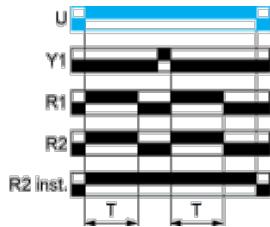
### Description

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

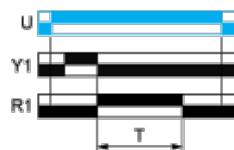


### Function W: Interval Relay with Control Signal Off

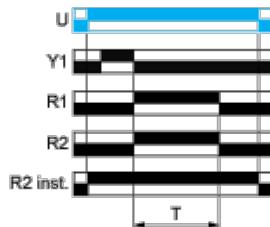
#### Description

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

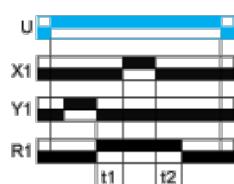


### Function Wt: Interval Relay with Control Signal Off & with Pause / Summation Control

#### Description

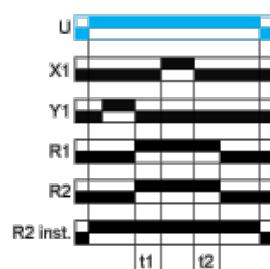
After energisation of power supply and on energization of Y1 following by deenergization of Y1, the output(s) R close(s) and starts the timing T. Timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R revert(s) 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



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

#### Function: 2 Outputs



**T** = t1 + t2 +...

**Legend**

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

**U** - Supply

**R1/R22** timed outputs

**X1** - Pause / Summation control

**Y1** - Retrigger / Restart control

**R2** The second output is instantaneous if the right position is selected  
inst.

**T** - Timing period