



Hlavní parametry

Řada výrobků	Zelio Time
Typ produktu nebo součásti	Modulární časové relé
Označení přístroje	RENF22
Operační systém	Android
Verze software	V4.4 and above
Popis software	Zelio NFC (downloadable from Google Play store)

Doplňěk

Typ diskrétního výstupu	Reléový
Jmenovitý výstupní proud	8 A
Typ a složení kontaktů	2 Z/V časově zpožděný kontakt, bez kadmia 1 C/O timed and instantaneous contact, cadmium free
Typ časového zpoždění	A Ac Ad Ah Ak At B Bw C D Di H Ht L Li Lt N O P Pt Qt TI Tt W Lit Dt Dit Qtt
Rozsah časového zpoždění	0.1 s...999 h
Kompatibilita	NFC enabled mobile device
[Us] jmenovité napájecí napětí	24...240 V AC/DC
Vstupní napětí	<= 2,4 V
Rozsah napětí	0,85 - 1,1 Un
Jmenovitý výkon	0.0002 mW
Maximální provozní frekvence	13.56 MHz
Frekvence sítě	50...60 Hz +/- 5 %
Připojení - svorky	Screw terminals 1 x 0.5...1 x 3.3 mm ² AWG 20...AWG 12 solid cable without cable end Screw terminals 2 x 0.5...2 x 2.5 mm ² AWG 20...AWG 14 solid cable without cable end Screw terminals 1 x 0.2...1 x 2.5 mm ² AWG 24...AWG 14 flexible cable with cable end Screw terminals 2 x 0.2...2 x 1.5 mm ² AWG 24...AWG 16 flexible cable with cable end
Kroutící moment	0,6...1 N.m podle IEC 60947-1 5.3...8.8 lbf.in podle IEC 60947-1

Materiál pláště	Samozhášecí
Opakovatelná přesnost	+/- 0.2 % for 10 s...999 h time delay range +/- 0.5 % for 100 ms...10 s time delay range
Teplotní odchylka	+/- 0,05 %/°C
Odchylka napětí	+/-0,2 %/V
Přesnost nastavení časového zpoždění	+/- 1 % for 1...999 h time delay range at 25 °C +/- 2 % for 1 h time delay range at 25 °C +/- 20 ms for 100 ms...10 s time delay range at 25 °C
Minimální délka pulzu	100 ms s paralelní zátěží 60 ms no-load
Izolační odpor	100 MΩ při 500 V DC podle IEC 60664-1
Doba resetu	120 ms on de-energisation
Příkon ve VA	3 VA při 240 V AC
Příkon ve W	1,5 W při 240 V DC 0,6 W při 24 V DC
Spínací schopnost ve VA	2000 VA
Minimální spínací proud	10 mA at 5 V
Maximální spínací proud	8 A
Maximální spínací napětí	250 V
Elektrická životnost	100000 cycles at 8 A, 250 V AC on resistive load
Mechanická životnost	100000000 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 a bezpečnosti	MTTFd = 227.5 years for 100 % duty cycle continuous operating condition at 30 °C
Montážní poloha	Libovolná poloha
Montážní držák	35 mm DIN lišta podle EN/IEC 60715
Místní signalizace	Un, zelená LED: (trvalá) pro napájení ON R1, pryskyřicová LED: (trvalá) pro relé napájeno R1, pryskyřicová LED: (blikající) pro probíhá časování R2, pryskyřicová LED: (trvalá) pro relé napájeno R2, pryskyřicová LED: (blikající) pro probíhá časování Pairing, zelená LED: (trvalá) pro stav komunikace Un, zelená LED: (fast blinking) pro diagnosis mode
Pracovní dosah	10 mm
Doba odezvy	2 s
Šířka	22,5 mm
Hmotnost přístroje	0.0904 kg

Životní prostředí

odolnost proti mikropřerušením	10 ms
dielektrická pevnost	2.5 kV for 1 mA/1 minute at 50 Hz between relay output and power supply with basic insulation with basic insulation
standarty	EN 61000-6-1 EN 61000-6-2 EN 61000-6-3 EN 61000-6-4 EN 61812-1
směrnice	2014/30/EU - electromagnetic compatibility 2014/35/EU - low voltage directive 2014/53/EU - radio equipment directive
certifikace výrobku	CE CSA UL KC
teplota okolního vzduchu pro provoz	-20...60 °C
teplota okolí pro uskladnění	-40...70 °C
stupeň krytí IP	IP20 na svorky podle IEC 60529 IP40 na skříňka podle IEC 60529 IP40 na čelní podle IEC 60529
stupeň znečištění	3 podle IEC 60664-1

odolnost proti vibracím	20 m/s ² při 10...150 Hz podle IEC 60068-2-6
odolnost proti otřesům	15 gn (mimo provoz) během 11 ms podle IEC 60068-2-27 5 gn (za provozu) během 11 ms podle IEC 60068-2-27
relativní vlhkost	95 % při 25...55 °C
elektromag.kompatibilita	Test odolnosti proti elektrostatickému výboji (testovací úroveň: 6 kV, úroveň 3 - vybíjecí kontakt) podle EN/IEC 61000-4-2 Test odolnosti proti elektrostatickému výboji (testovací úroveň: 8 kV, úroveň 3 - odvod vzduchu) podle EN/IEC 61000-4-2 Test odolnosti proti rychlým přechodovým dějům (testovací úroveň: 1 kV, úroveň 3 - kapacitní propojovací spona) podle IEC 61000-4-4 Test odolnosti proti rychlým přechodovým dějům (testovací úroveň: 2 kV, úroveň 3 - přímý kontakt) 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 Test odolnosti proti vyzařovanému radiofrekvenčnímu elektromagnetickému poli (testovací úroveň: 10 V, úroveň 3 - 0,15 – 80 MHz) podle IEC 61000-4-6 Test odolnosti proti elektromagnetickému poli (testovací úroveň: 10 V/m, úroveň 3 - 80 MHz...1 GHz) podle IEC 61000-4-3 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 Rádiové vyzařování, třída B podle EN 55022 Vyzařování vedením, třída A podle EN 55022 Test odolnosti proti elektromagnetickému poli (testovací úroveň: 3 V/m, úroveň 2 - 1,4 GHz...2 GHz) podle IEC 61000-4-3 Test odolnosti proti elektromagnetickému poli (testovací úroveň: 1 V/m, level 1 - 2...2,7 GHz) podle IEC 61000-4-3

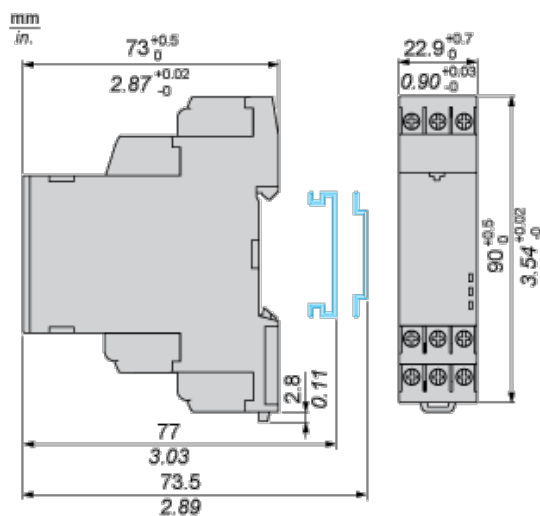
Nabídka udržitelnosti

udržitelný stav nabídky	Výrobek Green Premium
RoHS	Vyhovuje - od 1551 - Prohlášení o shodě Schneider Electric
REACH	Odkaz neobsahuje SVHC nad mezní hodnotou
dokument o ekologickém profilu	Dostupný
instrukce o ukončení životnosti výrobku	Dostupný

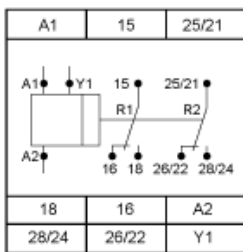
Contractual warranty

Záruční lhůta	18 měsíců
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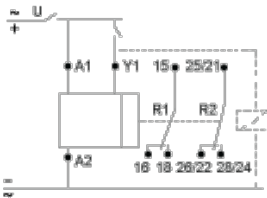
Dimensions



Internal Wiring Diagram



Wiring Diagram

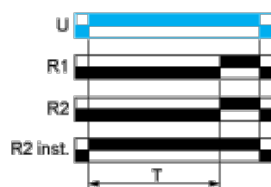


Function A: Power On-Delay Relay

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: 2 Output

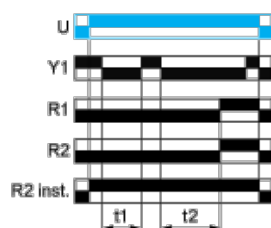


Function At: Power On-Delay Relay with Pause / Summation Control Signal

Description

On energisation of power supply, the timing period T starts. 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: 2 Output



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

Function Ac: On-Delay and Off-Delay Relay with Control Signal

Description

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

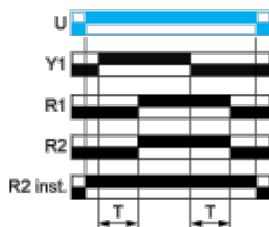
At the end of this timing period, the output(s) R close(s).

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: 2 Output



Function Ad : Pulse Delayed Relay with Control Signal

Description

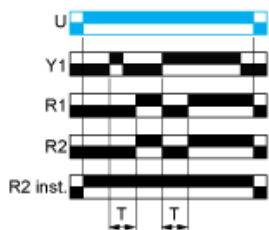
After energisation of power supply, pulsing or maintaining of energization of Y1 starts the timing T.

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

The output(s) R reverts to its initial position the next time Y1 is energized in pulsation or permanent energized manner.

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

Function: 2 Output



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

Description

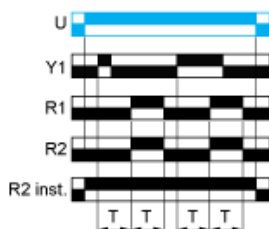
After energisation of power supply, pulsing or maintaining of energization of Y1 starts the timing T.

A single flashing cycle then starts with 2 timing periods T of equal duration (start with output(s) R in initial position). Output(s) R 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.

Re-energizing of Y1, either in pulsation or permanent energized manner, will re-start the single flashing cycle again.

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

Function: 2 Output



Function Ak: Asymmetrical On-Delay and Off-Delay Relay With Control Signal

Description

After energisation of power supply and energization of Y1, timing starts for a period Ta.

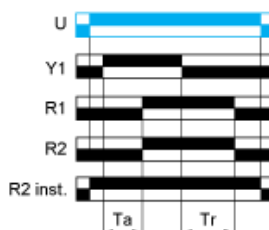
At the end of this timing period Ta, the output(s) R closes.

Deenergization of Y1 causes a second timing period Tr to start.

At the end of this timing period Tr, the output(s) R reverts to its initial state.

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

Function: 2 Output

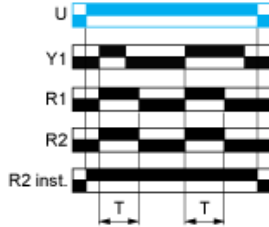


Function B: Single Interval Relay with Control Signal

Description

After energisation of power supply, pulsing or maintaining of energization of Y1 starts the timing T. The output(s) R close(s) for the duration of the timing period T then 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: 2 Output

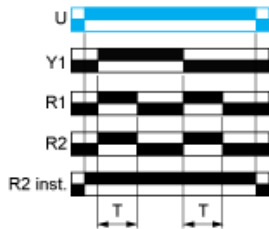


Function Bw : Double Interval Relay with Control Signal

Description

After energisation of power supply, transition of Y1 (either from energization to deenergization or vice-versa) will cause the output(s) R close(s) for the duration of the timing period T then 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: 2 Output

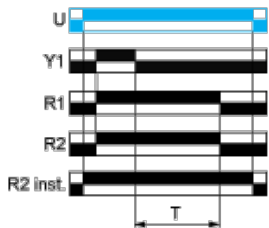


Function C: Off-Delay Relay with Control Signal

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: 2 Output

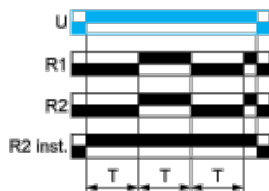


Function D: Symmetrical Flashing Relay (Starting Pulse-Off)

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

Function: 2 Output

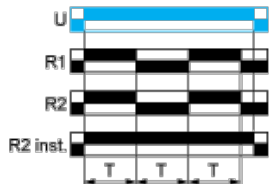


Function Di: Symmetrical Flashing Relay (Starting Pulse-On)

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: 2 Output

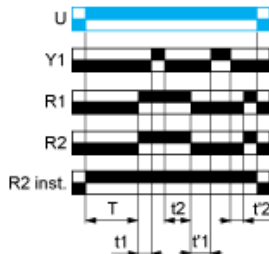


Function Dt: Symmetrical Flashing Relay (Starting Pulse-Off) With Pause / Summation Control Signal

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 Y1 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 Y1 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: 2 Output



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

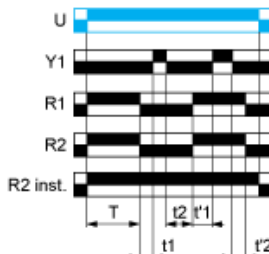
$$T = t'_1 + t'_2 + \dots$$

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

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 Y1 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 Y1 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: 2 Output



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

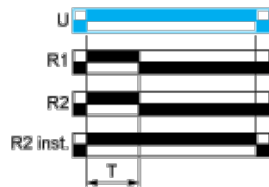
$$T = t'_1 + t'_2 + \dots$$

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: 2 Output

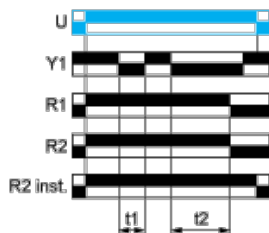


Function Ht: Interval Relay With Pause / Summation Control Signal

Description

On energisation of power supply, output(s) R close(s) and timing period T starts. The 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 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: 2 Output



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

Function L: Asymmetrical Flashing Relay (Starting Pulse-Off)

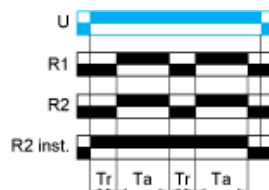
Description

On energisation of power supply, output(s) R starts at its/their initial state for timing duration T_r then change(s) to output(s) R close(s) for the another timing duration T_a .

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: 2 Output



Function Li: Asymmetrical Flashing Relay (Starting Pulse-On)

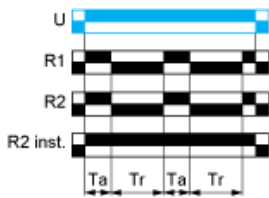
Description

On energisation of power supply, output(s) R starts at output(s) R close(s) for timing duration T_a then change(s) to its/their initial state for timing duration T_r .

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: 2 Output



Function Lt: Asymmetrical Flashing Relay (Starting Pulse-Off) With Pause / Summation Control Signal

Description

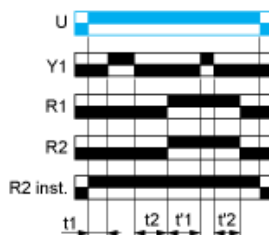
On energisation of power supply, output(s) R starts at its/their initial state for timing duration T_r and the timing can be interrupted / paused each time Y1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T_r , then changes to output(s) R close(s).

The output(s) R close state will remain for the same timing duration T_a and the timing can be interrupted / paused each time Y1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T_a , 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: 2 Output



$$T_r = t_1 + t_2 + \dots$$

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

Function Lit: Asymmetrical Flashing Relay (Starting Pulse-On) With Pause / Summation Control Signal

Description

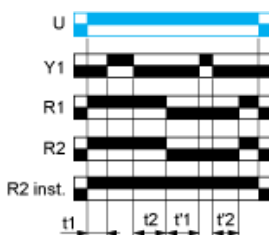
On energisation of power supply, output(s) R starts at output(s) R close(s) for timing duration T_a and the timing can be interrupted / paused each time Y1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T_a , the output(s) R revert (s) to its/their initial state.

The output(s) R at initial state will remain for timing duration T_r the timing can be interrupted / paused each time Y1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T_r , then changes to output(s) R close(s)

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: 2 Output



$$T_a = t_1 + t_2 + \dots$$

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

Function N : Safe-Guard Relay

Description

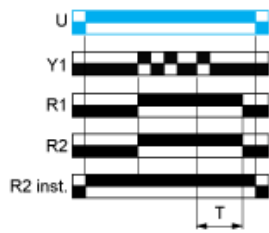
After energisation of power supply and on energization of Y1 cause the output(s) R close(s) and starts the timing T.

If the duration interval between 2 consecutive energization of Y1 is greater than the pre-set value T, the output(s) R close(s) at the end of the timing period.

If the duration interval between 2 consecutive energization of Y1 is less than the pre-set value T, the output(s) R remain(s) closed and timing restarted base on the last energization of Y1.

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

Function: 2 Output



Function O : Delayed Safe-Guard Relay

Description

On energisation of power supply, the timing T starts.

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

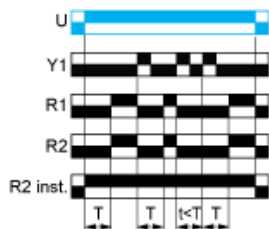
On energization of Y1, the output(s) R revert(s) to its/their initial state and the timing T restarts.

If the duration interval between 2 consecutive energization of Y1 is greater than the pre-set value T, the output(s) R close(s) at the end of the timing period.

If the duration interval between 2 consecutive energization of Y1 is less than the pre-set value T, the output(s) R remain(s) at its/their initial state and timing restarted base on the last energization of Y1.

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

Function: 2 Output



Function P : Pulse Delayed Relay with Fixed Pulse Length

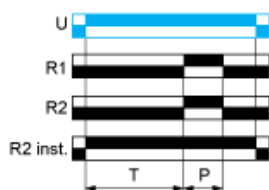
Description

On energisation of power supply, the timing T starts.

At the end of this period, the output(s) R close(s) for a fixed time P then 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: 2 Output



P = 500ms

Function Pt : Pulse Delayed Relay With Fixed Pulse Length and Pause / Summation Control Signal

Description

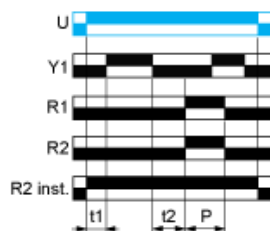
On energisation of power supply, the timing T starts.

The 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) for a fixed time P then 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: 2 Output



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

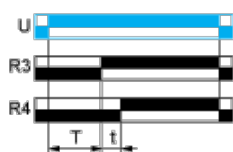
$$P = 500ms$$

Function Qt: Star-Delta Relay (2 CO Outputs with Split Common)

Description

On energisation of power supply, the output R3 & R4 initializes 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 R3 closes such that deenergizes STAR CONTACTOR and causes t transition time starts. At the end of the transition time, the output R4 closes such that energizes DELTA CONTACTOR.

Function: 2 Output



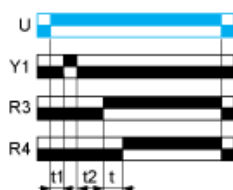
$$T = 50, 60 \dots ms$$

Function Qtt: Star-Delta Relay (2 CO Outputs With Split Common) with Pause / Summation Control Signal

Description

On energisation of power supply, the output R3 & R4 initializes at its initial state such that energizes STAR CONTACTOR + MAIN CONTACTOR and the timing T starts (STAR connection time duration starts). During STAR connection time, the 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 R3 closes such that deenergizes STAR CONTACTOR and causes t transition time starts. At the end of the transition time, the output R4 closes such that energizes DELTA CONTACTOR.

Function: 2 Output



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

$$t = 50, 60 \dots ms$$

Function TL : Bistable Relay with Control Signal On

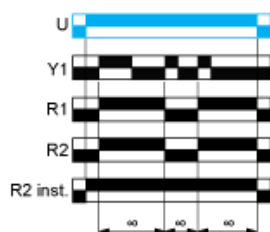
Description

After energisation of power supply and on energization of Y1 cause the output(s) R close(s). The subsequent on energization of Y1 cause 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: 2 Output



Function Tt : Retriggerable Bistable Relay with Control Signal On

Description

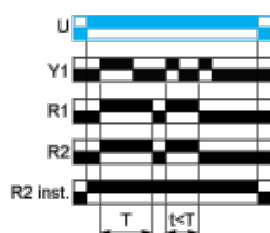
After energisation of power supply and on energization of Y1 cause the output(s) R close(s) and starts the timing T.

If the duration interval between 2 consecutive energization of Y1 is greater than the pre-set value T, the output(s) R will toggle from its/their present status the end of the timing period.

If the duration interval between 2 consecutive energization of Y1 is less than the pre-set value T, the output(s) R toggle from its/their present status as soon as Y1 energizes without completing T duration.

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

Function: 2 Output

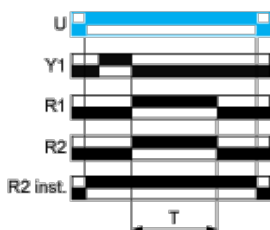


Function W: Interval Relay with Control Signal Off

Description

After energisation of power supply and on energization of Y1 following by denenergization 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: 2 Output



Legend

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

U - Supply

R1/R22 timed outputs

-

Ta - Adjustable On-delay

Tr - Adjustable Off-delay

Y1 - Retrigger / Restart control

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

-

T - Timing period

R4 - Delta contact output

t - Delay to switch ON Delta contact output

R3 - Star-Delta contact output