

Fișă tehnică produs

Specificatii



Releu de Timp Nfc, 0.1 S, 999 H, 24, 240 V Ac/Dc, 2 Co

RENF22R2MMW

Principale

gama de produse	Harmony Timer Relays
Tip produs sau componenta	NFC timer relay
nume scurt al dispozitivului	RENF22
App for product	Ecostruxure Industrial Device (downloadable from Google Play store or Apple Store)

Suplimentare

tip de iesire discreta	Releu
curent nominal de iesire	8 A
tip si compozitie contacte	2 C/O contact temporizat, fara cadmiu 1 C/O temporizata si instantanee, fara cadmiu
tip intarziere	Power on-delay On-delay and off-delay Pulse delay Asymmetrical on-delay and off-delay Interval Temporizare la revenire Symmetrical flashing Safe-guard Star-delta Asymmetrical flashing Bistable
intervalul de intarziere	0.05 s...999 h
Compatibilitate produs	Dispozitiv NFC disponibil
tip de control	Without test button
[Us] tensiune nominala de alimentare	24...240 V c.a./c.c.
Release input voltage	<= 2.4 V
interval de tensiune	0.85...1.1 Un
Maximum RF power transmitted	0,0002 mW
Frecventa de functionare NFC	13.56 MHz
frecventa de alimentare	50...60 Hz +/- 5 %
conexiuni - borne	Borne cu surub, 2 x 0.5 - 1 x 3.3 mm² (AWG 20 - AWG 12) solid fara terminale de cablu Borne cu surub, 3 x 0.5 - 2 x 2.5 mm² (AWG 20...AWG 14) solid fara terminale de cablu Borne cu surub, 1 x 0.2 - 1 x 2.5 mm² (AWG 24 - AWG 14) flexibil cu pini Borne cu surub, 2 x 0.2 - 2 x 1.5 mm² (AWG 24 - AWG 16) flexibil cu pini
cuplu de strangere	0,6...1 N.m conformitate cu IEC 60947-1 0,6...1,0 N.m conformitate cu IEC 60947-1
material carcasa	Autostingere

Declinare de responsabilitate: Această documentație nu se substituie și nu trebuie utilizată pentru stabilirea adecvării sau fiabilității acestor produse pentru aplicații utilizator

precizie de repetare	+/- 0,2 % pentru 10 s...999 h interval de temporizare +/- 0,5 % pentru 100 ms...10 s interval de temporizare +/- 0.7 % pentru 50...100 ms interval de temporizare
Abatere temperatura	+/- 0,05 %/°C
abatere a tensiunii	+/- 0,2 %/V
setarea preciziei temporizarii	+/- 1 % pentru 1...999 h interval de temporizare la 25 °C +/- 2 % pentru 1...3600 s interval de temporizare la 25 °C +/- 20 ms pentru 100 ms...10 s interval de temporizare la 25 °C +/- 30 ms pentru 50...100 ms interval de temporizare la 25 °C
Time delay type	Power on-delay - A- Power on-delay relay On-delay and off-delay - Ac- On-delay and off-delay relay w/ control signal Pulse delay - Ad- Pulse delayed relay w/ control signal Pulse delay - Ah- Pulse delayed relay (single cycle) w/ control signal On-delay and off-delay - Ak- Asymmetrical on-delay and off -delay relay w/ control signal Power on-delay - At- Power on-delay relay w/ pause/summation (Y1) Interval - B- Single interval relay w/ control signal Interval - Bw- Double interval relay w/ control signal Temporizare la revenire - C- Off-delay relay w/ control signal Symmetrical flashing - D- Symmetrical flashing relay (starting pulse-off) Symmetrical flashing - Di- Symmetrical flashing relay (starting pulse-on) Symmetrical flashing - Dt- Symmetrical flashing relay (starting pulse-off) w/ pause/summation (Y1) Symmetrical flashing - Dit- Symmetrical flashing relay (starting pulse-on) w/ pause/summation (Y1) Interval - H- Interval relay Interval - Ht- Interval relay w/ pause/summation (Y1) Asymmetrical flashing - Li- Asymmetrical flashing relay (starting pulse-on) Asymmetrical flashing - Lt- Asymmetrical flashing relay (starting pulse-off) w/ pause/summation (Y1) Asymmetrical flashing - Lit- Asymmetrical flashing relay (starting pulse-on) w/ pause/summation (Y1) Safe-guard - N- Safe-guard relay Safe-guard - O- Delayed Safe-guard relay Pulse delay - P- Pulse delayed relay w/ fixed pulse length Pulse delay - Pt- Pulse delayed relay w/ fixed pulse length and pause/summation Star-delta - Qt- Star-delta relay (2 CO outputs w/ split common) Star-delta - Qtt- Star-delta relay (2 CO outputs w/ split common) w/ pause/summation (Y1) Bistable - TI- Bistable relay w/ control signal on Bistable - Tt- Retriggerable bistable relay w/ control signal on Interval - W- Interval relay w/ control signal off Asymmetrical flashing - L- Asymmetrical flashing relay (starting pulse-off)
Control signal pulse width	100 ms cu sarcina în paralel 60 ms în gol
rezistența de izolație	100 MΩ la 500 V c.c. conformitate cu SR EN 60664-1
Recovery time	120 ms la întreruperea alimentării
puterea consumată în VA	3 VA la 240 V c.a.
puterea consumată în W	1,5 W la 240 V c.c. 0,6 W la 24 V c.c.
capacitatea de comutare în VA	2000 VA
curentul minim de comutare	10 mA la 5 V
curent maxim comutat	8 A
tensiunea maximă de comutație	250 V
durabilitate electrică	100000 cic pentru rezistiv sarcină, 8 A la 250 V, AC
durabilitate mecanică	10000000 cic
Rated impulse withstand voltage	5 kV 1.2/50 μs conformitate cu SR EN 60664-1
power on delay	100 ms
distanța de conturare	4 kV/3 conformitate cu SR EN 60664-1
categorie de supratensiune	III conforming to SR EN 60664-1

fiabilitatea datelor despre securitate	MTTFd = 227.5 ani stare de functionare continua 100 % la 30 °C
pozitie de montare	Orice pozitie
suport de montare	Sina DIN 35 mm conformitate cu IEC 60715
status LED	Un, verde LEDspatiustabil) pentru alimentat R1, portocaliu LEDspatiustabil) pentru releu alimentat R2, portocaliu LEDspatiustabil) pentru releu alimentat Pairing, verde LEDspatiustabil) pentru stare comunicatie Un, verde LEDspatiuclipire rapida) pentru mod diagnoza R1, portocaliu LEDspatiuintermitent) pentru temporizare în progres R2, portocaliu LEDspatiuintermitent) pentru temporizare în progres
Maximum communication distance	10 mm
functie disponibila	A- Power on-delay relay-2 C/O Ac- On-delay and off-delay relay w/ control signal-2 C/O Ad- Pulse delayed relay w/ control signal-2 C/O Ah- Pulse delayed relay (single cycle) w/ control signal-2 C/O Ak- Asymmetrical on-delay and off -delay relay w/ control signal-2 C/O At- Power on-delay relay w/ pause/summation (Y1)-2 C/O B- Single interval relay w/ control signal-2 C/O Bw- Double interval relay w/ control signal-2 C/O C- Off-delay relay w/ control signal-2 C/O D- Symmetrical flashing relay (starting pulse-off)-2 C/O Di- Symmetrical flashing relay (starting pulse-on)-2 C/O Dt- Symmetrical flashing relay (starting pulse-off) w/ pause/summation (Y1)-2 C/O Dit- Symmetrical flashing relay (starting pulse-on) w/ pause/summation (Y1)-2 C/O H- Interval relay-2 C/O Ht- Interval relay w/ pause/summation (Y1)-2 C/O Li- Asymmetrical flashing relay (starting pulse-on)-2 C/O Lt- Asymmetrical fl ashing relay (starting pulse-off) w/ pause/summation (Y1)-2 C/O Lit- Asymmetrical flashing relay (starting pulse-on) w/ pause/summation (Y1)-2 C/O N- Safe-guard relay-2 C/O O- Delayed Safe-guard relay-2 C/O P- Pulse delayed relay w/ fixed pulse length-2 C/O Pt- Pulse delayed relay w/ fixed pulse length and pause/summation-2 C/O Qt- Star-delta relay (2 CO outputs w/ split common)-2 C/O Qtt- Star-delta relay (2 CO outputs w/ split common) w/ pause/summation (Y1)-2 C/O TI- Bistable relay w/ control signal on-2 C/O Tt- Retriggerable bistable relay w/ control signal on-2 C/O W- Interval relay w/ control signal off-2 C/O L- Asymmetrical flashing relay (starting pulse-off)-2 C/O
sistem de operare	Androidversion >= V7.0 IOSversion >= V14.5
latime	22,5 mm
greutate produs	0,0904 kg
Number of functions	28

Mediu

imunitate la microintreruperi	10 ms
rigiditate dielectrica	2,5 kV pentru 1 mA/1 minut la 50 Hz cu between relay output and power supply with basic insulation cu Izolatie de baza
standarde	IEC 61000-6-1 IEC 61000-6-2 IEC 61000-6-4 EN 61812-1 IEC 61000-6-3
directive	2014/35/EU - directiva joasa tensiune 2014/53/EU - directiva privind echipamente radio 2014/30/EU - directiva de compatibilitate electromagnetica

certificari produs	UE CSA KC UL CCC EAC DNV-GL
temperatura ambientala de functionare	-20...60 °C
temperatura ambietala pentru depozitare	-40...70 °C
grad de protectie IP	IP40 carcasa: conforming to SR EN 60529 IP40 parte frontala: conforming to SR EN 60529 IP20 borne: conforming to SR EN 60529
grad de poluare	3 conformitate cu SR EN 60664-1
rezistenta la vibratii	20 m/s² (f= 10...150 Hz) conforming to IEC 60068-2-6
rezistenta la socuri	15 gn nu functioneaza pentru 11 ms conformitate cu IEC 60068-2-27 5 gn în functionare pentru 11 ms conformitate cu IEC 60068-2-27
umiditate relativa	95 % la 25...55 °C
compatibilitate electromagnetica	Test de imunitate la descarcari electrostatice - test level: 6 kV nivel 3 (descarcare pe contact) conforming to IEC 61000-4-2 Test de imunitate la descarcari electrostatice - test level: 9 kV nivel 3 (descarcare în aer) conforming to IEC 61000-4-2 Test de imunitate la tranzienti rapizi - test level: 1 kV nivel 3 (brida de conectare capacitiva) conforming to IEC 61000-4-4 Test de imunitate la tranzienti rapizi - test level: 2 kV nivel 3 (contact direct) conforming to IEC 61000-4-4 Test de imunitate la supratensiuni - test level: 1 kV nivel 3 (mod diferential) conforming to IEC 61000-4-5 Test de imunitate la supratensiuni - test level: 2 kV nivel 3 (mod comun) conforming to IEC 61000-4-5 Test de imunitate la frecventa radio radiata - test level: 10 V nivel 3 (0.15 - 80 MHz) conforming to IEC 61000-4-6 Test de imunitate la câmp electromagnetic - test level: 10 V/m nivel 3 (80 MHz - 1 GHz) conforming to IEC 61000-4-3 Imunitate la microîntreruperi si caderi ale tensiunii - test level: 30 % (500 ms) conforming to IEC 61000-4-11 Imunitate la microîntreruperi si caderi ale tensiunii - test level: 100 % (21 ms) conforming to IEC 61000-4-11 Emisie radiata clasa B conforming to EN 55022 Emisie efectuata clasa A conforming to EN 55022 Test de imunitate la câmp electromagnetic - test level: 3 V/m nivel 2 (1.4 GHz - 2 GHz) conforming to IEC 61000-4-3 Test de imunitate la câmp electromagnetic - test level: 1 V/m nivel 1 (2 - 2.7 GHz) conforming to IEC 61000-4-3

Unitati de ambalare

Unitate de masura pentru prima forma de impachetare	PCE
Numar unitati in prima forma de impachetare	1
Inaltime prima forma de impachetare	2,4 cm
Latime prima forma de impachetare	8,05 cm
Lungime prima forma de impachetare	9,45 cm
Greutate prima forma de impachetare	103,635 g
Unitate de masura pentru a doua forma de impachetare	S02
Numar unitati in a doua forma de impachetare	40
Inaltime a doua forma de impachetare	15,0 cm
Latime a doua forma de impachetare	30,0 cm
Lungime a doua forma de impachetare	40,0 cm

Greutate a doua forma de impachetare	4,616 kg
Unitate de masura pentru a treia forma de impachetare	P06
Numar unitati in a treia forma de impachetare	640
Inaltime a treia forma de impachetare	70,0 cm
Latime a treia forma de impachetare	60,0 cm
Lungime a treia forma de impachetare	80,0 cm
Greutate a treia forma de impachetare	84,13 kg

Garanție contractuală

Garantie	18 luni
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Environmental Data

Schneider Electric isi propune sa atinga nivelul Net Zero pana in 2050 prin parteneriate la nivelul lantului de aprovizionare, materiale cu impact mai redus si circularitate, prin campania „Use Better, Use Longer, Use Again” pentru a extinde durata de viata a produselor si reciclabilitatea.

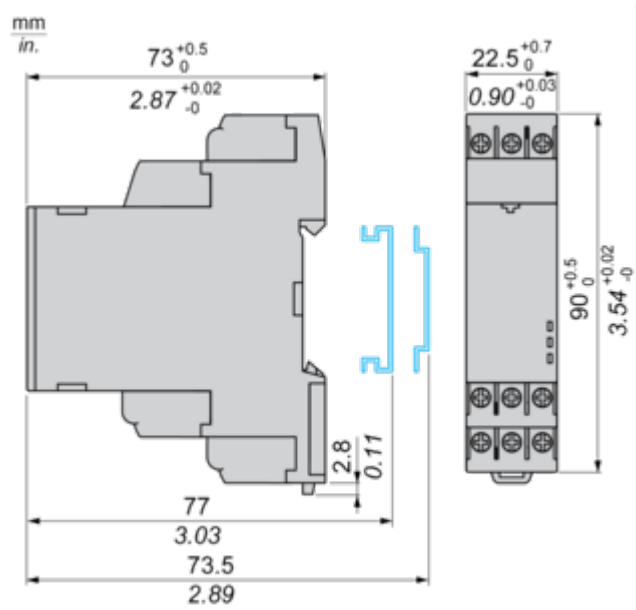
Environmental Data explicate >

Cum evaluam sustenabilitatea produselor >

Amprenta de mediu	
Amprenta de carbon (kg CO2 eq.)	64
Use Better	
Materiale si ambalare	
Pachet cu carton reciclabil	Da
Ambalaj fara plastic	Da
Directiva RoHS UE	Conformitate proactiva (Produs in afara domeniului de aplicare a EU RoHS)
Numar SCIP	7bdc2711-0ad2-427c-8ece-532c5e9f09d7
Regulamentul REACH	Declaratia REACH
Use Again	
Reambalare si refabricare	
Preluare la sfarsitul duratei de viata	No

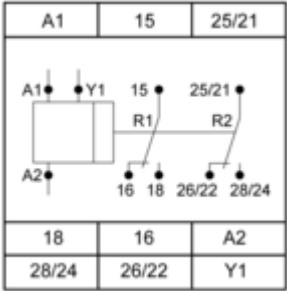
Dimensions Drawings

Dimensions

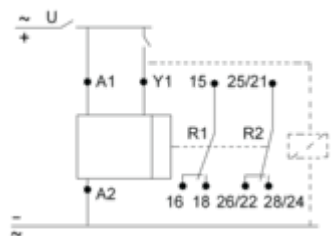


Connections and Schema

Internal Wiring Diagram



Wiring Diagram



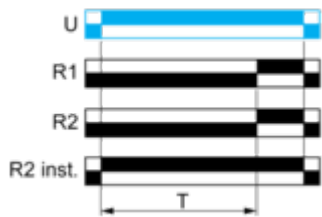
Technical Description

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

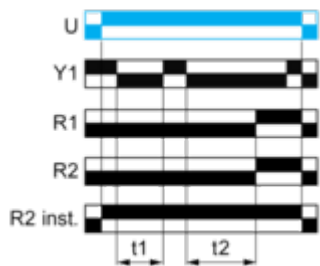


Function At: Power On-Delay Relay with Pause / Summation Control Signal

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



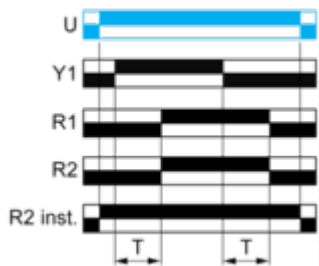
$T = t1 + t2 + \dots$

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

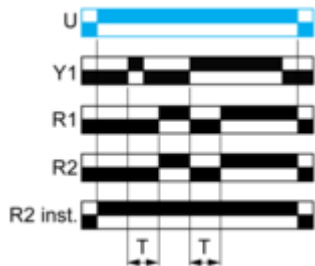


Function Ad : Pulse Delayed Relay with Control Signal

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

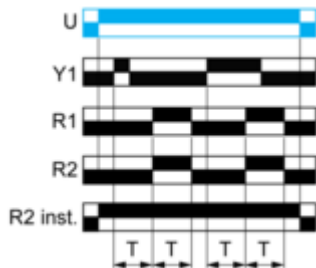


Function Ah : Pulse Delayed Relay (Single Cycle) with Control Signal

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

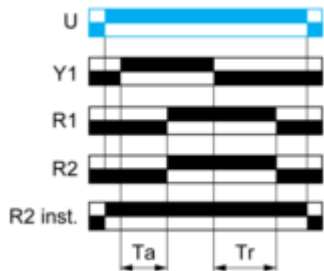


Function Ak: Asymmetrical On-Delay and Off-Delay Relay With Control Signal

Description

After energisation of power supply and energization of Y1, timing starts for a period T_a .
At the end of this timing period T_a , the output(s) R closes.
Deenergization of Y1 causes a second timing period T_r to start.
At the end of this timing period T_r , 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

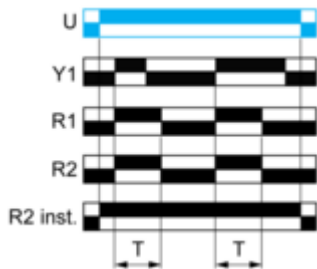


Function B: Single Interval Relay with Control Signal

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

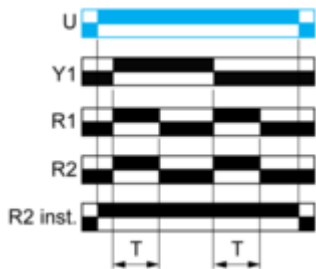


Function Bw : Double Interval Relay with Control Signal

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

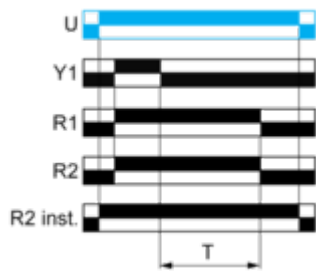


Function C: Off-Delay Relay with Control Signal

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

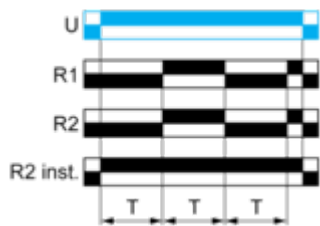


Function D: Symmetrical Flashing Relay (Starting Pulse-Off)

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

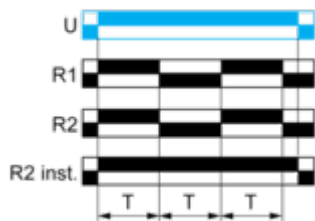


Function Di: Symmetrical Flashing Relay (Starting Pulse-On)

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

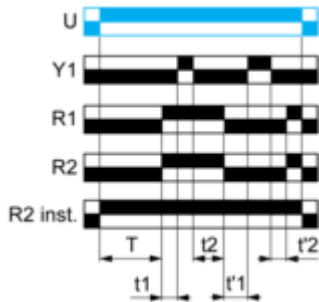


Function Dt: Symmetrical Flashing Relay (Starting Pulse-Off) With Pause / Summation Control Signal

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



$T = t_1 + t_2 + \dots$

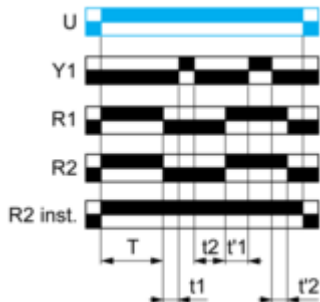
$T = t'_1 + t'_2 + \dots$

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



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

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

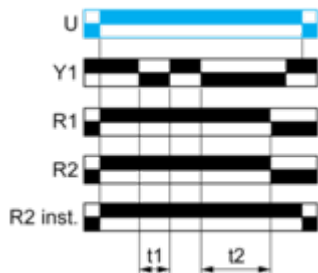


Function Ht: Interval Relay With Pause / Summation Control Signal

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



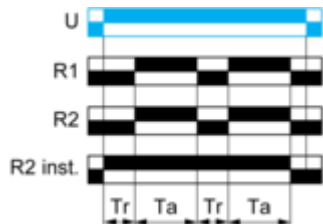
$T = t1 + t2 + \dots$

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

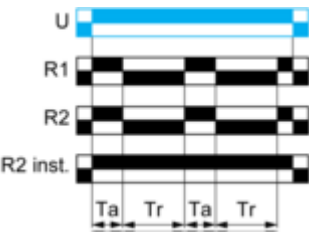


Function Li: Asymmetrical Flashing Relay (Starting Pulse-On)

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

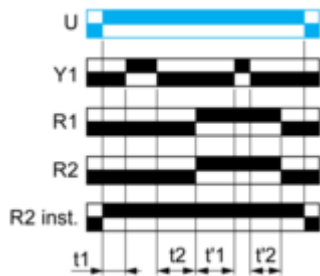


Function Lt: Asymmetrical Flashing Relay (Starting Pulse-Off) With Pause / Summation Control Signal

Description

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



$Tr = t1 + t2 + \dots$
 $Ta = t'1 + t'2 + \dots$

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

Description

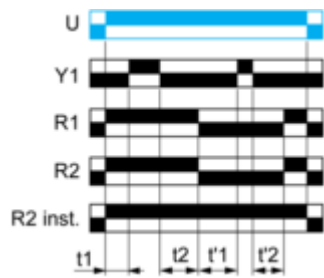
On energisation of power supply, output(s) R starts at output(s) R close(s) for timing duration Ta and the timing can be interrupted / paused each time Y1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value Ta, the output(s) R revert(s) to its/their initial state.

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



$Ta = t1 + t2 + \dots$

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

Function N : Safe-Guard Relay

Description

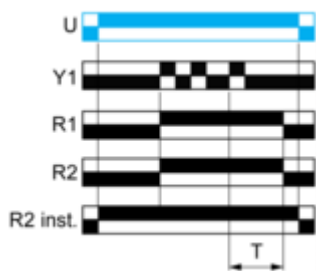
After energisation of power supply and on energization of Y1 cause the output(s) R close(s) and starts the timing T.

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

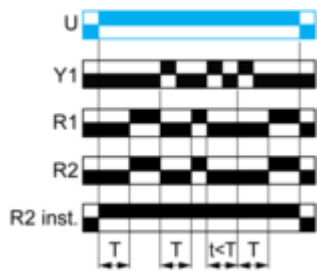


Function O : Delayed Safe-Guard Relay

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

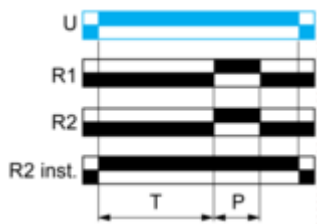


Function P : Pulse Delayed Relay with Fixed Pulse Length

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



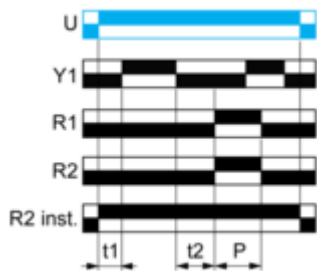
P = 500ms

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 + ...
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. Diagnostic feature not available.

Function: 2 Output



T = 50, 60... 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. Diagnostic feature not available.

Function: 2 Output



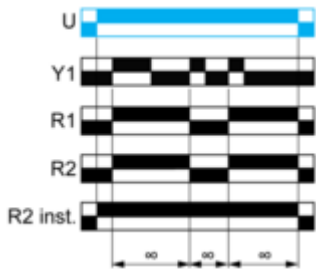
T = t1 + t2 + ...
t = 50, 60 ... ms

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

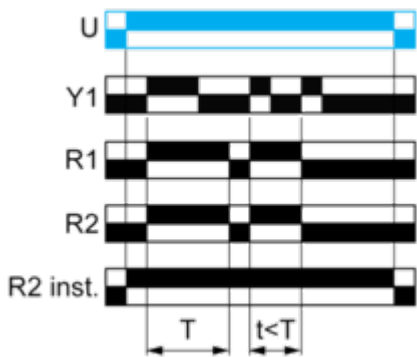
After energisation of power supply and on energization of Y1 cause the output(s) R close(s) and starts the timing T.

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

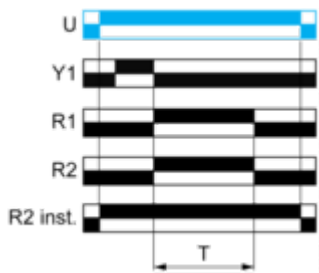


Function W: Interval Relay with Control Signal Off

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



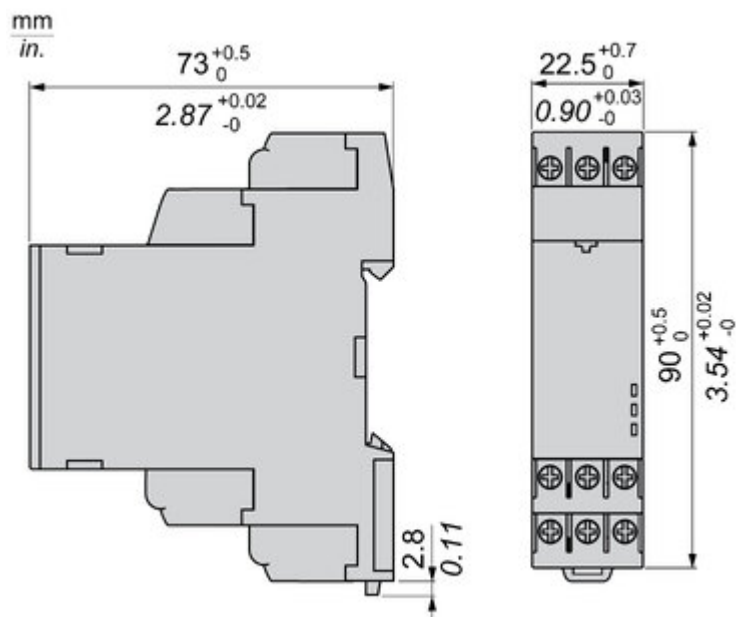
Legend

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

U -	Supply
R1/R2 -	2 timed outputs
Ta -	Adjustable On-delay
Tr -	Adjustable Off-delay
Y1 -	Retrigger / Restart control
R2 inst. -	The second output is instantaneous if the right position is selected
T -	Timing period
R4 -	Delta contact output
t -	Delay to switch ON Delta contact output
R3 -	Star-Delta contact output

Technical Illustration

Dimensions



Offer Marketing Illustration

Product benefits / Features

Features

NFC Apps features



One integrated app for both timer and control relays



10 Alarms configurable with different monitoring functions



Easy to configure using Auto-Configure function



Operation efficiency by Clone setting to multiple relays



20 historical fault/events data logging



Simplicity and inventory optimization – Multi functions all in one



Offer Marketing Illustration

Product benefits / Features

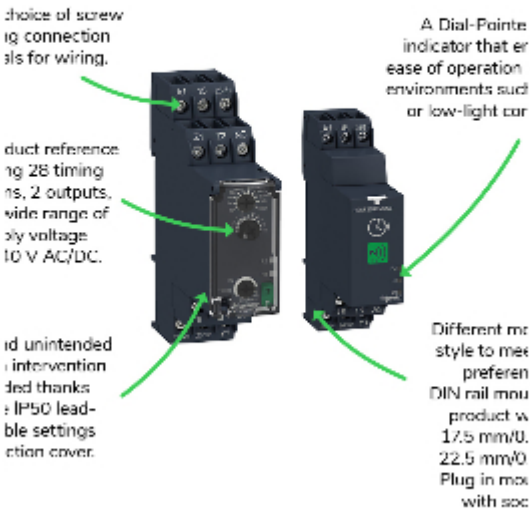


Offer Marketing Illustration

Product benefits / Features

Technical Benefits

Harmony Timer Relay



Offer Marketing Illustration

Product benefits / Features

Features

Harmony Timer Relay



"Diagnostic button" to check downstream circuit immediately, shorten the commission and troubleshooting time



Compatible with a wide range of applications including machines, buildings, water segments, and HVAC.



Wide range of time delay for adjustment: from 0.01 s to 999 hrs.



Compliant with IEC 60255-1 standard, and a wide array of product certifications such as UL, CE, CSA, EAC.



Unprecedented accuracy, predictive maintenance, and superior security.



Image of product / Alternate images

Alternative



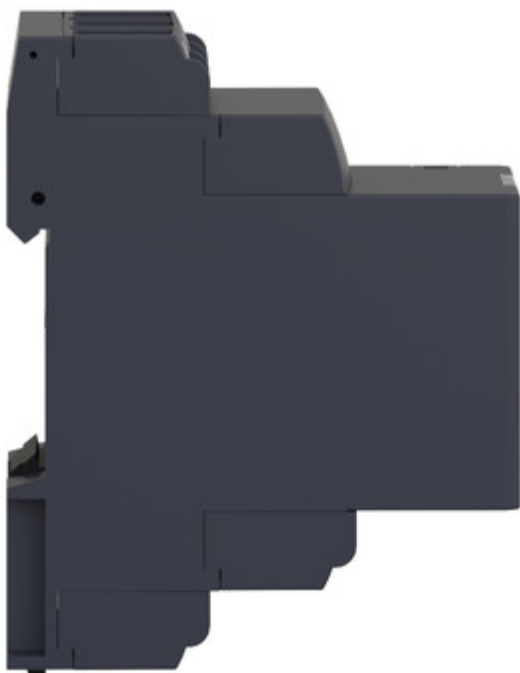




Image of product in real life situation

