

Productinformatieblad

Specificaties



NFC modular timing relay, 8 A, 2 CO, 0.1 s...999 h, multifunction, 24...240 V AC/DC

RENF22R2MMW

EAN Code: 3606480936203

Prijs: 108,50 EUR

Hoofd

range of product	Harmony-timerrelais
product of component type	NFC-timerrelais
device short name	RENF22
App voor product	EcoStruxure industrieel apparaat (downloaden van Google Play Store of Apple Store)

Complementair

digitaal uitgangstype	Relais
nominale uitgangsstroom	8 A
type en samenstelling contact	2 C/O tijdcontact, cadmiumvrij 1 C/O vertraagd en ogenblikkelijk contact, cadmiumvrij
type tijdsvertraging	Vertraging bij inschakeling Vertraging bij in- en uitschakelen Pulsvertraging Asymmetrische inschakelvertraging en uitschakelvertraging Print gegevens Vertraging bij uitschakeling Symmetrisch knipperend Safe-guard Star-delta Asymmetrisch knipperend Tastbaar
tijdvertraging bereik	0.05 s...999 H
compatibiliteit product	Mobiel apparaat met NFC
control type	Zonder testknop
Us nominale voedingsspanning	24...240 V AC/DC
ingangsspanning	≤ 2.4 V
spanningsbereik	0,85...1,1 Un
Maximaal overgedragen RF-vermogen	0,0002 mW
NFC-bedrijfsfrequentie	13,56 MHz
voedingsfrequentie	50...60 Hz +/- 5 %
aansluitingen - aansluitklemmen	Schroefklemmen, 1 x 0,5...1 x 3,3 mm ² (AWG 20...AWG 12) vast zonder kabeluiteinde Schroefklemmen, 2 x 0,5...2 x 2,5 mm ² (AWG 20...AWG 14) vast zonder kabeluiteinde Schroefklemmen, 1 x 0,2...1 x 2,5 mm ² (AWG 24...AWG 14) flexibel met kabeluiteinde Schroefklemmen, 2 x 0,2...2 x 1,5 mm ² (AWG 24...AWG 16) flexibel met kabeluiteinde

De weergegeven prijs is de adviesprijs in euro excl. BTW. Deze kan onderhevig zijn aan korting. Neem contact op met uw lokale distributeur of detailhandel voor de daadwerkelijke prijs

aanspanmoment	0,6...1 N.m In overeenstemming met IEC 60947-1 0,6...1,0 N.m In overeenstemming met IEC 60947-1
materiaal behuizing	Polycarbonaat
herhalingsnauwkeurigheid	+/- 0.2 % voor 10 s...999 h bereik tijdvertraging +/-0.5% voor 100 ms...10 s bereik tijdvertraging +/-0,7 % voor 50...100 ms bereik tijdvertraging
temperatuurafwijking	+/- 0,05 %/°C
spanningsverloop	+/- 0,2 %/V
instelling nauwkeurigheid tijdsvertraging	+/-1% voor 1...999 h bereik tijdvertraging om 25 °C +/-2% voor 1...3600 sec bereik tijdvertraging om 25 °C +/- 20 ms voor 100 ms...10 s bereik tijdvertraging om 25 °C +/- 30 ms voor 50...100 ms bereik tijdvertraging om 25 °C
Time delay type	Vertraging bij inschakeling - A- Vertragingrelais bij inschakeling Vertraging bij in- en uitschakelen - Ac - Vertraginginschakeling en uitschakelrelais m/ controlesignaal Pulsvertraging - Ad- pulsvertraagd relais m/ controlesignaal Pulsvertraging - Ah- pulsvertraagd relais (één cyclus) m/ controlesignaal Vertraging bij in- en uitschakelen - Ak-Asymmetrische on-delay en off-delay relais m/ controlesignaal Vertraging bij inschakeling - Bij- Vertragingrelais bij inschakeling vermogen m/ pauze/optelling (Y1) Print gegevens - B- Eén intervalrelais met controlesignaal Print gegevens - Bw- Dubbel intervalrelais m/ besturingssignaal Vertraging bij uitschakeling - C- Uit-vertragingrelais m/ controlesignaal Symmetrisch knipperend - D- Symmetrisch knipperend relais (start pulse-off) Symmetrisch knipperend - Di- Symmetrisch knipperend relais (start puls-on) Symmetrisch knipperend - Dt- Symmetrisch knipperend relais (startpuls-off) m/ pauze/optelling (Y1) Symmetrisch knipperend - Dit- Symmetrisch knipperend relais (startpuls-on) m/ pauze/optelling (Y1) Print gegevens - H- Intervalrelais Print gegevens - Ht- Intervalrelais m/ pauze/optelling (Y1) Asymmetrisch knipperend - Li- Asymmetrisch knipperend relais (startpuls-on) Asymmetrisch knipperend - Lt-asymmetrisch vertraagd relais (startpuls-uit) m/ pauze/optelling (Y1) Asymmetrisch knipperend - Lit- Asymmetrisch knipperend relais (startpuls-on) m/ pauze/optelling (Y1) Safe-guard - N- Veilig beveiligingsrelais Safe-guard - O- vertraagd veiligheidsrelais Pulsvertraging - P- Pulsvertraagd relais met vaste pulslengte Pulsvertraging - Pt- Pulsvertraagd relais met vaste pulslengte en pauze/optelling Star-delta - Qt- Star-delta relais (2 CO uitgangen m/ split common) Star-delta - Qtt-Star-delta relais (2 CO-uitgangen m/ split common) m/ pauze/optelling (Y1) Tastbaar - TI - Bistable relais met controlesignaal aan Tastbaar - Tt-Heractiveerbaar belastbaar relais met controlesignaal aan Print gegevens - W- Intervalrelais met controlesignaal uit Asymmetrisch knipperend - L- Asymmetrisch knipperend relais (start pulse-off)
impulsduur	100 ms met belasting in parallel 60 ms onbelast
isolatieweerstand	100 MOhm om 500 V DC In overeenstemming met IEC 60664-1
Hersteltijd	120 ms bij ontkrachtiging
maximaal energieverbruik in VA	3 VA om 240 V AC
maximaal energieverbruik in W	1,5 W om 240 V DC 0,6 W om 24 V DC
schakelcapaciteit in VA	2000 VA
minimale schakelstroom	10 mA om 5 V
maximale schakelstroom	8 A
maximale schakelspanning	250 V
elektrische duurzaamheid	100000 cycles voor resistief belasting, 8 A om 250 V, AC
mechanical durability	10000000 cycles

Uimp toegekende schokgolfspanning	5 kV 1,2/50 µs In overeenstemming met IEC 60664-1
responsvertraging	100 ms
kruipweg	4 kV/3 In overeenstemming met IEC 60664-1
overvoltage category	III In overeenstemming met IEC 60664-1
betrouwbaarheidsgegevens veiligheid	MTTFd = 227.5 jaar 100 % bedrijfscyclus continue werkingstoestand bij 30°C
montagepositie	Eender welke positie
montagesteun	35mm DIN rail In overeenstemming met IEC 60715
status LED	Un, groen LED: (Vast) voor stroom AAN R1, amber LED: (Vast) voor relais bekrachtigd R2, amber LED: (Vast) voor relais bekrachtigd Koppeling, groen LED: (Vast) voor communicatiestatus Un, groen LED: (snel knipperend) voor diagnosemodus R1, amber LED: (Flitsend) voor timing in progress R2, amber LED: (Flitsend) voor timing in progress
Maximale communicatieafstand	10 mm
functie beschikbaar	A- Vertragsrelais bij inschakeling-2 C/O Ac - Vertragsinschakeling en uitschakelrelais m/ controlesignaal-2 C/O Ad- pulsvertraagd relais m/ controlesignaal-2 C/O Ah- pulsvertraagd relais (één cyclus) m/ controlesignaal-2 C/O Ak-Asymmetrische on-delay en off-delay relais m/ controlesignaal-2 C/O Bij- Vertragsrelais bij inschakeling vermogen m/ pauze/optelling (Y1)-2 C/O B- Eén intervalrelais met controlesignaal-2 C/O Bw- Dubbel intervalrelais m/ besturingssignaal-2 C/O C- Uit-vertragsrelais m/ controlesignaal-2 C/O D- Symmetrisch knipperend relais (start pulse-off)-2 C/O Di- Symmetrisch knipperend relais (start puls-on)-2 C/O Dt- Symmetrisch knipperend relais (startpuls-off) m/ pauze/optelling (Y1)-2 C/O Dit- Symmetrisch knipperend relais (startpuls-on) m/ pauze/optelling (Y1)-2 C/O H- Intervalrelais-2 C/O Ht- Intervalrelais m/ pauze/optelling (Y1)-2 C/O Li- Asymmetrisch knipperend relais (startpuls-on)-2 C/O Lt-asymmetrisch vertraagd relais (startpuls-uit) m/ pauze/optelling (Y1)-2 C/O Lit- Asymmetrisch knipperend relais (startpuls-on) m/ pauze/optelling (Y1)-2 C/O N- Veilig beveiligingsrelais-2 C/O O- vertraagd veiligheidsrelais-2 C/O P- Pulsvertraagd relais met vaste pulslengte-2 C/O Pt- Pulsvertraagd relais met vaste pulslengte en pauze/optelling-2 C/O Qt- Star-delta relais (2 CO uitgangen m/ split common)-2 C/O Qtt-Star-delta relais (2 CO-uitgangen m/ split common) m/ pauze/optelling (Y1)-2 C/O T1 - Bistable relais met controlesignaal aan-2 C/O Tt-Heractiveerbaar belastbaar relais met controlesignaal aan-2 C/O W- Intervalrelais met controlesignaal uit-2 C/O L- Asymmetrisch knipperend relais (start pulse-off)-2 C/O
besturingssysteem	Androidversie >= V7.0 IOSversie >= V14.5
breedte	22,5 mm
gewicht product	0,0904 kg
Aantal functies	28
Omgeving	
immuniteit voor micro-onderbrekingen	10 ms
doorslagvastheid	2,5 kV voor 1 mA/1 minuut om 50 Hz met tussen relaisuitgang en voeding met basisisolatie met basisisolatie
standards	IEC 61000-6-1 IEC 61000-6-2 IEC 61000-6-4 NL 61812-1 IEC 61000-6-3

richtlijnen	2014/35/EU - laagspanningsrichtlijn 2014/53/EU - RF-richtlijn 2014/30/EU - elektromagnetische compatibiliteit
product certifications	CE CSA KC UL CCC EAC DNV-GL
omgevingstemperatuur voor werking	-20...60 °C
ambient air temperature for storage	-40...70 °C
IP beschermingsgraad	Behuizing: IP40 In overeenstemming met IEC 60529 Voorkant: IP40 In overeenstemming met IEC 60529 Aansluitklemmen: IP20 In overeenstemming met IEC 60529
pollution degree	3 In overeenstemming met IEC 60664-1
trilling bestendigheid	20 m/s ² (f= 10...150 Hz) In overeenstemming met IEC 60068-2-6
schokbestendigheid	15 gn niet in werking voor 11 ms In overeenstemming met IEC 60068-2-27 5 gn in bedrijf voor 11 ms In overeenstemming met IEC 60068-2-27
relatieve vochtigheid	95 % om 25...55 °C
elektromagnetische compatibiliteit	Elektrostatische ontlading immuniteitstest - testniveau: 6 kV niveau 3 (contactontlading) In overeenstemming met IEC 61000-4-2 Elektrostatische ontlading immuniteitstest - testniveau: 8 kV niveau 3 (luchtontlading) In overeenstemming met IEC 61000-4-2 Fast transients immunity test - testniveau: 1 kV niveau 3 (capacitieve verbindingclip) In overeenstemming met IEC 61000-4-4 Fast transients immunity test - testniveau: 2 kV niveau 3 (direct contact) In overeenstemming met IEC 61000-4-4 Immuniteitstest overspanning - testniveau: 1 kV niveau 3 (differentieelmodus) In overeenstemming met IEC 61000-4-5 Immuniteitstest overspanning - testniveau: 2 kV niveau 3 (gewone modus) In overeenstemming met IEC 61000-4-5 Radiofrequent elektromagnetisch veld immuniteitstest - testniveau: 10 V niveau 3 (0,15...80 MHz) In overeenstemming met IEC 61000-4-6 Elektromagnetisch veld immuniteitstest - testniveau: 10 V/m niveau 3 (80 MHz...1 GHz) In overeenstemming met IEC 61000-4-3 Bestand tegen micro-onderbrekingen en spanningsverlies - testniveau: 30 % (500 ms) In overeenstemming met IEC 61000-4-11 Bestand tegen micro-onderbrekingen en spanningsverlies - testniveau: 100 % (20 ms) In overeenstemming met IEC 61000-4-11 Uitgestraalde eliminatie klasse B In overeenstemming met EN 55022 Uitgevoerde overbrenging klasse A In overeenstemming met EN 55022 Elektromagnetisch veld immuniteitstest - testniveau: 3 V/m niveau 2 (1.4 GHz...2 GHz) In overeenstemming met IEC 61000-4-3 Elektromagnetisch veld immuniteitstest - testniveau: 1 V/m niveau 1 (2...2,7 GHz) In overeenstemming met IEC 61000-4-3

Verpakkingseenheid

Eenheidstype van verpakking 1	PCE
Aantal eenheden in verpakking 1	1
verpakking 1 hoogte	2,4 cm
verpakking 1 breedte	8,05 cm
verpakking 1 lengte	9,45 cm
verpakking_1_gewicht	103,635 g
Eenheidstype van verpakking 2	S02
Aantal eenheden in verpakking 2	40
verpakking 2 hoogte	15,0 cm
verpakking 2 breedte	30,0 cm

verpakking 2 lengte	40,0 cm
verpakking 2 gewicht	4,616 kg
Eenheidstype van verpakking 3	P06
Aantal eenheden in verpakking 3	640
verpakking_3_hoogte	70,0 cm
verpakking 3 breedte	60,0 cm
verpakking 3 lengte	80,0 cm
verpakking 3 gewicht	84,13 kg

contractuele waarborg

Garantie (in maanden)	18
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Schneider Electric wil tegen 2050 de Net Zero-status hebben bereikt via partnerschappen in de toeleveringsketen, materialen met een lagere impact en circulariteit via onze doorlopende campagne "Use Better, Use Longer, Use Again" om de levensduur van producten en de recycleerbaarheid te verlengen.

[Uitleg van Environmental Data >](#)

[Hoe evalueren we de duurzaamheid van producten? >](#)

Milieuoetafdruk

Totale levenscyclus ecologische voetafdruk	64 kg CO2 eq.
Koolstofvoetafdruk van de fabricagefase [A1–A3]	2 kg CO2 eq.
Koolstofvoetafdruk van de distributiefase [A4]	0 kg CO2 eq.
Koolstofvoetafdruk van de installatiefase [A5]	0 kg CO2 eq.
Koolstofvoetafdruk van de gebruiksfase [B2, B3, B4, B6]	62 kg CO2 eq.
Koolstofvoetafdruk van de einde-levensfase [C1–C4]	0.1 kg CO2 eq.
Milieu Profiel	Milieuprofiel van het product

Use Better

Materialen en verpakking

Pakket met gerecycleerd karton	Ja
Verpakkingen zonder kunststof	Ja
SCIP-nummer	7bdc2711-0ad2-427c-8ece-532c5e9f09d7
RoHS-richtlijn van de EU	Conform door vrijstelling
REACH-verordening	Referentie bevat zorgwekkende stoffen (SVHC) boven drempelwaarde

Use Longer

Levensduurverlenging

Reparatie	Nee
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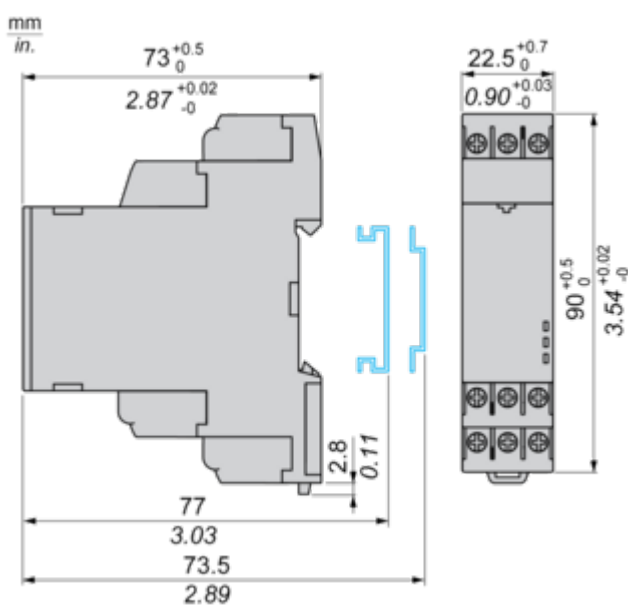
Use Again

Herverpakken en herfabriceren

Circulair Profiel	Informatie over einde levensduur
Terugname	Ja

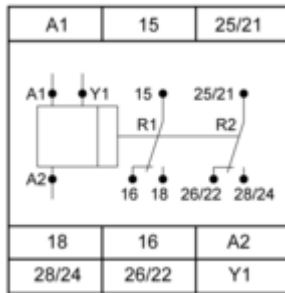
Dimensions Drawings

Dimensions

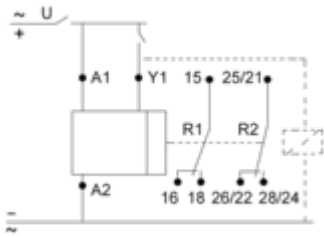


Connections and Schema

Internal Wiring Diagram



Wiring Diagram



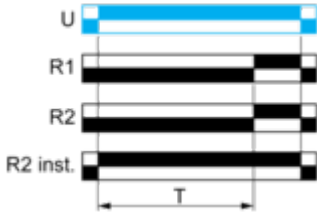
Technical Description

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

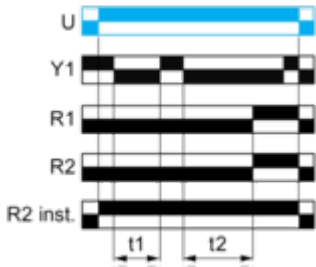


Function At: Power On-Delay Relay with Pause / Summation Control Signal

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.

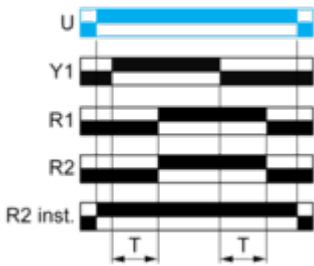
At the end of this timing period, the output(s) R close(s).

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

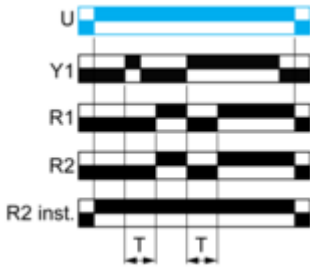


Function Ad : Pulse Delayed Relay with Control Signal

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

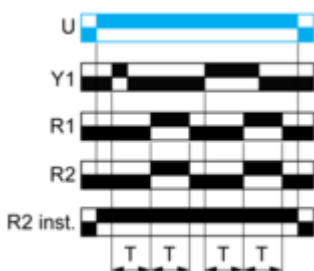


Function Ah : Pulse Delayed Relay (Single Cycle) with Control Signal

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 .

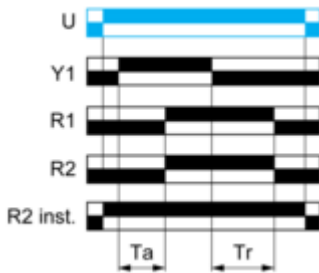
At the end of this timing period T_a , the output(s) R closes.

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

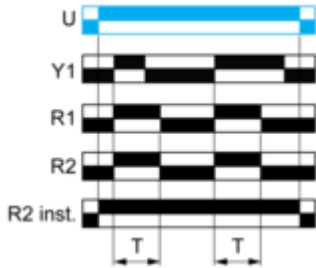


Function B: Single Interval Relay with Control Signal

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



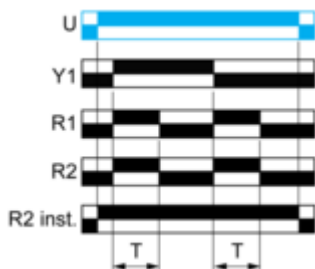
Function Bw : Double Interval Relay with Control Signal

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

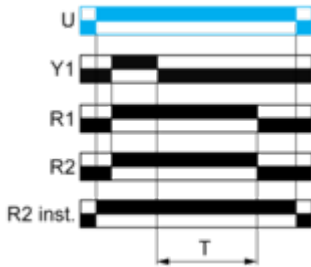


Function C: Off-Delay Relay with Control Signal

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

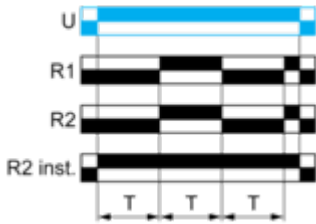


Function D: Symmetrical Flashing Relay (Starting Pulse-Off)

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

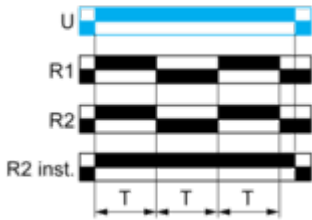


Function Di: Symmetrical Flashing Relay (Starting Pulse-On)

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

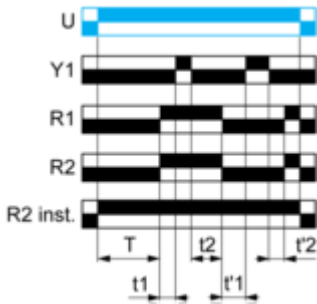


Function Dt: Symmetrical Flashing Relay (Starting Pulse-Off) With Pause / Summation Control Signal

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



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

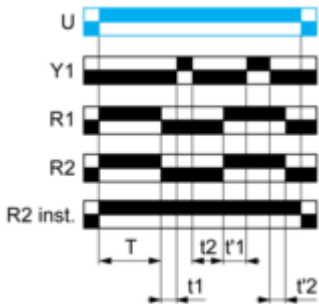
$$T = t'_1 + t'_2 + \dots$$

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



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

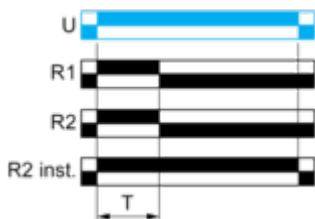
$$T = t'_1 + t'_2 + \dots$$

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

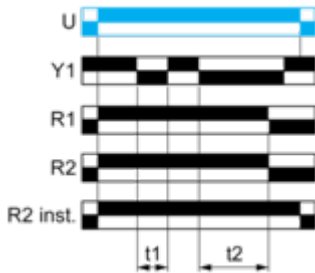


Function Ht: Interval Relay With Pause / Summation Control Signal

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)

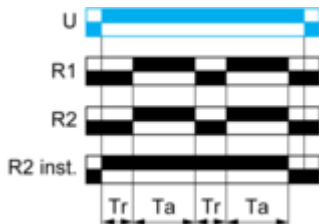
Description

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)

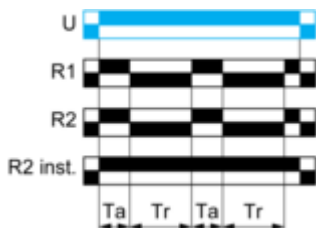
Description

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

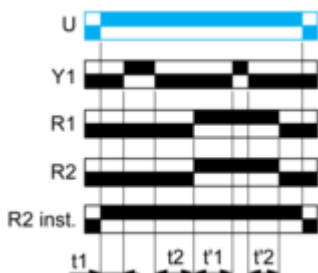
On energisation of power supply, output(s) R starts at its/their initial state for timing duration T_r and the timing can be interrupted / paused each time Y1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T_r , then changes to output(s) R close(s).

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

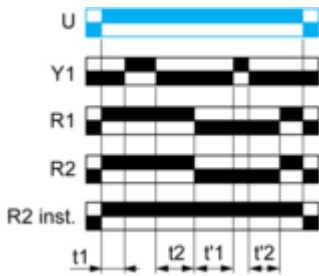
On energisation of power supply, output(s) R starts at output(s) R close(s) for timing duration T_a and the timing can be interrupted / paused each time Y1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T_a , the output(s) R revert(s) to its/their initial state.

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

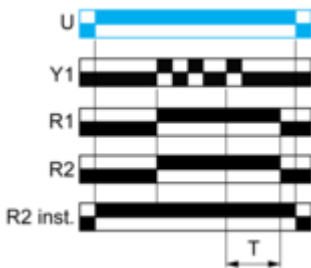
Description

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).

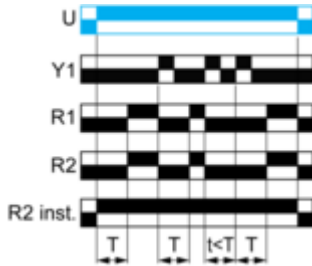
On energization of Y1, the output(s) R revert(s) to its/their initial state and the timing T restarts.

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

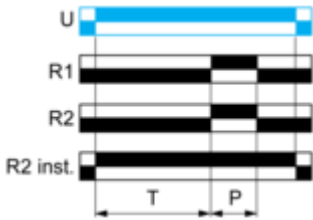
Description

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

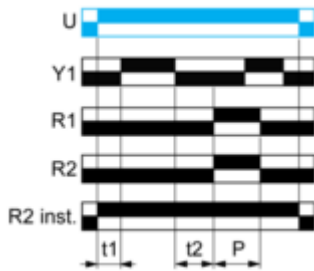
On energisation of power supply, the timing T starts.

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



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

$$P = 500\text{ms}$$

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



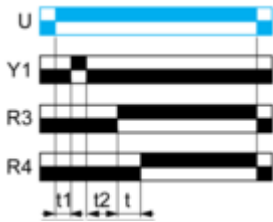
T = 50, 60... ms

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



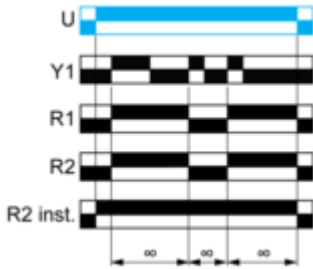
$T = t1 + t2 + \dots$
 $t = 50, 60 \dots \text{ms}$

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

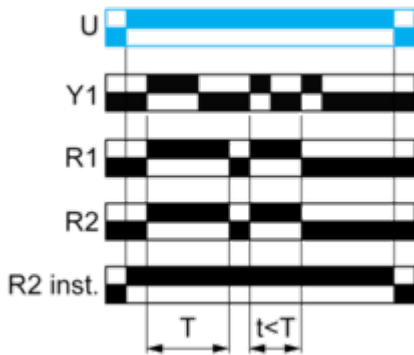


Function Tt : Retriggerable Bistable Relay with Control Signal On

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

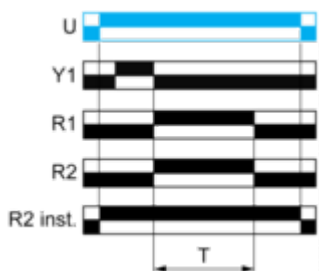


Function W: Interval Relay with Control Signal Off

Description

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



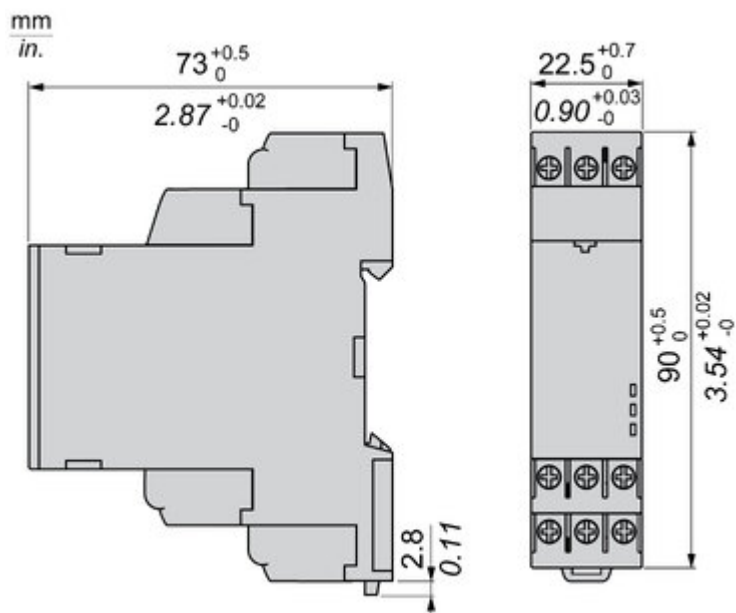
Legend

- 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

Technical benefits
NFC Control & Timer Relays



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

Technical Benefits

Harmony Timer Relay

Flexible choice of screw or spring connection terminals for wiring.

One product reference covering 28 timing functions, 2 outputs, and a wide range of supply voltage 24...240 V AC/DC.

Dust and unintended human intervention avoided thanks to the IP50 lead-sealable settings protection cover.



A Dial-Pointer LED indicator that enhances ease of operation in difficult environments such as dusty or low-light conditions

Different mounting style to meet your preference:
DIN rail mount with product width; 17.5 mm/0.69 in.
22.5 mm/0.88 in.
Plug in mounting with socket



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.

Productinformatieblad RNF22R2MMW

Image of product / Alternate images

Alternative







