



Teknisk informasjon

Produktspekter	Harmony Timer Relays
Produkt eller type komponent	Modular timing relay
Digitale utganger	Relé
Bredde	17,5 mm
Kortnavn utstyr	RE17R
Tidsforsinker type	Power on-delay On-delay and off-delay Interval Forsinket av Symmetrical flashing
Tidsforsinkelsesområde	6...60 min 1...10 t 0.1...1 s 1...10 s 1...10 min 10...100 t 6...60 s
Nominell utgangsstrøm	8 A

Komplementær

Kontakttype og sammensetning	1 C/O
Kontaktmateriale	Cadmium fri
Høyde	90 mm
Dybde	72 mm
Start/stopp	Vribryter front panel
[Us] matespenning	24...240 V AC 50/60 Hz 24 V DC
Spenningsområde	0.85...1.1 Us
Nettfrekvens	50...60 Hz +/- 5 %
Release of input voltage	10 V
Tilkoblingsklemmer	Skrulklemmer, 1 x 0.5...1 x 3.3 mm ² (AWG 20...AWG 12) Solid uten endehylse Skrulklemmer, 2 x 0.5...2 x 2.5 mm ² (AWG 20...AWG 14) Solid uten endehylse Skrulklemmer, 1 x 0.2...1 x 2.5 mm ² (AWG 24...AWG 14) Fleksibel med endehylse Skrulklemmer, 2 x 0.2...2 x 1.5 mm ² (AWG 24...AWG 16) Fleksibel med endehylse
Tiltrekningsmoment	0,6...1 N.m i samsvar med IEC 60947-1
Kapslingsmateriale	Self-extinguishing
Nøyktighet	+/- 0.5 % i samsvar med IEC 61812-1
Temperature drift	+/- 0.05 %/°C
Spenningsdrift	+/- 0.2 %/V
Setting accuracy of time delay	+/- 10 % av full skala på 25 °C i samsvar med IEC 61812-1
Control signal pulse width	100 ms med last i parallell typisk 30 ms typisk
Isolasjonsmotstand	100 MOhm på 500 V DC i samsvar med IEC 60664-1
Tilbakestillingsstid	120 ms on de-energisation typisk
"on-load" -faktor	100 %
Strømforbruk i VA	0...32 VA på 240 V AC
Strømforbruk i W	0,6 W på 24 V DC
Minimum brytestrøm	10 mA på 5 V DC

Maximum svitsjestrøm	8 A AC/DC
Maksimum brytespenning	250 V AC
Bryteevne	2000 VA
Operating frequency	10 Hz
Elektrisk levetid	100000 sykluser for Ohmsk last (8 A på 250 V AC maksimum)
Mekanisk levetid	10000000 sykluser
Dielektrisk styrke	2,5 kV 1 mA/1 minutt 50 Hz i samsvar med IEC 61812-1
[Uimp] Nominell impulsspenning	5 kV under 1.2/50 µs
Power on delay	100 ms
Merking	CE
Krypavstand	4 kV/3 i samsvar med IEC 60664-1
Sikkerhet pålitelighet data	B10d = 270000 MTTFd = 296.8 år
Monteringsposisjon	Alle posisjoner i forhold til normalplanet loddrett feste
Monteringssupport	35 mm DIN-skinne i samsvar med IEC 60715
Lokal varsling	LED indikasjon for on steady: relay energised, no timing in progress LED indikasjon 80% PÅ og 20% OFF for flashing: timing in progress LED indikasjon 5% PÅ og 95% OFF for pulsing: relay de-energised, no timing in progress (except function Di-D, Li-L)
Funksjonen tilgjengelig	A- Power on-delay relay-1 C/O Ac- On-delay and off-delay relay w/ control signal-1 C/O At- Power on-delay relay w/ pause/summation (Y1)-1 C/O B- Single interval relay w/ control signal-1 C/O Bw- Double interval relay w/ control signal-1 C/O C- Off-delay relay w/ control signal-1 C/O D- Symmetrical flashing relay (starting pulse-off)-1 C/O Di- Symmetrical flashing relay (starting pulse-on)-1 C/O H- Interval relay-1 C/O Ht- Interval relay w/ pause/summation (Y1)-1 C/O
Vekt	0,07 kg
Kontrolltype	Uten testknappen
Number of functions	10
Tidsforsinker type	A, Ac, At, B, Bw, C, D, Di, H, Ht
Funksjonalitet	Multifunksjon
Kompatibilitetskode	RE17

Miljø

Immunitet mot mikroavbrytelser	20 ms
Standarder	2006/95/EC 2004/108/EC IEC 61812-1 IEC 61000-6-2 IEC 61000-6-3 IEC 61000-6-4 IEC 61000-6-1
Produktsertifikater	CSA[RETURN]GL[RETURN]cULus
Omgivelsestemperatur for lagring	-30...60 °C
Omgivelsestemperatur drift	-20...60 °C
IP-grad	IP20 i samsvar med IEC 60529 (tilkoplingsblokk) IP40 i samsvar med IEC 60529 (kapsling) IP50 i samsvar med IEC 60529 (front panel)
Vibrasjonsmotstand	20 m/s² (f= 10...150 Hz) i samsvar med IEC 60068-2-6
Støtmotstand	15 gn for 11 ms i samsvar med IEC 60068-2-27

Relativ fuktighet	93 % uten kondens i samsvar med IEC 60068-2-30
Elektromagnetisk kompatibilitet	Immunitetstest for elektrostatisk utladning: test nivå: 6 kV (i kontakt) nivå 3 i samsvar med IEC 61000-4-2 Immunitetstest for elektrostatisk utladning: test nivå: 8 kV (i luft) nivå 3 i samsvar med IEC 61000-4-2 Mottakelig for elektromagnetiske felt: test nivå: 10 V/m (80 MHz to 1 GHz) nivå 3 i samsvar med IEC 61000-4-3 Electrical fast transient/burst immunity test: test nivå: 1 kV (kapasitiv koble klipp) nivå 3 i samsvar med IEC 61000-4-4 Electrical fast transient/burst immunity test: test nivå: 2 kV (direkte) nivå 3 i samsvar med IEC 61000-4-4 1.2/50 µs sjokkbølge immunisjonstest: test nivå: 1 kV (differensialmodus) nivå 3 i samsvar med IEC 61000-4-5 1.2/50 µs sjokkbølge immunisjonstest: test nivå: 2 kV (felles modul) nivå 3 i samsvar med IEC 61000-4-5 Gjennomført RF-forstyrrelser: test nivå: 10 V (0.15...80 MHz) nivå 3 i samsvar med IEC 61000-4-6 Spenningsfall og avbrudd immunitet test: test nivå: 0 % (en syklus) i samsvar med IEC 61000-4-11 Spenningsfall og avbrudd immunitet test: test nivå: 70 % (25/30 sykluser) i samsvar med IEC 61000-4-11 Strålt og ledet elektromagnetisme: klasse B i samsvar med EN 55022

Forpakkingsinformasjon

Enhetstype pakke 1	PCE
Antall enheter i pakke 1	1
Pakke 1 Høyde	2,600 cm
Pakke 1 Bredde	7,800 cm
Pakke 1 Vekt	9,500 cm
Package 1 Weight	80,000 g
Enhetstype pakke 2	S02
Antall enheter i pakke 2	40
Pakke 2 Høyde	15,000 cm
Pakke 2 Bredde	30,000 cm
Pakke 2 Lengde	40,000 cm
Pakke 2 Vekt	3,690 kg
Enhetstype pakke 3	P06
Antall enheter i pakke 3	640
Pakke 3 Høyde	75,000 cm
Pakke 3 Bredde	60,000 cm
Pakke 3 Lengde	80,000 cm
Pakke 3 Vekt	65,700 kg

Bærekraftig

Produktets miljøstatus	Green Premium miljømerket produkt
REACH-regelverk	 REACH-erklæring
EU RoHS-direktiv	Proaktivt i samsvar (Produktet inngår ikke i EUs RoHS direktivet)
Kvikksølvfri	Ja
Kinas RoHS-forskrift	 Kinas RoHS-Erklæring
Informasjon om RoHS-unntak	 Ja
Miljøinformasjon	 Produktmiljøprofil
Produktets livssyklus	 Informasjon Om Levetidsslutt

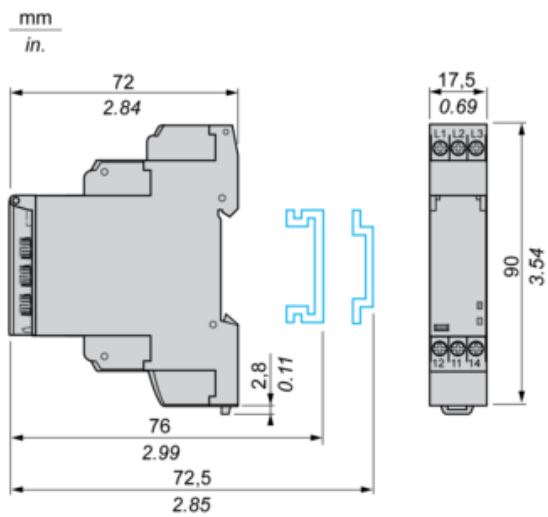
Logistisk informasjon

Opprinnelsesland	ID
------------------	----

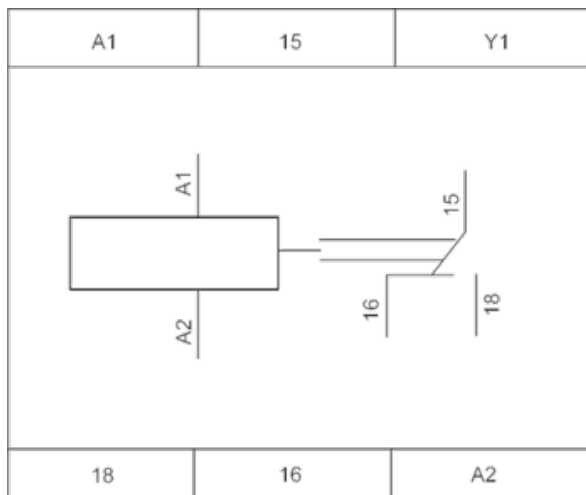
Garantiperiode

Garanti	18 måneder
---------	------------

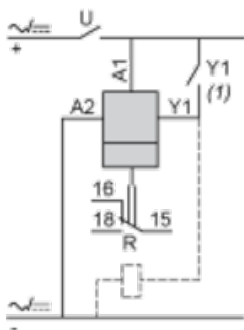
Width 17.5 mm



Internal Wiring Diagram



Wiring Diagram



1) Contact Y1:

- Control for functions B, C, Ac, Bw, Ad, Ah, N, O, W, T, Tt.
- Partial stop for functions At, Ht and Pt.
- Function D if Di selected.
- Not used for functions A, H and P.

Function A : Power on Delay Relay

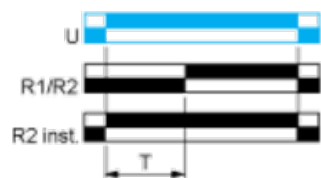
Description

The timing period T begins on energisation. After timing, the output(s) R close(s). The second output can be either timed or instantaneous.

Function: 1 Output



Function: 2 Outputs



2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.)

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

Description

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

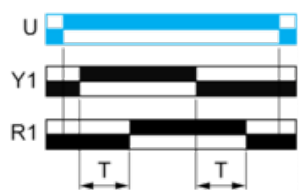
At the end of this timing period, the output(s) R close(s).

When deenergization of Y1, the timing T starts.

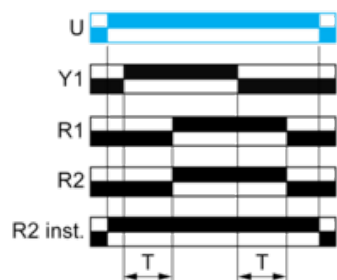
At the end of this timing period T, the output(s) R revert(s) to its/their initial position.

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

Function: 1 Output



Function: 2 Outputs

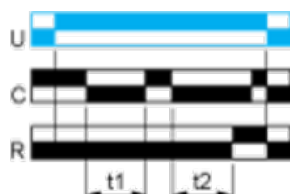


Function At : Power on Delay Relay (Summation) with Control Signal

Description

After power-up, the first opening of control contact C starts the timing. Timing can be interrupted each time control contact closes. When the cumulative total of time periods elapsed reaches the pre-set value T, the output relay closes.

Function: 1 Output



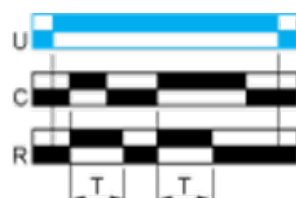
$$T = t1 + t2 + \dots$$

Function B : Interval Relay with Control Signal

Description

After power-up, pulsing or maintaining control contact C starts the timing T. The output R closes for the duration of the timing period T then reverts to its initial state.

Function: 1 Output

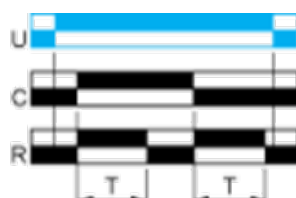


Function Bw : Double Interval Relay with Control Signal

Description

On closing and opening of control contact C, the output R closes for the duration of the timing period T.

Function: 1 Output

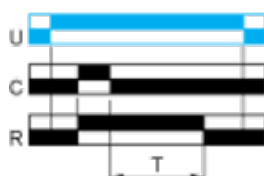


Function C : Off-Delay Relay with Control Signal

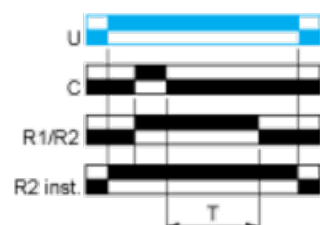
Description

After power-up and closing of the control contact C, the output R closes. When control contact C re-opens, timing T starts. At the end of the timing period, the output(s) R revert(s) to its/their initial state. The second output can be either timed or instantaneous.

Function: 1 Output



Function: 2 Outputs



2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.)

Function D: Symmetrical Flashing Relay (Starting Pulse Off)

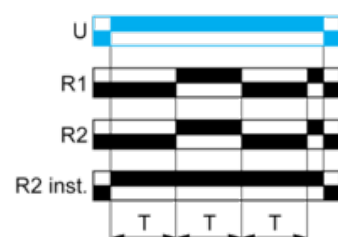
Description

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

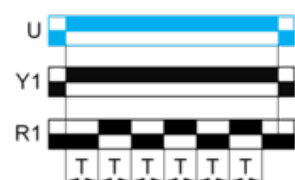
Function: 1 Output



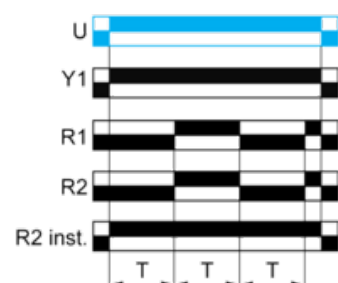
Function: 2 Outputs



Function: 1 Output with Retrigger / Restart Control



Function: 2 Output with Retrigger / Restart Control



Function Di : Symmetrical Flasher Relay (Starting Pulse On)

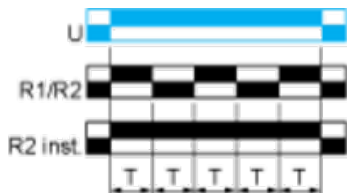
Description

Repetitive cycle with two timing periods T of equal duration, with output(s) R changing state at the end of each timing period T. The second output can be either timed or instantaneous.

Function: 1 Output



Function: 2 Outputs



2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.)

Function H : Interval Relay

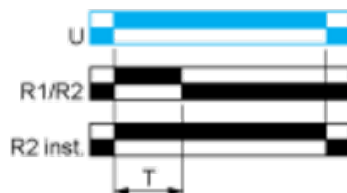
Description

On energisation of the relay, timing period T starts and the output(s) R close(s). At the end of the timing period T, the output(s) R revert(s) to its/their initial state. The second output can be either timed or instantaneous.

Function: 1 Output



Function: 2 Outputs



2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.)

Function Ht: Interval Relay & With Pause / Summation Control

Description

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

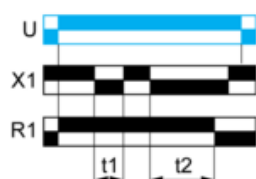
The timing can be interrupted / paused each time X1 energizes.

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

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

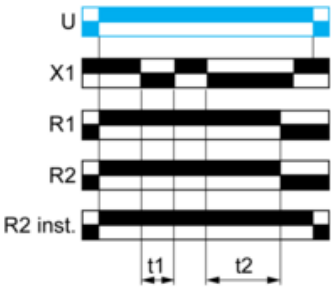
The second output (R2) can be either timed (when set to "TIMED" or instantaneous (when set to "INST").

Function: 1 Output



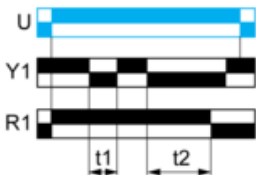
$T = t_1 + t_2 + \dots$

Function: 2 Outputs



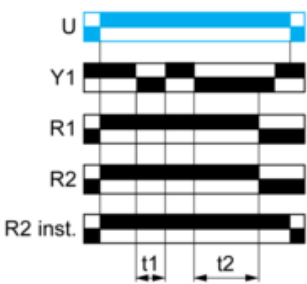
$T = t1 + t2 + \dots$

Function: 1 Output with Retrigger / Restart Control



$T = t1 + t2 + \dots$

Function: 2 Outputs with Retrigger / Restart Control



$T = t1 + t2 + \dots$

Legend

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

C	Control contact
G	Gate
R	Relay or solid state output
R1/R2	2 timed outputs
R2 inst.	The second output is instantaneous if the right position is selected
T	Timing period
Ta -	Adjustable On-delay
Tr -	Adjustable Off-delay
U	Supply