Produktdatablad
Egenskaper

RE22R2MYMR
Tidrelä, Harmony Time, multifunktion, 0,05 s… 300 h, matning 24…240 V AC/DC, 2 växlande kontakter

Produktdata

Produktområde	Harmony Timer Relays
Typ av produkt eller komponent	Multifunction relay
Digital utgångstyp	Relä
Enhetens korta namn	RE22
Nominell belastningsström	8 A

Teknisk data

Kontakttyp och komposition	1 C/O tidsfördröjd eller momentan kontakt, cadmiumfri 2 C/O tidsfördröjd kontakt, cadmiumfri
Typ av tidsfördröjning	Power on-delay Frånslagsfördröjd Symmetrical flashing Interval Star-delta
Tidsfördröjningsintervall	3...30 min 30...300 min 0.3...3 s 3...30 h 10...100 s 1...10 s 0.05...1 s 30...300 s 30...300 h 3...30 s
Manövertyp	Vridhandtag Diagnostisk knapp Potentiometer extern
[Us] matningsspänning	24...240 V AC/DC 50/60 Hz
Release input voltage	<= 2.4 V
Spänningsområde	0.85...1.1 Us
Frekvens på matningsspänning	50...60 Hz +/- 5 %
Anslutningar - plintar	Skruvanslutningar, 1 x 0.5...1 x 3.3 mm² (AWG 20...AWG 12) fast utan ändhylsa Skruvanslutningar, 2 x 0.5...2 x 2.5 mm² (AWG 20...AWG 14) fast utan ändhylsa Skruvanslutningar, 1 x 0.2...1 x 2.5 mm² (AWG 24...AWG 14) flexibel med ändhylsa Skruvanslutningar, 2 x 0.2...2 x 1.5 mm² (AWG 24...AWG 16) flexibel med ändhylsa
Åtdragningsmoment	0,6…1 N.m överensstämmer med IEC 60947-1
Material kåpa	Självsläckande
Repeternoggrannhet	+/- 0.5 % överensstämmer med IEC 61812-1
Temperatur drift	+/- 0.05 %/°C
Spänningsdrift	+/- 0.2 %/V
Inställningsnoggrannhet av tidsfördröjning	+/- 10 % av full skala vid 25 °C överensstämmer med IEC 61812-1
Control signal pulse width	100 Ms med parallell last 30 ms
Isolationsresistans	100 MOhm vid 500 V DC överensstämmer med IEC 60664-1

Recovery time	120 ms vid urladdning
Immunitet mot mikroavbrott	10 ms
Effektförbrukning i VA	3 VA vid 240 V AC
Effektförbrukning i W	1,5 W vid 240 V DC
Brytförmåga i VA	2000 VA
Minimum omkopplingsström	10 mA vid 5 V DC
Maximal switchnings ström	8 A
Maximal omkopplingsspänning	250 V AC
Elektrisk livslängd	100000 Cycles, 8 A vid 250 V, AC-1 100000 cycles, 2 A vid 24 V, DC-1
Mekanisk livslängd	10000000 cycles
Rated impulse withstand voltage	5 kV för 1,2…50 µs överensstämmer med IEC 60664-1
Power on delay	100 ms
Krypavstånd	4 kV/3 överensstämmer med IEC 60664-1
Överspänningskategori	III överensstämmer med IEC 60664-1
Tillförlitlighetsdata (säkerhet)	B10d = 160000 MTTFd = 171.2 år
Montageposition	Alla positioner
Montagefästen	35 mm DIN-skena överensstämmer med IEC 60715
Status lysdiod	Grön LED-bakgrundsbelysning (fast) för indikator för uppringning Gul LED (fast) för utgångsrelä aktiverat Gul LED (snabbt blinkande) för pågående tidpunkt och utgångsrelä avaktiverat Gul LED (långsamt blinkande) för pågående tidpunkt och utgångsrelä aktiverat
Tillgängliga funktioner	A- Power on-delay relay-2 C/O At- Power on-delay relay w/ pause/summation (X1)-2 C/O Aw- Power on-delay relay w/ retrigger/restart-2 C/O C- Off-delay relay w/ control signal-2 C/O Ct- Off-delay relay w/ control signal and pause/summation-2 C/O D- Symmetrical flashing relay (starting pulse-off)-2 C/O Dt- Symmetrical flashing relay (starting pulse-off) w/ pause/summation (X1)-2 C/O Dw- Symmetrical flashing relay (starting pulse-off) w/ retrigger/restart-2 C/O Di- Symmetrical flashing relay (starting pulse-on)-2 C/O Dit- Symmetrical flashing relay (starting pulse-on) w/ pause/summation (X1)-2 C/O Diw- Symmetrical flashing relay (starting pulse-on) w/ retrigger/restart-2 C/O H- Interval relay-2 C/O Ht- Interval relay w/ pause/summation (X1)-2 C/O Hw- Interval relay w/ retrigger/restart-2 C/O Qg- Star-delta relay (2 CO outputs w/ same common)-2 C/O Qgt- Star-delta relay (2 CO outputs w/ same common) w/ 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 (X1)-2 C/O W- Interval relay w/ control signal off-2 C/O Wt- Interval relay w/ control signal off and pause/summation-2 C/O
Bredd	22,5 mm
Produktens vikt	0,105 kg
Number of functions	22

Miljö

Dielektrisk styrka	2,5 kV för 1 mA/1 minut vid 50 Hz mellan reläutgång och strömförsörjning med grundläggande isolering överensstämmer med IEC 61812-1
Standarder	UL 508 IEC 61812-1
Direktiv	2004/108/EC - elektromagnetisk kompatibilitet 2006/95/EC - lågspänningsdirektivet
Produktcertifieringar	RCM[RETURN]CE[RETURN]EAC[RETURN]CSA[RETURN]CCC[RETURN]UL[RETURN]GL
Omgivningstemeperatur vid drift	−20…60 °C
Omgivande lufttemperatur för lagring	−40…70 °C
IP-kapslingsklass	IP40 hus: conforming to IEC 60529 IP20 anslutningar: conforming to IEC 60529 IP50 frontpanel: conforming to IEC 60529
Föroreningsgrad	3 överensstämmer med IEC 60664-1
Vibrationsbeständighet	20 m/s² (f= 10…150 Hz) överensstämmer med IEC 60068-2-6

Chocktålighet	15 gn ej i drift för 11 ms överensstämmer med IEC 60068-2-27 5 gn i drift för 11 ms överensstämmer med IEC 60068-2-27
Relativ fuktighet	95 % vid 25…55 °C
Elektromagnetisk kompatibilitet	Immunitetstester för snabba transienter - test level: 1 kV nivå 3 (kapacitiv anslutningsklämma) conforming to IEC 61000-4-4 Immunitet testat för spänningsspikar - test level: 1 kV nivå 3 (differentialläge) conforming to IEC 61000-4-5 Immunitet testat för spänningsspikar - test level: 2 kV nivå 3 (normalläge) conforming to IEC 61000-4-5 Elektrostatisk urladdning - test level: 6 kV nivå 3 (kontakt urladdad) conforming to IEC 61000-4-2 Elektrostatisk urladdning - test level: 8 kV nivå 3 (lufturladdning) conforming to IEC 61000-4-2 Strålade radiofrekventa elektromagnetiska fält immunitet test - test level: 10 V/m nivå 3 (80 MHz...1 GHz) conforming to IEC 61000-4-3 Ledningsbundna (RF) strörningar - test level: 10 V nivå 3 (0.15...80 MHz) conforming to IEC 61000-4-6 Snabba transienta urladdningar/förlopp - test level: 2 kV nivå 3 (direkt kontakt) conforming to IEC 61000-4-4 Immunitet mot mikroavbrott och spänningfall - test level: 30 % (500 ms) conforming to IEC 61000-4-11 Immunitet mot mikroavbrott och spänningfall - test level: 100 % (20 ms) conforming to IEC 61000-4-11

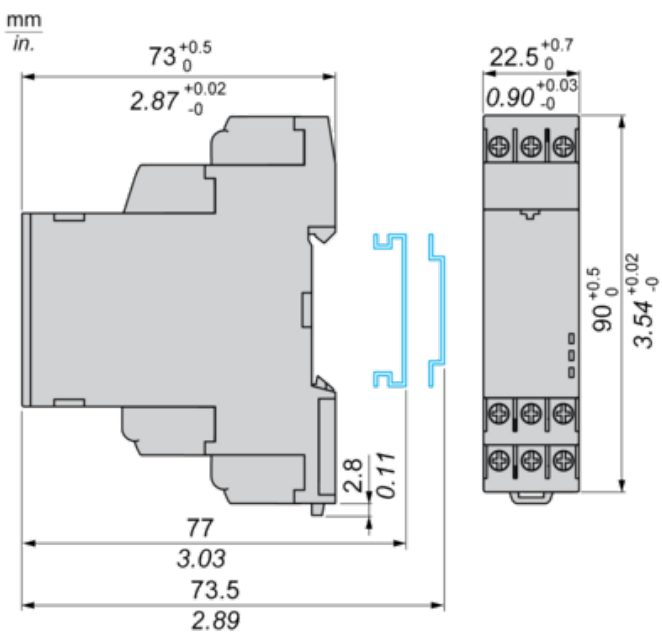
Förpackningsinformation

Förpackningstyp 1	PCE
Antal i Förpackning 1	1
Förpackning 1 höjd	2,6 cm
Förpackning 1 bredd	8,2 cm
Förpackning 1 djup	9,5 cm
Förpackning 1 vikt	116,0 g
Förpackningstyp 2	S02
Antal i Förpackning 2	40
Förpackning 2 höjd	15,0 cm
Förpackning 2 bredd	30,0 cm
Förpackning 2 djup	40,0 cm
Förpackning 2 vikt	5,153 kg
Förpackningstyp 3	P06
Number of Units in Package 3	640
Förpackning 3 höjd	75,0 cm
Förpackning 3 bredd	60,0 cm
Förpackning 3 djup	80,0 cm
Förpackning 3 vikt	74,24 kg

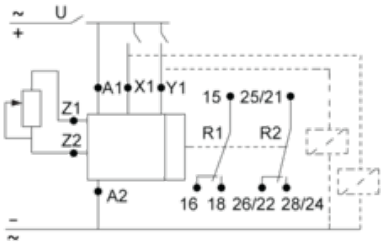
Hållbarhetsinformation

Hållbarhetsstatus	Green Premium-produkt
REACh-förordning	REACh-Deklaration
EU RoHS-direktiv	Proaktiv överensstämmelse (produkten utanför EU RoHS juridiska omfattning)
Kvicksilverfri	Ja
RoHS-förordning Kina	RoHS-deklaration Kina
RoHS-undantagsinformation	Ja
Miljöupplysning	Produktmiljöprofil
Cirkulationsprofil	Information Om Livslängdsslut

Dimensions


mm
in.
73 +0.5 0
2.87 +0.02 -0
22.5 +0.7 0
0.90 +0.03 -0
90 +0.5 0
3.54 +0.02 -0
2.8
0.11
77
3.03
73.5
2.89

Wiring Diagram



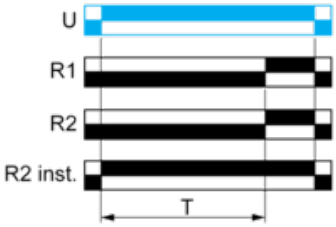
Function A: Power On-Delay

Description

On energisation of power supply, the timing period T starts. After timing, the output(s) R close(s).The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

Function: 1 Output

Function: 2 Outputs

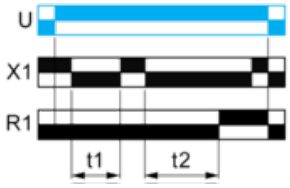


Function At: Power On-Delay with Pause / Summation Control

Description

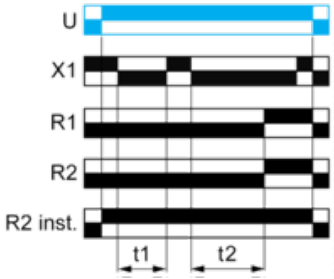
On energisation of power supply, the timing period T starts.Timing can be interrupted / paused each time X1 energizes.Except for RE17*, RE22R2AMU, RE22R2MMW, RE22R2MMU, RE22R2MJU, timing can be interrupted / paused each time Y1 energizes.When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R close(s).The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

Function: 1 Output with Pause / Summation Control



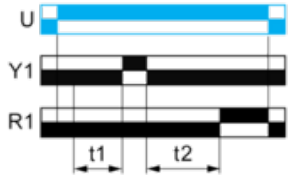
T = t1 + t2 +…

Function: 2 Outputs with Pause / Summation Control



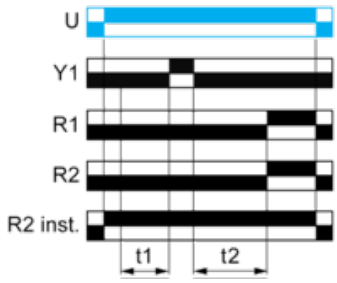
T = t1 + t2 +…

Function: 1 Output with Retrigger / Restart Control



T = t1 + t2 +…

Function: 2 Outputs with Retrigger / Restart Control



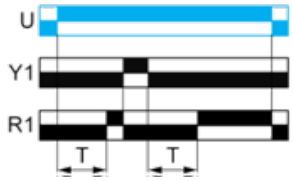
T = t1 + t2 +…

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

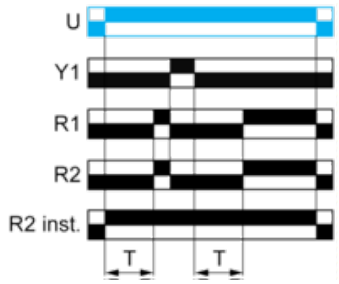
Description

On energisation of power supply, the timing period T starts.At the end of the timing period T, the output(s) R close(s).Energization of Y1 makes the output(s) R open(s).Deenergization of Y1 restarts timing period T.At the end of timing period T, the output(s) R close(s).The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST")

Function: 1 Output



Function: 2 Outputs

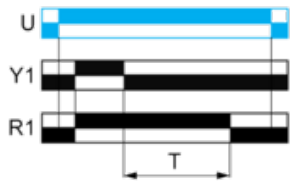


Function C: Off-Delay Relay with Control Signal

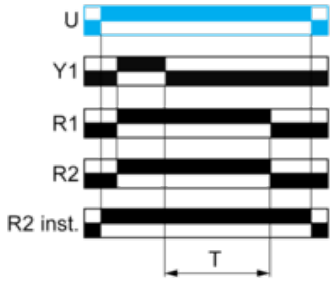
Description

After energisation of power supply and energization of Y1 causes output(s) R close(s). When Y1 deenergizes, timing T starts.At the end of this timing period T,the output(s) R revert(s) to its/their initial position.The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

Function: 1 Output



Function: 2 Outputs

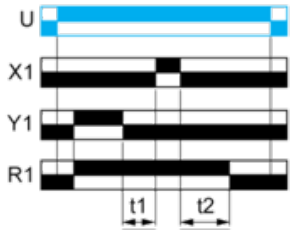


Function Ct: Off-Delay Relay with Control Signal & With Pause / Summation Control

Description

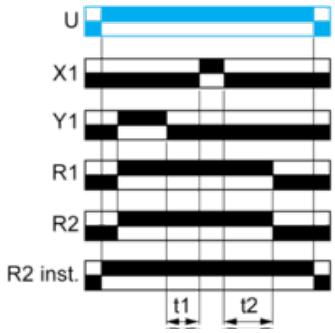
After energisation of power supply and energization of Y1 cause output(s) R close(s).When Y1 deenergizes, timing starts and the timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsedreaches the pre-set value T, the output(s) R revert(s) to its/their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

Function: 1 Output



T = t1 + t2 +…

Function: 2 Outputs



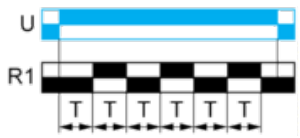
T = t1 + t2 +…

Function D: Symmetrical Flashing Relay (Starting Pulse Off)

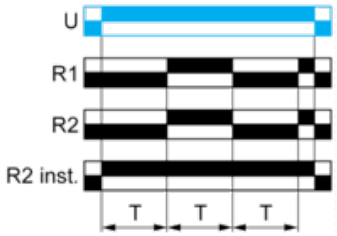
Description

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 indefintely until power supply removal.Specially for RE17*, RE22R2AMU, RE22R2MMW, RE22R2MMU, RE22R2MJU,this D function can only be initiated by energizing Y1 permanently.The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

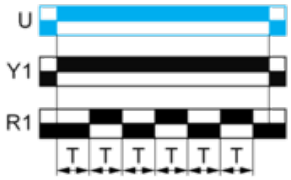
Function: 1 Output



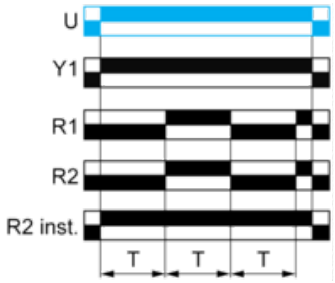
Function: 2 Outputs



Function: 1 Output with Retrigger / Restart Control



Function: 2 Output with Retrigger / Restart Control

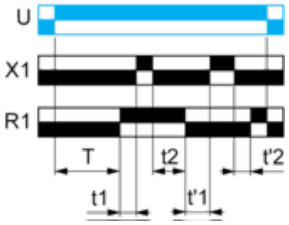


Function Dt: Symmetrical Flashing Relay (Starting Pulse Off) & With Pause / Summation Control

Description

On energisation of power supply, output(s) R starts at its/their initial state for timing duration T and the timing can be interrupted / paused each time X1 energizes.When the cumulative total of time periods elapsed reaches the pre-set value T, then changes to output(s) R close(s).The output(s) R close state will remain for the same timing duration T and the timing can be interrupted / paused each time X1 energizes.When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R revert(s) to its/their initial state.This cycle is repeated indefintely until power supply removal.The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

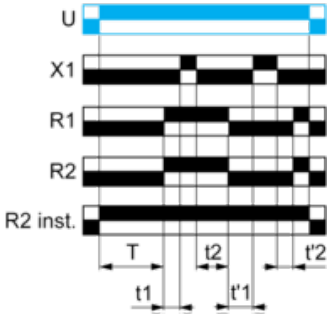
Function: 1 Output



T = t1 + t2 +…

T = t'1 + t'2 +…

Function: 2 Outputs



T = t1 + t2 +…

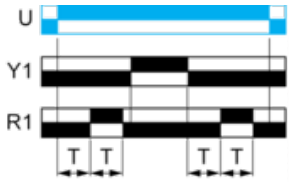
T = t'1 + t'2 +…

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

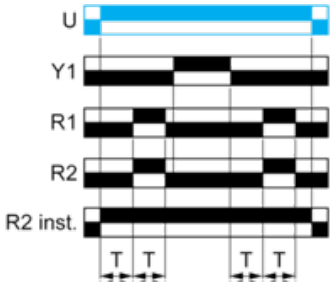
Description

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

Function: 1 Output



Function: 2 Outputs

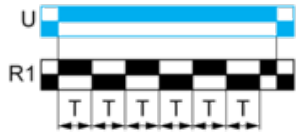


Function Di: Symmetrical Flashing Relay (Starting Pulse On)

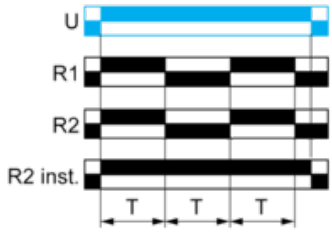
Description

On energisation of power supply, output(s) R starts at output(s) R close(s) for timing duration T then revert(s) to its/their initial state for the same timing duration T.This cycle is repeated indefintely until power supply removal.The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

Function: 1 Output



Function: 2 Outputs

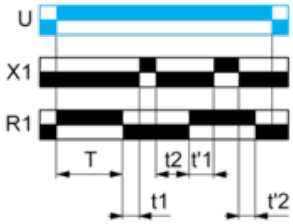


Function Dit: Symmetrical Flashing Relay (Starting Pulse On) & With Pause / Summation Control

Description

On energisation of power supply, output(s) R starts at output(s) R close(s) for timing duration T and the timing can be interrupted / paused each time X1 energizes.When the cumulative total of time periods elapsed reaches the pre-set value T, then revert(s) to its/their initial state.The output(s) R at initial state will remain for the same timing duration T and the timing can be interrupted / paused each time X1 energizes.When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R change(s) to close state.This cycle is repeated indefintely until power supply removal.The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

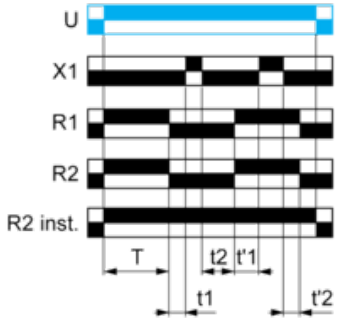
Function: 1 Output



T = t1 + t2 +…

T = t'1 + t'2 +…

Function: 2 Outputs



T = t1 + t2 +…

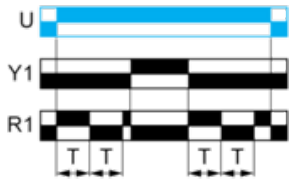
T = t'1 + t'2 +…

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

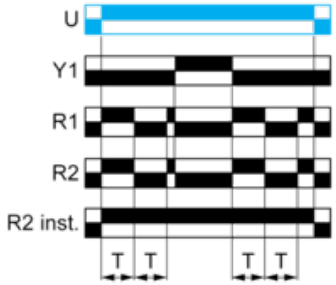
Description

On energisation of power supply, output(s) R starts at output(s) R close(s) for timing duration T then revert(s) to its/their initial state for the same timing duration T.This cycle is repeated indefintely until power supply removal.At any state of the output(s) R when Y1 energizes, the output(s) R will revert to its/their initial state and followed by Y1 deenergizes then restarts the same operation as described at the beginning.The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

Function: 1 Output



Function: 2 Outputs

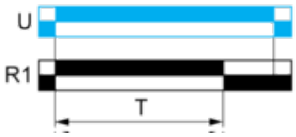


Function H: Interval Relay

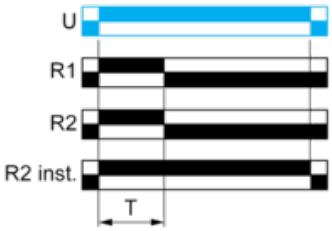
Description

On energisation of power supply, output(s) R close(s) and timing period T starts.At the end of the timing period T, the output(s) R revert(s) to its/their initial state.The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

Function: 1 Output



Function: 2 Outputs



Function Ht: Interval Relay & With Pause / Summation Control

Description

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

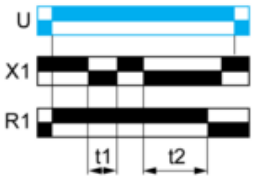
The timing can be interrupted / paused each time X1 energizes.

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

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

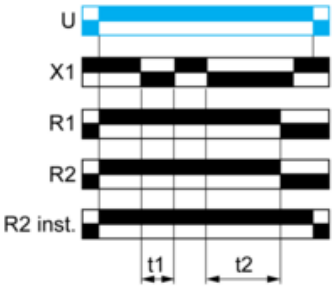
The second output (R2) can be either timed (when set to “TIMED” or instantaneous (when set to “INST”).

Function: 1 Output



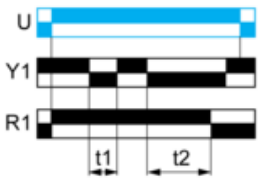
T = t1 + t2 +...

Function: 2 Outputs



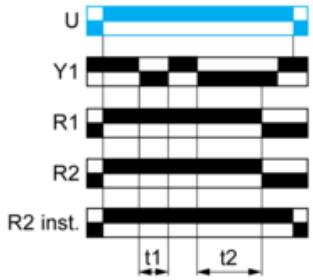
T = t1 + t2 +...

Function: 1 Output with Retrigger / Restart Control



T = t1 + t2 +...

Function: 2 Outputs with Retrigger / Restart Control



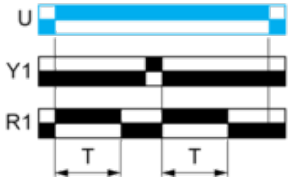
T = t1 + t2 +...

Function Hw: Interval Relay & with Retrigger / Restart Control

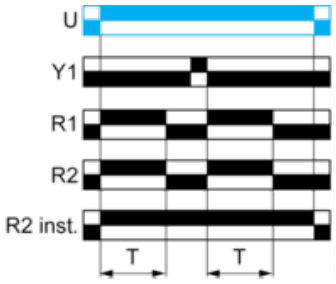
Description

On energisation of power supply, output(s) R close(s) and timing period T starts.At the end of the timing period T, the output(s) R revert(s) to its/their initial state.At any state of the output(s) R when Y1 energizes followed by deenergizes, the output(s) R close(s) then restarts the same operation as described at the beginning.The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

Function: 1 Output



Function: 2 Outputs

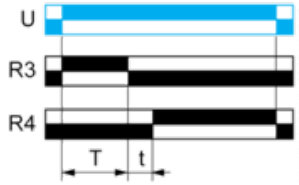


Function Qg: Star-Delta Relay (2 CO with same Common)

Description

On energisation of power supply, the output R3 closes 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 reverts to its initial state 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 Outputs



t : 20, 40, 60, 80, 100, 120, 140 ms

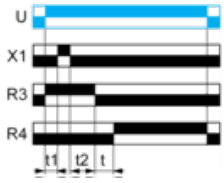
Function Qgt: Star-Delta Relay (2 CO with same common) with Pause / Summation Control

Description

On energisation of power supply, the output R3 closes 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 X1

energizes.When the cumulative total of time periods elapsed reaches the pre-set value T, R3 reverts to its initial state 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 Outputs



T = t1 + t2 +…

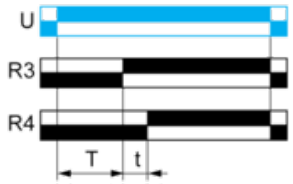
NOTE: RE22R2MYMR is with fixed transition time, t: 50ms

Function Qt: Star-Delta Relay (2 CO 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 Outputs



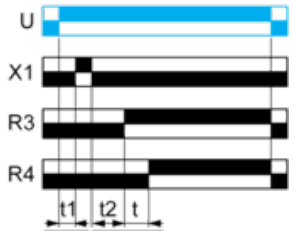
t : 20, 40, 60, 80, 100, 120, 140 ms

Function Qtt: Star-Delta Relay (2 CO with same common) with Pause / Summation Control

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 X1 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 Outputs



T = t1 + t2 +…

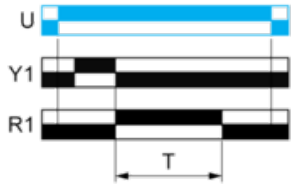
NOTE: RE22R2MYMR is with fixed transition time, t: 50ms

Function W: Interval Relay with Control Signal Off

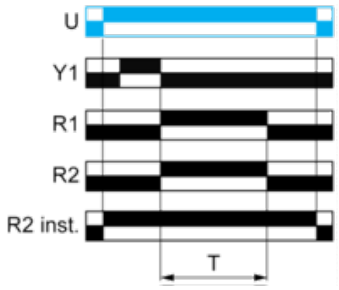
Description

After energisation of power supply and on energization of Y1 following by denergization of Y1, the output(s) R close(s) and starts the timing T.At the end of the timing period, the output(s) R revert(s) to its/their initial state.The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

Function: 1 Output



Function: 2 Outputs

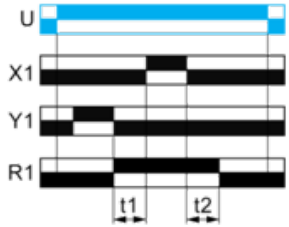


Function Wt: Interval Relay with Control Signal Off & with Pause / Summation Control

Description

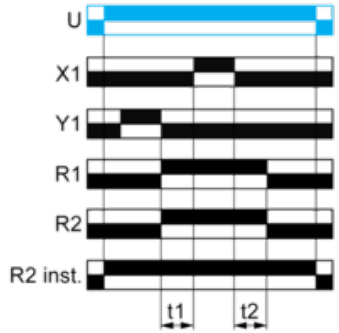
After energisation of power supply and on energization of Y1 following by denergization of Y1, the output(s) R close(s) and starts the timing T.Timing can be interrupted / paused each time X1 energizes.When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R revert(s)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

Function: 1 Output



T = t1 + t2 +…

Function: 2 Outputs



T = t1 + t2 +…

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
X1 -	Pause / Summation control
Y1 -	Retrigger / Restart control
X2 -	Function Selection
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