

RE22R2MYMR

HARMONY Time multifunkciós időrelé, 20
funkció, 2CO, 24-240VAC/DC



Fő jellemzők

Termékválaszték	Harmony XA2
Termék vagy alkatrész típusa	Multifunction relay
Diszkrét kimenet típusa	Relé
Készülék rövid neve	RE22
Névleges kimeneti áram	8 A

Kiegészítő jellemzők

Érintkezők típusa és összetétele	1 kapcsolási ciklus időzített vagy azonnali kontaktus, kádmiumentes 2 C/O időzített kontaktus, kádmiumentes
Időkéseleltetés típus	Power on-delay Kikapcsolás késleltetés Symmetrical flashing Interval Star-delta
Késleltetési idő tartomány	3...30 min 30...300 min 0.3 s 3...30 h 10...100 s 1...13 s 0.05...30 s 30...300 s 30...300 h 3...60 perc
Vezérlés típusa	Forgatógombos nyomó típusú Tekerőtárcsa Processzor vagy rendszerhiba (ERR) kiegészítő modul
[Us] névleges betáplálási feszültség	24...240 V automatikus kalibráció 50/60 Hz
Release input voltage	<= 2.4 V
Feszültségtartomány	0,85...1,1 Us
Betáplálási frekvencia	50...60 Hz +/- 5 V
Csatlakozás típusa	Csavaros bekötések, 1 x 0,5...1 x 4 mm ² (AWG 20...AWG 14) tömör kábelvég nélkül Csavaros bekötések, 2 x 0,5...2 x 4 mm ² (AWG 20...AWG 16) tömör kábelvég nélkül Csavaros bekötések, 1 x 0,2...1 x 3,3 mm ² (AWG 24...AWG 16) rugalmas kábelvéggel Csavaros bekötések, 2 x 0,2...2 x 1 mm ² (AWG 24...AWG 17) rugalmas kábelvéggel
Meghúzási nyomaték	0,6...1 N.m megfelel IEC 60947-1
Burkolat anyaga	Önkioltó
Ismétlési pontosság	+/- 0,5% megfelel IEC 61812-1
Hőmérsékletingadozás	+/- 0,05%/°C
Feszültség ingadozás	+/- 0,2%/V
Időkéseleltetés állítási pontossága	+/- 10% a méréshatárra -25 °C külső megfelel IEC 61812-1

Control signal pulse width	100 Ms párhuzamosan kötött terheléssel 30 ms
Szigetelési ellenállás	100 mOhm -500 V DC elkülönítetlen megfelel IEC 60664-1
Recovery time	120 ms de-energetizációkor
Ellenállóképesség mikromegszakításokkal szemben	10 ms
Teljesítményigény [VA]	3 VA -240 V AC
Teljesítményigény W-ben	1,5 W -240 V DC
Kapcsolási teljesítmény [VA]	2000 VA
Minimális kapcsolóáram	10 mA -5 V DC elkülönítetlen
Maximális kapcsolási áram	8 A
Maximális kapcsolási feszültség	250 V AC
Elektromos élettartam	100000 Ciklus, 8 A -250 V, AC-1 100000 ciklus, 2 A -24 Veff, DC-1...5
Mechanikai tartósság	10000000 ciklus
Rated impulse withstand voltage	5 kV esetén 1,2...50 µs megfelel IEC 60664-1
Power on delay	100 ms
Kúszóáramút	4 kV/3 megfelel IEC 60664-1
Túlfeszültségi kategória	III megfelel IEC 60664-1
Biztonsági megbízhatósági adatok	B10d = 160000 MTTFd = 171.2 years
Szerelési helyzet	Bármely pozíció
Rögzítő tartó	35 mm DIN sín megfelel IEC 60721-3-3
LED állapota	Zöld LED-es háttérvilágítás (folyamatos) esetén logikai bemenetek állapota Sárga LED (folyamatos) esetén kimeneti relé állapota Sárga LED (gyorsan villogó) esetén átmeneti zárlat Sárga LED (lassan villogó) esetén timing in progress and output relay energised
A funkció elérhető	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 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 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 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
Szélesség	22,5 mm
Nettó súly	0,105 kg
Number of functions	22

Környezet

Dielektromos szilárdság	2,5 kV esetén 1 perc -50 Hz beépített érintkező mellett alapszigetelés megfelel IEC 61812-1
Szabványok	UL 508-CM IEC 61812-1
Irányelvek	2004/108/EK - elektromágneses kompatibilitás 2006/95/EK - kisfeszültségű irányelv
Terméktanúsítványok	RCM[RETURN]CE[RETURN]EAC[RETURN]CSA-Ex[RETURN]CCC[RETURN]UL-Aex[RETURN]GOST
Környezeti levegő hőmérséklete a működéshez	-20...60 °C
Környezeti levegő hőmérséklete a tároláshoz	-40...70 °C

IP védettség szint	IP40 burkolat: conforming to MSZ EN 60529 IP20 sorkapocs: conforming to MSZ EN 60529 IP51 homloklap: conforming to MSZ EN 60529
Szennyezettségi fok	3 megfelel IEC 60664-1
Rezgési ellenállás	20 m/s ² maximum (f= 10...150 Hz) megfelel IEC 60068-2-6
Ütésállóság	15 gn NO érintkező esetén 11 ms megfelel IEC 60068-2-27, Ea tesztek 60 gn raktáron esetén 11 ms megfelel IEC 60068-2-27, Ea tesztek
Relatív páratartalom	95 % -25...55 °C
Elektromágneses kompatibilitás	Gyors tranziens impulzus - test level: 1 kV 4. szint (kapacitív csatolás) conforming to IEC61000-4-4 1-es szint Túlfeszültség ellen védett 1,2/50-8/20 - test level: 1 kV 4. szint (differenciális módus) conforming to IEC 61000-4-5 3. szint Túlfeszültség ellen védett 1,2/50-8/20 - test level: 2 kV, 5/100 kHz 4. szint (kommunikációs áramkör) conforming to IEC 61000-4-5 3. szint Elektrosztatikus kisütés védelem teszt - test level: 6 kV 4. szint (érintkező kisülés) conforming to IEC 61000-4-2 3. szint Elektrosztatikus kisütés védelem teszt - test level: 8 kV légrés, 4 kV érintkező 4. szint (riasztás) conforming to IEC 61000-4-2 3. szint Gyors tranziens elleni védelem teszt - test level: 10 V/m, 80 MHz...1 GHz 4. szint (80 MHz...1 GHz) conforming to IEC 61000-4-3 3. szint Nedves ingadozó hullámok - test level: 10 Vrms 4. szint (0,15...8 MHz) conforming to IEC 61000-4-6 3-as szint Gyors tranziens impulzus, 5 ns - test level: 2 kV, 5/100 kHz 4. szint (direkt kisütés) conforming to IEC61000-4-4 1-es szint Sugárzott rádió-elektromos interferencia elleni védelem - test level: 30 %, 500 ms (500 ms) conforming to IEC 61000-4-12 Sugárzott rádió-elektromos interferencia elleni védelem - test level: 100 % (20 ms) conforming to IEC 61000-4-12

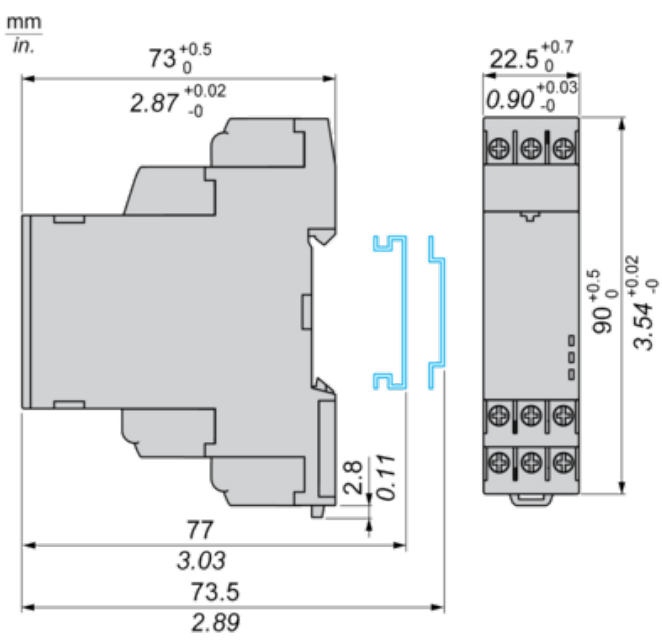
Csomagolási egység

1. csomag-csomagolási egység típusa	PCE
Egységek száma 1. csomagban	1
1. csomag magassága	2,6 cm
1. csomag szélessége	8,2 cm
1. csomag hossza	9,5 cm
1. csomag súlya	116,0 g
2. csomag- csomagolási egység típusa	S02
Egységek száma 2. csomagban	40
2. csomag magassága	15,0 cm
2. csomag szélessége	30,0 cm
2. csomag hossza	40,0 cm
2. csomag súlya	5,153 kg
3. csomag- csomagolási egység típusa	P06
Egységek száma 3. csomagban	640
3. csomag magassága	75,0 cm
3. csomag szélessége	60,0 cm
3. csomag hossza	80,0 cm
3. csomag súlya	74,24 kg

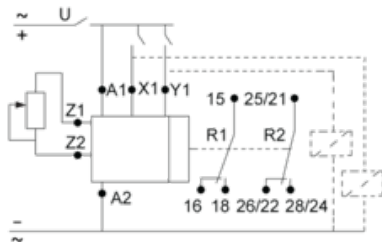
Kínálat fenntarthatósága

Fenntarthatósági állapot	Green Premium termék
REACH rendelet	 REACH Nyilatkozat
EU RoHS irányelv	Proaktív megfelelés (A termék nem tartozik az EU RoHS jogi hatálya alá)
Higanymentes	Igen
Kínai RoHS rendelet	 Kínai RoHS Nyilatkozat
RoHS korlátozás alóli kivétel	 Igen
Környezetvédelmi közzététel	 A Termék Környezeti Profilja
Körkörösségi profil	 Élettartam Végére Vonatkozó Információ

Dimensions



Wiring Diagram

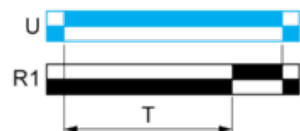


Function A: Power On-Delay

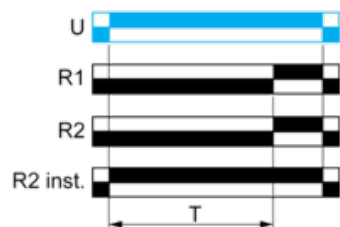
Description

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

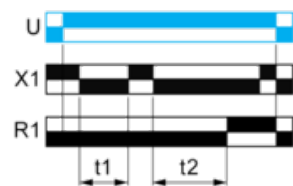


Function At: Power On-Delay with Pause / Summation Control

Description

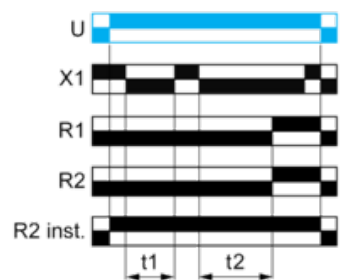
On energisation of power supply, the timing period T starts. Timing can be interrupted / paused each time X1 energizes. Except for RE17*, RE22R2AMU, RE22R2MMW, RE22R2MMU, RE22R2MJU, timing can be interrupted / paused each time Y1 energizes. When the cumulative total of time periods elapsed reaches the 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



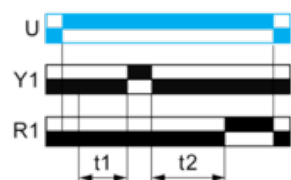
$$T = t1 + t2 + \dots$$

Function: 2 Outputs with Pause / Summation Control



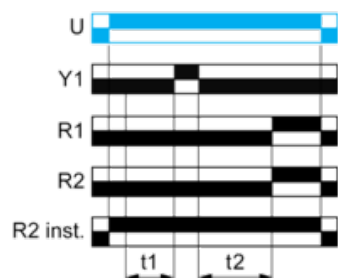
$$T = t1 + t2 + \dots$$

Function: 1 Output with Retrigger / Restart Control



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

Function: 2 Outputs with Retrigger / Restart Control



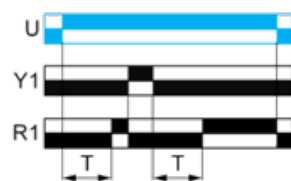
$$T = t1 + t2 + \dots$$

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

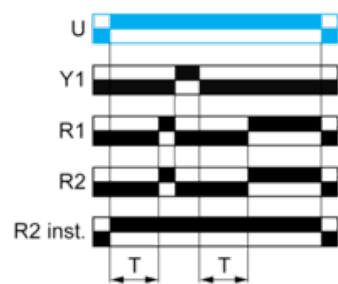
Description

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

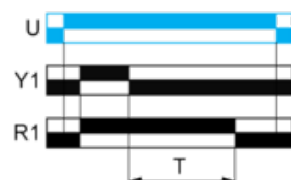


Function C: Off-Delay Relay with Control Signal

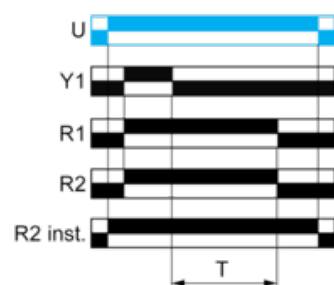
Description

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

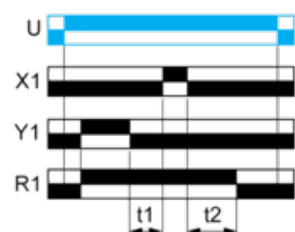


Function Ct: Off-Delay Relay with Control Signal & With Pause / Summation Control

Description

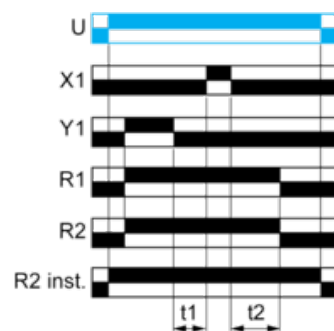
After energisation of power supply and energization of Y1 cause output(s) R close(s). When Y1 deenergizes, timing starts and the timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R revert(s) to its/their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

Function: 1 Output



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

Function: 2 Outputs



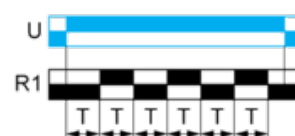
$$T = t1 + t2 + \dots$$

Function D: Symmetrical Flashing Relay (Starting Pulse Off)

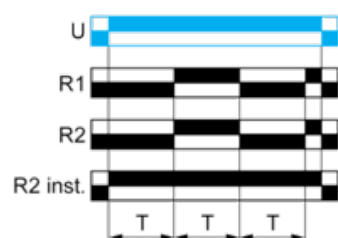
Description

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").

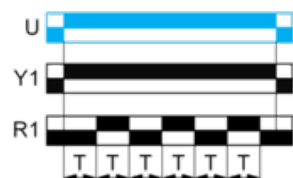
Function: 1 Output



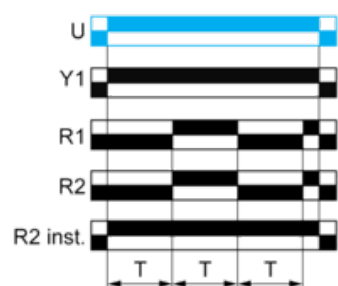
Function: 2 Outputs



Function: 1 Output with Retrigger / Restart Control



Function: 2 Output with Retrigger / Restart Control

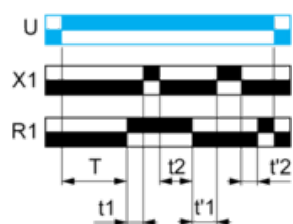


Function Dt: Symmetrical Flashing Relay (Starting Pulse Off) & With Pause / Summation Control

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 indefinitely until power supply removal. The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

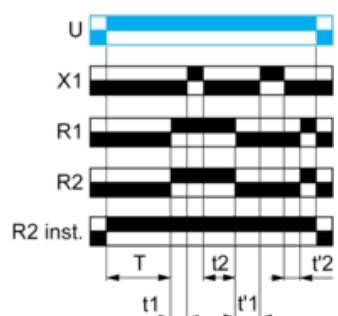
Function: 1 Output



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

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

Function: 2 Outputs



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

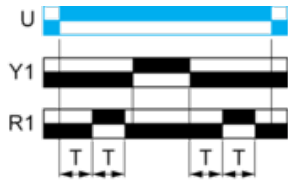
$$T = t'1 + t'2 + \dots$$

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

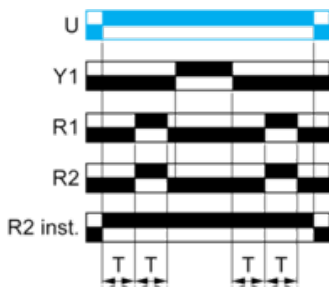
Description

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 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

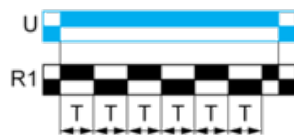


Function Di: Symmetrical Flashing Relay (Starting Pulse On)

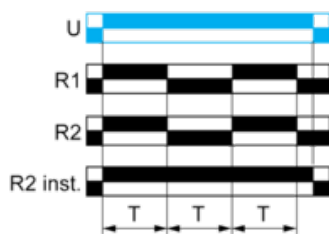
Description

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: 1 Output



Function: 2 Outputs

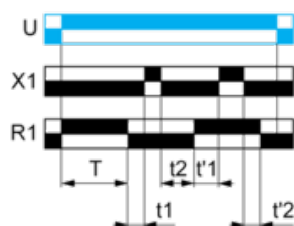


Function Dit: Symmetrical Flashing Relay (Starting Pulse On) & With Pause / Summation Control

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 indefinitely until power supply removal. The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

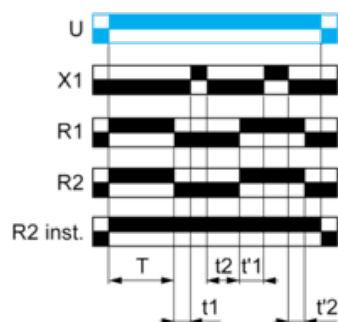
Function: 1 Output



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

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

Function: 2 Outputs



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

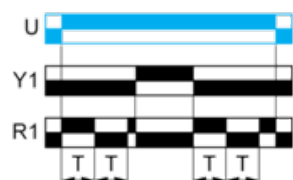
$$T = t'_1 + t'_2 + \dots$$

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

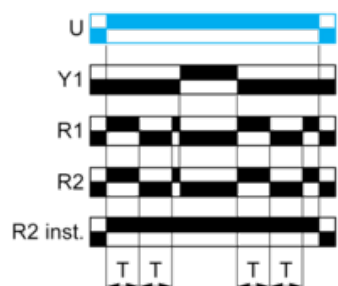
Description

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 indefinitely 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

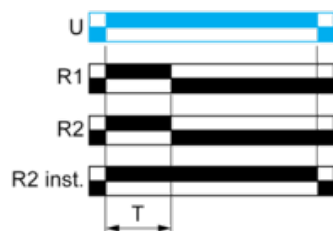
Description

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.

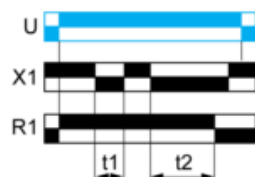
The timing can be interrupted / paused each time X1 energizes.

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.

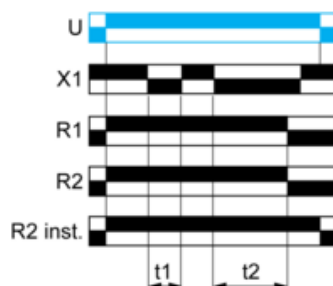
The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

Function: 1 Output



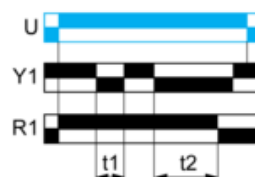
$$T = t_1 + t_2 + \dots$$

Function: 2 Outputs



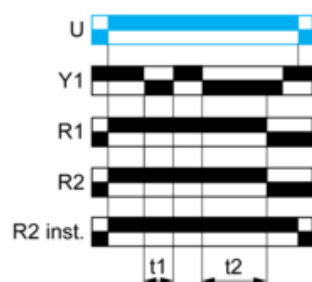
$$T = t_1 + t_2 + \dots$$

Function: 1 Output with Retrigger / Restart Control



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

Function: 2 Outputs with Retrigger / Restart Control



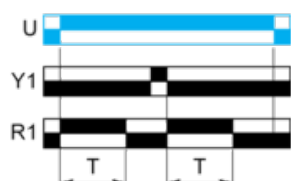
$$T = t1 + t2 + \dots$$

Function Hw: Interval Relay & with Retrigger / Restart Control

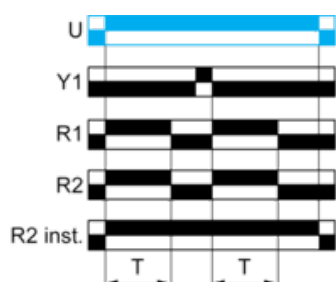
Description

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

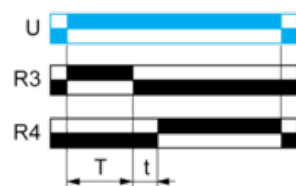


Function Qg: Star-Delta Relay (2 CO with same Common)

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

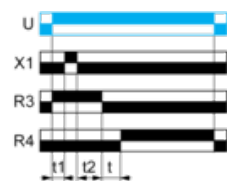
Function Qgt: Star-Delta Relay (2 CO with same common) with Pause / Summation Control

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



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

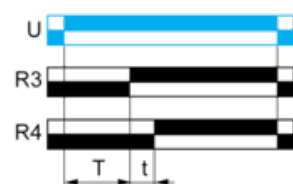
NOTE: RE22R2MYMR is with fixed transition time, t: 50ms

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



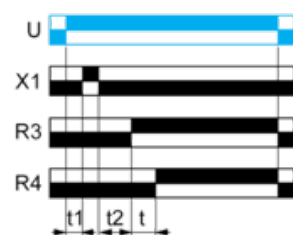
t : 20, 40, 60, 80, 100, 120, 140 ms

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



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

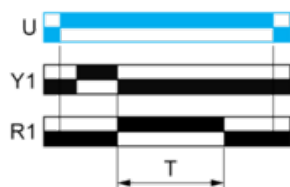
NOTE: RE22R2MYMR is with fixed transition time, t: 50ms

Function W: Interval Relay with Control Signal Off

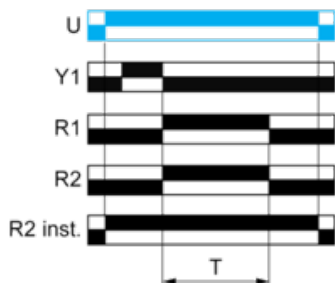
Description

After energisation of power supply and on energization of Y1 following by 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: 1 Output



Function: 2 Outputs

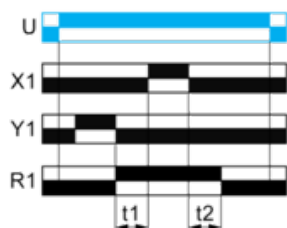


Function Wt: Interval Relay with Control Signal Off & with Pause / Summation Control

Description

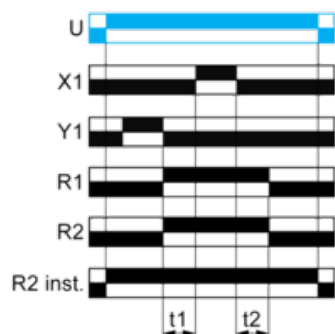
After energisation of power supply and on energization of Y1, the output(s) R close(s) and starts the timing T. Timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R revert(s) to its/their initial state.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

Function: 1 Output



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

Function: 2 Outputs



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

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