



Principales

Gamme de produit	Relais de temporisation Harmony
Type de produit ou équipement	Relais multifonctions
Type de sortie logique	Relais
Nom de l'appareil	RE22
Courant de sortie nominal	8 A

Complémentaires

Type et composition des contacts	1 F/O contact temporisé ou instantané, sans cadmium 2 "O/F" contact temporisé, sans cadmium
Type de temporisation	Puissance d'enclenchement Déclenchement Clignotement asymétrique Intervalle Étoile-triangle
Plage de temporisation	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
Type de commande	Bouton rotatif Bouton de diagnostic Potentiomètre externe
[Us] tension d'alimentation	24...240 V CA/CC 50/60 Hz
Libération de la tension d'entrée	<= 2,4 V
Plage d'utilisation en tension	0,85 à 1,1 Us
Fréquence d'alimentation	50...60 Hz +/- 5 %
Mode de raccordement	Bornes à vis, 1 x 0,5 à 1 x 3,3 mm ² (AWG 20 à AWG 12) rigide sans embout Bornes à vis, 2 x 0,5 à 2 x 2,5 mm ² (AWG 20 à AWG 14) rigide sans embout Bornes à vis, 1 x 0,2 à 1 x 2,5 mm ² (AWG 24...AWG 14) souple avec embout Bornes à vis, 2 x 0,2 à 2 x 1,5 mm ² (AWG 24 à AWG 16) souple avec embout
Couple de serrage	0,6...1 N.m se conformer à CEI 60947-1
Matière du boîtier	Auto-extinguible
Précision de répétition	+/- 0,5% se conformer à CEI 61812-1
Dérive en température	+/- 0,05 %/°C
Dérive en tension	+/- 0,2 %/V
Réglage exact du temps de retard	+/- 10 % pleine échelle à 25 °C se conformer à CEI 61812-1
Largeur d'impulsion du signal de commande	100 Ms avec charge en parallèle 30 ms
Résistance d'isolement	100 MΩ à 500 V CC se conformer à CEI 60664-1
Temps de récupération	120 ms sur désexcitation
Immunité aux micro-coupures	10 ms

Puissance consommée en VA	3 VA à 240 V CA
Puissance consommée en W	1,5 W à 240 V CC
Capacité de commutation en VA	2000 VA
Courant commuté minimum	10 mA à 5 V CC
Courant commuté maximum	8 A
Tension de coupure maximale	250 V CA
Durée de vie électrique	100000 Cycle, 8 A à 250 V, AC-1 100000 cycle, 2 A à 24 V, DC-1
Endurance mécanique	10000000 cycle
Tension assignée de tenue aux chocs	5 kV pour 1,2...50 µs se conformer à CEI 60664-1
Délai de mise sous tension	100 ms
Distance de fuite	4 kV/3 se conformer à CEI 60664-1
Catégorie de surtension	III se conformer à CEI 60664-1
Données de fiabilité de la sécurité	B10d = 160000 MTTFd = 171,2 années
Position de montage	Toutes positions
Support de montage	Rail DIN 35 mm se conformer à CEI 60715
Etat LED	Vert rétro-éclairage à DEL (fixe) pour indication de l'aiguille du cadran Jaune LED (fixe) pour relais de sortie sous tension Jaune LED (clignotement rapide) pour temporisation en cours et relais de sortie hors tension Jaune LED (clignotement lent) pour temporisation en cours et relais de sortie sous tension
Fonction disponible	A-Relais de mise sous tension-2 "O/F" At-relais de temporisation à la mise sous tension avec pause/somme (X1)-2 "O/F" Aw- relais de temporisation à la mise sous tension avec redéclenchement/redémarrage-2 "O/F" C- relais temporisé au déclenchement avec signal de commande-2 "O/F" Ct- relais temporisé au déclenchement avec signal de commande et pause/sommation-2 "O/F" D- relais clignotant symétrique (impulsion de démarrage)-2 "O/F" Dt- relais clignotant symétrique (impulsion de démarrage) avec pause/sommation (X1)-2 "O/F" Dw- relais clignotant symétrique (impulsion de démarrage) avec redéclenchement/redémarrage-2 "O/F" Di- relais clignotant di-symétrique (impulsion de démarrage)-2 "O/F" Dit - relais clignotant symétrique (impulsion de démarrage) avec pause/somme (X1)-2 "O/F" Diw - relais clignotant symétrique (impulsion de démarrage) avec redéclenchement/redémarrage-2 "O/F" H- intervalle relais-2 "O/F" Ht- relais à intervalle avec pause/somme (X1)-2 "O/F" Hw- relais à intervalle avec redéclenchement/redémarrage-2 "O/F" Qg- Relais étoile-triangle (2 sorties CO avec même commun)-2 "O/F" Qgt- Relais étoile-triangle (2 sorties CO avec même commun) avec pause/sommation-2 "O/F" Qt- Relais étoile-triangle (2 sorties CO avec commun divisé)-2 "O/F" Qtt- Relais étoile-triangle (2 sorties CO avec commun divisé) avec pause/sommation (X1)-2 "O/F" W- Relais à intervalle avec signal de commande désactivé-2 "O/F" Qt- Relais à intervalle avec signal de commande désactivé et pause/sommation-2 "O/F"
Largeur	22,5 mm
Poids du produit	0,105 kg
Nombre de fonctions	22

Environnement

Tenue diélectrique	2,5 kV pour 1 mA/1 minute à 50 Hz entre sortie de relais et alimentation avec isolement de base se conformer à CEI 61812-1
Normes	UL 508 CEI 61812-1
Règlement Européen	2004/108/CE - compatibilité électromagnétique 2006/95/CE - directive basse tension
Certifications du produit	RCM[RETURN]CE[RETURN]EAC[RETURN]CSA[RETURN]CCC[RETURN]UL[RETURN]GL
Température ambiante de fonctionnement	-20...60 °C
Température ambiante de stockage	-40...70 °C

Degré de protection IP	IP40 enveloppe: conforming to CEI 60529 IP20 bornes: conforming to CEI 60529 IP50 face avant: conforming to CEI 60529
Degré de pollution	3 se conformer à CEI 60664-1
Tenue aux vibrations	20 m/s ² (f= 10...150 Hz) se conformer à CEI 60068-2-6
Tenue aux chocs mécaniques	15 gn non fonctionnant pour 11 ms se conformer à CEI 60068-2-27 5 gn en marche pour 11 ms se conformer à CEI 60068-2-27
Humidité relative	95 % à 25...55 °C
Compatibilité électromagnétique	Test d'immunité des transitoires rapides - test level: 1 kV niveau 3 (clip de connexion capacitive) conforming to CEI 61000-4-4 Test d'immunité aux surtensions - test level: 1 kV niveau 3 (mode différentiel) conforming to CEI 61000-4-5 Test d'immunité aux surtensions - test level: 2 kV niveau 3 (mode commun) conforming to CEI 61000-4-5 Décharge électrostatique - test level: 6 kV niveau 3 (décharge par contact) conforming to CEI 6100-4-11 Décharge électrostatique - test level: 8 kV niveau 3 (décharge dans l'air) conforming to CEI 6100-4-11 Test d'immunité aux champs électromagnétiques radio-fréquences rayonnés - test level: 10 V/m niveau 3 (80 MHz...1 GHz) conforming to CEI 61000-4-3 Perturbations RF transmises par conduction - test level: 10 V niveau 3 (0,15 à 80 MHz) conforming to CEI 61000-4-6 Transitoire rapide en sèves - test level: 2 kV niveau 3 (contact direct) conforming to CEI 61000-4-4 Immunité aux micro-coupures et baisses de tension - test level: 30 % (500 ms) conforming to CEI 61000-4-11 Immunité aux micro-coupures et baisses de tension - test level: 100 % (20 ms) conforming to CEI 61000-4-11

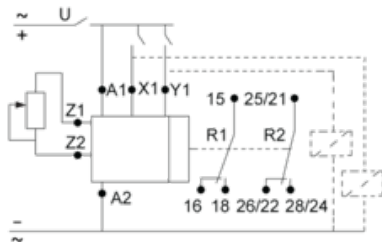
Durabilité de l'offre

Statut environnemental de l'offre	Produit Green Premium
Régulation REACH	 Déclaration REACH
Directive RoHS UE	Conformité pro-active (Produit en dehors du scope légal RoHS UE)
Sans mercure	Oui
Régulation RoHS Chine	 Déclaration RoHS Pour La Chine
Information sur les exemptions RoHS	 Oui
Profil environnemental	 Profil Environnemental Du Produit
Profil de circularité	 Informations De Fin De Vie

Dimensions



Wiring Diagram

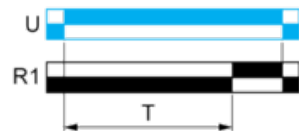


Function A: Power On-Delay

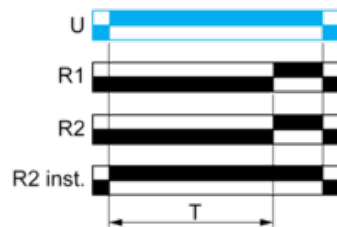
Description

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

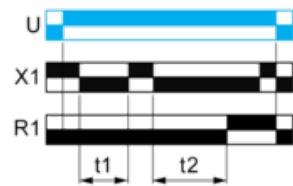


Function At: Power On-Delay with Pause / Summation Control

Description

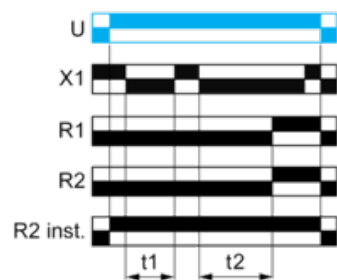
On energisation of power supply, the timing period T starts. Timing can be interrupted / paused each time X1 energizes. Except for RE17*, RE22R2AMU, RE22R2MMW, RE22R2MMU, RE22R2MJU, timing can be interrupted / paused each time Y1 energizes. When the cumulative total of time periods elapsed reaches the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



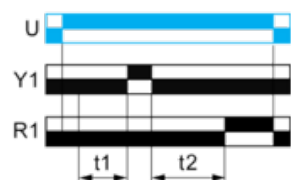
$$T = t1 + t2 + \dots$$

Function: 2 Outputs with Pause / Summation Control



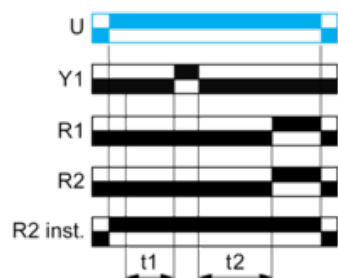
$$T = t1 + t2 + \dots$$

Function: 1 Output with Retrigger / Restart Control



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

Function: 2 Outputs with Retrigger / Restart Control



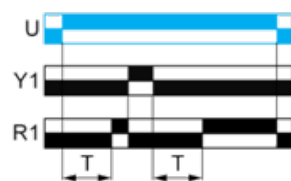
$$T = t1 + t2 + \dots$$

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

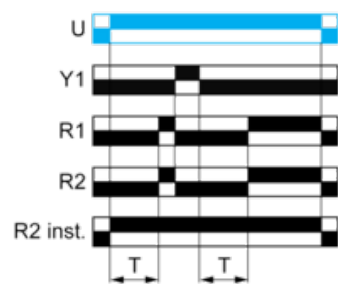
Description

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

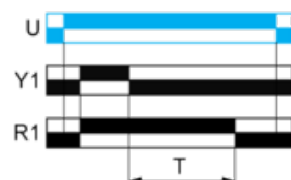


Function C: Off-Delay Relay with Control Signal

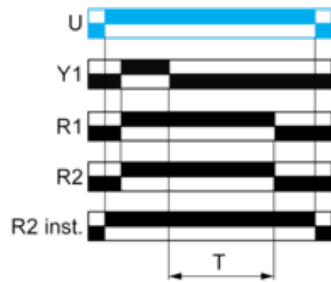
Description

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

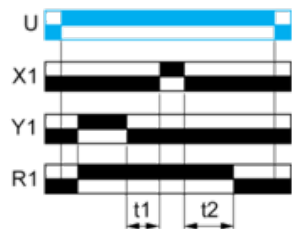


Function Ct: Off-Delay Relay with Control Signal & With Pause / Summation Control

Description

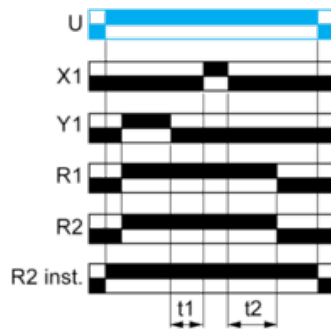
After energisation of power supply and energization of Y1 cause output(s) R close(s). When Y1 deenergizes, timing starts and the timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R revert(s) to its/their 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



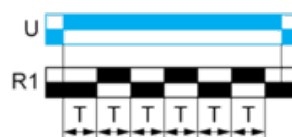
$$T = t1 + t2 + \dots$$

Function D: Symmetrical Flashing Relay (Starting Pulse Off)

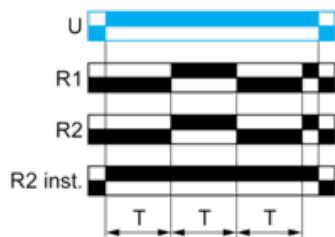
Description

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



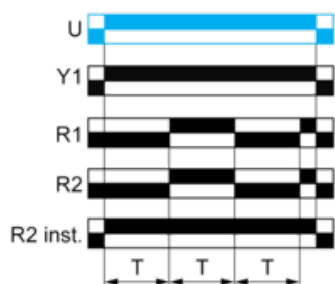
Function: 2 Outputs



Function: 1 Output with Retrigger / Restart Control



Function: 2 Output with Retrigger / Restart Control

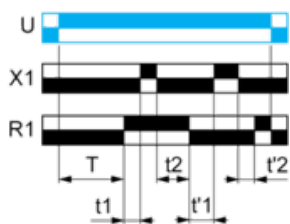


Function Dt: Symmetrical Flashing Relay (Starting Pulse Off) & With Pause / Summation Control

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").

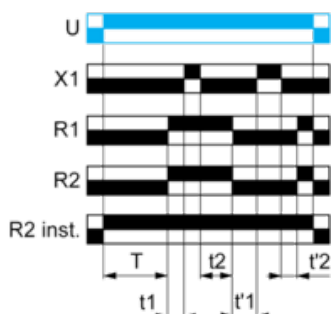
Function: 1 Output



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

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

Function: 2 Outputs



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

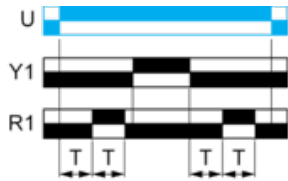
$$T = t'1 + t'2 + \dots$$

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

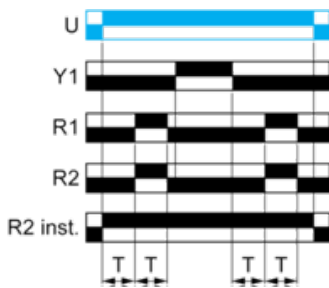
Description

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

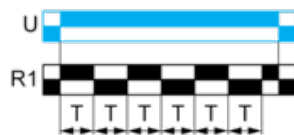


Function Di: Symmetrical Flashing Relay (Starting Pulse On)

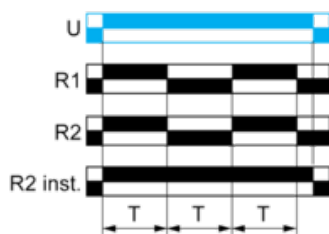
Description

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

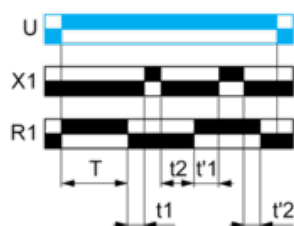


Function Dit: Symmetrical Flashing Relay (Starting Pulse On) & With Pause / Summation Control

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").

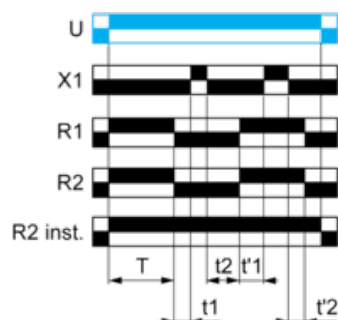
Function: 1 Output



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

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

Function: 2 Outputs



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

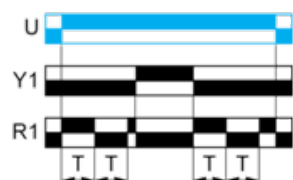
$$T = t'_1 + t'_2 + \dots$$

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

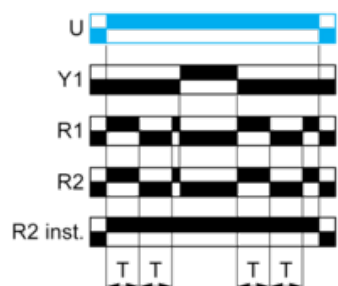
Description

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

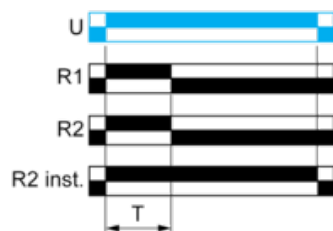
Description

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.

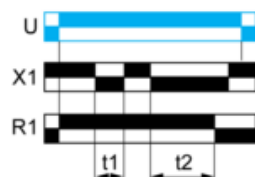
The timing can be interrupted / paused each time X1 energizes.

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.

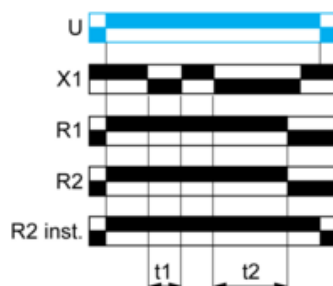
The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

Function: 1 Output



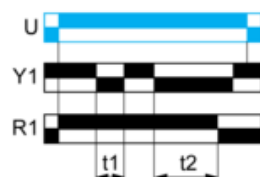
$$T = t_1 + t_2 + \dots$$

Function: 2 Outputs



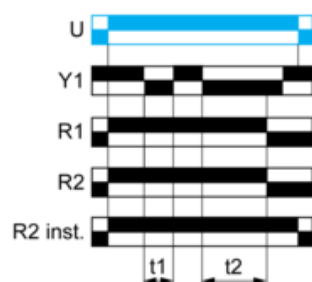
$$T = t_1 + t_2 + \dots$$

Function: 1 Output with Retrigger / Restart Control



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

Function: 2 Outputs with Retrigger / Restart Control



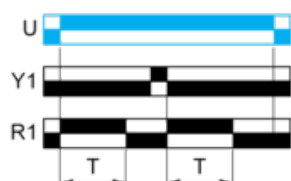
$$T = t1 + t2 + \dots$$

Function Hw: Interval Relay & with Retrigger / Restart Control

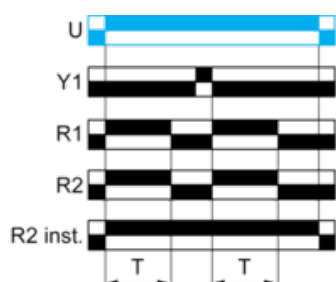
Description

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

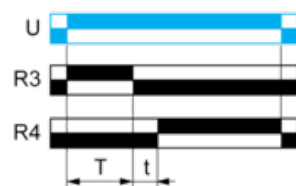


Function Qg: Star-Delta Relay (2 CO with same Common)

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

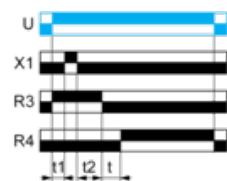
Function Qgt: Star-Delta Relay (2 CO with same common) with Pause / Summation Control

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



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

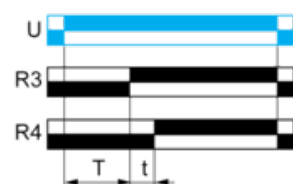
NOTE: RE22R2MYMR is with fixed transition time, t: 50ms

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



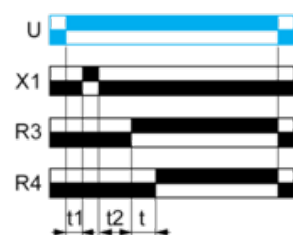
t : 20, 40, 60, 80, 100, 120, 140 ms

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



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

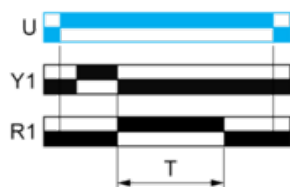
NOTE: RE22R2MYMR is with fixed transition time, t: 50ms

Function W: Interval Relay with Control Signal Off

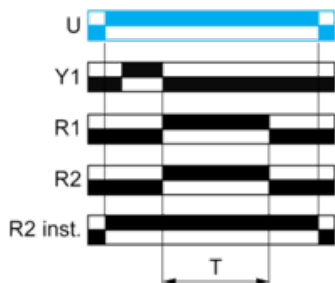
Description

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

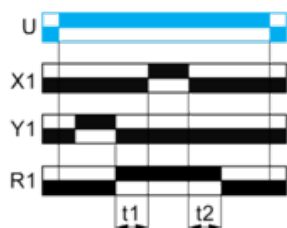


Function Wt: Interval Relay with Control Signal Off & with Pause / Summation Control

Description

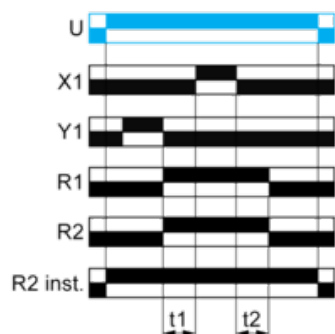
After energisation of power supply and on energization of Y1, the output(s) R close(s) and starts the timing T. Timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R revert(s) to its/their initial state.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