



Hauptkenndaten

Produktserie	Zelio Time
Produkt oder Komponententyp	Modulares Zeitrelais
Digitaler Ausgang	Relais
Kurzbezeichnung des Geräts	RE22
Nennausgangsstrom	8 A

Zusatzdaten

Typ und Zusammenstellung der Kontakte	1Ö/1S zeitgesteuerter oder verzögerungsfreier Kontakt, cadmiumfrei 1Ö/1S zeitgesteuerter oder verzögerungsfreier Kontakt, cadmiumfrei 2Ö/2S zeitgesteuerter Kontakt, cadmiumfrei
Zeitverzögerungsfunktion	A At Aw C D Di H Ht Qg Qt W Ct Dw Hw Wt Dt Dit Diw Qgt Qtt Qgw Qtw
Zeitverzögerungsbereich	0,3-3 s 1...10 s 0,05...1 s 3...30 s 10...100 s 30...300 s 3...30 min 30...300 min 3...30 h 30...300 h
Betätigungsart	Drehknopf Diagnosetaste Externe Potenziometer
Nennhilfsspannung [UH,nom]	24-240 V AC/DC bei 50/60 Hz
Eingangsspannung	<= 2,4 V
Spannungsbereich	0,85...1,1 Us
Netzfrequenz	50...60 Hz (+/- 5 %)
Anschlüsse - Klemmen	Schraubklemmen : _test1 x 0,5...1 x 3,3 mm ² , AWG 20...AWG 12 starr Kabel ohne Kabelende Schraubklemmen : _test2 x 0,5...2 x 2,5 mm ² , AWG 20...AWG 14 starr Kabel ohne Kabelende Schraubklemmen : _test1 x 0,2-1 x 2,5 mm ² , AWG 24-AWG 14 flexibel Kabel mit

Die in dieser Dokumentation bereitgestellten Informationen beinhalten allgemeine Beschreibungen und/oder technische Daten und Leistungsmerkmale der entsprechenden Produkte. Diese Dokumentation ist nicht als Ersatz für eine Eignungsbestimmung gedacht und darf nicht dazu verwendet werden, die Eignung oder Zuverlässigkeit dieser Produkte für spezifische Benutzeranwendungen zu bestimmen. Jeder Benutzer oder Integrator ist verpflichtet, geeignete und vollständige Risikoanalysen, Evaluierungen und Tests der Produkte im Hinblick auf die jeweilige spezifische Anwendung durchzuführen. Weder Schneider Electric Industries SAS noch seine angegliederten Unternehmen sind für den fehlerhaften Gebrauch oder Missbrauch der gelieferten Informationen verantwortlich oder haftbar zu machen.

Kabelende
Schraubklemmen : _test2 x 0,2-2 x 1,5 mm², AWG 24...AWG 16 flexibel Kabel mit
Kabelende

Anzugsmoment	0.6...1 Nm entspricht IEC 60947-1
Gehäusematerial	Selbstverlöschend
Wiederholgenauigkeit	+/-0,5% entspricht IEC 61812-1
Temperaturdrift	+/- 0.05 %/°C
Spannungsdrift	+/-0.2 %/V
Einstellgenauigkeit der Zeitverzögerung	+/- 10 % der Gesamtskala bei 25 °C entspricht IEC 61812-1
Minimale Impulsdauer	30 ms 100 ms (mit Last parallel geschaltet)
Isolationswiderstand	100 MOhm bei 500 V DC entspricht IEC 60664-1
Rückstellzeit	120 ms (bei Abschaltung)
Überbrückungszeit	<= 10 ms
Leistungsaufnahme in VA	3 VA bei 240 V AC
Leistungsaufnahme in W	1.5 W at 240 V
Schaltleistung in VA	2000 VA
Minimaler Schaltstrom	10 mA 5 V DC
Maximaler Schaltstrom	8 A
Maximale Schaltspannung	250 V AC
Elektrische Lebensdauer	100000 Zyklen für 8 A bei 250 V AC-1 100000 Zyklen für 2 A bei 24 V DC-1
Mechanische Lebensdauer	10000000 Zyklen
Bemessungsstoßspannungsfestigkeit [Uimp]	5 kV für 1.2...50 µs entspricht IEC 60664-1
Verzögerungsansprechzeit	< 100 ms
Kriechstrecke	4 kV/3 entspricht IEC 60664-1
Überspannungskategorie	III entspricht IEC 60664-1
Daten bezüglich Sicherheit und Zuverlässigkeit	MTTFd = 171,2 Jahre B10d = 160000
Einbauposition	Alle Positionen
Montagehalterung	35 mm DIN-Schiene entspricht EN/IEC 60715
Status-LED	Grün LED, hinterleuchtet (stetig) für Pfeil zur Skaleneinstellung auf dem Potenziometer Gelb LED (stetig) für Ausgangsrelais ist eingeschaltet Gelb LED (schnelles Blinken) für Zeitfunktion ist aktiv und Ausgangsrelais ist abgeschaltet Gelb LED (langsames Blinken) für Zeitfunktion ist aktiv und Ausgangsrelais ist eingeschaltet
Breite	22,5 mm
Produktgewicht	0,105 kg

Umgebung

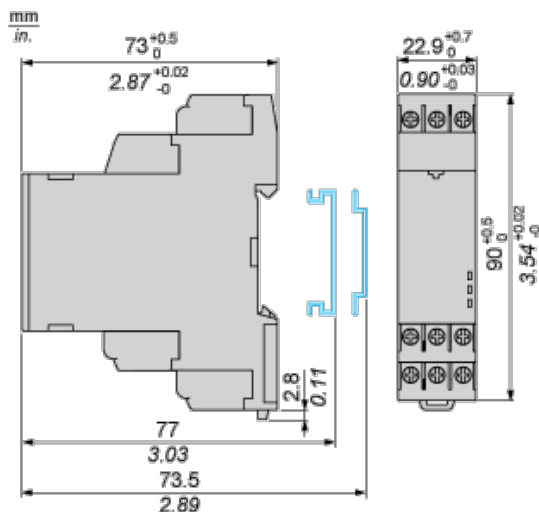
Spannungsfestigkeit	2.5 kV für 1 mA/1 Minute bei 50 Hz zwischen Relaisausgang und Versorgungsspannung mit Grundisolation entspricht IEC 61812-1
Normen	IEC 61812-1 UL 508
Richtlinien	2004/108/EG - elektromagnetische Verträglichkeit 2006/95/EG - Niederspannungsrichtlinie
Produktzertifizierungen	CCC CE CSA GL UL RCM EAC Chinesische RoHS-Richtlinie
Umgebungstemperatur bei Betrieb	-20-60 °C
Umgebungstemperatur bei Lagerung	-40-70 °C
Schutzart (IP)	IP20 (Klemmen) entspricht IEC 60529 IP40 (Gehäuse) entspricht IEC 60529 IP50 (Frontplatte) entspricht IEC 60529
Verschmutzungsgrad	3 entspricht IEC 60664-1

Vibrationsfestigkeit	20 m/s ² (f = 10...150 Hz) entspricht IEC 60068-2-6
Stoßfestigkeit	15 gn (nicht in Betrieb) (Dauer = 11 ms) entspricht IEC 60068-2-27 5 gn (im Betrieb) (Dauer = 11 ms) entspricht IEC 60068-2-27
Relative Feuchtigkeit	95 % bei 25...55 °C
elektromagnetische Verträglichkeit	FT-Störfestigkeitstest (Teststufe: 1 kV, Level 3 - kapazitiver Verbindungsverschluss) entspricht IEC 61000-4-4 Zerstörfestigkeitsprüfung (Teststufe: 1 kV, Level 3 - Differentialbetrieb) entspricht IEC 61000-4-5 Zerstörfestigkeitsprüfung (Teststufe: 2 kV, Level 3 - Gleichtakt) entspricht IEC 61000-4-5 Elektrostatische Entladung (Teststufe: 6 kV, Level 3 - Kontaktentladung) entspricht IEC 61000-4-2 Elektrostatische Entladung (Teststufe: 8 kV, Level 3 - Luftaustritt) entspricht IEC 61000-4-2 Abgestrahlte Hochfrequenzsignal-Störfestigkeitsprüfung (Teststufe: 10 V/m, Level 3 - 80 MHz...1 GHz) entspricht IEC 61000-4-3 Leitungsgebundene HF-Störungen (Teststufe: 10 V, Level 3 - 0,15-80 MHz) entspricht IEC 61000-4-6 Schnelle Stoßspannungs-Bursts (Teststufe: 2 kV, Level 3 - direkter Kontakt) entspricht IEC 61000-4-4 Störfestigkeit gegen Mikrounterbrechungen und Spannungsabfälle (Teststufe: 30 % - 500 ms) entspricht IEC 61000-4-11 Störfestigkeit gegen Mikrounterbrechungen und Spannungsabfälle (Teststufe: 100 % - 20 ms) entspricht IEC 61000-4-11

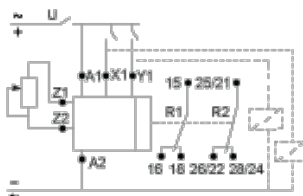
Nachhaltigkeit

Grad der Umweltverträglichkeit	Green-Premium-Produkt
ROHS	Konform - seit 1520 - Schneider-Electric-Konformitätserklärung
REACH	Produkt beinhaltet besorgniserregende Stoffe (SVHC) nicht über dem Schwellwert
Umgebungsbedingungen Produkt	Verfügbar
Entsorgungshinweise	Verfügbar

Dimensions



Wiring Diagram



Function A: Power On-Delay

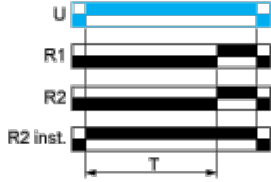
Description

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

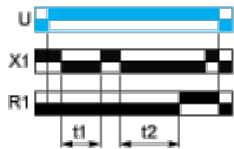


Function At: Power On-Delay with Pause / Summation Control

Description

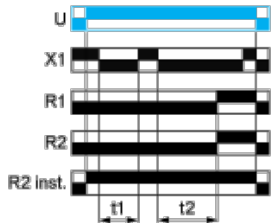
On energisation of power supply, the timing period T starts. Timing can be interrupted / paused each time X1 energizes. Except for RE17*, RE22R2AMU, RE22R2MMW, RE22R2MMU, RE22R2MJU, timing can be interrupted / paused each time Y1 energizes. When the cumulative total of time periods elapsed reaches the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



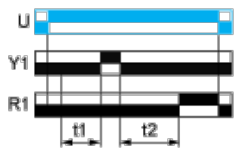
$$T = t1 + t2 + \dots$$

Function: 2 Outputs with Pause / Summation Control



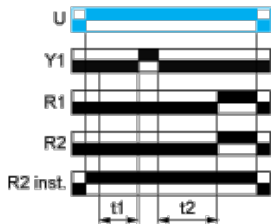
$$T = t1 + t2 + \dots$$

Function: 1 Output with Retrigger / Restart Control



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

Function: 2 Outputs with Retrigger / Restart Control



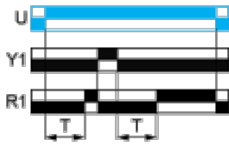
$$T = t1 + t2 + \dots$$

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

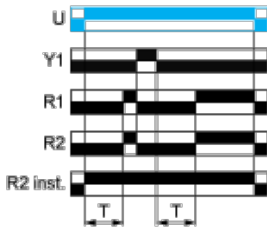
Description

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

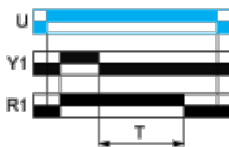


Function C: Off-Delay Relay with Control Signal

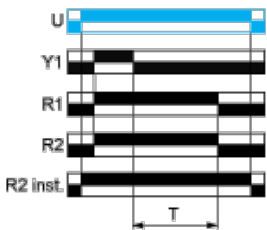
Description

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

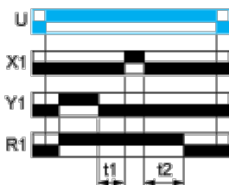


Function Ct: Off-Delay Relay with Control Signal & With Pause / Summation Control

Description

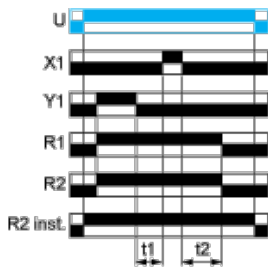
After energisation of power supply and energization of Y1 cause output(s) R close(s). When Y1 deenergizes, timing starts and the timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R revert(s) to its/their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



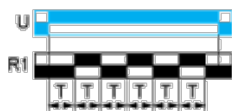
$$T = t_1 + t_2 + \dots$$

Function D: Symmetrical Flashing Relay (Starting Pulse Off)

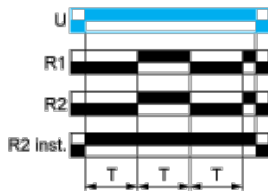
Description

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



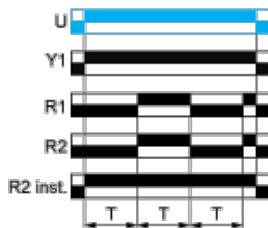
Function: 2 Outputs



Function: 1 Output with Retrigger / Restart Control



Function: 2 Output with Retrigger / Restart Control

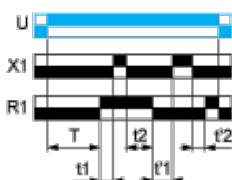


Function Dt: Symmetrical Flashing Relay (Starting Pulse Off) & With Pause / Summation Control

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").

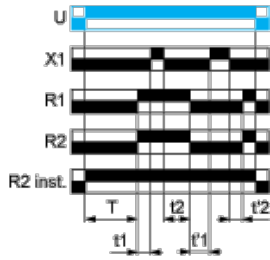
Function: 1 Output



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

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

Function: 2 Outputs



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

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

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

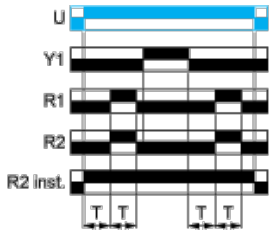
Description

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)

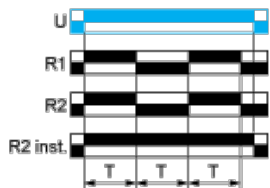
Description

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

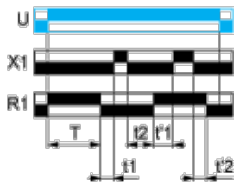


Function Dit: Symmetrical Flashing Relay (Starting Pulse On) & With Pause / Summation Control

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").

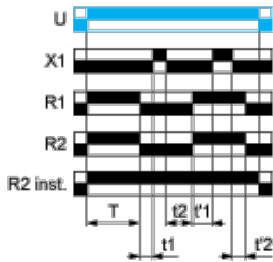
Function: 1 Output



$T = t_1 + t_2 + \dots$

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

Function: 2 Outputs



$T = t_1 + t_2 + \dots$

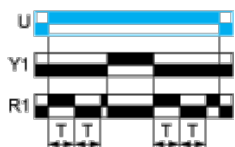
$T = t'_1 + t'_2 + \dots$

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

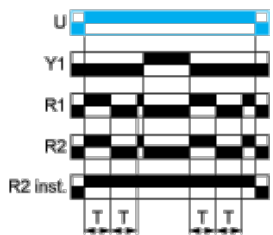
Description

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

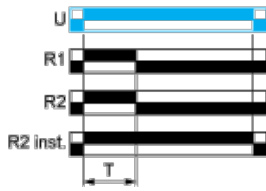
Description

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

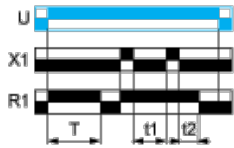


Function Ht: Interval Relay & With Pause / Summation Control

Description

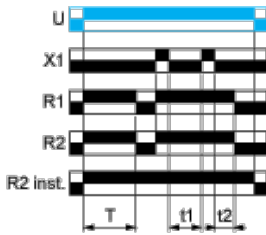
On energisation of power supply, output(s) R close(s) and timing period T starts. The timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R revert(s) to its/their initial state. Reenergization of X1 will 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*, RE22R2AMU, RE22R2MMW, RE22R2MMU, 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



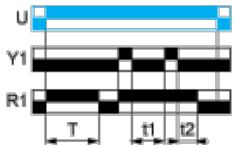
$$T = t1 + t2 + \dots$$

Function: 2 Outputs



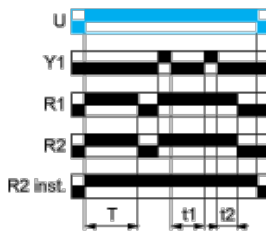
$$T = t1 + t2 + \dots$$

Function: 1 Output with Retrigger / Restart Control



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

Function: 2 Output with Retrigger / Restart Control



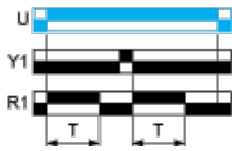
$$T = t1 + t2 + \dots$$

Function Hw: Interval Relay & with Retrigger / Restart Control

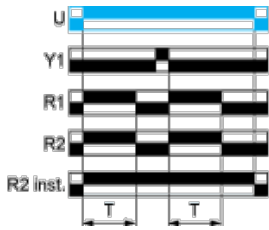
Description

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

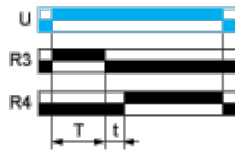


Function Qg: Star-Delta Relay (2 CO with same Common)

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.

Function: 2 Outputs



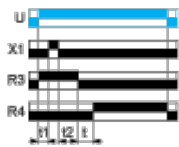
t : 20, 40, 60, 80, 100, 120, 140 ms

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.

Function: 2 Outputs



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

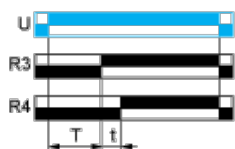
NOTE: RE22R2MYMR is with fixed transition time, t: 50ms

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.

Function: 2 Outputs



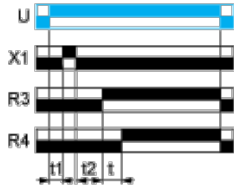
t : 20, 40, 60, 80, 100, 120, 140 ms

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.

Function: 2 Outputs



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

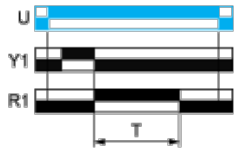
NOTE: RE22R2MYMR is with fixed transition time, t: 50ms

Function W: Interval Relay with Control Signal Off

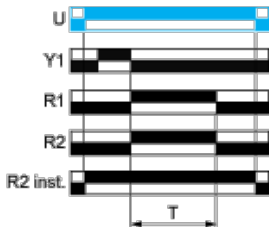
Description

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

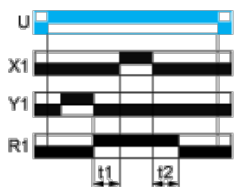


Function Wt: Interval Relay with Control Signal Off & with Pause / Summation Control

Description

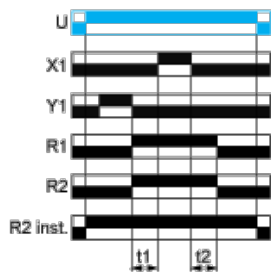
After energisation of power supply and on energization of Y1 following by deenergization of Y1, the output(s) R close(s) and starts the timing T. Timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R revert(s)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



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

Function: 2 Outputs



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

Legend

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

U - Supply

R1/R22 timed outputs

-

Ta - Adjustable On-delay

Tr - Adjustable Off-delay

X1 - Pause / Summation control

Y1 - Retrigger / Restart control

X2 - Function Selection

R2 The second output is instantaneous if the right position is selected
inst.

-

T - Timing period

R4 - Delta contact output

t - Delay to switch ON Delta contact output

R3 - Star-Delta contact output