# Produktdatenblatt
## Eigenschaften

# RE22R2MYMR
## Multifunktionszeitrelais, 0,05 s-300 h, 24-240VAC/DC, 2 W

## Hauptmerkmale

| | |
|---|---|
| Produktbereich | Harmony Zeitrelais |
| Produkt- oder Komponententyp | Multifunktionsrelais |
| Digitaler Ausgang | Relais |
| Kurzbezeichnung des Geräts | RE22 |
| Nennausgangsstrom | 8 A |

## Zusatzmerkmale

| | |
|---|---|
| Typ und Zusammenstellung der Kontakte | 1 Wechslerkontakt zeitgesteuerter oder verzögerungsfreier Kontakt, cadmiumfrei<br>2 Wechslerkontakte zeitgesteuerter Kontakt, cadmiumfrei |
| Zeitverzögerungsfunktion | Einschaltverzögerung<br>Zeitverzögerung bei fallender Flanke (OFF delay)<br>Symmetrisches Blinken<br>Intervall<br>Star-delta |
| Zeitverzögerungsbereich | 3 - 30 min<br>30 - 300 min<br>0,3 - 3 s<br>3 - 30 h<br>10 - 100 s<br>1 - 10 s<br>0,05 - 1 s<br>30 - 300 s<br>30 - 300 h<br>3 - 30 s |
| Betätigungsart | Drehknopf<br>Diagnosetaste<br>Potenziometer extern |
| [UH,nom] Bemessungsbetriebsspannung | 24 - 240 V AC/DC 50/60 Hz |
| Auslöseeingangsspannung | <= 2,4 V |
| Spannungsbereich | 0,85 - 1,1 Us |
| Netzfrequenz | 50 - 60 Hz +/-5 % |
| Anschlüsse - Klemmen | Schraubklemmen, 1 x 0,5 - 3,3 mm² (AWG 20 - AWG 12) starr ohne Kabelende<br>Schraubklemmen, 2 x 0,5 - 2,5 mm² (AWG 20 - AWG 14) starr ohne Kabelende<br>Schraubklemmen, 1 x 0,2 - 2,5 mm² (AWG 24 - AWG 14) flexibel mit Kabelende<br>Schraubklemmen, 2 x 0,2 - 1,5 mm² (AWG 24 - AWG 16) flexibel mit Kabelende |
| Anzugsdrehmoment | 0,6…1 Nm entspricht IEC 60947-1 |
| Gehäusematerial | Selbstlöschend |
| Wiederholgenauigkeit | +/-0,5 % entspricht IEC 61812-1 |
| Temperaturabweichung | +/- 0,05 %/°C |
| Spannungsdrift | +/-0,2 %/V |
| Einstellgenauigkeit der Zeitverzögerung | +/- 10 % der Gesamtskala bei 25°C entspricht IEC 61812-1 |
| Breite des Steuersignalimpulses | 100 Ms mit Last parallel geschaltet<br>30 ms |
| Isolationswiderstand | 100 MOhm bei 500 V DC entspricht IEC 60664-1 |
| Wiederherstellungszeit | 120 ms bei Abschaltung |
| Störfestigkeit gegen Unterbrechungen | 10 ms |
| Leistungsaufnahme in VA | 3 VA bei 240 V AC |

Das vorliegende Dokument beinhaltet allgemeine Beschreibungen und/oder technische Eigenschaften der Leistungsfähigkeit der hierin enthaltenen Produkte.
Anhand des vorliegenden Dokuments soll nicht die Eignung und Zuverlässigkeit dieser Produkte für bestimmte Benutzeranwendungen festgestellt werden. Es stellt auch keinen Ersatz dafür dar.
Es obliegt dem Benutzer oder Integrator, eine vollständige und zweckmäßige Risikoabschätzung sowie eine Bewertung und Prüfung der Produkte hinsichtlich ihres entsprechenden Einsatzes durchzuführen.
Schneider Electric Industries SAS und die entsprechenden Tochter- oder Konzerngesellschaften übernehmen nicht die Haftung für den missbräuchlichen Gebrauch der hier enthaltenen Informationen.

| | |
|---|---|
| Leistungsaufnahme in W | 1,5 W bei 240 V DC |
| Schaltleistung in VA | 2000 VA |
| Min. Schaltstrom | 10 mA bei 5 V DC |
| Max. Schaltstrom | 8 A |
| Maximale Schaltspannung | 250 V AC |
| Elektrische Lebensdauer | 100000 Zyklen, 8 A bei 250 V, AC-1<br>100000 Zyklen, 2 A bei 24 V, DC-1 |
| Mechanische Lebensdauer | 10000000 Zyklen |
| Bemessungsstoßspannungsfestigkeit | 5 kV für 1,2…50 µs entspricht IEC 60664-1 |
| Einschaltverzögerung | 100 ms |
| Kriechstrecke | 4 kV/3 entspricht IEC 60664-1 |
| Überspannungskategorie | III entspricht IEC 60664-1 |
| Daten bezüglich Sicherheit und Zuverlässigkeit | B10d = 160.000<br>MTTFd = 171,2 Jahre |
| Einbauposition | Jede Position |
| Montagehalterung | 35 mm DIN-Schiene entspricht EN/IEC 60715 |
| Status-LED | LED-Hintergrundbeleuchtung grün (stetig leuchtend) für Pfeil zur Skaleneinstellung auf dem Potenziometer<br>LED gelb (stetig leuchtend) für Ausgangsrelais ist eingeschaltet<br>LED gelb (schnelles Blinken) für Zeitfunktion ist aktiv und Ausgangsrelais ist abgeschaltet<br>LED gelb (langsames Blinken) für Zeitfunktion ist aktiv und Ausgangsrelais ist eingeschaltet |
| Funktion verfügbar | A- Power on-delay relay-2 Wechslerkontakte<br>At- Power on-delay relay w/ pause/summation (X1)-2 Wechslerkontakte<br>Aw- Power on-delay relay w/ retrigger/restart-2 Wechslerkontakte<br>C- Off-delay relay w/ control signal-2 Wechslerkontakte<br>Ct- Off-delay relay w/ control signal and pause/summation-2 Wechslerkontakte<br>D- Symmetrical flashing relay (starting pulse-off)-2 Wechslerkontakte<br>Dt- Symmetrical flashing relay (starting pulse-off) w/ pause/summation (X1)-2 Wechslerkontakte<br>Dw- Symmetrical flashing relay (starting pulse-off) w/ retrigger/restart-2 Wechslerkontakte<br>Di- Symmetrical flashing relay (starting pulse-on)-2 Wechslerkontakte<br>Dit- Symmetrical flashing relay (starting pulse-on) w/ pause/summation (X1)-2 Wechslerkontakte<br>Diw- Symmetrical flashing relay (starting pulse-on) w/ retrigger/restart-2 Wechslerkontakte<br>H- Interval relay-2 Wechslerkontakte<br>Ht- Interval relay w/ pause/summation (X1)-2 Wechslerkontakte<br>Hw- Interval relay w/ retrigger/restart-2 Wechslerkontakte<br>Qg- Star-delta relay (2 CO outputs w/ same common)-2 Wechslerkontakte<br>Qgt- Star-delta relay (2 CO outputs w/ same common) w/ pause/summation-2 Wechslerkontakte<br>Qt- Star-delta relay (2 CO outputs w/ split common)-2 Wechslerkontakte<br>Qtt- Star-delta relay (2 CO outputs w/ split common) w/ pause/summation (X1)-2 Wechslerkontakte<br>W- Interval relay w/ control signal off-2 Wechslerkontakte<br>Wt- Interval relay w/ control signal off and pause/summation-2 Wechslerkontakte |
| Breite | 22,5 mm |
| Produktgewicht | 0,105 kg |

## Montage

| | |
|---|---|
| Spannungsfestigkeit | 2,5 kV für 1 mA/1 Minute bei 50 Hz zwischen Relaisausgang und Versorgungsspannung mit Grundisolation entspricht IEC 61812-1 |
| Normen | UL 508<br>IEC 61812-1 |
| Richtlinien | 2004/108/EG - elektromagnetische Verträglichkeit<br>2006/95/EG - Niederspannungsrichtlinie |
| Produktzertifizierungen | RCM<br>CE<br>EAC<br>CSA<br>CCC<br>UL<br>GL |
| Umgebungstemperatur bei Betrieb | -20…60 °C |
| Umgebungstemperatur bei Lagerung | -40…70 °C |

| | |
|---|---|
| Schutzart (IP) | IP40 Gehäuse: entspricht IEC 60529<br>IP20 Klemmen: entspricht IEC 60529<br>IP50 Frontplatte: entspricht IEC 60529 |
| Verschmutzungsgrad | 3 entspricht IEC 60664-1 |
| Vibrationsfestigkeit | 20 m/s² (f= 10…150 Hz) entspricht IEC 60068-2-6 |
| Stoßfestigkeit | 15 gn nicht in Betrieb für 11 ms entspricht IEC 60068-2-27<br>5 gn im Betrieb für 11 ms entspricht IEC 60068-2-27 |
| Relative Feuchtigkeit | 95 % bei 25…55 °C |
| Elektromagnetische Verträglichkeit | Prüfung der Störfestigkeit gegen schnelle Transienten - Teststufe: 1 kV Level 3 (kapazitiver Verbindungsverschluss) entspricht IEC 61000-4-4<br>Prüfung der Störfestigkeit gegen Überspannungen - Teststufe: 1 kV Level 3 (Differentialbetrieb) entspricht IEC 61000-4-5<br>Prüfung der Störfestigkeit gegen Überspannungen - Teststufe: 2 kV Level 3 (Gleichtakt) entspricht IEC 61000-4-5<br>Elektrostatische Entladung - Teststufe: 6 kV Level 3 (Kontaktentladung) entspricht IEC 61000-4-2<br>Elektrostatische Entladung - Teststufe: 8 kV Level 3 (Luftaustritt) entspricht IEC 61000-4-2<br>Prüfung der Störfestigkeit gegen abgestrahlte hochfrequente elektromagnetische Felder - Teststufe: 10 V/m Level 3 (80 MHz - 1 GHz) entspricht IEC 61000-4-3<br>Leitungsgebundene HF-Störungen - Teststufe: 10 V Level 3 (0,15 - 80 MHz) entspricht IEC 61000-4-6<br>Schnelle Stoßspannungsspitzen - Teststufe: 2 kV Level 3 (direkter Kontakt) entspricht IEC 61000-4-4<br>Störfestigkeit gegen Mikrounterbrechungen und Spannungsabfälle - Teststufe: 30 % (500 ms) entspricht IEC 61000-4-11<br>Störfestigkeit gegen Mikrounterbrechungen und Spannungsabfälle - Teststufe: 100 % (20 ms) entspricht IEC 61000-4-11 |

## Verpackungseinheiten

| | |
|---|---|
| VPE 1 Art | PCE |
| VPE 1 Menge | 1 |
| VPE 1 Höhe | 2,6 cm |
| VPE 1 Breite | 8,2 cm |
| VPE 1 Länge | 9,5 cm |
| VPE 1 Gewicht | 116,0 g |
| VPE 2 Art | S02 |
| VPE 2 Menge | 40 |
| VPE 2 Höhe | 15,0 cm |
| VPE 2 Breite | 30,0 cm |
| VPE 2 Länge | 40,0 cm |
| VPE 2 Gewicht | 5,153 kg |
| VPE 3 Art | P06 |
| VPE 3 Menge | 640 |
| VPE 3 Höhe | 75,0 cm |
| VPE 3 Breite | 60,0 cm |
| VPE 3 Länge | 80,0 cm |
| VPE 3 Gewicht | 74,24 kg |

## Nachhaltigkeit

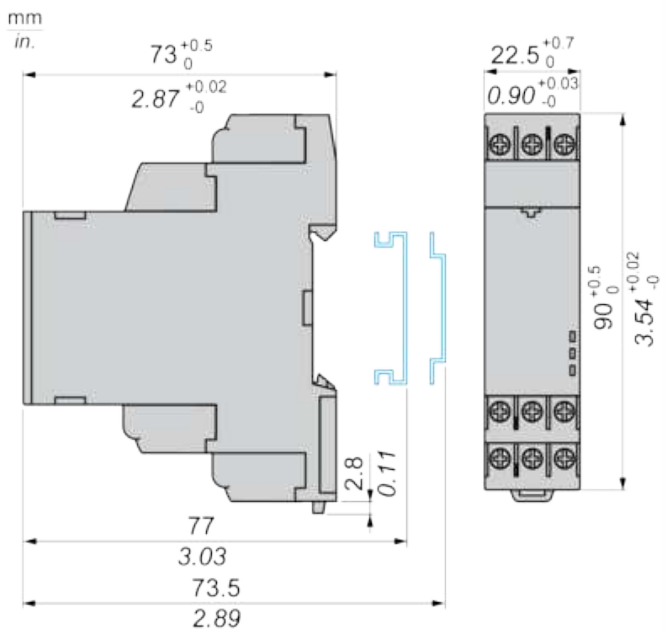
| | |
|---|---|
| Angebotsstatus nachhaltiges Produkt | Green Premium Produkt |
| REACh-Verordnung | REACh-Deklaration |
| EU-RoHS-Richtlinie | Übererfüllung der Konformität (außerhalb EU RoHS-Scope) EU-RoHS-Deklaration |
| Quecksilberfrei | Ja |
| RoHS-Richtlinie für China | RoHS-Erklärung Für China |
| Informationen zu RoHS-Ausnahmen | Ja |
| Umweltproduktdeklaration | Produktumweltprofil |
| Kreislaufwirtschafts-Profil | Entsorgungsinformationen |

## Vertragliche Gewährleistung

| | |
|---|---|
| Garantie | 18 Monate |

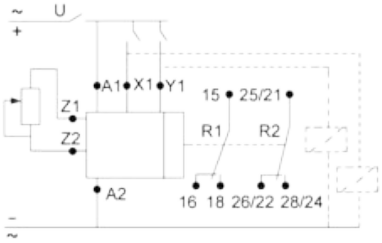
# RE22R2MYMR

## Dimensions



# RE22R2MYMR

## Wiring Diagram

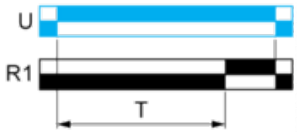


## Function A: Power On-Delay

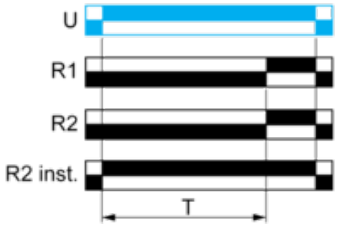
### Description

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

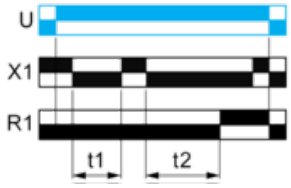



## Function At: Power On-Delay with Pause / Summation Control

### Description

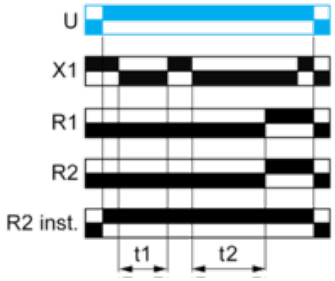
On energisation of power supply, the timing period T starts.Timing can be interrupted / paused each time X1 energizes.Except for RE17*, RE22R2AMU, RE22R2MMW, RE22R2MMU, RE22R2MJU, timing can be interrupted / paused each time Y1 energizes.When the cumulative total of time periods elapsed reaches the pre-set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



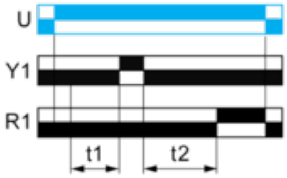

T = t1 + t2 +…

### Function: 2 Outputs with Pause / Summation Control



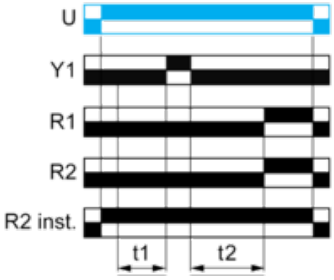

T = t1 + t2 +…

### Function: 1 Output with Retrigger / Restart Control




T = t1 + t2 +…

### Function: 2 Outputs with Retrigger / Restart Control



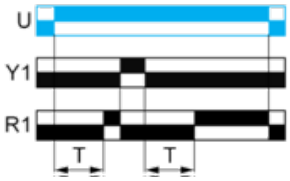

T = t1 + t2 +…

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

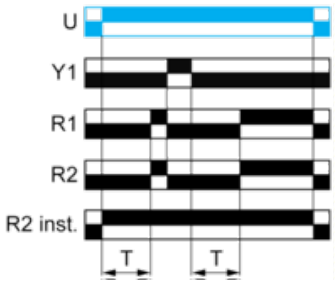
### Description

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

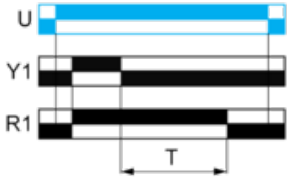



## Function C: Off-Delay Relay with Control Signal

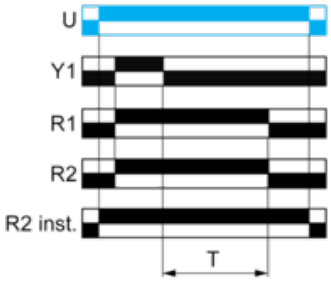
### Description

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

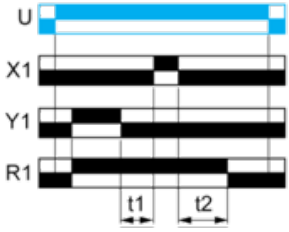



## Function Ct: Off-Delay Relay with Control Signal & With Pause / Summation Control

### Description

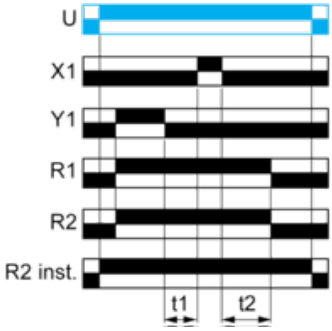
After energisation of power supply and energization of Y1 cause output(s) R close(s).When Y1 deenergizes, timing starts and the timing can be interrupted / paused each time X1 energizes. When the cumulative total of time periods elapsedreaches the pre-set value T, the output(s) R revert(s) to its/their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



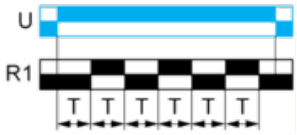

T = t1 + t2 +…

## Function D: Symmetrical Flashing Relay (Starting Pulse Off)

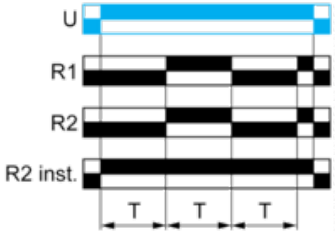
### Description

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

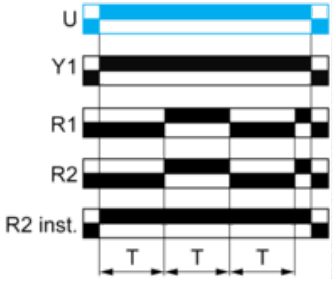


### Function: 2 Outputs




### Function: 1 Output with Retrigger / Restart Control

### Function: 2 Output with Retrigger / Restart Control

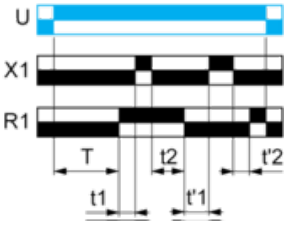



## Function Dt: Symmetrical Flashing Relay (Starting Pulse Off) & With Pause / Summation Control

### 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").

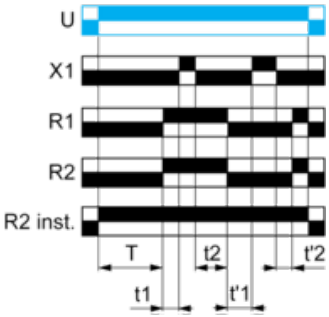
### Function: 1 Output




T = t1 + t2 +…

T = t'1 + t'2 +…

### Function: 2 Outputs




T = t1 + t2 +…

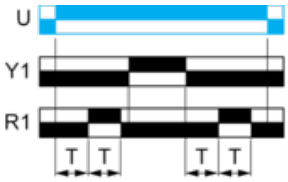
T = t'1 + t'2 +…

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

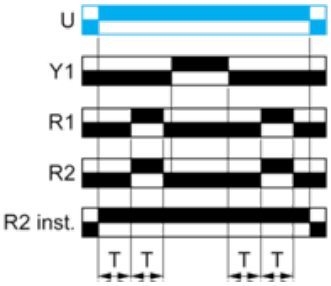
### Description

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

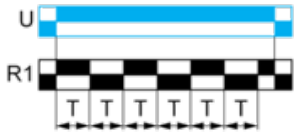



## Function Di: Symmetrical Flashing Relay (Starting Pulse On)

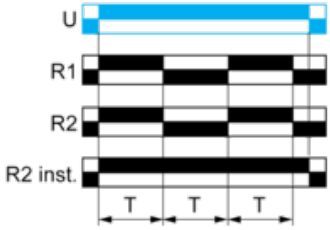
### Description

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

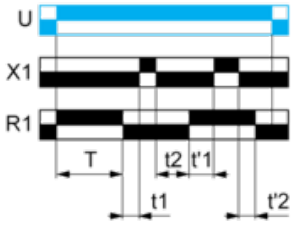



## Function Dit: Symmetrical Flashing Relay (Starting Pulse On) & With Pause / Summation Control

### 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").

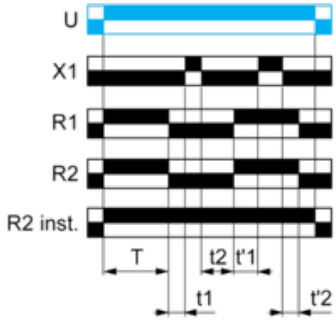
### Function: 1 Output




T = t1 + t2 +…

T = t'1 + t'2 +…

### Function: 2 Outputs




T = t1 + t2 +…

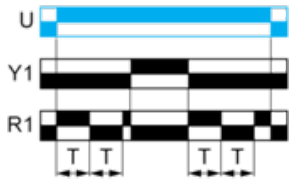
T = t'1 + t'2 +…

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

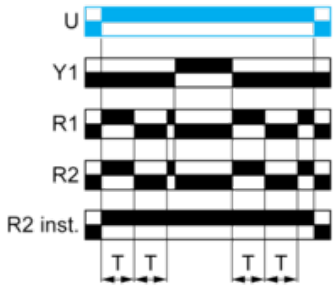
### Description

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

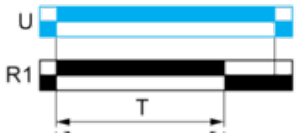



## Function H: Interval Relay

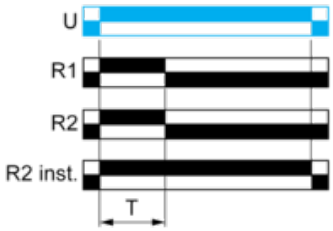
### Description

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.

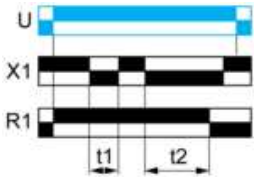
The timing can be interrupted / paused each time X1 energizes.

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.

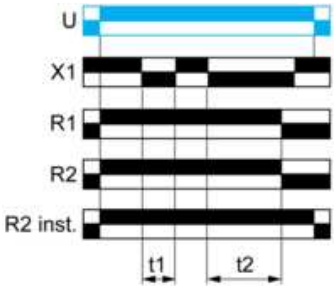
The second output (R2) can be either timed (when set to “TIMED” or instantaneous (when set to “INST”).

### Function: 1 Output



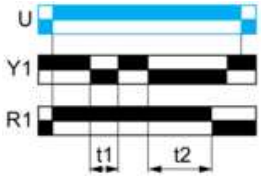

T = t1 + t2 +...

### Function: 2 Outputs



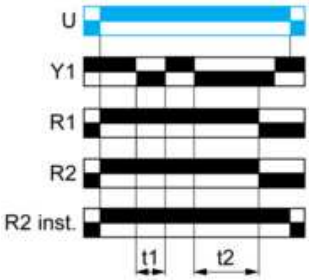

T = t1 + t2 +...

### Function: 1 Output with Retrigger / Restart Control




T = t1 + t2 +...

## Function: 2 Outputs with Retrigger / Restart Control



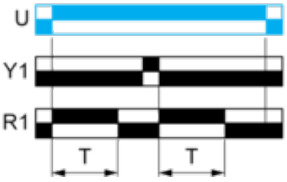

T = t1 + t2 +...

## Function Hw: Interval Relay & with Retrigger / Restart Control

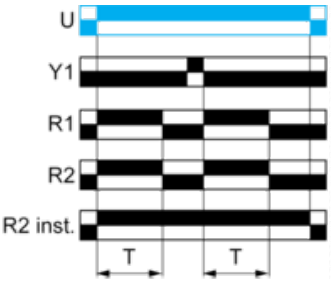
### Description

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

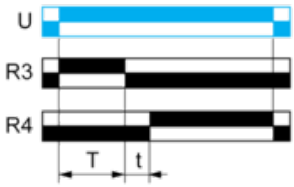



## Function Qg: Star-Delta Relay (2 CO with same Common)

### 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

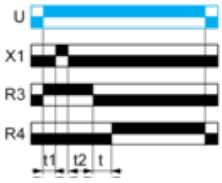
## Function Qgt: Star-Delta Relay (2 CO with same common) with Pause / Summation Control

### 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 +…

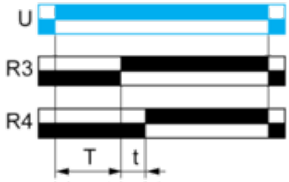
NOTE: RE22R2MYMR is with fixed transition time, t: 50ms

## 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



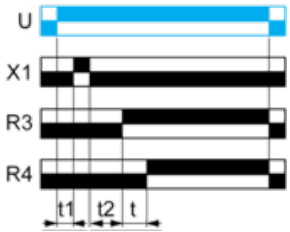

t : 20, 40, 60, 80, 100, 120, 140 ms

## 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 +…

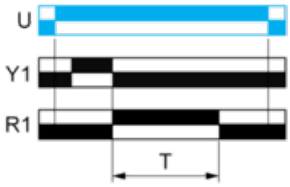
NOTE: RE22R2MYMR is with fixed transition time, t: 50ms

## Function W: Interval Relay with Control Signal Off

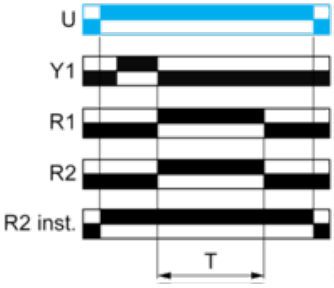
### Description

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

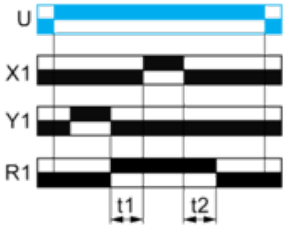



## Function Wt: Interval Relay with Control Signal Off & with Pause / Summation Control

### Description

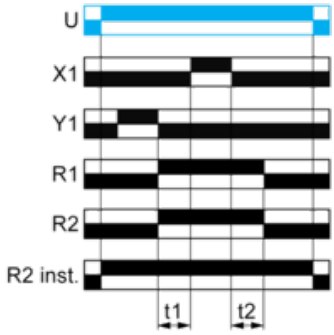
After energisation of power supply and on energization of Y1 following by denergization of Y1, the output(s) R close(s) and starts the timing T.Timing can be interrupted / paused each time X1 energizes.When the cumulative total of time periods elapsed reaches the pre-set value T, the output(s) R revert(s)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