Zelio Time timing relays

Catalog

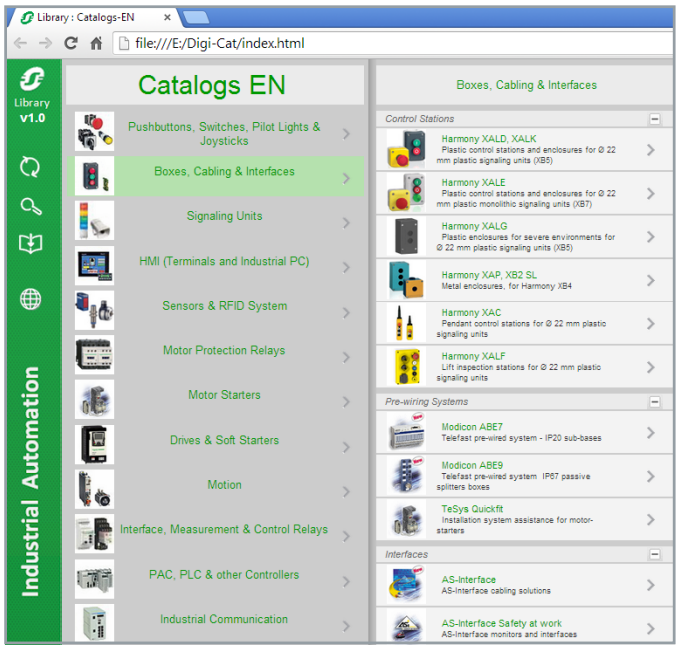
December 2015

Schneider Electric

How can you fit a 6000-page catalog in your pocket ?

Schneider Electric provides you with the complete set of industrial automation catalogs all on a handy USB key for PC or in an application for tablets

Digi-Cat, a handy USB key for PC



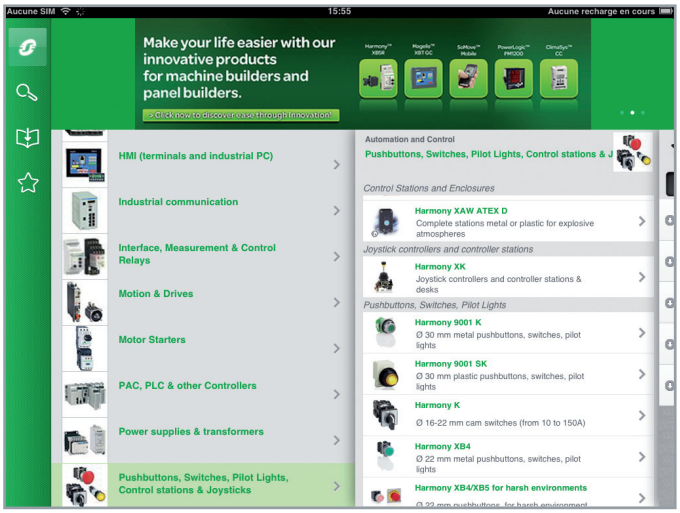
> Convenient to carry
> Always up-to-date
> Environmentally friendly
> Easy-to-share format

Contact your local representative to get your own Digi-Cat

e-Library, the app for tablets

If you have an iPad®:

> Go to the App Store and search for e-Library
> or scan the QR code



If you have an Android tablet:

> Go to the Google Play Store™ and search for eLibrary
> or scan the QR code

Content

Zelio Time - timing relays

Zelio Time - timing relays

Applications	**These timing relays enable simple automation cycles to be set up using wired logic. They can also be used to complement the functions of PLCs.**							
Output	**Solid state** **Timing relays with solid state output reduce the amount of wiring required (wired in series). The durability of these timing relays is independent of the number of operating cycles.**		**Relay** **Relay outputs provide complete isolation between the supply circuit and the output.** **It is possible to have several output circuits.**					
								
Type	Modular	Industrial	Modular	Modular				
Time ranges	□ *7 ranges:* 1 s, 10 s, 1 min, 10 min, 1 h, 10 h, 100 h	□ *1 or 2 ranges depending on model:* 10 s, 30 s, 300 s, 60 min	Depending on model: □ *6 ranges* 1 s, 10 s, 1 min, 10 min, 1 h, 10 h □ *7 ranges:* 1 s, 10 s, 1 min, 10 min, 1 h, 10 h, 100 h	Depending on model: □ *7 ranges:* 1 s, 10 s, 1 min, 10 min, 1 h, 10 h, 100 h □ *7 ranges:* 1 s, 3 s, 10 s, 30 s, 100 s, 300 s, 10 min □ *7 ranges* 0.5 s 1 s 3 s 10 s 30 s 100 s 300 s □ *1 range* 30 s □ *10 ranges:* 1 s, 3 s, 10 s, 30 s, 100 s, 300 s, 30 min, 300 min, 30 h, 300 h				
Timer Relay type	**RE17L**	**RE9**	**RE17R**	**RE22**				
Pages	16	17	16	18				

These timing relays enable simple automation cycles to be set up using wired logic. They can also be used to complement the functions of PLCs.								
Relay **Relay outputs provide complete isolation between the supply circuit and the output.** **It is possible to have several output circuits.**								
								
Industrial	Industrial	Plug-in		Panel-mounted/plug-in				
		Universal	Miniature	Analogue	Digital			
Depending on model: □ *7 ranges:* 1 s, 3 s, 10 s, 30 s, 100 s, 300 s, 10 min □ *10 ranges* 1 s, 3 s, 10 s, 30 s, 100 s, 300 s, 30 min, 300 min, 30 h, 300 h	□ *1 range depending on model:* *0.5 s,* *3 s,* *10 s,* *30 s,* *300 s,* *30 min*	□ *7 ranges:* 1 s, 10 s, 1 min, 10 min, 1 h, 10 h, 100 h	□ *7 ranges:* 0.1 s...1 s, 1 s...10 s, 0.1 min...1 min, 1 min...10 min, 0.1 h...1 h, 1 h...10 h, 10 h...100 h	*14 ranges:* 1.2 s, 3 s, 12 s, 30 s, 120 s, 300 s, 12 min, 30 min, 120 min, 300 min, 12 h, 30 h, 120 h, 300 h	Depending on model: □ *7 ranges:* 99.99 s, 999.99 s, 99 min 59 s, 99.99 min, 999.9 min, 99 h 59 min, 999.9 h □ *11 ranges:* 99.99 s, 999.99 s, 9999 s, 99 min 59 s, 99.99 min, 999.9 min, 9999 min, 99 h 59 min, 99.99 h, 999.9 h, 9999 h			
RE7	**RE8**	**RE88867**	**REXL**	**RE48A**	**RE88857**			
19	20	21 and 22	23	24	25			

Zelio Time - timing relays

DIN rail mounted timing relays

RE17

RE22

Miniature plug-in timing relays with sockets

REXL

RXZE2M114

Panel-mounted/plug-in timing relays

RE48A

Presentation

A timing relay is a component that is designed to time events in industrial automation systems by closing or opening contacts before, during, or after a set timing period.

There are three main families of timing relays:
- DIN rail mounted relays (**RE7**, **RE8**, **RE9**, **RE17**, **RE22**) designed for mounting on DIN rails in an enclosure
- Miniature plug-in relays (**REXL**) designed to be plugged into sockets
- Panel mounted/plug-in relays (**RE48A**) designed for mounting on the front panel to give users easy access to the settings

These relays have 1, 2 or 4 outputs. Sometimes the second output can be either timed or instantaneous. If the power is switched off during the timing period, the relay reverts to its initial position.

Application examples:
- opening of automatic doors
- alarm
- lighting in toilets
- car park barriers, etc.

Definitions

The following definitions explain relay operation:

- **Relay output:**

This is the most common type of output. When the relay is energized, the moving armature is attracted by the coil and so actuates the contacts, which change state. When the relay is de-energized, both the armature and the contacts revert to their initial position.
This type of output allows complete isolation between the power supply and the output. There are three types of output contact:

C/O: Changeover contact, i.e. when the relay is de-energized, the circuit between the common point C and N/C is closed and when the relay is operating (coil energized), it closes the circuit between the common point C and the N/O contact.	
N/C: A contact that is closed without being actuated is called a **Normally Closed (N/C)** contact.	
N/O: A contact that closes when actuated is called a **Normally Open (N/O)** contact.	

- **Solid state output:**

This output is entirely electronic and involves no moving parts; service life is therefore increased.

- **Breaking capacity:**

The current value that a contact is capable of breaking in specified conditions.

- **Mechanical durability:**

The number of mechanical operating cycles of the contact or contacts.

- **Minimum switching capacity** (or minimum breaking capacity):

This is the minimum required current that can flow through the contacts of a relay.

- **G (Gate) input:**

Gate input allows timing in progress to be interrupted without it being reset.

Definitions (continued)

Functions

Timing functions are identified by letters. For the complementary functions, select the main timing function using the selection dial in the front panel; refer to functional diagrams for connection.

Main timing functions	Complementary functions *(1)*	Definitions
A *(2)*		Power on-delay relay
	Ac	On-delay and off-delay relay with control signal
	Act	On-delay and off-delay relay with control signal and pause/summation control signal
	Ad	Pulse delayed relay with control signal
	Ah	Pulse delayed relay (single cycle) with control signal
	Ak	Asymmetrical on-delay and off-delay relay with control signal
	Akt	Asymmetrical on-delay and off-delay relay with control signal and pause/summation control signal
	At	Power on-delay relay with pause/summation control signal
	Aw	Power on-delay relay with retrigger/restart control signal
B *(2)*		Interval relay with control signal
	Bw	Double interval relay with control signal
C *(2)*		Off-delay relay with control signal
	Ct	Off-delay relay with control signal and pause/summation control signal
D *(2)*		Symmetrical flashing relay (starting pulse-off)
	Di *(2)*	Symmetrical flashing relay (starting pulse-on)
	Dit	Symmetrical flashing relay (starting pulse-on) with pause/summation control signal
	Diw	Symmetrical flashing relay (starting pulse-on) with retrigger/restart control signal
	Dt	Symmetrical flashing relay (starting pulse-off) with pause/summation control signal
	Dw	Symmetrical flashing relay (starting pulse-off) with retrigger/restart control signal
H *(2)*		Interval relay
	He	Pulse-on de-energization
	Ht	Interval relay with pause/summation control signal
	Hw	Ineterval relay with retrigger/restart control signal
K		Delay on de-energization (without auxiliary supply)
L *(2)*		Asymmetrical flashing relay (starting pulse-off)
	Li *(2)*	Asymmetrical flashing relay (starting pulse-on)
	Lit	Asymmetrical flashing relay (starting pulse-on) with pause/summation control signal
	Lt	Asymmetrical flashing relay with pause/summation control signal
N		Safe guard relay
O		Delayed safe guard relay
P		Pulse delayed relay with fixed pulse length
	Pt	Pulse delayed relay with fixed pulse length, pause/summation control signal and control signal off
Q		Star-delta relay (2 N/O outputs with same common)
	Qc	Star-delta timing (1 C/O output)
	Qe	Star-delta timing (1 N/C + 1 N/O outputs with split common)
	Qg	Star-delta timing (2 C/O outputs with same common)
	Qgt	Star-delta timing (2 C/O outputs with same common) with pause-summation control signal
	Qt	Star-delta timing (2 C/O outputs with split common)
	Qtt	Star-delta timing (2 C/O outputs with split common) with pause-summation control signal
T	**Tl**	Bistable relay with control signal on
	Tt	Retriggerable bistable relay with control signal on
W		Interval relay with control signal off
	Wt	Interval relay with control signal off and pause/summation control signal

(1) Complementary functions enhance the main timing functions.
*Example: **Ac**: timing after closing and opening of control contact.*
(2) The most commonly used timing functions.

Zelio Time - timing relays

Selection table

Selection criteria

- **Functions** (on-delay or off-delay, counter, flashing, etc.)
- **Supply voltage** (example: ⎓ 12 V…240 V)
- **Timing range** for a timing relay (for example; 0.05 s…100 h)
- **Type of output** (contact or solid state) and required **Number of contacts**
- **Rated current** or **Breaking capacity** of contacts, expressed in Amperes. This is the maximum current that may flow through the contacts.

Functions	Timing range	Supply voltage	Type of output	Rated current	Relay
A	0.1 s…100 h	⎓ 12 V	2 C/O contacts	5 A	REXL2TMJD
			4 C/O contacts	3 A	REXL4TMJD
	0.1 s…100 h	⎓ 24 V	2 C/O contacts	5 A	REXL2TMBD
			4 C/O contacts	3 A	REXL4TMBD
	0.1 s…100 h	∿ 24 V	2 C/O contacts	5 A	REXL2TMB7
			4 C/O contacts	3 A	REXL4TMB7
	0.1 s…100 h	∿ 120 V	2 C/O contacts	5 A	REXL2TMF7
			4 C/O contacts	3 A	REXL4TMF7
	0.1 s…100 h	∿ 230 V	2 C/O contacts	5 A	REXL2TMP7
			4 C/O contacts	3 A	REXL4TMP7
	0.1 s…10 s	⎓ 24…240 V	1 solid state output	0.7 A	RE9TA11MW
	0.3 s…30 s			0.7 A	RE9TA31MW
	3 s…300 s			0.7 A	RE9TA21MW
	40 s…60 min			0.7 A	RE9TA51MW
	0.1 s…100 h			0.7 A	RE17LAMW
	0.02 s…300 h		2 timed C/O contacts	5 A	RE48ATM12MW
	0.05 s…300 h	⎓ 24 V, ∿ 110…240 V	1 C/O contact	8 A	RE7TL11BU
	0.1 s…3 s			8 A	RE8TA61BUTQ
	0.1s…10 s			8 A	RE8TA11BUTQ
	0.3 s…30 s			8 A	RE8TA31BUTQ
	3 s…300 s			8 A	RE8TA21BUTQ
	20…30 min			8 A	RE8TA41BUTQ
	0.05 s…300 h	⎓ 24 V, ∿ 110…240 V, ⎓ 42…48 V	2 C/O contacts	8 A	RE7TP13BU
A, Ac, At, B, Bw, C, D, Di, H, Ht	0.1 s…100 h	∿ 24…240 V	1 solid state output	0.7 A	RE17LMBM
	0.1 s…100 h	⎓ 12 V	1 C/O contact	8 A	RE17RMJU
	0.1 s…100 h	⎓ 12…240 V	1 C/O contact	8 A	RE17RMMW
				8 A	RE17RMMWS
	0.1 s…100 h	⎓ 24 V, ∿ 24…240 V	1 C/O contact	8 A	RE17RMMU
	0.1 s…100 h	⎓ 24/∿ 24…240 V ⎓ 12 V ⎓ 12…240 V	2 C/O contact	8 A	RE22R2MMU RE22R2MJU RE22R2MMW
A, At	0.1 s…100 h	⎓ 24 V, ∿ 24…240 V	1 C/O contact	8 A	RE17RAMU
	0.1 s…100 h	⎓ 24 V, ∿ 24…240 V	2 C/O contact	8 A	RE22R2AMU
A, Aw	0.05 s…300 h	⎓ 24…240 V	1 C/O contact 2 C/O contacts	8 A	RE22R1AMR RE22R2AMR
A, At, Aw	0.05 s…300 h	∿ 110…240 V, ⎓ 24 V, ⎓ 42…48 V	1 C/O contact	8 A	RE7TM11BU
	0.05 s to 300 h	⎓ 24…240 V	1 C/O contact	8 A	RE22R1MAMR
A, At, B, C, D, Di, H, Ht	0.1 s…10 h	⎓ 24 V, ∿ 24…240 V	1 C/O contact	8 A	RE17RMEMU
A, B, C, Di	0.02 s…300 h	⎓ 24…240 V	2 C/O contacts	5 A	RE48AML12MW
A, C, D, Di, H, Qg, Qt, W	0.05 s…300 h	∿ 110…240 V, ⎓ 24 V, ⎓ 42…48 V	2 C/O contacts	8 A	RE7MY13BU
	0.05 s…300 h	⎓ 24…240 V	2 C/O contacts	8 A	RE7MY13MW
A, At, Aw, C, Ct, D, Dt, Dw, Di, Dit, Diw, H, Ht, Hw, Qg, Qgt, Qt, Qtt, Qtw, W, Wt	0.05 s…300 h	⎓ 24…240 V	2 C/O contacts	8 A	RE22R2MYMR
A, At, Aw, C, Ct, D, Dt, Dw, Di, Dit, Diw, H, Ht, Hw, W, Wt, Ac, Act	0.05 s…300 h	⎓ 24…240 V	1 C/O contact	8 A	RE22R1MYMR

Selection table (continued)

Functions	Timing range	Supply voltage	Type of output	Rated current	Relay
A, C, D, Di, H, W	0.05 s…300 h	∼ 110…240 V, ⎓ 24 V, ⎓ 42…48 V	1 C/O contact	8 A	RE7ML11BU
A, D, Di, H	0.1 s…10 s and 3 s…300 s	⎓ 24…240 V ∼ 24…240 V	1 solid state output	0.7 A	RE9MS21MW
A1, A2, H1, H2	0.02 s…300 h	⎓ 24…240 V	2 C/O contacts	5 A	RE48AMH13MW
Ac	0.05 s…300 h	∼ 110…240 V, ⎓ 24 V, ⎓ 42…48 V	1 C/O contact	8 A	RE7MA11BU
			2 C/O contacts	8 A	RE7MA13BU
	0.05 s…300 h	⎓ 24…240 V	2 C/O contacts	8 A	RE22R2ACMR
Ac, Act	0.05 s…300 h	⎓ 24…240 V	1 C/O contact	8 A	RE22R1ACMR
Ad, Ah, N, O, P, Pt, Tl, Tt, W	0.1 s…100 h	⎓ 24 V, ∼ 24…240 V	1 C/O contact	8 A	RE17RMXMU
	0.1 s…100 h	⎓ 24 V/∼ 24…240 V	2 C/O contacts	8 A	RE22R2MXMU
Ak	0.05 s…300 h	∼ 110…240 V, ⎓ 24 V, ⎓ 42…48 V	1 C/O contact	8 A	RE7MV11BU
Ak, Akt	0.05 s to 300 h	⎓ 24…240 V	1 C/O contact	8 A	RE22R1AKMR
B	0.1 s…100 h	⎓ 24 V, ∼ 24…240 V	1 C/O contact	8 A	RE17RBMU
C	0.1 s…10 s	⎓ 24 V	1 C/O contact	8 A	RE8RA11BTQ
	0.3 s…30 s			8 A	RE8RA31BTQ
	3 s…300 s			8 A	RE8RA21BTQ
	0.1 s…100 h	⎓ 24 V, ∼ 24…240 V	1 C/O contact	8 A	RE17RCMU
	0.1 s…10 s	∼ 110…240 V	1 C/O contact	8 A	RE8RA11FUTQ
	0.3 s…30 s			8 A	RE8RA31FUTQ
	3 s…300 s			8 A	RE8RA21FUTQ
	20 s…30 min			8 A	RE8RA41FUTQ
	0.05 s…300 h	⎓ 24 V, ∼ 110…240 V, ⎓ 42…48 V	1 C/O contact	8 A	RE7RA11BU
				8 A	RE7RM11BU
			2 C/O contacts	8 A	RE7RL13BU
	0.1 s…10 s	∼ 24…240 V	1 solid state output	0.7 A	RE9RA11MW7
	0.3 s…30 s			0.7 A	RE9RA31MW7
	3 s…300 s			0.7 A	RE9RA21MW7
	40 s…60 min			0.7 A	RE9RA51MW7
	0.1 s…100 h			0.7 A	RE17LCBM
C, Ct	0.05 s to 300 h	⎓ 24…240 V	1 C/O contact	8 A	RE22R1CMR
			2 C/O contacts	8 A	RE22R2CMR
D	0.05 s…300 h	⎓ 24 V, ∼ 110…240 V	1 C/O contact	8 A	RE7CL11BU
	0.1 s…10 s			8 A	RE8CL11BUTQ
	0.05 s…300 h	⎓ 24 V, ∼ 110…240 V, ⎓ 42…48 V	2 C/O contacts	8 A	RE7CP13BU
D, Dw	0.05 s to 300 h	⎓ 24…240 V	1 C/O contact	8 A	RE22R1DMR
			2 C/O contacts	8 A	RE22R2DMR
H	0.05 s…300 h	⎓ 24 V, ∼ 110…240 V	1 C/O contact	8 A	RE7PE11BU
	0.1 s…10 s			8 A	RE8PE11BUTQ
	0.3 s…30 s			8 A	RE8PE31BUTQ
	3 s…300 s			8 A	RE8PE21BUTQ
	0.05 s…300 h	⎓ 24 V, ∼ 110…240 V, ⎓ 42…48 V	2 C/O contacts	8 A	RE7PP13BU
	0.1 s…100 h	∼ 24…240 V	1 solid state output	0. 7 A	RE17LHBM
H, Hw	0.05 s to 300 h	⎓ 24…240 V	1 C/O contact	8 A	RE22R1HMR
			2 C/O contacts	8 A	RE22R2HMR
H, Ht	0.1 s…100 h	⎓ 24 V, ∼ 24…240 V	1 C/O contact	8 A	RE17RHMU
He	0.05 s…0.5 s	⎓ 24 V, ∼ 110…240 V	1 C/O contact	8 A	RE8PT01BUTQ
K	0.05 s…10 min	⎓ 24…240 V	1 C/O contact	5 A	RE7RB11MW
	0.05 s…0.5 s	⎓ 24 V, ∼ 110…240 V	1 C/O contact	8 A	RE8RB51BUTQ
	0.1 s…10 s			8 A	RE8RB11BUTQ
	0.3 s…30 s			8 A	RE8RB31BUTQ
	0.05 s…10 min	⎓ 24…240 V	2 C/O contacts	5 A	RE7RB13MW
	0.05 s…10 min	⎓ 24…240 V	1 C/O contact	5 A	RE22R1KMR
			2 C/O contacts	5 A	RE22R2KMR
K, He	0.05 s to 300 h	⎓ 24…240 V	1 C/O contact	5 A	RE22R1MKMR

Selection table (continued)

Functions	Timing range	Supply voltage	Type of output	Rated current	Relay
L, Li	0.1 s…100 h	⎓ 24 V, ∿ 24…240 V	1 C/O contact	8 A	RE17RLMU
	0.1 s…100 h	∿ 24…240 V	1 solid state output	0.7 A	RE17LLBM
	0.1 s…100 h	⎓ 12 V	1 C/O contact	8 A	RE17RLJU
	0.02 s…300 h	⎓ 24…240 V	2 timed C/O contacts	5 A	RE48ACV12MW
L, Li, Lt	0.05 s…300 h	∿ 110…240 V, ⎓ 24 V, ⎓ 42…48 V	1 C/O contact	8 A	RE7CV11BU
L, Lt, Li, Lit	0.05 s…300 h	⎓ 24…240 V	1 C/O contact	8 A	RE22R1MLMR
Q	0.1 s…100 h	⎓ 24 V, ∿ 24…240 V ∿ 230…240 V, ∿ 380 …440 V	1 C/O contact 1 C/O contact	8 A 8 A	RE22R1QMU RE22R1QMQ
Qc	0.1 s…10 s	⎓ 24 V, ∿ 110…240 V	1 C/O contact	8 A	RE8YG11BUTQ
	0.3 s…30 s			8 A	RE8YG31BUTQ
	3 s…300 s			8 A	RE8YG21BUTQ
	0.05 s…300 h	⎓ 24 V, ∿ 24…240 V	1 C/O contact	8 A	RE22R1QCMU
Qe	0.3 s…30 s	⎓ 24 V	1 N/O + 1 N/C	8 A	RE8YA32BTQ
	0.3 s…30 s	∿ 110…240 V	1 N/O + 1 N/C	8 A	RE8YA32FUTQ
	0.3 s…30 s	∿ 380…415 V	1 N/O + 1 N/C	8 A	RE8YA32QTQ
	0.3 s…30 s	∿ 380…415 V	2 C/O contacts	8 A	RE22R2QEMT
	0.3 s…30 s	⎓ 24…240 V	2 C/O contacts	8 A	RE22R2QEMR
Qg	0.05 s…300 h	⎓ 24 V, ∿ 110…240 V, ⎓ 42…48 V	1 N/O + 1 N/C	8 A	RE7YR12BU
	0.05 s to 300 h	⎓ 24…240 V	2 C/O contacts	8 A	RE22R2QGMR
Qt	0.05 s…300 h	⎓ 24 V, ∿ 110…240 V, ⎓ 42…48 V	2 C/O contacts	8 A	RE7YA12BU
	0.05 s to 300 h	⎓ 24…240 V	2 C/O contacts	8 A	RE22R2QTMR
W	0.1 s…10 s	⎓ 24 V	1 C/O contact	8 A	RE8PD11BTQ
	0.3 s…30 s			8 A	RE8PD31BTQ
	3 s…300 s			8 A	RE8PD21BTQ
	0.1 s…10 s	∿ 110…240 V	1 C/O contact	8 A	RE8PD11FUTQ
	0.3 s…30 s			8 A	RE8PD31FUTQ
	3 s…300 s			8 A	RE8PD21FUTQ
	0.05 s…300 h	⎓ 24 V, ∿ 110…240 V, ⎓ 42…48 V	2 C/O contacts	8 A	RE7PD13BU
W, Ht	0.05 s…300 h	⎓ 24 V, ∿ 110…240 V, ⎓ 42…48 V	1 C/O contact	8 A	RE7PM11BU
W, Wt	0.05 s…300 h	⎓ 24…240 V	2 C/O contacts	8 A	RE22R2MWMR

Functions

U: Supply
R: Relay or solid state output
R1/R2: 2 timed outputs
R2 inst.: Second output is instantaneous if the correct position is selected
T: Timing period

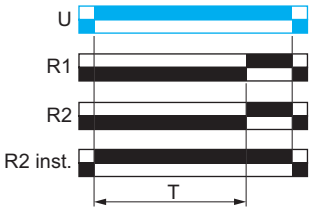
X1/X2/Y1: Control contacts
Ta: Adjustable on-delay
Tr: Adjustable off-delay

Function diagram:
- Power-on
- Power-off
- Output open
- Output closed

Function A: Power on-delay relay

1 output

2 outputs

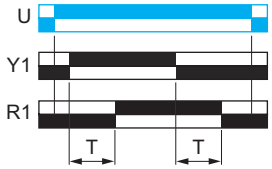


2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.).

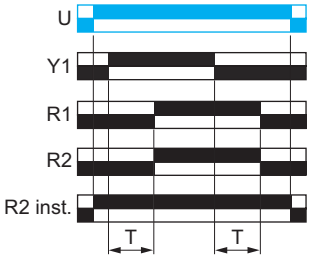
The timing period T begins on power-on.
At the end of this timing period, the output(s) R close(s).
The second output (R2) can be either timed (when set to “TIMED”) or instantaneous (when set to “INST”).

Function Ac: On-delay and off-delay relay with control signal

1 output



2 outputs

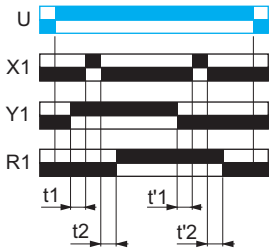


2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.).

After power-on, and the closure of Y1 the timing period T starts.
At the end of this timing period, the output(s) R close(s).
When Y1 opens, the timing period 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”).

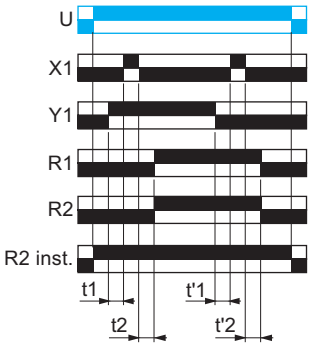
Function Act: On-delay and off-delay relay with control signal and pause/summation control signal

1 output



T = t1 + t2 + …
T = t’1 + t’2 + …

2 outputs

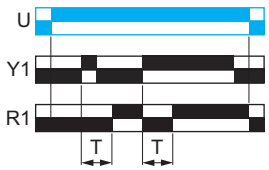


T = t1 + t2 + …
T = t’1 + t’2 + …

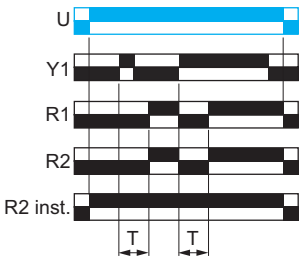
After power-on and the closure of Y1 the timing period T starts and it can be interrupted/paused each time X1 closes. When the cumulative total time elapsed reaches the preset value T, the output(s) R close(s).
When Y1 opens, the timing T starts and it can be interrupted/paused each time X1 closes. When the cumulative total time elapsed reaches the preset value 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 Ad: Pulse delayed relay with control signal

1 output



2 outputs

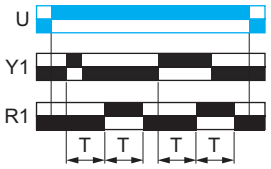


After power-on, pulsing or maintaining Y1 starts the timing T.
At the end of this timing period T, the output(s) R close(s).
The output(s) R will revert to its/their initial position the next time Y1 is pulsed or maintained.

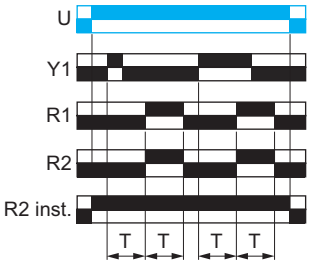
Functions (continued)

Function Ah: Pulse delayed relay (single cycle) with control signal

1 output



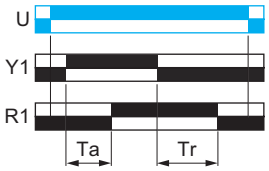
2 outputs



After power-on, pulsing or maintaining control contact Y1 starts the timing T.
A single cycle then starts with 2 timing periods T of equal duration (start with output(s) in rest position).
The output(s) R change(s) state at the end of the first timing period T and reverts to its/their initial position at the end of the second timing period T.
Control contact Y1 should be reset in order to re-start the single flashing cycle.

Function Ak: Asymmetrical on-delay and off-delay relay with control signal

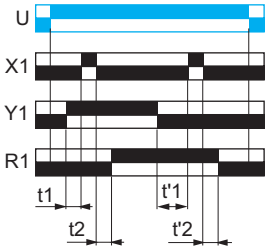
1 output



After power-on and the closure of control contact Y1, timing starts for a period Ta.
At the end of this timing period Ta, the output R closes.
A second timing period Tr starts when control contact Y1 re-opens. At the end of this timing period Tr, the output R reverts to its initial state.

Function Akt: Asymmetrical on-delay and off-delay relay with control signal and pause/summation control signal

1 output

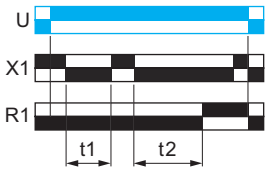


Ta = t1 + t2 + …
Tr = t'1 + t'2 + …

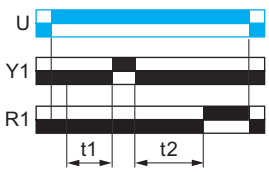
After power-on and the closure of Y1, timing starts for a period Ta and can be interrupted/paused each time X1 closes. When the cumulative total time elapsed reaches the preset value Ta, the output R closes.
A second timing period Tr starts when control contact Y1 re-opens and can be interrupted/paused each time X1 closes. When the cumulative total time elapsed reaches the preset value Tr, the output R reverts to its initial state.

Function At: Power on-delay relay with pause/summation control signal

1 output

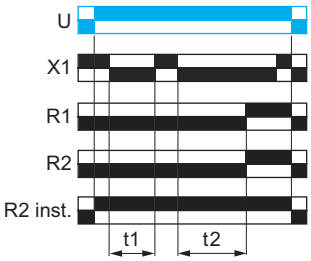


T = t1 + t2 + …

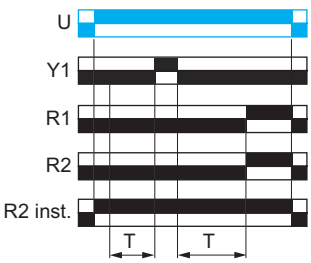


T = t1 + t2 + …

2 outputs



T = t1 + t2 + …



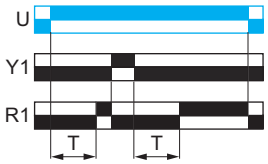
T = t1 + t2 + …

After power-on, the timing period T starts. Timing can be interrupted/paused each time X1 closes.
Note: Except for RE17●, RE22R2AMU, RE22R2MMW, RE22R2MMU, and RE22R2MJU, timing can be interrupted/paused each time X1 closes.
When the cumulative total time elapsed reaches the preset 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”).

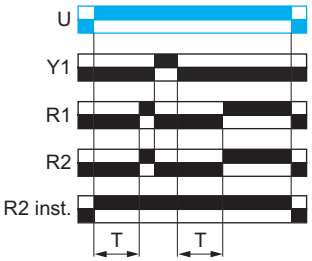
Functions (continued)

Function Aw: Power on-delay relay with retrigger/restart control signal

1 output



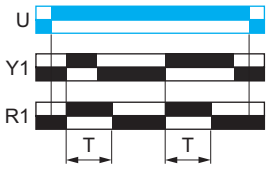
2 outputs



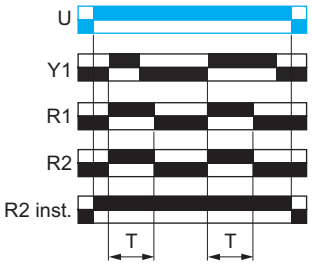
The timing period T starts on power-on. At the end of the timing period T, the output(s) R close(s).
Closing of the control contact Y1 makes the output(s) R open. Opening of control contact Y1 restarts timing period T.
At the end of the timing period T, the output(s) R close(s).
The second output (R2) can be either timed (when set to “TIMED”) or instantaneous (when set to “INST”).

Function B: Interval relay with control signal

1 output



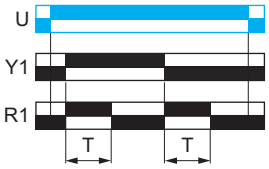
2 outputs



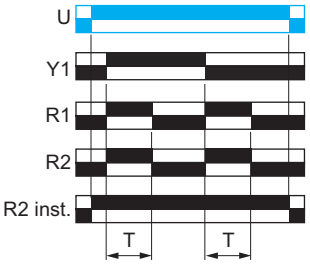
After power-on, pulsing or maintaining control contact Y1 starts the timing T.
The output(s) R close(s) for the duration of the timing period T then revert(s) to its/their initial state.
The second output (R2) can be either timed (when set to “TIMED”) or instantaneous (when set to “INST”).

Function Bw: Double interval relay with control signal

1 output



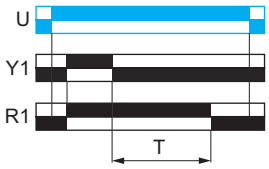
2 outputs



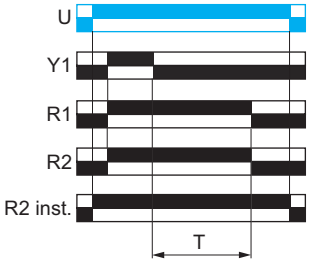
After power-on, transition of Y1 (either from open to closed or vice-versa) will cause the output(s) R to close(s) for the duration of the timing period T and then revert(s) to its/their initial state.
The second output (R2) can be either timed (when set to “TIMED”) or instantaneous (when set to “INST”).

Function C: Off-delay relay with control signal

1 output



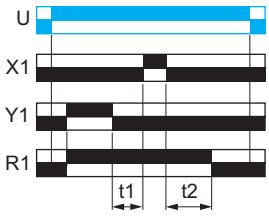
2 outputs



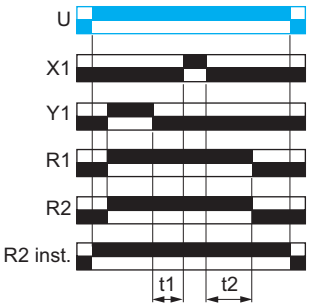
2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.).

After power-on and closure of the control contact Y1, the output(s) R close(s).
When control contact Y1 re-opens, timing T starts.
At the end of the timing period, 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 Ct : Off-delay relay with control signal and pause/summation control signal



T = t1 + t2 + …



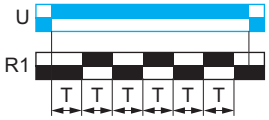
T = t1 + t2 + …

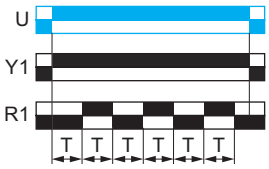
After power-on and the closure of Y1, the output(s) R close(s).
When Y1 re-opens, timing starts and can be interrupted/paused each time X1 closes. When the cumulative total time elapsed reaches the preset value T, the output(s) R revert(s) to its/their initial state.
The second output (R2) can be either timed (when set to “TIMED”) or instantaneous (when set to “INST”).

Functions (continued)

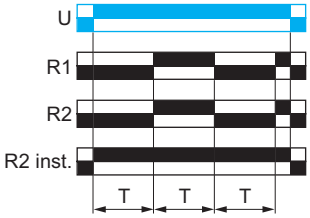
Function D: Symmetrical flashing relay (starting pulse-off)

1 output

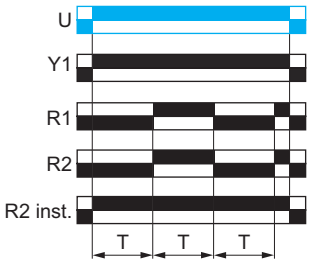




2 outputs



2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.).

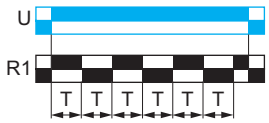


Repetitive cycle with 2 timing periods T of equal duration, with output(s) R changing state at the end of each timing period T.
The second output (R2) can be either timed (when set to “TIMED”) or instantaneous (when set to “INST”).

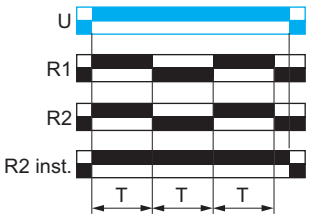
Note: Function D with Y1 is only for the RE17 range and RE22R2MJU, RE22R2MMU, and RE22R2MMW references.

Function Di: Symmetrical flashing relay (starting pulse-on)

1 output



2 outputs

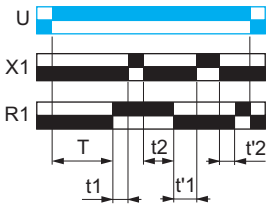


2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.).

Repetitive cycle with 2 timing periods T of equal duration, with output(s) R changing state at the end of each timing period T.
The second output (R2) can be either timed (when set to “TIMED”) or instantaneous (when set to “INST”).

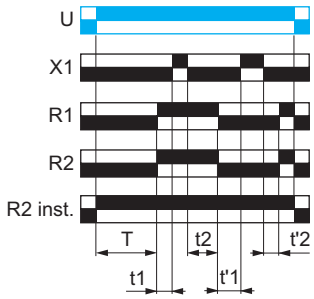
Function Dt : Symmetrical flashing relay (starting pulse-off) with pause/summation control signal

1 output



T = t1 + t2 + …
T = t’1 + t’2 + …

2 outputs



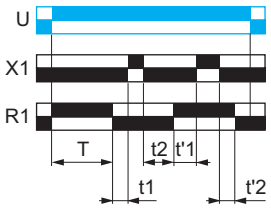
T = t1 + t2 + …
T = t’1 + t’2 + …

After power-on, output(s) R start(s) at its/their initial state for timing period T and the timing can be interrupted/paused each time X1 closes. When the cumulative total time elapsed reaches the preset value T, the output(s) R close(s). The output(s) R will remain in the closed state for the same timing period T and the timing can be interrupted/paused each time X1 closes. When the cumulative total time elapsed reaches the preset value T, the output(s) R revert(s) to its/their initial state.
This cycle is repeated indefinitely until the power supply is removed.
The second output (R2) can be either timed (when set to “TIMED”) or instantaneous (when set to “INST”).

Functions (continued)

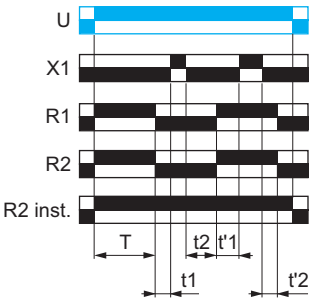
Function Dit : Symmetrical flashing relay (starting pulse-on) with pause/summation control signal

1 output



T= t1 + t2 + …
T = t'1 + t'2 +…

2 outputs

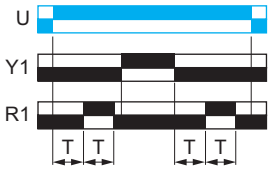


T= t1 + t2 + …
T = t'1 + t'2 +…

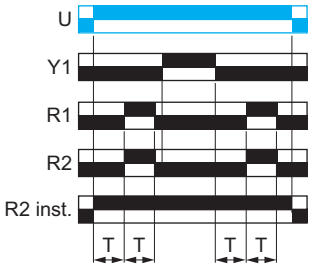
After power-on, output(s) R start(s) when output(s) R close(s) for timing period T and the timing can be interrupted/paused each time X1 closes. When the cumulative total time elapsed reaches the preset value T, then the output(s) revert(s) to its/their initial state.
The output(s) R will remain in this initial state for the same timing period T and the timing can be interrupted/paused each time X1 closes. When the cumulative total time elapsed reaches the preset value T, the output(s) R close(s). This cycle is repeated indefinitely until the power supply is removed.
The second output (R2) can be either timed (when set to "TIMED") or instantaneous (when set to "INST").

Function Dw: Symmetrical flashing relay (starting pulse-off) with retrigger/restart control signal

1 output



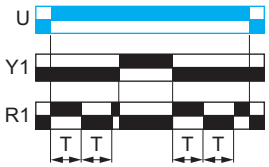
2 outputs



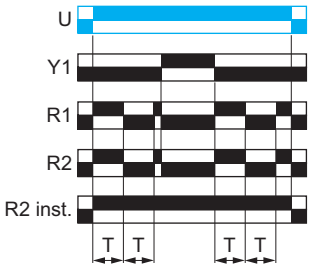
After power-on, output(s) R start(s) at its/their initial state for timing period T then close(s) for the same timing period T. This cycle is repeated indefinitely until the power supply is removed.
At any state of the output(s) R, when Y1 closes and then re-opens, the output(s) R open(s) and restart(s) 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 Diw: Symmetrical flashing relay (starting pulse-on) with retrigger/restart control signal

1 output



2 outputs

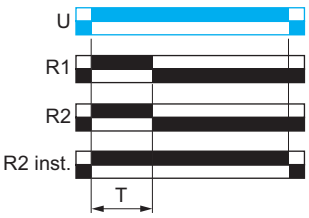


After power-on, output(s) R start(s) when output(s) R close(s) for timing period T and revert(s) to its/their initial state for the same timing period T. This cycle is repeated indefinitely until the power supply is removed. At any state of the output(s) R when Y1 closes and then re-opens, the output(s) R close(s) and restart(s) 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 H: Interval relay

1 output

2 outputs



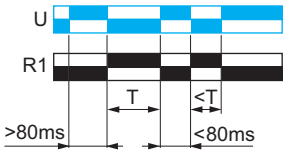
2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.).

After power-on, timing period T starts and the output(s) R close(s).
At the end of the timing period T, 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").

Functions (continued)

Function He: Pulse-on de-energization

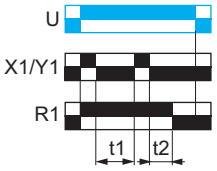
1 output



After power-on > 80 ms followed by power-off, the output R closes for the duration of a timing period T then reverts to its initial state.
After power-on < 80 ms followed by power-off, the output R closes and will not be able to sustain this state for the duration of a timing period T before reverting to its initial state.

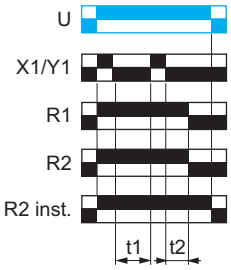
Function Ht: Interval relay with pause/summation control signal

1 output



T = t1 + t2 + …

2 outputs

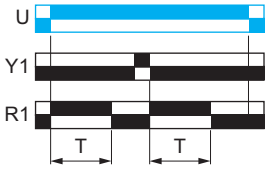


T = t1 + t2 + …

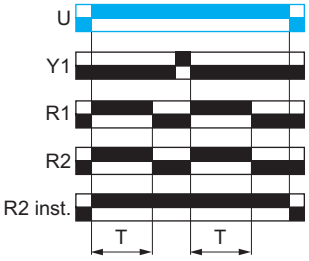
After power-on, output(s) R close(s) and timing period T starts, the timing can be interrupted/paused each time X1 closes. When the cumulative total time elapsed reaches the preset value T, the output(s) R revert(s) to its/their initial state.
The second output (R2) can be either timed (when set to “TIMED”) or instantaneous (when set to “INST”).
Note: For RE17●, RE22R2AMU, RE22R2MMW, RE22R2MMU, and RE22R2MJU, timing can be interrupted/paused each time Y1 closes.

Function Hw : Interval relay with retrigger/restart control signal

1 output



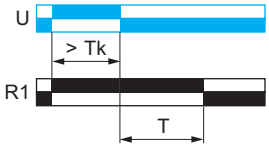
2 outputs



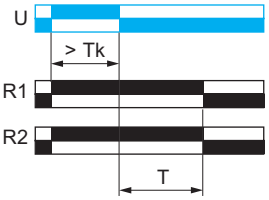
After power-on, output(s) R close(s) and timing period T starts. At the end of the timing period T, the output(s) R revert(s) to its/their initial state.
At any state of the output(s) R when Y1 closes and then re-opens, the output(s) R close(s) and restart(s) the same operation as described at the beginning.
The second output (R2) can be either timed (when set to “TIMED”) or instantaneous (when set to “INST”).

Function K: Delay on de-energization (without auxiliary supply)

1 output



2 outputs

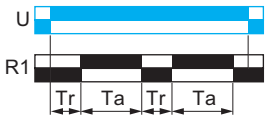


After power-on, the output(s) R close(s). After power-off, timing period T starts and, at the end of this period, the output(s) R revert to its/their initial state.
The power-on > Tk is necessary to sustain the timing period T.
There are 3 references with different Tk as follows:
(a) RE22R1KMR --> Tk > 1 s
(b) RE22R2KMR --> Tk > 1 s
(c) RE22R1MKMR --> Tk > 80 ms

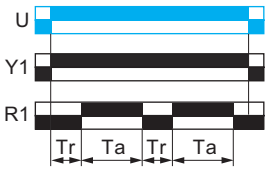
Functions (continued)

Function L: Asymmetrical flashing relay (starting pulse-off)

1 output



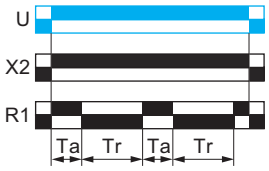
1 output



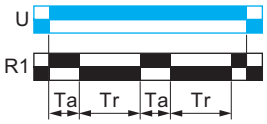
Repetitive cycle consisting of 2, independently adjustable timing periods Ta and Tr.
Each timing period corresponds to a different state of the output R.

Function Li: Asymmetrical flashing relay (starting pulse-on)

1 output



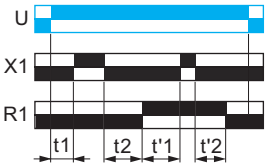
1 output



Repetitive cycle consisting of 2, independently adjustable timing periods Ta and Tr.
Each timing period corresponds to a different state of the output R.

Function Lt: Asymmetrical flashing relay with pause/summation control signal

1 output

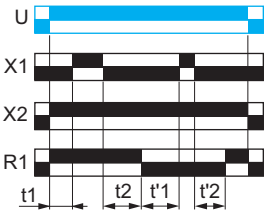


Tr = t1 + t2 + …
Ta = t'1 + t'2 + …

Repetitive cycle comprises of 2, independently adjustable timing periods Ta and Tr.
Each timing period corresponds to a different state of the output R.
Control contact X1 can be operated to partially stop timing periods Ta and Tr.

Function Lit: Asymmetrical flashing relay (starting pulse-on) with pause/summation control signal

1 output

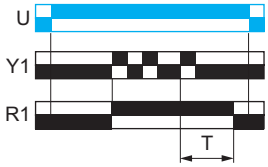


Ta = t1 + t2 + …
Tr = t'1 + t'2 + …

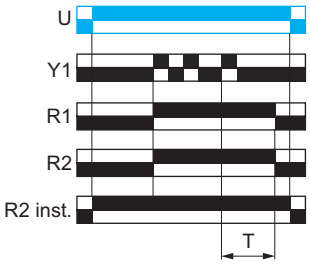
After power-on, output(s) R close(s) for timing duration Ta and the timing can be interrupted/paused each time X1 closes. When the cumulative total time elapsed reaches the preset value Ta, the output(s) R revert(s) to its/their initial state.
The output(s) R will remain at its initial state for timing duration Tr, the timing can be interrupted/paused each time X1 closes. When the cumulative total time elapsed reaches the preset value Tr, then output(s) R close(s).
This cycle is repeated indefinitely until the power supply is removed.

Function N: Safe guard relay

1 output



2 outputs

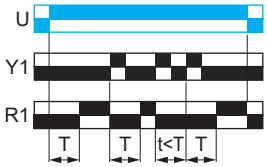


After power-on and an initial control pulse Y1, the output(s) R close(s).
If the interval between 2 Y1 control pulses is greater than the set timing period T, timing elapses normally and the output(s) R open(s) at the end of the timing period.
If the interval is not greater than the set timing period, the output(s) R remain(s) closed until this condition is met.

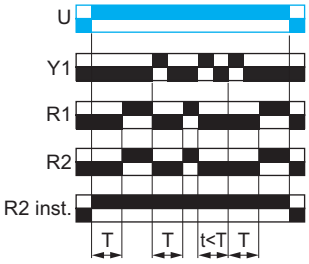
Functions (continued)

Function O: Delayed safe-guard relay

1 output



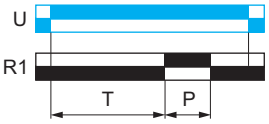
2 outputs



An initial timing period T begins on power-on. At the end of this timing period, the output(s) R close(s).
When there is a control pulse Y1, the output(s) R revert(s) to its/their initial state and remain(s) in that state until the interval between two control pulses is less than the value of the set timing period T. Otherwise, the output(s) R close(s) at the end of the timing period T.

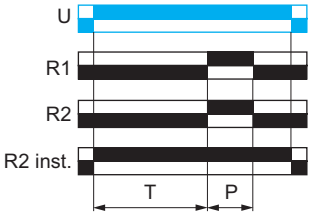
Function P: Pulse delayed relay with fixed pulse length

1 output



P = 500 ms

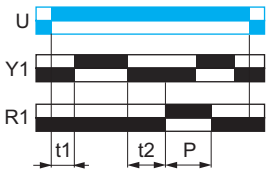
2 outputs



The timing period T starts on power-on. At the end of this period, the output(s) R close(s) for a fixed time P and then revert(s) to its/their initial state.

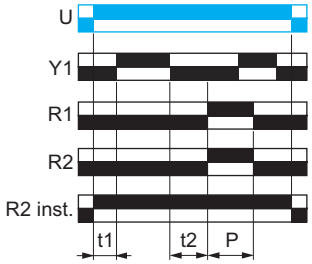
Function Pt: Pulse delayed relay with fixed pulse length, pause/summation control signal and control signal off

1 output



T = t1 + t2 + …
P = 500 ms

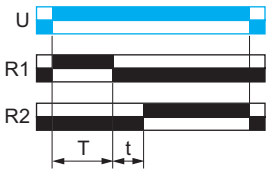
2 outputs



After power-on, timing period T starts (it can be interrupted by operating control contact Y1).
When the cumulative total time elapsed reaches the preset value T, the output(s) R close(s) for a fixed time P then revert(s) to its/their initial state.

Function Q: Star-delta relay (2 N/O outputs with same common)

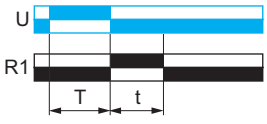
2 outputs



After power-on, the output R1 closes such that it closes the star contactor and the main contactor and the timing T starts (star connection timing period starts).
At the end of the timing period T, the output R1 reverts to its initial state such that it opens the star contactor and starts transition time t.
At the end of the transition time, the output R2 closes such that it closes the delta contactor.

Function Qc: Star-delta timing (1 C/O output)

1 output

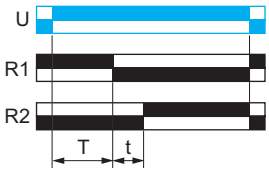


t = 50 ms

After power-on, the output R initializes at its initial state to close the star contactor and main contactor and the timing T starts (star connection timing period starts).
At the end of the timing period T, output R closes such that it opens the star contactor and starts transition time t.
At the end of the transition time, output R reverts to its initial state such that it closes the delta contactor.

Function Qe: Star-delta timing (1 N/C + 1 N/O output with split common)

2 outputs

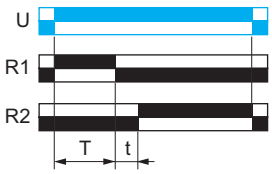


After power-on, the output R1 is at its initial state such that it closes the star contactor and the main contactor and the timing T starts (star connection timing period starts).
At the end of the timing period T, output R1 opens such that it opens the star contactor and starts transition time t.
At the end of the transition time, output R2 closes such that it closes the delta contactor.

Functions (continued)

Function Qg: Star-delta timing (2 C/O outputs with same common)

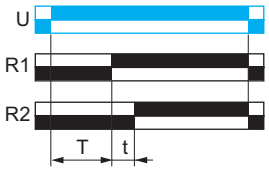
2 outputs



After power-on, output R1 closes the star contactor and the main contactor, and the timing T starts (star connection time period starts).
At the end of the timing period T, output R1 reverts to its initial state such that it opens the star contactor and starts transition time t.
At the end of the transition time, output R2 closes such that it closes the delta contactor.

Function Qt: Star-delta timing (2 C/O outputs with split common)

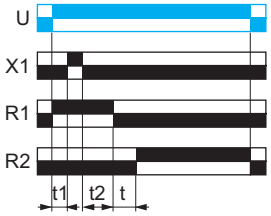
2 outputs



After power-on, the outputs R1 and R2 initialize at its/their initial state such that they close the star contactor and the main contactor and the timing T starts (Star connection time duration starts).
At the end of the timing period T, the output R1 closes such that it opens the star contactor and starts transition time t.
At the end of the transition time, the output R2 closes such that it closes the delta contactor.

Function Qgt : Star-delta relay (2 C/O outputs with same common) with pause/summation control signal

2 outputs



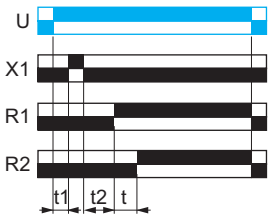
T = t1 + t2 + …

After power-on, output R1 closes the star contactor and the main contactor, and the timing T starts (star connection time period starts).

During star connection time, the timing can be interrupted/paused each time X1 closes. When the cumulative total time elapsed reaches the preset value T, output R1 reverts to its initial state such that it opens the star contactor and starts transition time t.
At the end of the transition time, output R2 closes such that it closes the delta contactor.

Function Qtt : Star-delta relay (2 C/O outputs with split common) with pause/summation control signal

2 outputs

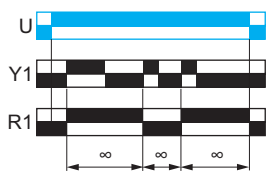


T = t1 + t2 + …

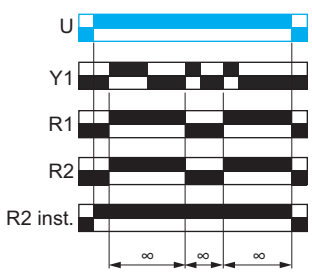
After power-on, the outputs R1 and R2 initialize at its/their initial state such that they close the star contactor and the main contactor and the timing T starts (star connection timing period starts).
During star connection time, the timing can be interrupted/paused each time X1 closes. When the cumulative total time elapsed reaches the preset value T, output R1 closes such that it opens the star contactor and starts transition time t.
At the end of the transition time, output R2 closes such that it closes the delta contactor.

Function TI: Bistable relay with control signal on

1 output



2 outputs

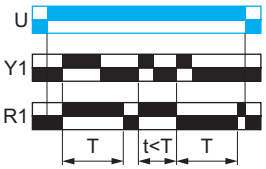


After power-on and closure of Y1, the output(s) R close(s). The subsequent closure of Y1 causes the output(s) R to revert(s) to its/their initial state. This cycle is repeated indefinitely until the power supply is removed.
The second output (R2) can be either timed (when set to “TIMED”) or instantaneous (when set to “INST”).

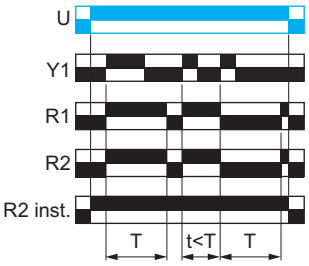
Functions (continued)

Function Tt: Retriggerable bistable relay with control signal on

1 output



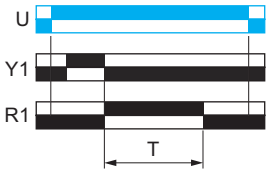
2 outputs



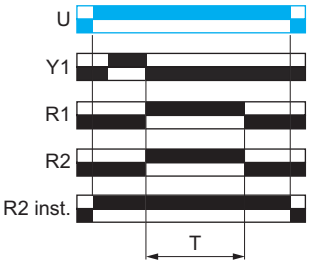
After power-on and closure of Y1, the output(s) R close(s) and the timing T starts.
If the interval between 2 consecutive closures of Y1 is greater than the preset value T, the output(s) R will toggle from its/their present state at the end of the timing period.
If the interval between 2 consecutive closures of Y1 is less than the preset value T, the output(s) R toggle from its/their present state as soon as Y1 closes without completing duration T.
The second output (R2) can be either timed (when set to “TIMED”) or instantaneous (when set to “INST”).

Function W: Interval relay with control signal off

1 output



2 outputs

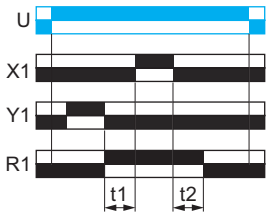


2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.).

After power-on and opening of the control contact Y1, the output(s) R close(s) for a timing period T.
At the end of this timing period the output(s) revert to its/their initial state.
The second output (R2) can be either timed (when set to “TIMED”) or instantaneous (when set to “INST”).

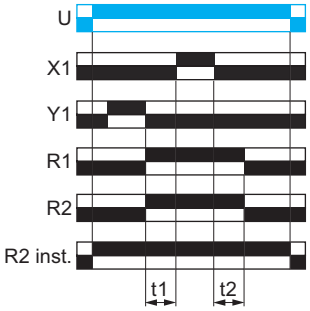
Function Wt: Interval relay with control signal off and pause/summation control signal

1 output



T = t1 + t2 + …

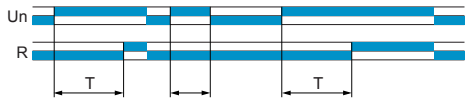
2 outputs



After power-on and opening of the control contact Y1, the output(s) R close(s) for a timing period T. Timing can be interrupted/paused each time X1 closes.
When the cumulative total time elapsed reaches the preset 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”).

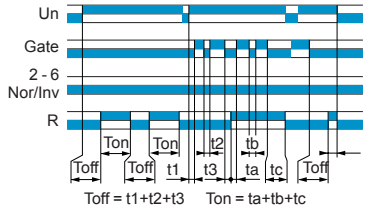
RE48ATM12MW

Function A: Power on-delay relay

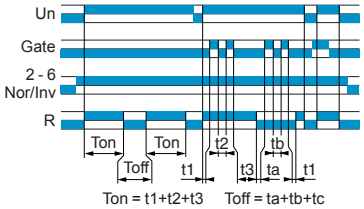


RE48ACV12MW

Function L: Asymmetrical flashing relay (starting pulse-off)

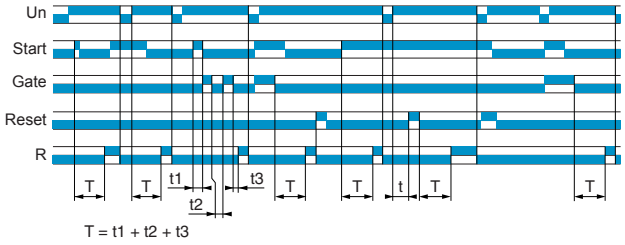


Function Li: Asymmetrical flashing relay (starting pulse-on)

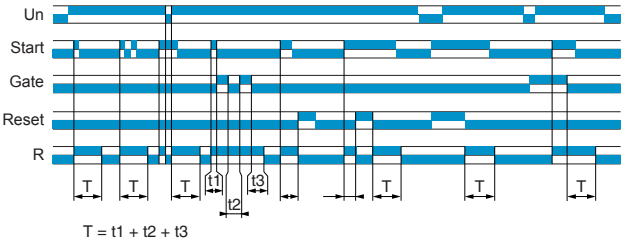


RE48AML12MW

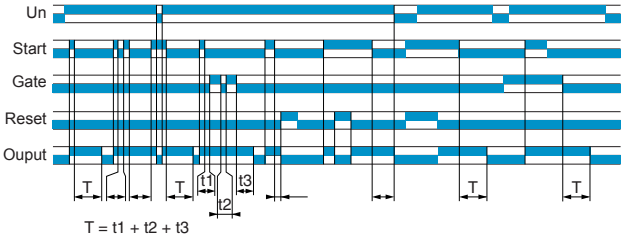
Function A: Power on-delay relay



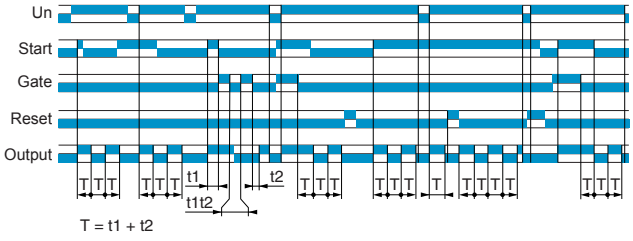
Function B: Interval relay with control signal



Function C: Off-delay relay with control signal

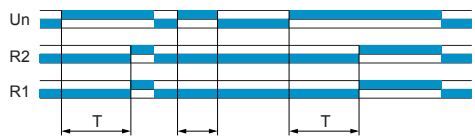


Function Di: Symmetrical flashing relay (starting pulse-on)

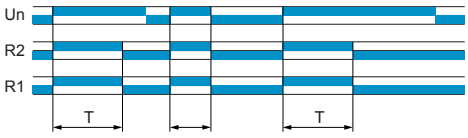


RE48AMH13MW

Functions A1, A2: Delay on energization



Functions H1, H2: Pulse-on energization



Note: *If A1 or H1 is selected, only R2 is timed, R1 is instantaneous.*

Zelio Time - timing relays

Modular relays with solid state or relay output, width 17.5 mm/*0.689 in.*

Solid state output
- *Multifunction, dual function, or single function*
- *Multi-range (7 selectable ranges)*
- *Multivoltage*
- *Solid state output: 0.7 A*
- *Screw terminals*

RE17LAMW

RE17LLBM

Relay output, 1 C/O contact
- *Dual function or single function*
- *Multi-range (7 selectable ranges)*
- *Multivoltage*
- *1 relay output: 8 A*
- *Screw and spring terminals*
- *State indication by 1 LED*
- *Option of supplying a load in parallel*
- *3-wire sensor control option*

RE17R●M●

Modular relays with solid state output 0.7 A

Single function

Timing ranges	Functions	Voltages V	Reference	Weight kg/*lb*
7 selectable timing ranges **1 s, 10 s, 1 min, 10 min, 1 h, 10 h, 100 h**	**A**	⎓ 24…240	**RE17LAMW**	0.060/ *0.132*
	H	∿ 24…240	**RE17LHBM**	0.060/ *0.132*
	C	∿ 24…240	**RE17LCBM**	0.060/ *0.132*

Dual function

7 selectable timing ranges **1 s, 10 s, 1 min, 10 min, 1 h, 10 h, 100 h**	**L, Li**	∿ 24…240	**RE17LLBM**	0.060/ *0.132*

Multifunction

7 selectable timing ranges **1 s, 10 s, 1 min, 10 min, 1 h, 10 h, 100 h**	**A, At,B, C, H, Ht, D, Di, Ac, Bw**	∿ 24…240	**RE17LMBM**	0.060/ *0.132*

Modular relays with relay output, 1 C/O contact

Single function

Timing ranges	Functions	Voltages V	Reference	Weight kg/*lb*
1 s, 10 s, 1 min, 10 min, 1 h, 10 h, 100 h	**B**	⎓ 24/∿ 24…240	**RE17RBMU**	0.070/ *0.154*
	C	⎓ 24/∿ 24…240	**RE17RCMU**	0.070/ *0.154*

Dual function

1 s, 10 s, 1 min, 10 min, 1 h, 10 h, 100 h	**A, At**	⎓ 24/∿ 24…240	**RE17RAMU**	0.070/ *0.154*
	H, Ht	⎓ 24/∿ 24…240	**RE17RHMU**	0.070/ *0.154*
	L, Li	⎓ 24/∿ 24…240	**RE17RLMU**	0.070/ *0.154*
		⎓ 12	**RE17RLJU**	0.070/ *0.154*

Multifunction

1 s, 10 s, 1 min, 10 min, 1 h, 10 h, 100 h	**A, At, B, C, H, Ht, D, Di Ac, Bw**	⎓ 12	**RE17RMJU**	0.070/ *0.154*
		⎓ 24/∿ 24…240	**RE17RMMU**	0.070/ *0.154*
		⎓ 12…240	**RE17RMMW**	0.070/ *0.154*
			RE17RMMWS *(1)*	0.070/ *0.154*
	Ad, Ah, N, O, P, Pt, Ti, Tt, W	⎓ 24/∿ 24…240	**RE17RMXMU**	0.070/ *0.154*
1 s, 10 s, 1 min, 10 min, 1 h, 10 h	**A, At, B, C, H, Ht, D, Di**	⎓ 24/∿ 24…240	**RE17RMEMU**	0.070/ *0.154*

(1) Connection by spring terminals.

Zelio Time - timing relays

Modular single, dual, or multifunction relays with diagnostic button and dial pointer, relay output, width 22.5 mm/*0.886 in.*

Output 1 C/O and 2 C/O contacts

- *Multifunction, dual function, or single function*
- *Multiple timing ranges (up to 10 switchable ranges)*
- *Multivoltage*
- *1 or 2 relay outputs: 8 A - 250 V*
- *Screw terminals*
- *State indication by LED*
- *Option of supplying a load in parallel*
- *3-wire sensor control option*
- *Diagnostic button (1) and dial pointer LED indicator*

RE22R2QTMR

RE22R2KMR

RE22R2QEMR

RE22R2HMR

RE22R1MYMR

References

Single function

Timing ranges	Functions	No. of relay outputs	Voltages	Reference	Weight
			V		kg/*lb*
10 selectable timing ranges **1 s, 3 s, 10 s, 30 s, 100 s, 300 s, 30 min, 300 min, 30 h, 300 h**	**Ac**	2	≂ 24…240	**RE22R2ACMR**	0.105/ *0.231*
	Qg	2	≂ 24…240	**RE22R2QGMR**	0.105/ *0.231*
	Qt	2	≂ 24…240	**RE22R2QTMR**	0.105/ *0.231*
7 selectable timing ranges **1 s, 3 s, 10 s, 30 s, 100 s, 300 s, 10 min**	**K**	1	≂ 24…240	**RE22R1KMR** *(1) (2)*	0.100/ *0.220*
		2	≂ 24…240	**RE22R2KMR** *(1) (2)*	0.100/ *0.220*
7 selectable timing ranges **0.5 s, 1 s, 3 s, 10 s, 30 s, 100 s, 300 s**	**Qc**	1	≂ 24/∼ 24…240	**RE22R1QCMU**	0.080/ 0.176
Single range selection **30 s**	**Qe**	2	≂ 24…240	**RE22R2QEMR**	0.090/ *0.198*
		2	∼ 380…415	**RE22R2QEMT**	0.090/ *0.198*

Dual function

Timing ranges	Functions	No. of relay outputs	Voltages	Reference	Weight
10 selectable timing ranges **1 s, 3 s, 10 s, 30 s, 100 s, 300 s, 30 min, 300 min, 30 h, 300 h**	**A, Aw**	1	≂ 24…240	**RE22R1AMR**	0.100/ *0.220*
		2	≂ 24…240	**RE22R2AMR**	0.105/ *0.231*
	C, Ct	1	≂ 24…240	**RE22R1CMR**	0.100/ *0.220*
		2	≂ 24…240	**RE22R2CMR**	0.105/ *0.231*
	Ac, Act	1	≂ 24…240	**RE22R1ACMR**	0.100/ *0.220*
	Ak, Akt	1	≂ 24…240	**RE22R1AKMR**	0.100/ *0.220*
	D, Dw	1	≂ 24…240	**RE22R1DMR**	0.100/ *0.220*
		2	≂ 24…240	**RE22R2DMR**	0.105/ *0.231*
	H, Hw	1	≂ 24…240	**RE22R1HMR**	0.100/ *0.220*
		2	≂ 24…240	**RE22R2HMR**	0.105/ *0.231*
	Wt, W	2	≂24…240	**RE22R2MWMR**	0.105/ *0.231*
7 selectable timing ranges **0.5 s, 1 s, 3 s, 10 s, 30 s, 100 s, 300 s**	**K, He**	1	≂24…240	**RE22R1MKMR** *(1) (2)*	0.100/ *0.220*
10 selectable timing ranges **1 s, 3 s, 10 s, 30 s, 100 s, 300 s, 30 min, 300 min, 30 h, 300 h**	**A, At, Aw**	1	≂ 24…240	**RE22R1MAMR**	0.100/ *0.220*
	A, At, Aw, Ac, Act, C, Ct, D, Dt, Dw, Di, Dit, Diw, H, Ht, Hw, W, Wt,	1	≂ 24…240	**RE22R1MYMR**	0.100/ *0.220*
	A, At, Aw, C, Ct, D, Dt, Dw, Di, Dit, Diw, H, Ht, Hw, Qg, Qgt, Qt, Qtt, W, Wt	2	≂ 24…240	**RE22R2MYMR**	0.105/ *0.231*
	L, Li, Lt, Lit	1	≂ 24…240	**RE22R1MLMR**	0.100/ *0.220*

(1) The diagnostic button is not available for the K function related references (RE22R1KMR, RE22R2KMR, and RE22R1MKMR).
(2) 1 or 2 relay outputs: 5 A - 250 V

Zelio Time - timing relays

Modular single, dual, or multifunction relays, relay output, width 22.5 mm/*0.886 in.*

Output 1 C/O and 2 C/O contacts

- *Multifunction, dual function, or single function*
- *Multiple timing ranges (7 switchable ranges)*
- *Multivoltage*
- *1 or 2 relay outputs: 8 A - 250 V*
- *Screw or spring terminals*
- *State indication by LED*
- *Option of supplying a load in parallel*
- *3-wire sensor control option*

PF132090

RE22R1QMU

PF132092

RE22R2AMU

PF132093

RE22R2MMU

References

Multifunction

Timing ranges	Functions	No. of relay outputs	Voltages	Reference	Weight
			V		kg/*lb*
7 selectable timing ranges **1 s, 10 s, 1min, 10 min, 1h, 10 h, 100 h**	**Q**	1	⎓ 24/∿ 24…240	**RE22R1QMU**	0.090/ *0.198*
		1	∿ 230/380	**RE22R1QMQ**	0.090/ *0.198*

Dual function

Timing ranges	Functions	No. of relay outputs	Voltages	Reference	Weight
7 selectable timing ranges **1 s, 10 s, 1 min, 10 min, 1 h, 10 h, 100 h**	**A, At**	2	⎓ 24/∿ 24…240	**RE22R2AMU**	0.090/ *0.198*

Multifunction

Timing ranges	Functions	No. of relay outputs	Voltages	Reference	Weight
7 selectable timing ranges **1 s, 10 s, 1 min, 10 min, 1 h, 10 h, 100 h**	**A, At, B, C, H, Ht, Di, D, Ac, Bw**	2	⎓ 24/∿ 24…240	**RE22R2MMU** *(1)*	0.090/ *0.198*
			≂ 12	**RE22R2MJU** *(1)*	0.090/ *0.198*
			≂ 12…240	**RE22R2MMW** *(1)*	0.090/ *0.198*
	Ad, Ah, N, O,P, Pt, Tl, Tt, W	2	⎓ 24/∿ 24…240	**RE22R2MXMU** *(1)*	0.090/ *0.198*

(1) Connection by screw terminals.

Zelio Time - timing relays

Industrial single, dual, or multifunction relays, relay output, width 22.5 mm/*0.886 in.*

Output 1 C/O and 2 C/O contacts

- *Multifunction, dual function, or single function*
- *Multiple timing ranges*
- *Multivoltage*
- *Transparent, hinged, and sealable flap on front panel*

PF103444SE

RE7TM11BU

PF105863SE

RE7MA11BU

PF516221

RE7CV11BU

References

Timing ranges	Functions	No. of relay outputs	Voltages	Reference	Weight
			V		kg/*lb*
0.05 s…300 h (10 ranges)	**A, Aw, At**	1	⎓ 24, ∿ 110…240, ⎓ 42…48	**RE7TM11BU**	0.150/ *0.331*
	Ac	1	⎓ 24, ∿ 110…240, ⎓ 42…48	**RE7MA11BU**	0.150/ *0.331*
		2	⎓ 24, ∿ 110…240, ⎓ 42…48	**RE7MA13BU** *(symmetrical)*	0.150/ *0.331*
	Ak	1	⎓ 24, ∿ 110…240, ⎓ 42…48	**RE7MV11BU**	0.150/ *0.331*
	C	1	⎓ 24, ∿ 110…240, ⎓ 42…48	**RE7RA11BU**	0.150/ *0.331*
		1	⎓ 24, ∿ 110…240, ⎓ 42…48	**RE7RM11BU** *(low level contact)*	0.150/ *0.331*
		2	⎓ 24, ∿ 110…240, ⎓ 42…48	**RE7RL13BU** *(low level contact)*	0.150/ *0.331*
	Ht, W	1	⎓ 24, ∿ 110…240, ⎓ 42…48	**RE7PM11BU**	0.150/ *0.331*
	L, Li, Lt	1	⎓ 24, ∿ 110…240, ⎓ 42…48	**RE7CV11BU**	0.150/ *0.331*
	A, C, H, W, D, Di	1	⎓ 24, ∿ 110…240, ⎓ 42…48	**RE7ML11BU**	0.150/ *0.331*

Zelio Time - timing relays

Industrial single, dual, or multifunction relays, relay output, width 22.5 mm/*0.886 in.*

Output 1 C/O and 2 C/O contacts

- ☐ *Multifunction, dual function, or single function*
- ☐ *Multiple timing ranges*
- ☐ *Multivoltage*
- ☐ *Transparent, hinged, and sealable flap on front panel*

PF103444SE

RE7TL11BU

References (continued)

Timing ranges	Functions	No. of relay outputs	Voltages	Reference	Weight
			V		kg/*lb*
0.05 s…300 h (10 ranges)	**A**	1	⎓ 24, ∿ 110…240	**RE7TL11BU**	0.150/ *0.331*
		2	⎓ 24, ∿ 110…240, ⎓ 42…48	**RE7TP13BU**	0.150/ *0.331*
	H	1	⎓ 24, ∿ 110…240	**RE7PE11BU**	0.150/ *0.331*
		2	⎓ 24, ∿ 110…240, ⎓ 42…48	**RE7PP13BU**	0.150/ *0.331*
	D	1	⎓ 24, ∿ 110…240	**RE7CL11BU**	0.150/ *0.331*
		2	⎓ 24, ∿ 110…240, ⎓ 42…48	**RE7CP13BU**	0.150/ *0.331*
	W	2	⎓ 24, ∿ 110…240, ⎓ 42…48	**RE7PD13BU**	0.150/ *0.331*
	Qt	2	⎓ 24, ∿ 110…240, ⎓ 42…48	**RE7YA12BU**	0.150/ *0.331*
	Qg	2	⎓ 24, ∿ 110…240, ⎓ 42…48	**RE7YR12BU**	0.150/ *0.331*
	A, C, H, W, D, Di, Qg, Qt	2	⎓ 24, ∿ 110…240, ⎓ 42…48	**RE7MY13BU**	0.150/ *0.331*
		2	⎓ 24…240	**RE7MY13MW**	0.150/ *0.331*
0.05 s…10 min (7 ranges)	**K**	1	⎓ 24…240	**RE7RB11MW**	0.150/ *0.331*
		2	⎓ 24…240	**RE7RB13MW**	0.150/ *0.331*

Zelio Time - timing relays

Industrial single function relays, optimum, relay output, width 22.5 mm/*0.886 in.*

Output 1 C/O contact
- ☐ *Single function*
- ☐ *Single timing range*
- ☐ *Transparent, hinged, and sealable flap on front panel*

PF105867SE

RE8TA●●●●●●

References

Timing ranges	Functions	Voltages	Unit reference *(1)*	Weight
		V		kg/*lb*
0.05 s…0.5 s	K	≂ 24, ∿ 110…240	RE8RB51BUTQ	0.110/ *0.243*
	He	≂ 24, ∿ 110…240	RE8PT01BUTQ	0.110/ *0.243*
0.1 s…3 s	A	≂ 24, ∿ 110…240	RE8TA61BUTQ	0.110/ *0.243*
0.1 s…10 s	A	≂ 24, ∿ 110…240	RE8TA11BUTQ	0.110/ *0.243*
	C	≂ 24	RE8RA11BTQ	0.110/ *0.243*
		∿ 110…240	RE8RA11FUTQ	0.110/ *0.243*
	D	≂ 24, ∿ 110…240	RE8CL11BUTQ	0.110/ *0.243*
	K	≂ 24, ∿ 110…240	RE8RB11BUTQ	0.110/ *0.243*
	H	≂ 24, ∿ 110…240	RE8PE11BUTQ	0.110/ *0.243*
	Qc	≂ 24, ∿ 110…240	RE8YG11BUTQ	0.110/ *0.243*
	W	≂ 24	RE8PD11BTQ	0.110/ *0.243*
		∿ 110…240	RE8PD11FUTQ	0.110/ *0.243*
0.3 s…30 s	A	≂ 24, ∿ 110…240	RE8TA31BUTQ	0.110/ *0.243*
	C	≂ 24	RE8RA31BTQ	0.110/ *0.243*
		∿ 110…240	RE8RA31FUTQ	0.110/ *0.243*
	H	≂ 24, ∿ 110…240	RE8PE31BUTQ	0.110/ *0.243*
	K	≂ 24, ∿ 110…240	RE8RB31BUTQ	0.110/ *0.243*
	Qc	≂ 24, ∿ 110…240	RE8YG31BUTQ	0.110/ *0.243*
	Qe	≂ 24	RE8YA32BTQ	0.110/ *0.243*
		∿ 110…240	RE8YA32FUTQ	0.110/ *0.243*
		∿ 380…415	RE8YA32QTQ	0.110/ *0.243*
	W	≂ 24	RE8PD31BTQ	0.110/ *0.243*
		∿ 110…240	RE8PD31FUTQ	0.110/ *0.243*
3 s…300 s	A	≂ 24, ∿ 110…240	RE8TA21BUTQ	0.110/ *0.243*
	C	≂ 24	RE8RA21BTQ	0.110/ *0.243*
		∿ 110…240	RE8RA21FUTQ	0.110/ *0.243*
	H	≂ 24, ∿ 110…240	RE8PE21BUTQ	0.110/ *0.243*
	Qc	≂ 24, ∿ 110…240	RE8YG21BUTQ	0.110/ *0.243*
	W	≂ 24	RE8PD21BTQ	0.110/ *0.243*
		∿ 110…240	RE8PD21FUTQ	0.110/ *0.243*
20 s…30 min	A	≂ 24, ∿ 110…240	RE8TA41BUTQ	0.110/ *0.243*
	C	∿ 110…240	RE8RA41FUTQ	0.110/ *0.243*

(1) *These products are sold in packs of 10.*

Zelio Time - timing relays

Industrial single or multifunction relays,
solid state output, width 22.5 mm/*0.886 in.*

Solid state output
- ☐ *Multifunction or single function*
- ☐ *Multivoltage*
- ☐ *Screw terminals*
- ☐ *Transparent, hinged, and sealable flap on front panel*

PF121100A

RE9●A●1MW

PF105869

RE9MS21MW

References

Single function

Timing ranges	Functions	Voltages	Reference	Weight
		V		kg/*lb*
0.1 s…10 s	A	≂ 24… 240	RE9TA11MW	0.110/ *0.243*
	C	≂ 24… 240	RE9RA11MW7	0.110/ *0.243*
0.3 s…30 s	A	≂ 24… 240	RE9TA31MW	0.110/ *0.243*
	C	≂ 24… 240	RE9RA31MW7	0.110/ *0.243*
3 s…300 s	A	≂ 24… 240	RE9TA21MW	0.110/ *0.243*
	C	≂ 24… 240	RE9RA21MW7	0.110/ *0.243*
40 s…60 min	A	≂ 24… 240	RE9TA51MW	0.110/ *0.243*
	C	≂ 24… 240	RE9RA51MW7	0.110/ *0.243*

Multifunction

0.1 s…10 s 0.3 s…30 s	A, H, D, Di	≂ 24… 240	RE9MS21MW	0.110/ *0.243*

Zelio Time - timing relays
Miniature plug-in relays, relay output

Output, 2 C/O and 4 C/O contacts
- *Miniature and plug-in (21 x 27 mm/0.827 x 1.062 in.)*
- *Single function: function A = delay on energization*
- *Rated current ∼ 5 A*
- *7 timing ranges (0.1 s to 100 h)*
- *Multivoltage*
- *Excellent immunity to interference*
- *Power on and relay energized indication by 2 LEDs*

PF516218

REXL2TM●●

PF516219

REXL4TM●●

PF106014

RXZE2M114

References

Single function

Timing ranges	Functions	No. of relay outputs	Voltages	Reference	Weight
			V		kg/*lb*
7 switchable ranges **0.1 s…1 s** **1 s…10 s** **0.1 min…1 min** **1 min…10 min** **0.1 h…1 h** **1 h…10 h** **10 h…100 h**	**A**	2	⎓ 12	**REXL2TMJD**	0.050/ *0.110*
			⎓ 24	**REXL2TMBD**	0.050/ *0.110*
			∼ 24 (50/60 Hz)	**REXL2TMB7**	0.050/ *0.110*
			∼ 120 (50/60 Hz)	**REXL2TMF7**	0.050/ *0.110*
			∼ 230 (50/60 Hz)	**REXL2TMP7**	0.050/ *0.110*
		4	⎓ 12	**REXL4TMJD**	0.050/ *0.110*
			⎓ 24 *(1)*	**REXL4TMBD**	0.050/ *0.110*
			∼ 24 (50/60 Hz) *(1)*	**REXL4TMB7**	0.050/ *0.110*
			∼ 120 (50/60 Hz)	**REXL4TMF7**	0.050/ *0.110*
			∼ 230 (50/60 Hz)	**REXL4TMP7**	0.050/ *0.110*

Sockets for relays

Contact terminal arrangement	For use with relays	Connection	Unit reference *(2)*	Weight kg/*lb*
Mixed *(3)*	REXL2TM●●, REXL4TM●●	Screw clamp	**RXZE2M114** *(5)*	0.048/ *0.106*
	REXL2TM●●, REXL4TM●●	Connector	**RXZE2M114M** *(6)*	0.056/ *0.123*
Separate *(4)*	REXL2TM●●	Connector	**RXZE2S108M**	0.070/ *0.154*
	REXL4TM●●	Connector	**RXZE2S114M**	0.058/ *0.128*
	REXL2TM●● REXL4TM●●	Spring clamp	**RXZE2S114S**	*0.070/* *0.154*

(1) For ⎓ 48 V supply, additional resistor 560 Ω 2 W/⎓ 24 V.
For ∼ 48 V, additional resistor 390 Ω 4 W/∼ 24 V.
(2) These products are sold in lots of 10.
(3) The inputs are mixed with the relay's power supply terminals, with the outputs being located on the opposite side of the socket.
(4) The inputs and outputs are separated from the relay power supply.
(5) Thermal current Ith: 10 A.
(6) Thermal current Ith: 12 A.

Zelio Time - timing relays

Analog, electronic relays, relay output, 48 x 48 mm

Output 2 C/O contacts

- *Time unit selector knob*
- *Multifunction, single function, or dual function*
- *Multirange*
- *Multivoltage*
- *2 relay outputs, 5 A*
- *Panel-mounted or plug-in*
- *LED indication*

PF110452

RE48ATM12MW

PF110451

RE48AMH13MW

DF523398

RUZC3M

109804

RE48ASOC11AR

109803

RE48ASOC8SOLD

109805

RE48ASOC11SOLD

109806

RE48ASETCOV

109807

RE48AIPCOV

References

8-pin relay

Timing ranges	Function	No. of relay outputs	Voltages	Reference	Weight
			V		kg/*lb*
1.2 s, 3 s, 12 s, 30 s, 120 s, 300 s, 12 min, 30 min, 120 min, 300 min, 12 h, 30 h, 120 h, 300 h	**A**	1	≂ 24…240	**RE48ATM12MW**	0.140/ *0.309*
	A1, A2, H1, H2	2 of which 1 instantaneous	≂ 24…240	**RE48AMH13MW**	0.140/ *0.309*

11-pin relay

Timing ranges	Function	No. of relay outputs	Voltages	Reference	Weight
1.2 s, 3 s, 12 s, 30 s, 120 s, 300 s, 12 min, 30 min, 120 min, 300 min, 12 h, 30 h, 120 h, 300 h	**L, Li**	2	≂ 24…240	**RE48ACV12MW**	0.140/ *0.309*
	A, B, C, Di	2	≂ 24…240	**RE48AML12MW**	0.140/ *0.309*

Sockets

Description	Number of pins	For use with relays	Sold in lots of	Unit reference	Weight kg/*lb*
IP 20 sockets with connection by connector and mixed contact terminals *(1)*	8	RE48ATM12MW, RE48AMH13MW	**10**	**RUZC2M**	0.054/ *0.119*
	11	RE48ACV12MW, RE48AML12MW	**10**	**RUZC3M**	0.054/ *0.119*
IP 20 socket with screw terminal connections on rear face	11	RE48ACV12MW, RE48AML12MW	**1**	**RE48ASOC11AR**	–

Connectors and protective cover

IP 20 solder connectors	8	RE48ATM12MW, RE48AMH13MW	**1**	**RE48ASOC8SOLD**	–
	11	RE48ACV12MW, RE48AML12MW	**1**	**RE48ASOC11SOLD**	–
Setting protection cover	–	RE48ATM12MW, RE48ACV12MW, RE48AML12MW, RE48AMH13MW	**1**	**RE48ASETCOV**	–
Protective cover IP 64	–	RE48ATM12MW, RE48ACV12MW, RE48AML12MW, RE48AMH13MW	**1**	**RE48AIPCOV**	–

(1) The inputs are mixed with the relay's power supply terminals, with the outputs being located on the opposite side of the socket.

Zelio Time - timing relays

Universal plug-in relays, 11-pin, relay output, width 35 mm/1.377 in.

Output 2 C/O contacts

- *Multifunction, dual function, or single function*
- *Multiple timing ranges (7 switchable ranges)*
- *Multivoltage*
- *2 relay output: 8 A - 250 V (10 A UL)*
- *Plug-in*
- *State indication by 1 LED*
- *Option of supplying a load in parallel*
- *3-wire sensor control option*

PF516212

RE88867415

PF516213

RE88867305

PF516214

RE88867300

DF523398

RUZC3M

References

Single function

Timing ranges	Functions	No. of relay outputs	Voltages	Reference	Weight
			V		kg/*lb*
1 s, 10 s, 1 min, 10 min, 1 h, 10 h, 100 h	**C**	2	≂ 24…240	**RE88867435**	0.080/ *0.176*

Dual function

1 s, 10 s, 1 min, 10 min, 1 h, 10 h, 100 h	**A, At**	2	≂ 24…240	**RE88867415**	0.080/ *0.176*
	Li, L	2	≂ 24…240	**RE88867455**	0.080/ *0.176*

Multifunction

1 s, 10 s, 1 min, 10 min, 1 h, 10 h, 100 h	**A, At, B, C, H, Ht, Di, D, Ac, Bw**	2 of which 1 instantaneous	≂ 24…240	**RE88867305**	0.080/ *0.176*
			≂ 12	**RE88867300**	0.080/ *0.176*
			≂ 12…240	**RE88867303**	0.080/ *0.176*

Sockets for 11-pin relays

Contact terminal arrangement	For use with relays	Connection	Unit reference *(1)*	Weight kg/*lb*
Mixed *(2)*	RE88867●●●	Connector	**RUZC3M**	0.054/ *0.119*

(1) These products are sold in packs of 10.

(2) The inputs are mixed with the relay's power supply terminals, with the outputs being located on the opposite side of the socket.

Zelio Time - timing relays

Universal plug-in relays, 8-pin, relay output, width 35 mm/1.377 in.

Output 1 C/O or 2 C/O contacts

- *Multifunction, dual function or single function*
- *Multiple timing ranges (7 switchable ranges)*
- *Multivoltage*
- *1 or 2 relay outputs: 8 A - 250 V (10 A UL)*
- *Plug-in*
- *State indication by 1 LED*
- *Option of supplying a load in parallel*
- *3-wire sensor control option*

PF516215

RE88867215

PF516216

RE88867155

PF516217

RE88867105

PF106031

RUZC2M

References

Single function

Timing ranges	Functions	No. of relay outputs	Voltages	Reference	Weight
			V		kg/*lb*
1 s, 10 s , 1 min, 10 min, 1 h, 10 h, 100 h	A	2	≂ 24…240	RE88867215	0.080/ *0.176*
	C	1	≂ 24…240	RE88867135	0.080/ *0.176*

Dual function

Timing ranges	Functions	No. of relay outputs	Voltages	Reference	Weight
1 s, 10 s, 1 min, 10 min, 1 h, 10 h, 100 h	Li, L	1	≂ 24…240	RE88867155	0.080/ *0.176*

Multifunction

Timing ranges	Functions	No. of relay outputs	Voltages	Reference	Weight
1 s, 10 s, 1 min, 10 min, 1 h, 10 h, 100 h	A, At, B, C, H, Ht, Di, D, Ac, Bw	1	≂ 24…240	RE88867105	0.080/ *0.176*
			≂ 12	RE88867100	0.080/ *0.176*
			≂ 12…240	RE88867103	0.080/ *0.176*

Sockets for 8-pin relays

Contact terminal arrangement	For use with relays	Unit reference *(1)*	Weight kg/*lb*
Mixed *(2)*	RE888671●●, RE888672●●	RUZC2M	0.054/ *0.119*

(1) These products are sold in packs of 10.

(2) The inputs are mixed with the relay's power supply terminals, with the outputs being located on the opposite side of the socket.

Zelio Time - timing relays
Panel-mounted universal, plug-in relays, relay output

Output 1 C/O or 2 C/O contacts

- ☐ *LCD display*
- ☐ *Multifunction or single function*
- ☐ *Multirange*
- ☐ *Multivoltage*
- ☐ *One 8 A relay output*
- ☐ *Reset function on front panel*
- ☐ *Memory in the event of power break*
- ☐ *Locking of access to programming (RE8885710● and RE8885700●)*
- ☐ *Upcount or downcount mode*
- ☐ *Internal supply by lithium battery (10 years at 20 °C)*

PF112150SE

RE8885740●

PF516220

RE8885760●

DF523398

RUZC3M

References

8-pin relay

Timing ranges	Functions	No. of relay outputs	Voltages	Reference	Weight
			V		kg/*lb*
99.99 s, 999.9 s, 9999 s, 99 min 59 s, 99.99 min, 999.9 min, 9999 min, 99 h 59 min, 99.99 h, 999.9 h, 9999 h	**A, B, C, D, Di, H**	1	⎓ 12 and ≂ 24…48	**RE88857003**	0.100/ *0.220*
			≂ 24 and ∿ 110…240	**RE88857005**	0.100/ *0.220*
			≂ 24 and ≂ 48	**RE88857604**	0.100/ *0.220*
			≂ 24 and ∿ 110, (50/60 Hz)	**RE88857607**	0.100/ *0.220*
			≂ 24 and ∿ 24…240, (50/60 Hz)	**RE88857601**	0.100/ *0.220*

11-pin relay

Timing ranges	Functions	No. of relay outputs	Voltages	Reference	Weight
99.99 s, 999.9 s, 9999 s, 99 min 59 s, 99.99 min, 999.9 min, 9999 min, 99 h 59 min, 99.99 h, 999.9 h, 9999 h	**A, B, C, D, Di, H**	1	⎓ 12 and ≂ 24…48	**RE88857103**	0.100/ *0.220*
			≂ 24 and ∿ 110…240	**RE88857105**	0.100/ *0.220*
			≂ 24 and ≂ 48	**RE88857704**	0.100/ *0.220*
			≂ 24 and ∿ 110 (50/60 Hz)	**RE88857707**	0.100/ *0.220*
			≂ 24 and ∿ 24…240 (50/60 Hz)	**RE88857701**	0.100/ *0.220*

Sockets for relays

Number of pins	For use with relays	Unit reference *(1)*	Weight kg/*lb*
8-pin connector	RE8885740●, RE8885700●, RE8885760●	**RUZC2M**	0.054/ *0.119*
11-pin connector	RE8885710●, RE8885730●, RE8885770●	**RUZC3M**	0.054/ *0.119*

(1) These products are sold in packs of 10.

Product reference index

Schneider Electric Industries SAS

Head Office
35, rue Joseph Monier
F-92500 Rueil-Malmaison
France

www.schneider-electric.com/relays

Design: Schneider Electric
Photos: Schneider Electric

DIA5ED2130103EN

December 2015-V5.0