

DIN rail mounted relays

RE17

RE7, RE8, RE9

REXL

Presentation

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

There are two main 'families' of timing relays:

- "DIN rail mounted" relays (RE7, RE8, RE9, RE17, REXL...) designed for mounting on DIN rails in an enclosure,

- "Panel mounted" relays type RE48A designed for mounting on the front of a panel to give users easy access to the settings.

These relays have one, two or four 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.

Panel mounted relays

RE48A

Application examples:

- opening of automatic doors,
- alarm,
- lighting in toilets,
- car park barriers ...

Definitions

The following definitions will assist in understanding the operation of these relays:

■ 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 supply and the output. There are three types of output:

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 N/O.	
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:

These outputs are entirely electronic and involve 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):

corresponds to the minimum required current which can flow through the contacts of a relay.

■ G (Gate) Input:

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

Definitions (continued)

Functions

Timing functions are identified by letters.

Main timing functions	Complementary functions (1)	Definitions
A (2)		Power on delay relay
	Ac	On-delay and off-delay relay with 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 with external control
	At	Power on delay relay (summation) with control signal
	Aw	Off-delay on energization or on opening of control contact
B (2)		Interval relay with control signal
	Bw	Double interval relay with control signal
C (2)		Off-delay relay with control signal
D (2)		Symmetrical flasher relay (starting pulse off)
	Di (2)	Symmetrical flasher relay (starting pulse on)
H (2)		Interval relay
	He	Pulse-on de-energization
	Ht	Interval relay (summation) with control signal
K		Delay on de-energization (without auxiliary supply)
L (2)		Asymmetrical flasher relay (starting pulse off)
	Li (2)	Asymmetrical flasher relay (starting pulse on)
	Lt	Asymmetrical flashing with partial stop of timing
N		Retriggerable interval relay with control signal on
O		Retriggerable interval delayed relay with control signal on
P		Pulse delayed relay with fixed pulse length
	Pt	Pulse delayed relay (summation and fixed pulse length) with control signal off
	Qc	Star-delta timing
	Qe	Star-delta timing
T	Qg	Star-delta timing
	Qt	Star-delta timing
		Bistable relay with control signal on
	Tt	Retriggerable bistable relay with control signal on
W		Interval relay with control signal off

(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.

Selection table**Selection criteria**

- **Functions** (On-delay or Off-delay, counter, flashing...)
- **Supply voltage** (example: $\sim/_$ 12 V...240 V).
- **Timing range** for a timing relay (example: 0.05 s...100 h)
- **Type of output** (contact or solid state) and required **Number of contacts**.
- **Breaking capacity** or **Rated current** of contacts, expressed in Amperes.

This is the maximum current which 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	\sim 24 V	2 C/O contacts	5 A	REXL2TMB7
			4 C/O contacts	3 A	REXL4TMB7
	0.1 s...100 h	\sim 120 V	2 C/O contacts	5 A	REXL2TMF7
			4 C/O contacts	3 A	REXL4TMF7
	0.1 s...100 h	\sim 230 V	2 C/O contacts	5 A	REXL2TMP7
			4 C/O contacts	3 A	REXL4TMP7
	0.1 s...10 s	$\sim/_$ 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
	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	$\sim/_$ 24 V, \sim 110...240 V	1 C/O contact	8 A	RE7TL11BU
	0.1 s...3 s			8 A	RE8TA61BUTQ
	0.1 s...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	$\sim/_$ 24 V, \sim 110...240 V, $\sim/_$ 42...48 V	2 C/O contacts	8 A	RE7TP13BU
A, Ac, At, B, Bw, C, D, Di, H, Ht	1 s...100 h	\sim 24...240 V	1 solid state output	0.7 A	RE17LMBM
	1 s...100 h	$\sim/_$ 12 V	1 C/O contact	8 A	RE17RMJU
	1 s...100 h	$\sim/_$ 12...240 V	1 C/O contact	8 A	RE17RMMW
				8 A	RE17RMMWS
	1 s...100 h	$_$ 24 V, \sim 24...240 V	1 C/O contact	8 A	RE17RMMU
A, At	1 s...100 h	$_$ 24 V, \sim 24...240 V	1 C/O contact	8 A	RE17RAMU
A, At, Aw	0.05 s...300 h	\sim 110...240 V, $\sim/_$ 24 V, $\sim/_$ 42...48 V	1 C/O contact	8 A	RE7TM11BU
A, At, B, C, D, Di, H, Ht	1 s...10 h	$_$ 24 V, \sim 24...240 V	1 C/O contact	8 A	RE17RMEMU
A, B, C, Di	0.02 s...300 h	$\sim/_$ 24...240 V	2 C/O contacts	5 A	RE48AML12MW
A, C, D, Di, H, Qg, Qt, W	0.05 s...300 h	\sim 110...240 V, $\sim/_$ 24 V, $\sim/_$ 42...48 V	2 C/O contacts	8 A	RE7MY13BU
	0.05 s...300 h	$\sim/_$ 24...240 V	2 C/O contacts	8 A	RE7MY13MW
A, C, D, Di, H, W	0.05 s...300 h	\sim 110...240 V, $\sim/_$ 24 V, $\sim/_$ 42...48 V	1 C/O contact	8 A	RE7ML11BU
A, D, Di, H	0.1 s...10 s and 3 s...300 s	$\sim/_$ 24...240 V \sim 24...240 V	1 solid state output	0.7 A	RE9MS21MW
A1, A2, H1, H2	0.02 s...300 h	$\sim/_$ 24...240 V	2 C/O contacts	5 A	RE48AMH13MW
Ac	0.05 s...300 h	\sim 110...240 V, $\sim/_$ 24 V, $\sim/_$ 42...48 V	1 C/O contact	8 A	RE7MA11BU
			2 C/O contacts	8 A	RE7MA13BU
Ad, Ah, N, O, P, Pt, T, Tt, W	1 s...100 h	$_$ 24 V, \sim 24...240 V	1 C/O contact	8 A	RE17RMXMU
Ak	0.05 s...300 h	\sim 110...240 V, $\sim/_$ 24 V, $\sim/_$ 42...48 V	1 C/O contact	8 A	RE7MV11BU

Selection table (continued)

Functions	Timing range	Supply voltage	Type of output	Rated current	Relay
B	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
	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 2 C/O contacts	8 A 8 A	RE7RA11BU RE7RM11BU 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
	1 s...100 h			0.7 A	RE17LCBM
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
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
	1 s...100 h	~ 24...240 V	1 solid state output	0.7 A	RE17LHBM
H, Ht	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
L, Li	1 s...100 h	— 24 V, ~ 24...240 V	1 C/O contact	8 A	RE17RLMU
	1 s...100 h	~ 24...240 V	1 solid state output	0.7 A	RE17LLBM
	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
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
Qe	0.3 s...30 s	~— 24 V	1 NO + 1 NC	8 A	RE8YA32BTQ
	0.3 s...30 s	~ 110...240 V	1 NO + 1 NC	8 A	RE8YA32FUTQ
	0.3 s...30 s	~ 380...415 V	1 NO + 1 NC	8 A	RE8YA32QTQ
Qg	0.05 s...300 h	~— 24 V, ~ 110...240 V, ~— 42...48 V	1 NO + 1 NC	8 A	RE7YR12BU
Qt	0.05 s...300 h	~— 24 V, ~ 110...240 V, ~— 42...48 V	2 C/O contacts	8 A	RE7YA12BUè+
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

Functions

U: Supply

R: Relay or solid state output

R1/R2: 2 timed outputs

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

T: Timing period

C: Control contact

G: Gate

Ta: Adjustable On-delay

Tr: Adjustable Off-delay

Function diagram :

Relay de-energized

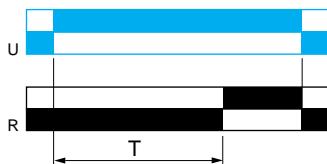
Relay energized

Output open

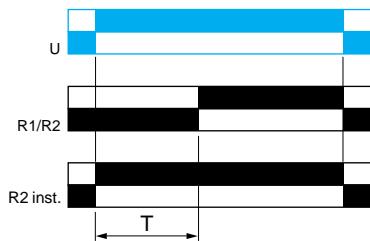
Output closed

Function A: Power on delay relay

1 output



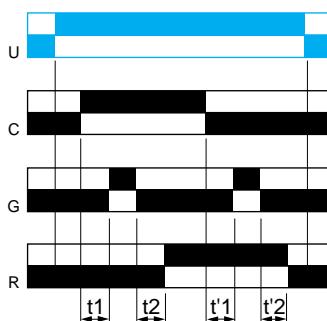
2 outputs



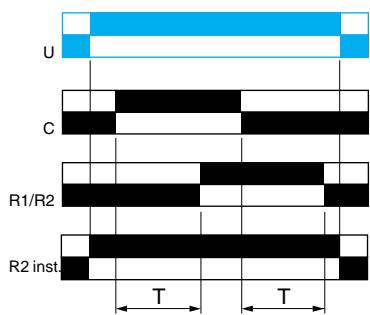
The timing period T begins on energization.
After timing, the output(s) R close(s).
The second output can be either timed or instantaneous.

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

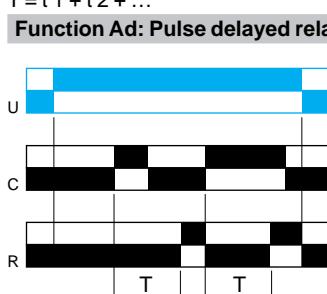
1 output



2 outputs

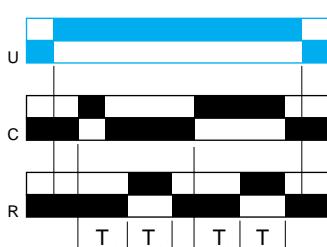


After power-up, closing of the control contact C causes the timing period T to start (timing can be interrupted by operating the Gate control contact G). At the end of this timing period, the relay closes.
When control contact C re-opens, the timing T starts.
At the end of this timing period T, the output reverts to its initial position (timing can be interrupted by operating the Gate control contact G).
The second output can be either timed or instantaneous.

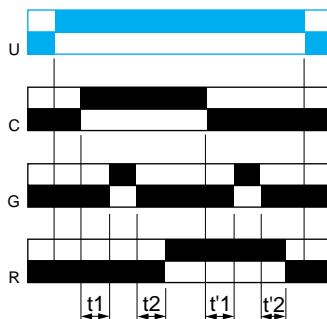
Function Ad: Pulse delayed relay with control signal

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

After power-up, pulsing or maintaining control contact C starts the timing T.
At the end of this timing period T, the output R closes.
The output R will be reset the next time control contact C is pulsed or maintained.

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

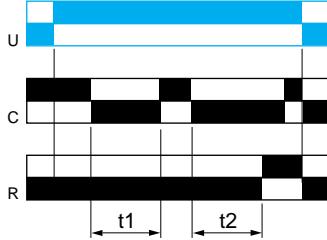
After power-up, pulsing or maintaining control contact C starts the timing T.
A single cycle then starts with 2 timing periods T of equal duration (start with output in rest position).
Output R changes state at the end of the first timing period T and reverts to its initial position at the end of the second timing period T.
Control contact C must be reset in order to re-start the single flashing cycle.

Functions (continued)**Function Ak: Asymmetrical On-delay and Off-delay with external control**

After power-up and closing of the control contact C, timing starts for a period T_a (timing can be interrupted by operating the Gate control contact G). At the end of this timing period T_a , the output R closes. Opening of control contact C causes a second timing period T_r to start (timing can be interrupted by operating the Gate control contact G). At the end of this timing period T_r , the output R reverts to its initial state.

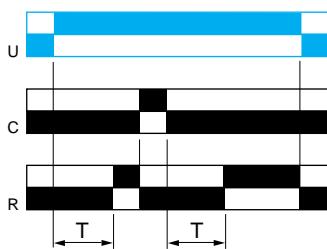
$$T_a = t_1 + t_2 + \dots$$

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

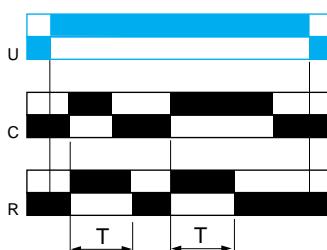
Function At: Power on delay relay (summation) with control signal

After power-up, the first opening of control contact C starts the timing. Timing can be interrupted each time control contact C closes. When the cumulative total of time periods elapsed reaches the pre-set value T, the output relay closes.

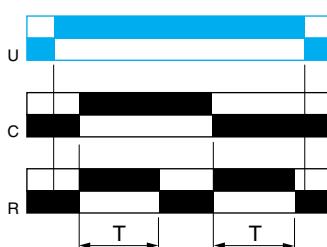
$$T = t_1 + t_2 + \dots$$

Function Aw: Off-delay on energization or on opening of control contact

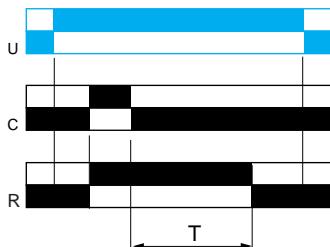
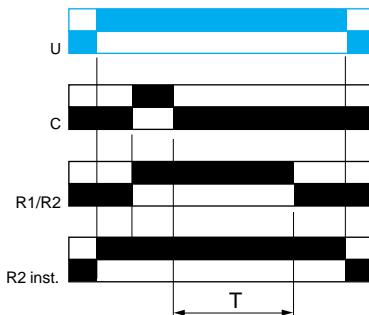
The timing period T starts on energization. At the end of the timing period T, the output R closes. Closing of the control contact C makes the output R open. Opening of control contact C restarts timing period T. At the end of the timing period T, the output R closes.

Function B: Interval relay with control signal

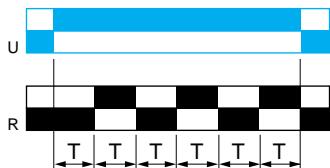
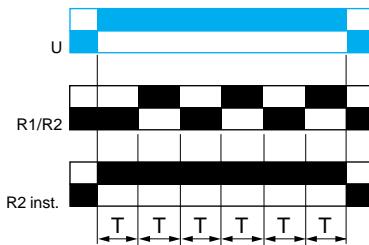
After power-up, pulsing or maintaining control contact C starts the timing T. The output R closes for the duration of the timing period T then reverts to its initial state.

Function Bw: Double interval relay with control signal

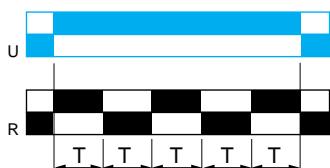
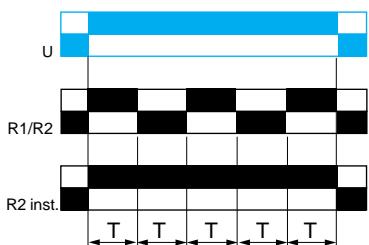
On closing and opening of control contact C, the output R closes for the duration of the timing period T.

Functions (continued)**Function C: Off-delay relay with control signal****1 output****2 outputs**

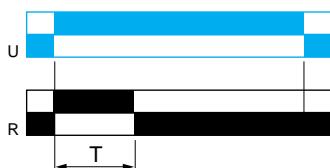
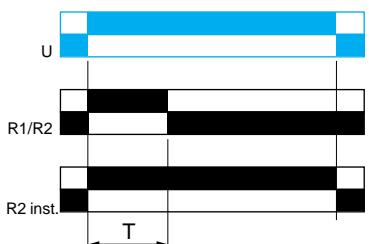
After power-up and closing of the control contact C, the output R closes.
When control contact C re-opens, timing T starts.
At the end of the timing period, output(s) R revert(s) to its/their initial state.
The second output can be either timed or instantaneous.

Function D: Symmetrical flasher relay (starting pulse off)**1 output****2 outputs**

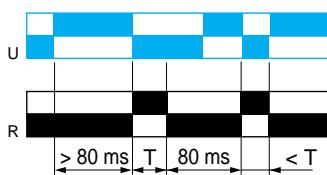
Repetitive cycle with two timing periods T of equal duration, with output(s) R changing state at the end of each timing period T.
The second output can be either timed or instantaneous.

Function Di: Symmetrical flasher relay (starting pulse on)**1 output****2 outputs**

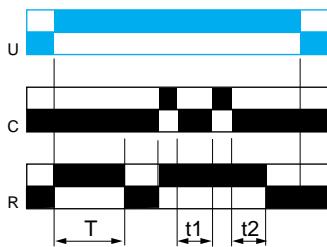
Repetitive cycle with two timing periods T of equal duration, with output(s) R changing state at the end of each timing period T.
The second output can be either timed or instantaneous.

Function H: Interval relay**1 output****2 outputs**

On energization of the relay, 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 can be either timed or instantaneous.

Functions (continued)**Function He: Pulse-on de-energization**

On de-energization, the output R closes for the duration of a timing period T.

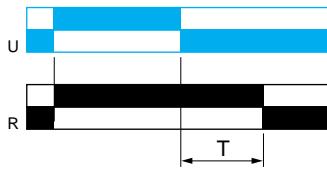
Function Ht: Interval relay (summation) with control signal

On energization, the output R closes for the duration of a timing period T then reverts to its initial state.
Pulsing or maintaining control contact C will again close the output R.
Timing T is only active when control contact C is released and so the output R will not revert to its initial state until after a time $t_1 + t_2 + \dots$.
The relay memorises the total, cumulative opening time of control contact C and, once the set time T is reached, output R reverts to its initial state.

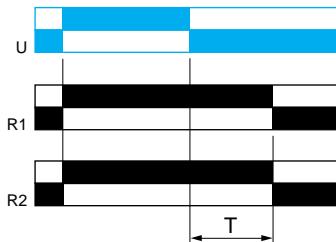
$$T = t_1 + t_2 + \dots$$

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

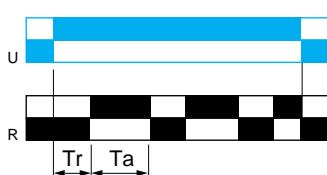
1 output



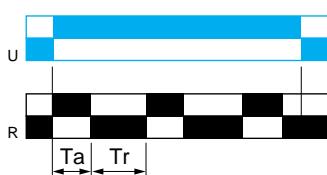
2 outputs



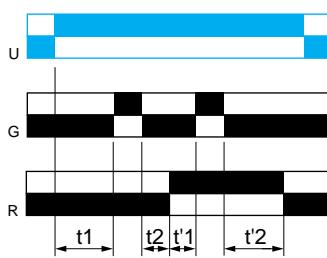
On energization, the output(s) R close(s). On de-energization, timing period T starts and, at the end of this period, the output(s) R revert to its/their initial state.

Function L: Asymmetrical flasher relay (starting pulse off)

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

Function Li: Asymmetrical flasher relay (starting pulse on)

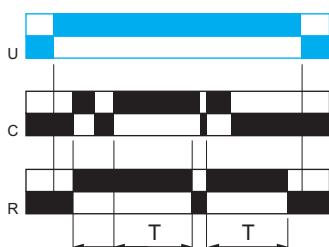
Repetitive cycle consisting of two, independently adjustable timing periods Ta and Tr . Each timing period corresponds to a different state of the output R.

Function Lt: Asymmetrical flashing with partial stop of timing

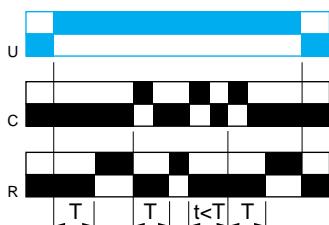
Repetitive cycle comprises of two, independently adjustable timing periods Ta and Tr . Each timing period corresponds to a different state of the output R. Gate control contact G can be operated to partially stop timing periods Ta and Tr .

$$Tr = t_1 + t_2 + \dots$$

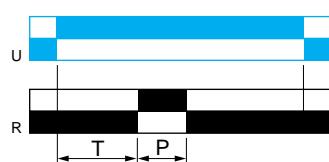
$$Ta = t'_1 + t'_2 + \dots$$

Functions (continued)**Function N: Retriggerable interval relay with control signal on**

After power-up and an initial control pulse C, the output R closes. If the interval between two control pulses C is greater than the set timing period T, timing elapses normally and the output R opens at the end of the timing period. If the interval is not greater than the set timing period, the output R remains closed until this condition is met.

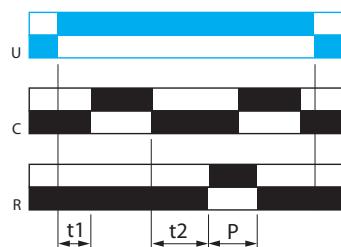
Function O: Retriggerable interval delayed relay with control signal on

An initial timing period T begins on energization. At the end of this timing period, the output R closes. As soon as there is a control pulse C, the output R reverts to its initial state and remains in that state until the interval between two control pulses is less than the value of the set timing period T. Otherwise, the output R closes at the end of the timing period T.

Function P: Pulse delayed relay with fixed pulse length

The timing period T starts on energization. At the end of this period, the output R closes for a fixed time P.

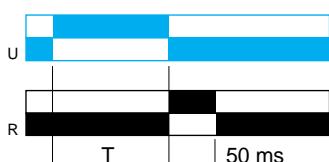
P = 500 ms

Function Pt: Pulse delayed relay (summation and fixed pulse length) with control signal off

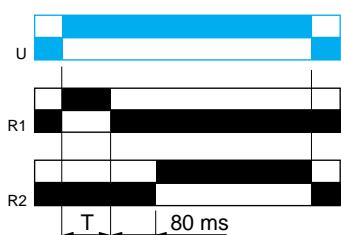
On energization, timing period T starts (it can be interrupted by operating control contact C). At the end of this period, the output R closes for a fixed time P.

T = t1 + t2 + ...

P = 500 ms

Function Qc: Star-delta timing

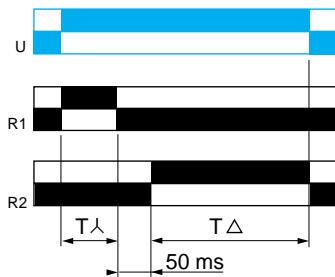
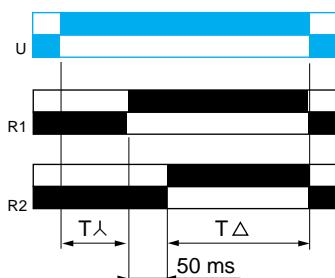
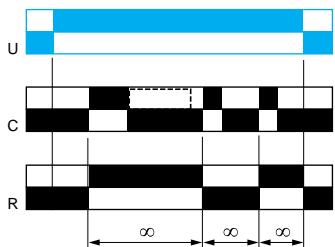
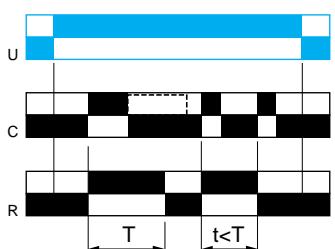
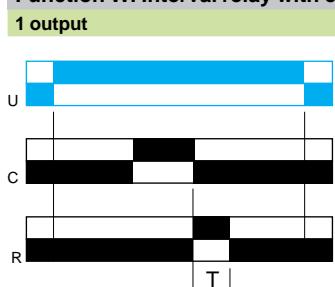
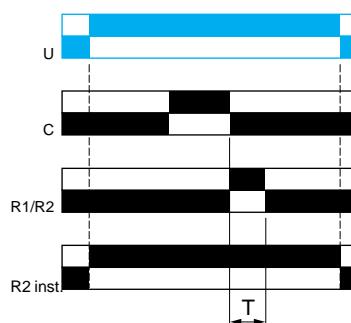
Timing for star delta starter with contact for switching to star connection.

Function Qe: Star-delta timing

On energization, the star contact closes instantly and timing starts.

At the end of the timing period, the star contact opens.

After a 80 ms pause, the delta contact closes and remains in this position.

Functions (continued)**Function Qg: Star-delta timing****Function Qt: Star-delta timing****Function T: Bistable relay with control signal on****Function Tt: Retriggerable bistable relay with control signal on****Function W: Interval relay with control signal off****2 outputs**

After power-up and opening of the control contact, the output(s) 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 can be either timed or instantaneous.

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

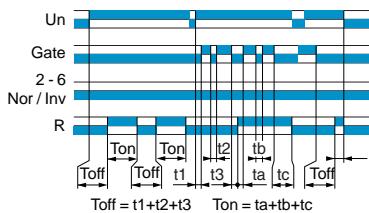
RE48ATM12MW

Function A: Delay on energization

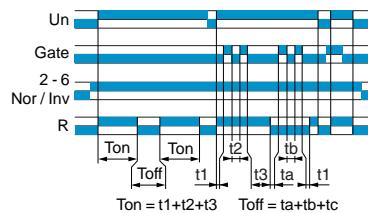


RE48ACV12MW

Function L: Asymmetrical flashing, start with output in rest position

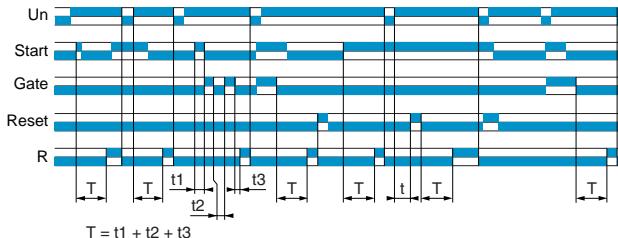


Function Li: Asymmetrical flashing, start with output in operating position

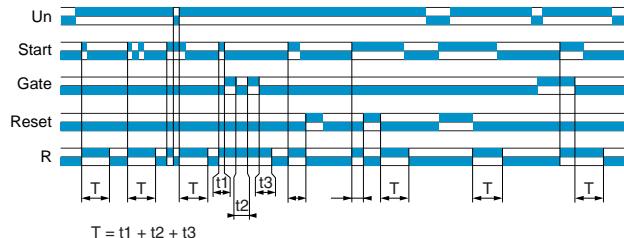


RE48A ML12MW

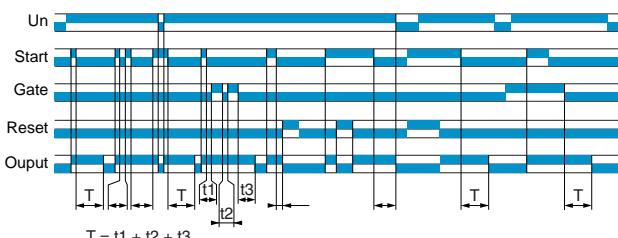
Function A: Delay on energization



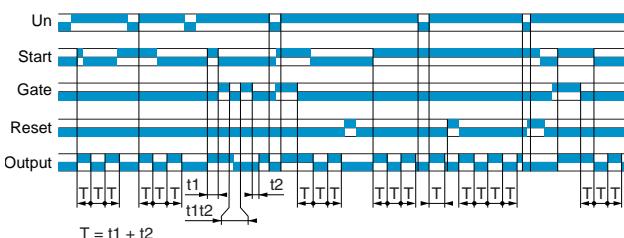
Function B: Timing on impulse, one shot



Function C: Timing after opening of control contact

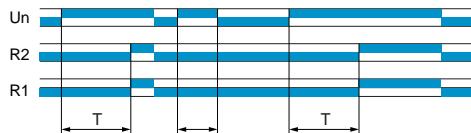


Function Di: Symmetrical flashing, start with output in operating position

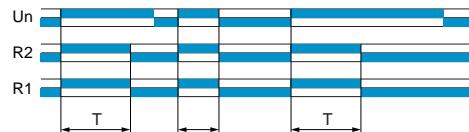


RE48AMH13MW

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/0.69 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

PF121103A

PF121103B

Modular relays with solid state output 0.7 A

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	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				
1 s, 10 s, 1 min, 10 min, 1 h, 10 h, 100 h	L, Li	~ 24...240	RE17LLBM	0.060/ 0.132
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	~ 24...240	RE17LMBM	0.060/ 0.132

Relay output, 1 C/O contact

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



RE17R•Mo

PF121113A

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	~ 12	RE17RMJU	0.070/ 0.154
	B, C	--- 24 / ~ 24...240	RE17RMMU	0.070/ 0.154
	H, Ht	~ 12...240	RE17RMMW	0.070/ 0.154
	D, Di, Ac, Bw		RE17RMMWS	0.070/ 0.154
	Ad, Ah, N, O, P, Pt, T, Tt, W	--- 24 / ~ 24...240	RE17RMXMU	0.070/ 0.154
1 s, 10 s, 1 min, 10 min, 1 h, 10 h	A, At	--- 24 / ~ 24...240	RE17RMEMU	0.070/ 0.154

Zelio Time - timing relaysIndustrial single or multifunction relays,
solid state output, width 22.5 mm/0.89 in.**Solid state output**

- Multifunction or single function
- Multivoltage
- Screw terminals
- Transparent, hinged and sealable flap on front panel



RE9A1MW



RE9MS21MW

References**Single function**

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

Multifunction

0.1 s...10 s, 0.3 s...30 s	A	~ 24... 240 V	RE9MS21MW	0.110/ 0.243
H, D, Di		~ 24... 240 V		

Zelio time - timing relays

Industrial single, dual or multifunction relays,
relay output, width 22.5 mm/0.89 in.

Output 1 C/O and 2 C/O contacts

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



RE88865125



RE88865155

References

Single function

Timing ranges	Functions	No. of relay outputs	Voltages	Reference	Weight kg/lb
1 s, 10 s, 1 min, 10 min, 1 h, 10 h, 100 h	B	1	≈ 24...240	RE88865125 (1)	0.090/ 0.198
0.6 s, 2.5 s, 20 s, 160 s	C	1	≈ 24...240	RE88865135 (1)	0.090/ 0.198
0.6 s, 2.5 s, 20 s, 160 s	K	2	≈ 24...240	RE88865265 (1)	0.090/ 0.198
Selectable interswitching time					
20 ms, 40 ms, 60 ms, 80 ms, 100 ms, 120 ms, 140 ms	Q	1	≈ 24...240	RE88865175 (1)	0.090/ 0.198
			≈ 230 / 380	RE88865176 (1)	0.090/ 0.198

Dual function

Timing ranges	Functions	No. of relay outputs	Voltages	Reference	Weight kg/lb
1 s, 10 s, 1 min, 10 min, 1 h, 10 h, 100 h	A, At	2	≈ 24...240	RE88865215 (1)	0.090/ 0.198
		1	≈ 24...240	RE88865115 (1)	0.090/ 0.198
	H, Ht	1	≈ 24...240	RE88865145 (1)	0.090/ 0.198
	L, Li	1	≈ 24...240	RE88865155 (1)	0.090/ 0.198

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	1	≈ 24...240	RE88865105 (1)	0.090/ 0.198
		1	≈ 12	RE88865100 (1)	0.090/ 0.198
		1	≈ 12...240	RE88865103 (1)	0.090/ 0.198
				RE88865503 (2)	0.090/ 0.198
		2 of which 1 convertible to instantaneous	≈ 24...240	RE88865305 (1)	0.090/ 0.198
			≈ 12	RE88865300 (1)	0.090/ 0.198
			≈ 12...240	RE88865303 (1)	0.090/ 0.198
	Ad, Ah, N, O, P, Pt, Tl, Tt, W	1	≈ 24...240	RE88865185 (1)	0.090/ 0.198
		2	≈ 24...240	RE88865385 (1)	0.090/ 0.198

(1) Connection by screw terminals.

(2) Connection by spring terminals.

References (continued)

Zelio time - timing relays

Industrial single, dual or multifunction relays, relay output, width 22.5 mm/0.89 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

PF10344SE



RE7TM11BU

PF105893SE



RE7MA11BU

PF516221



RE7CV11BU

References (continued)

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
	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
0.05 s...10 min (7 ranges)		2	≈ 24...240	RE7MY13MW	0.150/ 0.331
	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/0.89 in.

- Single function
- Single timing range
- Output 1 C/O contact
- 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 ≈ 110...240	RE8RA11BTQ RE8RA11FUTQ	0.110/ 0.243
0.3 s...30 s	D	≈ 24, ≈ 110...240	RE8CL11BUTQ	0.110/ 0.243
	K	≈ 24, ≈ 110...240	RE8RB11BUTQ	0.110/ 0.243
3 s...300 s	H	≈ 24, ≈ 110...240	RE8PE11BUTQ	0.110/ 0.243
	Qc	≈ 24, ≈ 110...240	RE8YG11BUTQ	0.110/ 0.243
20 s...30 min	W	≈ 24 ≈ 110...240	RE8PD11BTQ RE8PD11FUTQ	0.110/ 0.243
	A	≈ 24, ≈ 110...240	RE8TA31BUTQ	0.110/ 0.243
3 s...300 s	C	≈ 24 ≈ 110...240	RE8RA31BTQ RE8RA31FUTQ	0.110/ 0.243
	H	≈ 24, ≈ 110...240	RE8PE31BUTQ	0.110/ 0.243
3 s...300 s	K	≈ 24, ≈ 110...240	RE8RB31BUTQ	0.110/ 0.243
	Qc	≈ 24, ≈ 110...240	RE8YG31BUTQ	0.110/ 0.243
3 s...300 s	Qe	≈ 24 ≈ 110...240	RE8YA32BTQ RE8YA32FUTQ	0.110/ 0.243
	W	≈ 24 ≈ 110...240	RE8PD31BTQ RE8PD31FUTQ	0.110/ 0.243
20 s...30 min	A	≈ 24, ≈ 110...240	RE8TA21BUTQ	0.110/ 0.243
	C	≈ 24 ≈ 110...240	RE8RA21BTQ RE8RA21FUTQ	0.110/ 0.243
20 s...30 min	H	≈ 24, ≈ 110...240	RE8PE21BUTQ	0.110/ 0.243
	Qc	≈ 24, ≈ 110...240	RE8YG21BUTQ	0.110/ 0.243
20 s...30 min	W	≈ 24 ≈ 110...240	RE8PD21BTQ RE8PD21FUTQ	0.110/ 0.243
	A	≈ 24, ≈ 110...240	RE8TA41BUTQ	0.110/ 0.243
20 s...30 min	C	≈ 110...240	RE8RA41FUTQ	0.110/ 0.243

(1) These products are sold in packs of 10

Zelio Time - timing relays

Universal plug-in relays, 11-pin, relay output, width 35 mm/1.38 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



RE88867415



RE88867305



RE88867300

References

Single 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	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	≈ 12	RE88867300	0.080/ 0.176
		≈ 12...240	≈ 12...240	RE88867303	0.080/ 0.176

Sockets for 11-pin relays

Contact terminal arrangement	For use with relays	Connection	Unit reference (1)	Weight
Mixed (2)	RE88867•••	Connector	RXZE2M114	0.054/ 0.119

(1) These products are sold in packs of 10

(2) The inputs are mixed with the relay's supply, 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/1.38 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



RE88867215



RE88867155



RE88867105

References

Single function

Timing ranges	Functions	No. of relay outputs	Voltages	Reference	Weight 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

1 s, 10 s, 1 min, 10 min, 1 h, 10 h, 100 h	Li, L	1	≈ 24...240	RE88867155	0.080/ 0.176
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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	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 supply, with the outputs being located on the opposite side of the socket.

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



REXL2TM••



REXL4TM••

References**Single function**

Timing ranges	Functions	No. of relay outputs	Voltages	Reference	Weight
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 (7 switchable ranges)	A	2	— 12 — 24 ~ 24 (50/60 Hz) ~ 120 (50/60 Hz) ~ 230 (50/60 Hz)	REXL2TMJD REXL2TMBD REXL2TMB7 REXL2TMF7 REXL2TMP7	0.050/ 0.110 0.050/ 0.110 0.050/ 0.110 0.050/ 0.110 0.050/ 0.110
		4	— 12 — 24 ~ 24 (50/60 Hz) ~ 120 (50/60 Hz) ~ 230 (50/60 Hz)	REXL4TMJD REXL4TMBD REXL4TMB7 REXL4TMF7 REXL4TMP7	0.050/ 0.110 0.050/ (1) 0.050/ (1) 0.050/ 0.110 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	RXZES108M	0.070/ 0.154
	REXL4TM••	Connector	RXZE2S114M	0.058/ 0.128

(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 supply, with the outputs being located on the opposite side of the socket.

(4) The inputs and outputs are separated from the relay 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

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



RE48ATM12MW



RE48AMH13MW



RUZC3M



RE48ASOC11AR



RE8ASOC8SOLD



RE48ASOC11SOLD



RE48ASETCOV



RE48AIPCOV

References

8-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	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

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

IP20 socket with screw terminal connections on rear face	11	RE48ACV12MW, RE48AML12MW	1	RE48ASOC11AR	–
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Connectors and protective cover

IP20 solder connectors	8	RE48ATM12MW, RE48AMH13MW	1	RE48ASOC8SOLD	–
	11	RE48ACV12MW, RE48AML12MW	1	RE48ASOC11SOLD	–

Setting protection cover	–	RE48ATM12MW, RE48ACV12MW, RE48AML12MW, RE48AMH13MW	1	RE48ASETCOV	–
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Protective cover IP64	–	RE48ATM12MW, RE48ACV12MW, RE48AML12MW, RE48AMH13MW	1	RE48AIPCOV	–
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(1) The inputs are mixed with the relay's 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
- 1 8A relay or 2 relay outputs: 5 A (RE8885740●), 8 A (RE8885730●)
- Reset function on front panel (RE8885730●)
- Memory in the event of mains power failure (RE 8885730●)
- Locking of access to programming (RE8885710● and RE8885700●)
- Upcount or downcount mode
- Internal supply by lithium battery (10 years at 20 °C)



RE8885740●



RE8885760●

FH1215GSE

PF516220

References**8-pin relay**

Timing ranges	Functions	No. of relay outputs	Voltages	Reference	Weight 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,	A	2	~ 24 ~ 110 ~ 220...240	RE88857409 RE88857406 RE88857400	0.140/ 0.309 0.140/ 0.309 0.140/ 0.309
99.99 h, 999.9 h, 9999 h	A, B, C, D, Di, H	1	~ 12 and ~ 24...48 ~ 24 and ~ 110...240 ~ 24 and ~ 48 ~ 24 V and ~ 110, (50/60 Hz) ~ 24 and ~ 24...240, (50/60 Hz)	RE88857003 RE88857005 RE88857604 RE88857607 RE88857601	0.100/ 0.220 0.100/ 0.220 0.100/ 0.220 0.100/ 0.220 0.100/ 0.220

11-pin relay

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 ~ 24 and ~ 110...240 ~ 24 and ~ 48 ~ 24 V and ~ 110 (50/60 Hz) ~ 24 and ~ 24...240 (50/60 Hz)	RE88857103 RE88857105 RE88857704 RE88857707 RE88857701	0.100/ 0.220 0.100/ 0.220 0.100/ 0.220 0.100/ 0.220 0.100/ 0.220
A1, A2, AM, AMt	2 of which 1 instantaneous	~ 12 V and ~ 42...48 ~ 24 and ~ 110 ~ 24 V and ~ 220...240	RE88857302 RE88857307 RE88857301	0.140/ 0.309 0.140/ 0.309 0.140/ 0.309	

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	RE8885710●, RE8885730●, RE8885770●	RUZC3M	0.054/ 0.119

(1) These products are sold in packs of 10



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помошь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

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