Zelio™ Timing Relays

Catalog
2013

Schneider Electric™

Contents

Zelio™ Timing Relays

For user guides and instruction sheets, visit www.schneider-electric.us.

Zelio™ Timing Relays

Applications	**Zelio 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). Solid state outputs have been proven to last longer than traditional relay output type timers.**		**Relay** **Timers with relay outputs provide isolation between the control circuit and the outputs. Relay outputs offer flexibility in output circuits.**	
				
Type	Modular	Industrial	Modular	Industrial
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: □ *4 ranges:* 0.6 s, 2.5 s, 20 s, 160 s □ *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 □ *10 ranges:* 1 s, 3 s, 10 s, 30 s, 100 s, 300 s, 30 min, 300 min, 30 h, 300 h
Relay type	**RE17L●●●**	**RE9**	**RE17R●●●**	**RE88865●●●** **RE7**
See pages	*16, 26*	*17, 28*	*16, 26*	*18,19, 32, 28*

Zelio 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
Timers with relay outputs provide isolation between the control circuit and the outputs.
Relay outputs offer flexibility in output circuits.

Optimum	Plug-in		Panel mounted
	Universal	Miniature	Analog
□ *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:* 0.1–1 s, 1–10 s, 0.1–1 min, 1–10 min, 0.1–1 h, 1–10 h, 10–100 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
RE8	**RE88867●●●**	**REXL●TM●●**	**RE48A●●●**
20, 28	*21, 22, 34*	*23, 33*	*24, 35*

DIN rail mounted relays

RE17

RE7, RE8, RE9

REXL

Panel mounted relays

RE48A

Introduction

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 timed or instantaneous.
If the power is switched off during the timing period, the relay reverts to its initial position.

Application examples:
■ opening automatic doors,
■ alarms,
■ lighting in parking lot gates,
■ car park barriers

Definitions

■ **Relay output:**
Relay outputs are the most common type of outputs in control circuits. The relay contains a coil and armature. The coil generates a magnetic field that actuates the contact change. When power is removed from the relay, the contacts revert to their initial position.
This type of output allows isolation between the supply and the output.

There are three types of outputs:

□ **C/O**: changeover contact. When the relay is de-energized, the circuit between the common point C and N/C is closed. When the relay is operating (coil energized), the circuit between the common point C and N/O is closed.

□ **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):
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)*		Delay on energization
	Ac	Timing after closing and opening of control contact
	Ad	Timing on closing of control contact
	Ah	Repeat single cycle by operation of control contact
	Ak	Asymmetrical On-delay and Off-delay with external control
	At	Delay on energization with memory
	Aw	Off-delay when switch opens, time delay begins
B *(2)*		Timing on impulse, one shot
	Bw	Pulse output (width adjustable)
C *(2)*		Off-delay timing after opening of control contact
D *(2)*		Repeat cycle, start with output in rest position
	Di *(2)*	Repeat cycle, start with output in operating position
H *(2)*		Interval timing
	He	Pulse-on de-energization
	Ht	Timing on energization with memory
K		Delay on de-energization (without auxiliary supply)
L *(2)*		Repeat cycle, start with output in rest position
	Li *(2)*	Repeat cycle, start with output in operating position
	Lt	Repeat cycle with partial stop of timing
N		Safeguard
O		Delayed safeguard
P		Delayed fixed-length pulse
	Pt	Impulse counter (On-delay)
	Qc	Star-delta timing
	Qe	Star-delta timing
	Qg	Star-delta timing
	Qt	Star-delta timing
T		Bistable relay
	Tt	Timed impulse relay
W		On-delay after opening of control contact

(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™ Timing Relays

Selection table

Selection criteria

- **Functions** (On-delay or Off-delay, counter, repeat)
- **Supply voltage** (example: ∿/⎓ 12–240 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	∿ 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
	0.1–10 s	∿/⎓ 24–240 V	1 solid state output	0.7 A	RE9TA11MW
	0.3–30 s			0.7 A	RE9TA31MW
	3–300 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	∿/⎓ 24 V, ∿ 110–240 V	1 C/O contact	8 A	RE7TL11BU
	0.1–3 s			8 A	RE8TA61BUTQ
	0.1–10 s			8 A	RE8TA11BUTQ
	0.3–30 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	1 s–100 h	∿ 24–240 V	1 solid state output	0.7 A	RE17LMBM
	1 s–100 h	∿/⎓ 12 V	1 C/O contact	8 A	RE17RMJU
	1 s–100 h	∿/⎓ 12–240 V	1 C/O contact	8 A	RE17RMMW
				8 A	RE17RMMWS
	1 s–100 h	⎓ 24 V, ∿ 24–240 V	1 C/O contact	8 A	RE17RMMU
A, At	1 s–100 h	⎓ 24 V, ∿ 24–240 V	1 C/O contact	8 A	RE17RAMU
A, At, Aw	0.05 s–300 h	∿ 110–240 V, ∿/⎓ 24 V, ∿/⎓ 42–48 V	1 C/O contact	8 A	RE7TM11BU
A, At, B, C, D, Di, H, Ht	1 s–10 h	⎓ 24 V, ∿ 24–240 V	1 C/O contact	5 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, 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	0.1–10 s and 3–300 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
Ad, Ah, N, O, P, Pt, T, Tt, W	1 s–100 h	⎓ 24 V, ∿ 24–240 V	1 C/O contact	8 A	RE17RMXMU
Ak	0.05 s–300 h	∿ 110–240 V, ∿/⎓ 24 V, ∿/⎓ 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	RE17RB MU
C	0.1–10 s	∿/⎓ 24 V	1 C/O contact	8 A	RE8RA11BTQ
	0.3–30 s			8 A	RE8RA31BTQ
	3–300 s			8 A	RE8RA21BTQ
	1 s–100 h	⎓ 24 V, ∿ 24–240 V	1 C/O contact	8 A	RE17RCMU
	0.1–10 s	∿ 110–240 V	1 C/O contact	8 A	RE8RA11FUTQ
	0.3–30 s			8 A	RE8RA31FUTQ
	3–300 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
	0.1–10 s	∿ 24–240 V	1 solid state output	0.7 A	RE9RA11MW7
	0.3–30 s			0.7 A	RE9RA31MW7
	3–300 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
	0.1–10 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
	0.1–10 s			8 A	RE8PE11BUTQ
	0.3–30 s			8 A	RE8PE31BUTQ
	3–300 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	0.05–0.5 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
	0.05–0.5 s	∿/⎓ 24 V, ∿ 110–240 V	1 C/O contact	8 A	RE8RB51BUTQ
	0.1–10 s			8 A	RE8RB11BUTQ
	0.3–30 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	0.1–10 s	∿/⎓ 24 V, ∿ 110–240 V	1 C/O contact	8 A	RE8YG11BUTQ
	0.3–30 s			8 A	RE8YG31BUTQ
	3–300 s			8 A	RE8YG21BUTQ
Qe	0.3–30 s	∿/⎓ 24 V	1 N/O + 1 N/C	8 A	RE8YA32BTQ
	0.3–30 s	∿ 110–240 V	1 N/O + 1 N/C	8 A	RE8YA32FUTQ
	0.3–30 s	∿ 380–415 V	1 N/O + 1 N/C	8 A	RE8YA32QTQ
Qg	0.05 s–300 h	∿/⎓ 24 V, ∿ 110–240 V, ∿/⎓ 42–48 V	1 N/O + 1 N/C	8 A	RE7YR12BU
Qt	0.05 s–300 h	∿/⎓ 24 V, ∿ 110–240 V, ∿/⎓ 42–48 V	2 C/O contacts	8 A	RE7YA12BU
W	0.1–10 s	∿/⎓ 24 V	1 C/O contact	8 A	RE8PD11BTQ
	0.3–30 s			8 A	RE8PD31BTQ
	3–300 s			8 A	RE8PD21BTQ
	0.1–10 s	∿ 110–240 V	1 C/O contact	8 A	RE8PD11FUTQ
	0.3–30 s			8 A	RE8PD31FUTQ
	3–300 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

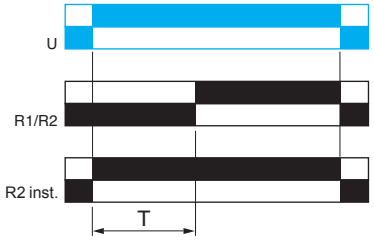
U: Supply
R: Relay or solid state output
R1/R2: 2 timed outputs
R2 inst.: The second output can be configured to be instantaneous.
T: Timing period
C: Control contact
G: Gate
Ta: Adjustable On-delay
Tr: Adjustable Off-delay

Function diagram :
- Relay de-energized
- Relay energized
- Output open
- Output closed

Function A: Delay on energization

1 output

2 outputs

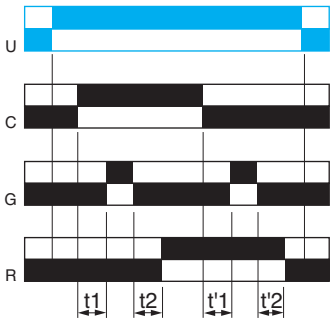


2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.).

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

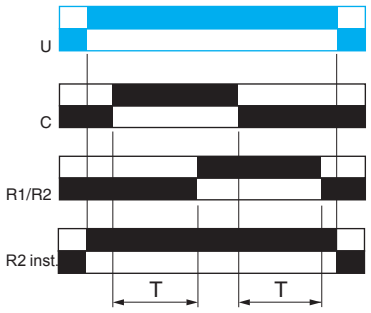
Function Ac: Timing after closing and opening of control contact

1 output



T = t1 + t2 + …
T = t'1 + t'2 + …

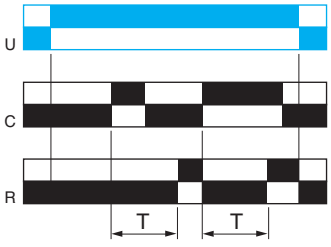
2 outputs



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

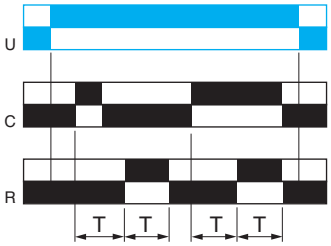
After power-up, closing of the control contact C causes the timing period T to start (timing can be interrupted by operating the Gate control contact G).
At the end of this timing period, the relay closes.
When control contact C re-opens, the timing period T starts.
At the end of this timing period T,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

Function Ad: Timing on closing of control contact



After power-up, pulsing or maintaining control contact C starts the timing period 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.

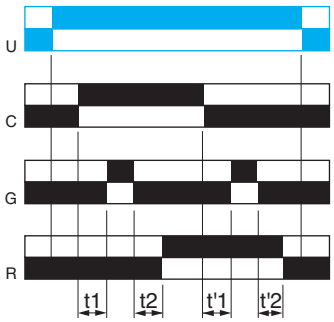
Function Ah: Repeat single cycle by operation of control contact



After power-up, pulsing or maintaining control contact C starts the timing period 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 repeat cycle.

Functions (continued)

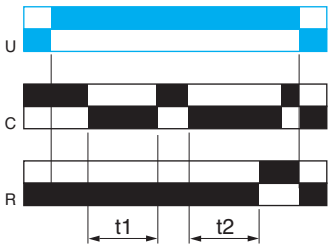
Function Ak: Asymmetrical On-delay and Off-delay with external control



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

Ta = t1 + t2 + …
Tr = t'1 + t'2 + …

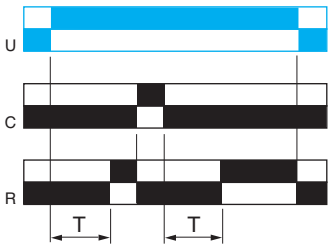
Function At: Delay on energization with memory



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.

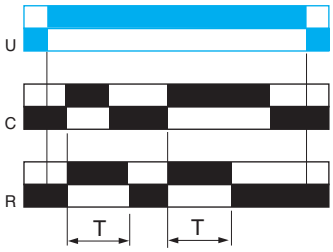
T = t1 + t2 + …

Function Aw: Off-delay when switch opens, time delay begins



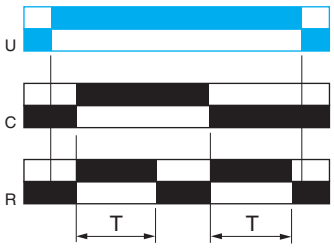
The timing period T starts on energization.
At the end of the timing period T, the output R closes.
Closing control contact C opens output R.
Opening control contact C restarts the timing period T.
At the end of the timing period T, the output R closes.

Function B: Timing on impulse, one shot



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

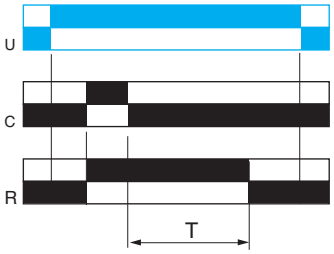
Function Bw: Pulse output (width adjustable)



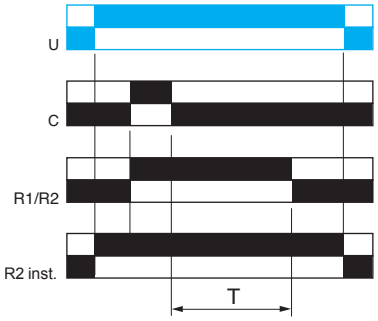
On closing and opening of control contact C, the output R closes for the duration of the timing period T.

Function C: Off-delay timing after opening of control contact

1 output



2 outputs

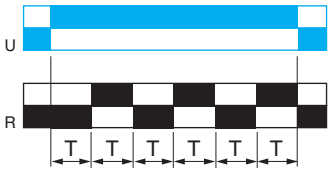


2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.).

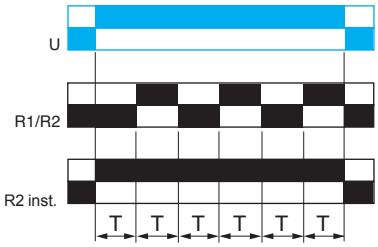
After power-up and closing of the control contact C, the outputs R close.
When control contact C re-opens, timing period T starts.
At the end of the timing period, the outputs R revert to their initial state.
The second output can be either timed or instantaneous.

Function D: Repeat cycle, start with output in rest position

1 output



2 outputs

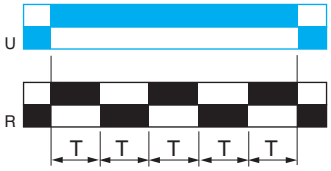


2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.).

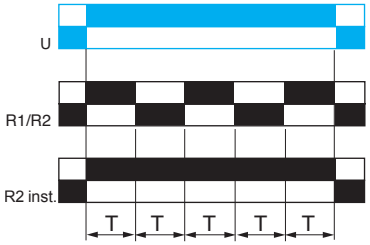
Repetitive cycle with two timing periods T of equal duration, with the outputs R changing their state at the end of each timing period T.
The second output can be either timed or instantaneous.

Function Di: Repeat cycle, start with output in operating position

1 output



2 outputs



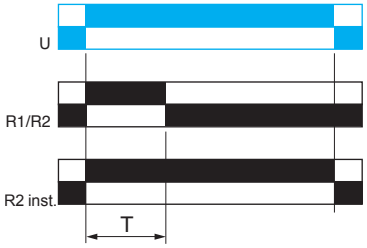
2 timed outputs (R1/R2) or 1 timed output (R1) and 1 instantaneous output (R2 inst.).

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

Function H: Interval timing

1 output

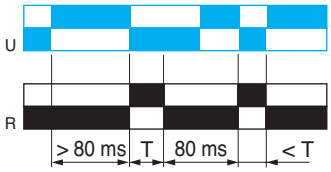
2 outputs



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

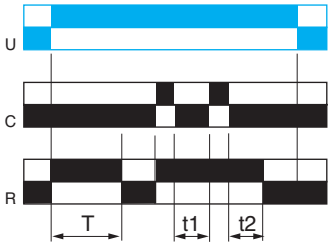
On energization of the relay, timing period T starts and the outputs R close.
At the end of the timing period T, outputs R revert to their initial state.
The second output can be either timed or instantaneous.

Function He: Pulse on de-energization



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

Function Ht: Timing on energization with memory



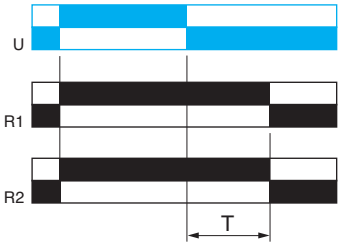
On energization, the output R closes for the duration of a timing period T, then reverts to its initial state.
Pulsing or maintaining control contact C will again close the output R.
Timing T is only active when control contact C is released and so the output R will not revert to its initial state until after a time t1 + t2 + … .
The relay memorizes the total, cumulative opening time of control contact C and, when the set time T is reached, output R reverts to its initial state.

T = t1 + t2 + …

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

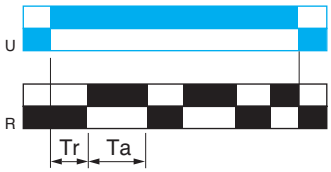
1 output

2 outputs



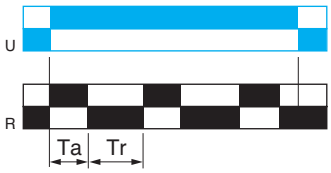
On energization, the outputs R close.
On de-energization, timing period T starts and, at the end of this period, the outputs R revert to their initial state.

Function L: Repeat cycle, start with output in rest position



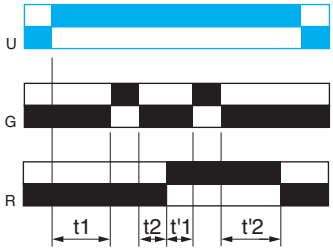
Repetitive cycle with two, independently adjustable timing periods Ta and Tr.
Each timing period corresponds to a different state of the output R.

Function Li: Repeat cycle, start with output in operating position



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

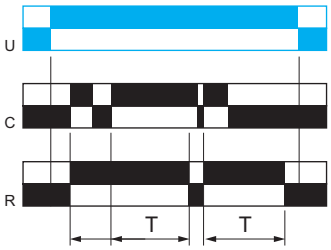
Function Lt: Repeat cycle with partial stop of timing



Repetitive cycle with 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.

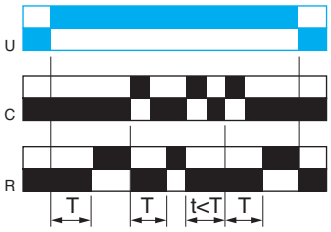
Tr = t1 + t2 + …
Ta = t'1 + t'2 + …

Function N: Safeguard



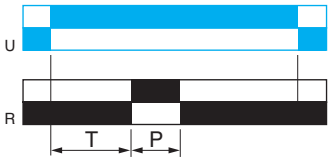
After power-up and an initial control pulse C, the output R closes.
If the interval between two control pulses C is greater than the set timing period T, timing elapses normally and the output R opens at the end of the timing period. If the interval is not greater than the set timing period, the output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

Function O: Delayed safeguard



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.

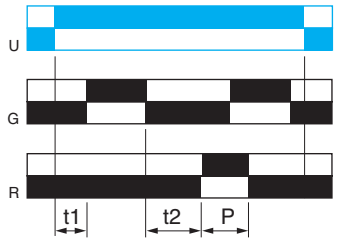
Function P: Delayed fixed-length pulse



P = 500 ms

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

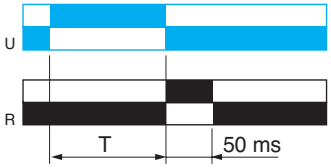
Function Pt: Impulse counter (On-delay)



T = t1 + t2 + …
P = 500 ms

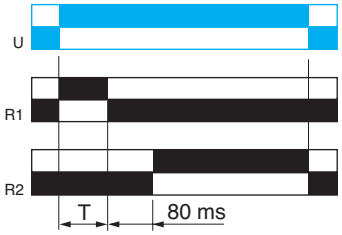
On energization, timing period T starts (it can be interrupted by operating the Gate control contact G).
At the end of this period, the output R closes for a fixed time P.

Function Qc: Star-delta timing



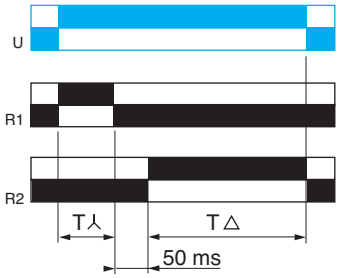
Timing for star delta starter with contact for switching to star connection.

Function Qe: Star-delta timing



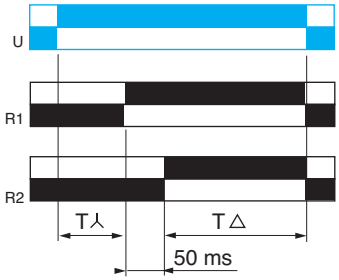
On energization, the star contact closes instantly and timing starts.
At the end of the timing period, the star contact opens.
After an 80 ms pause, the delta contact closes and remains in this position.

Function Qg: Star-delta timing



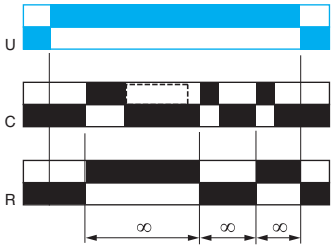
Timing for star delta starter with contact for switching to star connection.

Function Qt: Star-delta timing



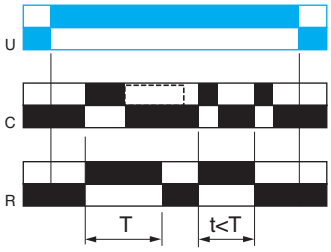
Timing for star-delta starter with double On-delay period.

Function T: Bistable relay



After power-up, pulsing or maintaining of control contact C turns on the output R.
A second pulse on the control contact C turns off the output R.

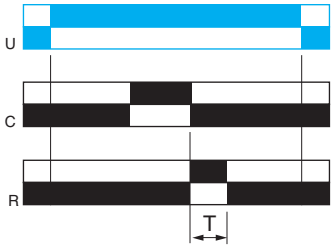
Function Tt: Timed impulse relay



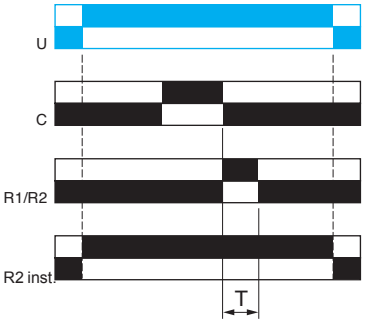
After power-up, pulsing or maintaining control contact C turns on output R and starts the timing.
The output turns off at the end of the timing period T or following a second pulse on the control contact C.

Function W: On-delay after opening of control contact

1 output



2 outputs



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

After power-up and opening of the control contact, the outputs R close for a timing period T.
At the end of this timing period, the outputs revert to their initial state.
The second output can be either timed or instantaneous.

Zelio™ Timing Relays

Modular relays with solid state or relay output, width 17.5 mm (0.7 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 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	Catalog number	Weight
		V		kg (lb)
1 s, 10 s, 1 min, 10 min, 1 h, 10 h, 100 h	A	≂ 24–240	RE17LAMW	0.060 (0.13)
	H	∼ 24–240	RE17LHBM	0.060 (0.13)
	C	∼ 24–240	RE17LCBM	0.060 (0.13)
Dual function				
1 s, 10 s, 1 min, 10 min, 1 h, 10 h, 100 h	L, Li	∼ 24–240	RE17LLBM	0.060 (0.13)
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 (0.13)

Modular relays with relay output, 1 C/O contact

Single function

Timing ranges	Functions	Voltages	Catalog number	Weight
		V		kg (lb)
1 s, 10 s, 1 min, 10 min, 1 h, 10 h, 100 h	B	≂ 24–240	RE17RBMU	0.060 (0.13)
	C	≂ 24–240	RE17RCMU	0.060 (0.13)
Dual function				
1 s, 10 s, 1 min, 10 min, 1 h, 10 h, 100 h	A, At	≂ 24–240	RE17RAMU	0.060 (0.13)
	H, Ht	≂ 24–240	RE17RHMU	0.060 (0.13)
	L, Li	≂ 24–240	RE17RLMU	0.060 (0.13)
		≂ 12	RE17RLJU	0.060 (0.13)
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	0.060 (0.13)
		≂ 24–240	RE17RMMU	0.060 (0.13)
		≂ 12–240	RE17RMMW	0.060 (0.13)
			RE17RMMWS	0.060 (0.13)
	Ad, Ah, N, O, P, Pt, T, Tt, W	≂ 24–240	RE17RMXMU	0.060 (0.13)
1 s, 10 s, 1 min 10 min, 1 h, 10 h	A, At, B, C, H, Ht, D, Di	≂ 24–240	RE17RMEMU	0.060 (0.13)

NOTE: *Detailed function descriptions begin on page 10.*
Dimensions and wiring diagrams begin on page 26.

Zelio™ Timing Relays

Industrial single or multifunction relays, solid state output, width 22.5 mm (0.9 in.)

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

RE9●A●1MW

RE9MS21MW

Catalog numbers

Single function

Timing ranges	Functions	Voltages	Catalog number	Weight
		V		kg (lb)
0.1–10 s	A	≂ 24–240 V	RE9TA11MW	0.110 (0.24)
	C	≂ 24–240 V	RE9RA11MW7	0.110 (0.24)
0.3–30 s	A	≂ 24–240 V	RE9TA31MW	0.110 (0.24)
	C	≂ 24–240 V	RE9RA31MW7	0.110 (0.24)
3–300 s	A	≂ 24–240 V	RE9TA21MW	0.110 (0.24)
	C	≂ 24–240 V	RE9RA21MW7	0.110 (0.24)
40 s–60 min	A	≂ 24–240 V	RE9TA51MW	0.110 (0.24)
	C	≂ 24–240 V	RE9RA51MW7	0.110 (0.24)

Multifunction

0.1–10 s, 0.3–30 s	A	≂ 24–240 V	RE9MS21MW	0.110 (0.24)
	H, D, Di	∼ 24–240 V		

NOTE: Detailed function descriptions begin on page 10.
Dimensions and wiring diagrams begin on page 26.

Zelio™ Timing Relays

Industrial single, dual, or multifunction relays, relay output, width 22.5 mm (0.9 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

Catalog numbers

Single function

Timing ranges	Functions	No. of relay outputs	Voltages	Catalog number	Weight
			V		kg (lb)
1 s, 10 s, 1 min, 10 min, 1 h, 10 h, 100 h	B	1	⎓ 24–240	RE88865125 (1)	0.090 (0.20)
	C	1	⎓ 24–240	RE88865135 (1)	0.090 (0.20)
0.6 s, 2.5 s, 20 s, 160 s	K	2	⎓ 24–240	RE88865265 (1)	0.090 (0.20)

Selectable interswitching time	Functions	No. of relay outputs	Voltages	Catalog number	Weight kg (lb)
20 ms, 40 ms, 60 ms, 80 ms, 100 ms, 120 ms, 140 ms	Q	1	⎓ 24–240	RE88865175 (1)	0.090 (0.20)
			∿ 230 / 380	RE88865176 (1)	0.090 (0.20)

Dual function

Timing ranges	Functions	No. of relay outputs	Voltages	Catalog number	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 (0.20)
		1	⎓ 24–240	RE88865115 (1)	0.090 (0.20)
	H, Ht	1	⎓ 24–240	RE88865145 (1)	0.090 (0.20)
	L, Li	1	⎓ 24–240	RE88865155 (1)	0.090 (0.20)

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 (0.20)
		1	⎓ 12	RE88865100 (1)	0.090 (0.20)
		1	⎓ 12–240	RE88865103 (1)	0.090 (0.20)
				RE88865503 (2)	0.090 (0.20)
		2, of which 1 is convertible to instantaneous	⎓ 24–240	RE88865305 (1)	0.090 (0.20)
			⎓ 12	RE88865300 (1)	0.090 (0.20)
			⎓ 12–240	RE88865303 (1)	0.090 (0.20)
	Ad, Ah, N, O P, Pt, Tl, Tt, W	1	⎓ 24–240	RE88865185 (1)	0.090 (0.20)
		2	⎓ 24–240	RE88865385 (1)	0.090 (0.20)

(1) Connection by screw terminals.
(2) Connection by spring terminals.

NOTE: *Detailed function descriptions begin on page 10.*
Dimensions and wiring diagrams begin on page 26.

Zelio™ Timing Relays

Industrial single, dual, or multifunction relays, relay output, width 22.5 mm (0.9 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*

RE7TM11BU

RE7MA11BU

RE7CV11BU

Catalog numbers

Timing ranges	Functions	No. of relay outputs	Voltages	Catalog number	Weight
			V		kg (lb)
0.05 s–300 h (10 ranges)	**A, Aw, At**	1	⎓ 24, ∿ 110–240, ⎓ 42–48	**RE7TM11BU**	0.150 (0.33)
	Ac	1	⎓ 24, ∿ 110–240, ⎓ 42–48	**RE7MA11BU**	0.150 (0.33)
		2	⎓ 24, ∿ 110–240, ⎓ 42–48	**RE7MA13BU** *(timing periods are equal)*	0.150 (0.33)
	Ak	1	⎓ 24, ∿ 110–240, ⎓ 42–48	**RE7MV11BU**	0.150 (0.33)
	C	1	⎓ 24, ∿ 110–240, ⎓ 42–48	**RE7RA11BU**	0.150 (0.33)
		1	⎓ 24, ∿ 110–240, ⎓ 42–48	**RE7RM11BU** *dry (voltage free) contact*	0.150 (0.33)
		2	⎓ 24, ∿ 110–240, ⎓ 42–48	**RE7RL13BU** *dry (voltage free) contact*	0.150 (0.33)
	Ht, W	1	⎓ 24, ∿ 110–240, ⎓ 42–48	**RE7PM11BU**	0.150 (0.33)
	L, Li, Lt	1	⎓ 24, ∿ 110–240, ⎓ 42–48	**RE7CV11BU**	0.150 (0.33)
	A, C, H, W, D, Di	1	⎓ 24, ∿ 110–240, ⎓ 42–48	**RE7ML11BU**	0.150 (0.33)
	A	1	⎓ 24, ∿ 110…240	**RE7TL11BU**	0.150 (0.33)
		2	⎓ 24, ∿ 110–240, ⎓ 42–48	**RE7TP13BU**	0.150 (0.33)
	H	1	⎓ 24, ∿ 110–240	**RE7PE11BU**	0.150 (0.33)
		2	⎓ 24, ∿ 110–240, ⎓ 42–48	**RE7PP13BU**	0.150 (0.33)
	D	1	⎓ 24, ∿ 110–240	**RE7CL11BU**	0.150 (0.33)
		2	⎓ 24, ∿ 110–240, ⎓ 42–48	**RE7CP13BU**	0.150 (0.33)
	W	2	⎓ 24, ∿ 110–240, ⎓ 42–48	**RE7PD13BU**	0.150 (0.33)
	Qt	2	⎓ 24, ∿ 110–240, ⎓ 42–48	**RE7YA12BU**	0.150 (0.33)
	Qg	2	⎓ 24, ∿ 110–240, ⎓ 42–48	**RE7YR12BU**	0.150 (0.33)
	A, C, H, W, D, Di, Qg, Qt	2	⎓ 24, ∿ 110–240, ⎓ 42–48	**RE7MY13BU**	0.150 (0.33)
		2	⎓ 24–240	**RE7MY13MW**	0.150 (0.33)
0.05 s–10 min (7 ranges)	**K**	1	⎓ 24–240	**RE7RB11MW**	0.150 (0.33)
		2	⎓ 24–240	**RE7RB13MW**	0.150 (0.33)

NOTE: Detailed function descriptions begin on page 10. Dimensions and wiring diagrams begin on page 26.

Zelio™ Timing Relays

Industrial single function relays, optimum, relay output, width 22.5 mm (0.9 in.)

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

RE8TA●●●●●●

Catalog numbers

Timing ranges	Functions	Voltages	Catalog number	Weight
		V	(1)	kg (lb)
0.05–0.5 s	K	⎓ 24, ∿ 110–240	RE8RB51BUTQ	0.110 (0.24)
	He	⎓ 24, ∿ 110–240	RE8PT01BUTQ	0.110 (0.24)
0.1–3 s	A	⎓ 24, ∿ 110–240	RE8TA61BUTQ	0.110 (0.24)
0.1–10 s	A	⎓ 24, ∿ 110–240	RE8TA11BUTQ	0.110 (0.24)
	C	⎓ 24	RE8RA11BTQ	0.110 (0.24)
		∿ 110–240	RE8RA11FUTQ	0.110 (0.24)
	D	⎓ 24, ∿ 110–240	RE8CL11BUTQ	0.110 (0.24)
	K	⎓ 24, ∿ 110–240	RE8RB11BUTQ	0.110 (0.24)
	H	⎓ 24, ∿ 110–240	RE8PE11BUTQ	0.110 (0.24)
	Qc	⎓ 24, ∿ 110–240	RE8YG11BUTQ	0.110 (0.24)
	W	⎓ 24	RE8PD11BTQ	0.110 (0.24)
		∿ 110–240	RE8PD11FUTQ	0.110 (0.24)
0.3–30 s	A	⎓ 24, ∿ 110–240	RE8TA31BUTQ	0.110 (0.24)
	C	⎓ 24	RE8RA31BTQ	0.110 (0.24)
		∿ 110–240	RE8RA31FUTQ	0.110 (0.24)
	H	⎓ 24, ∿ 110–240	RE8PE31BUTQ	0.110 (0.24)
	K	⎓ 24, ∿ 110–240	RE8RB31BUTQ	0.110 (0.24)
	Qc	⎓ 24, ∿ 110–240	RE8YG31BUTQ	0.110 (0.24)
	Qe	⎓ 24	RE8YA32BTQ	0.110 (0.24)
		∿ 110–240	RE8YA32FUTQ	0.110 (0.24)
		∿ 380–415	RE8YA32QTQ	0.110 (0.24)
	W	⎓ 24	RE8PD31BTQ	0.110 (0.24)
		∿ 110–240	RE8PD31FUTQ	0.110 (0.24)
3–300 s	A	⎓ 24, ∿ 110–240	RE8TA21BUTQ	0.110 (0.24)
	C	⎓ 24	RE8RA21BTQ	0.110 (0.24)
		∿ 110–240	RE8RA21FUTQ	0.110 (0.24)
	H	⎓ 24, ∿ 110–240	RE8PE21BUTQ	0.110 (0.24)
	Qc	⎓ 24, ∿ 110–240	RE8YG21BUTQ	0.110 (0.24)
	W	⎓ 24	RE8PD21BTQ	0.110 (0.24)
		∿ 110–240	RE8PD21FUTQ	0.110 (0.24)
20 s–30 min	A	⎓ 24, ∿ 110–240	RE8TA41BUTQ	0.110 (0.24)
	C	∿ 110–240	RE8RA41FUTQ	0.110 (0.24)

(1) These products are sold in packs of 10

NOTE: Detailed function descriptions begin on page 10.
Dimensions and wiring diagrams begin on page 26.

Zelio™ Timing Relays

Universal plug-in relays, 11-pin, relay output, width 35 mm (1.4 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

Catalog numbers

Single function

Timing ranges	Functions	No. of relay outputs	Voltages	Catalog number	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 (0.18)

Dual function

1 s, 10 s, 1 min, 10 min, 1 h, 10 h, 100 h	**A, At**	2	≂ 24–240	**RE88867415**	0.080 (0.18)
	Li, L	2	≂ 24–240	**RE88867455**	0.080 (0.18)

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 is instantaneous	≂ 24–240	**RE88867305**	0.080 (0.18)
			≂ 12	**RE88867300**	0.080 (0.18)
			≂ 12–240	**RE88867303**	0.080 (0.18)

Sockets *(1)* for 11-pin relays

Contact terminal arrangement	For use with relays	Connection	Catalog number	Weight
				kg (lb)
Mixed *(2)*	RE88867●●●	Connector	**RXZE2M114**	0.054 (0.12)

(1) These products are sold in packs of 10
(2) The inputs are mixed with the relay's supply. The outputs are located on the opposite side of the socket.

NOTE: *Detailed function descriptions begin on page 10.*
Dimensions and wiring diagrams begin on page 26.

Zelio™ Timing Relays

Universal plug-in relays, 8-pin, relay output, width 35 mm (1.4 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

Catalog numbers

Single function

Timing ranges	Functions	No. of relay outputs	Voltages	Catalog number	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 (0.18)
	C	1	≂ 24–240	**RE88867135**	0.080 (0.18)

Dual function

1 s, 10 s, 1 min, 10 min, 1 h, 10 h, 100 h	Li, L	1	≂ 24–240	**RE88867155**	0.080 (0.18)

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 (0.18)
			≂ 12	**RE88867100**	0.080 (0.18)
			≂ 12–240	**RE88867103**	0.080 (0.18)

Sockets *(1)* for 8-pin relays

Contact terminal arrangement	For use with relays	Catalog number	Weight kg (lb)
Mixed *(2)*	RE888671●●, RE888672●●	**RUZC2M**	0.054 (0.12)

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

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

NOTE: *Detailed function descriptions begin on page 10.*
Dimensions and wiring diagrams begin on page 26.

Zelio™ 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)*
- *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●●

Catalog numbers

Single function

Timing ranges	Functions	No. of relay outputs	Voltages	Catalog number	Weight
			V		kg (lb)
0.1–1 s, 1–10 s, 0.1–1 min, 1–10 min, 0.1–1 h, 1–10 h, 10–100 h (7 switchable ranges)	**A**	2	⎓ 12	**REXL2TMJD**	0.050 (0.11)
			⎓ 24	**REXL2TMBD**	0.050 (0.11)
			∼ 24 (50/60 Hz)	**REXL2TMB7**	0.050 (0.11)
			∼ 120 (50/60 Hz)	**REXL2TMF7**	0.050 (0.11)
			∼ 230 (50/60 Hz)	**REXL2TMP7**	0.050 (0.11)
		4	⎓ 12	**REXL4TMJD**	0.050 (0.11)
			⎓ 24 *(1)*	**REXL4TMBD**	0.050 (0.11)
			∼ 24 (50/60 Hz) *(1)*	**REXL4TMB7**	0.050 (0.11)
			∼ 120 (50/60 Hz)	**REXL4TMF7**	0.050 (0.11)
			∼ 230 (50/60 Hz)	**REXL4TMP7**	0.050 (0.11)

Sockets *(2)* for relays

Contact terminal arrangement	For use with relays	Connection	Catalog number	Weight
				kg (lb)
Mixed *(3)*	REXL2TM●●, REXL4TM●●	Screw clamp	**RXZE2M114** *(5)*	0.048 (0.11)
	REXL2TM●●, REXL4TM●●	Connector	**RXZE2M114M** *(6)*	0.056 (0.12)
Separate *(4)*	REXL2TM●●	Connector	**RXZES108M**	0.070 (0.15)
	REXL4TM●●	Connector	**RXZE2S114M**	0.058 (0.13)

(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 packs of 10.
(3) The inputs are mixed with the relay's supply. The outputs are 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.

NOTE: Detailed function descriptions begin on page 10.
Dimensions and wiring diagrams begin on page 26.

Zelio™ 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

Catalog numbers

8-pin relay

Timing ranges	Function	No. of relay outputs	Voltages	Catalog number	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 (0.31)
	A1, A2, H1, H2	2, of which 1 is instantaneous	≂ 24–240	**RE48AMH13MW**	0.140 (0.31)

11-pin relay

Timing ranges	Function	No. of relay outputs	Voltages	Catalog number	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 (0.31)
	A, B, C, Di	2	≂ 24–240	**RE48AML12MW**	0.140 (0.31)

NOTE: *Detailed function descriptions begin on page 10.*
Dimensions and wiring diagrams begin on page 26.

Zelio™ Timing Relays

Analog, electronic relays, relay output, 48 x 48

RUZC3M

RE48ASOC11AR

RE48ASOC8SOLD

RE48ASOC11SOLD

RE48ASETCOV

RE48AIPCOV

Description	Number of pins	For use with relays	Sold in packs of	Catalog number	Weight kg (lb)
Sockets					
IP20 sockets with connection by connector and mixed contact terminals *(1)*	8	RE48ATM12MW, RE48AMH13MW	10	**RUZC2M**	0.054 (0.12)
	11	RE48ACV12MW, RE48AML12MW	10	**RUZC3M**	0.054 (0.12)
IP20 socket with screw terminal connections on rear face	11	RE48ACV12MW, RE48AML12MW	1	**RE48ASOC11AR**	–
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**	–
Protective cover IP64	–	RE48ATM12MW, RE48ACV12MW, RE48AML12MW, RE48AMH13MW	1	**RE48AIPCOV**	–

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

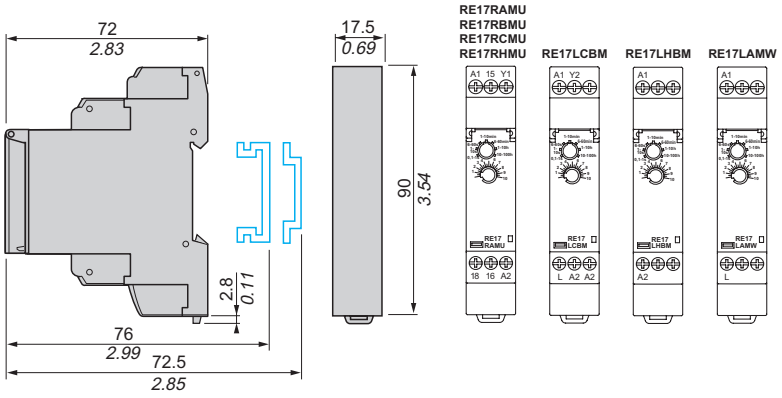
NOTE: *Detailed function descriptions begin on page 10.*
Dimensions and wiring diagrams begin on page 26.

Zelio™ Timing Relays

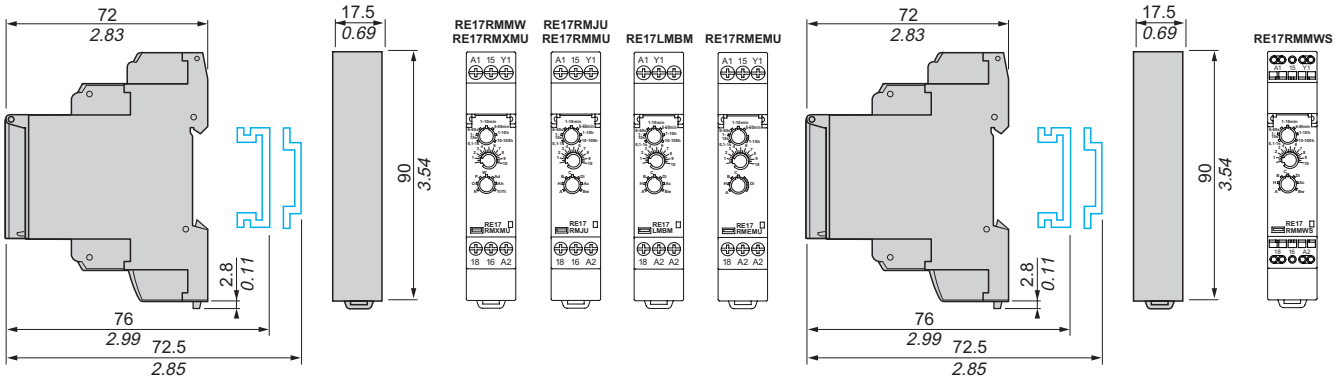
Modular relays with solid state or relay output, width 17.5 mm (0.69 in.)

Dimensions and terminal locations for RE17 models

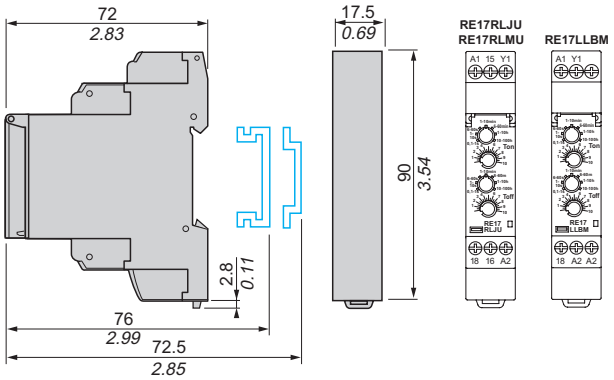
RE17RAMU, RE17RBMU, RE17RCMU, RE17RHMU, RE17LCBM, RE17LHBM, RE17LAMW



RE17RMMW, RE17RMXMU, RE17RMJU, RE17RMMU, RE17LMBM, RE17MEMU, RE17RMMWS

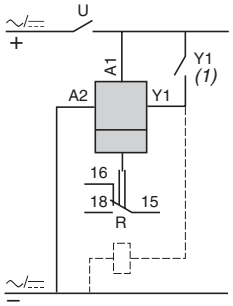


RE17RLJU, RE17RLMU, RE17LLBM



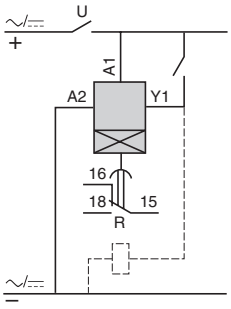
Dual dimensions = $\frac{\text{in.}}{\text{mm}}$

Wiring connection diagrams for RE17 models

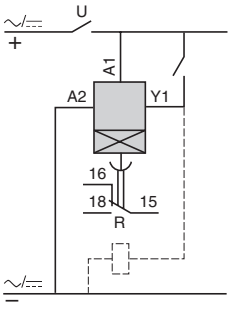


Contact Y1:
Control for functions B, C, Ac, Bw, Ad, Ah, N, O, W, Tl, Tt
Partial stop for functions At, Ht, and Pt
Function D if Di selected
Not used for functions A, H, and P

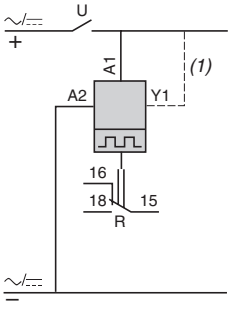
Functions A and At



Functions H and Ht

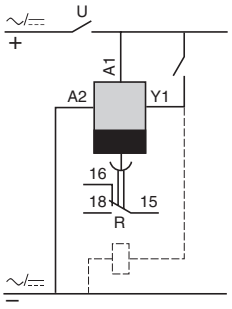


Functions L and Li



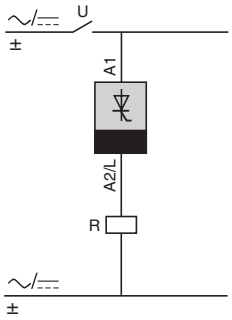
(1) Jumper A1-Y1 for function L only

Functions B and C

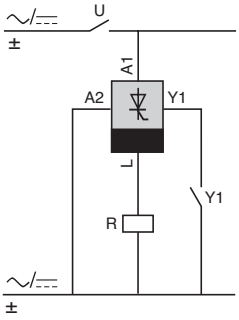


Single function relay

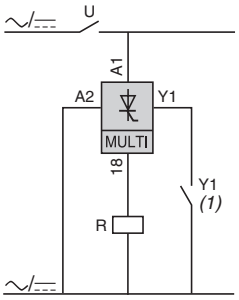
Functions A and H



Function C



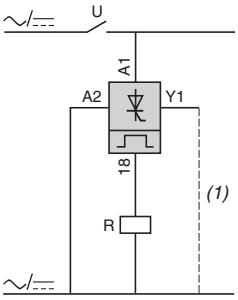
Multi-function relay



Contact Y1:
- Control for functions B, C, Ac, Bw
- Partial stop for functions At, Ht
- Function D if Di selected
- Not used for functions A and H

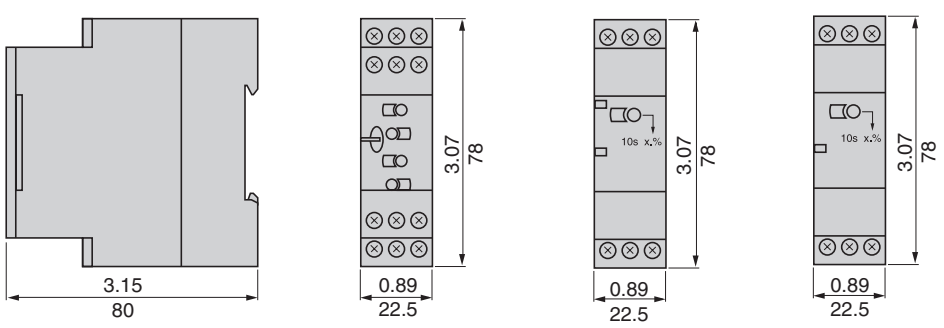
Flasher

Functions L and Li



Dimensions and terminal locations for RE7, RE8, and RE9 models

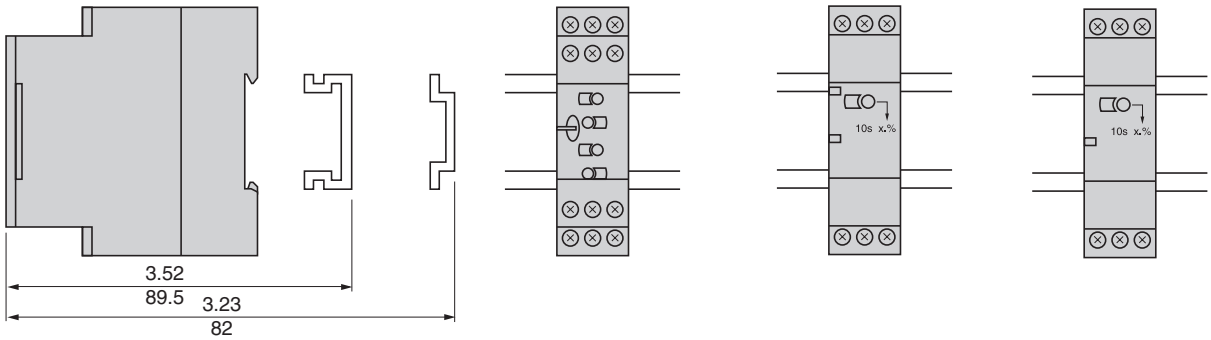
RE7 **RE8** **RE9**



Dual dimensions = $\frac{\text{in.}}{\text{mm}}$

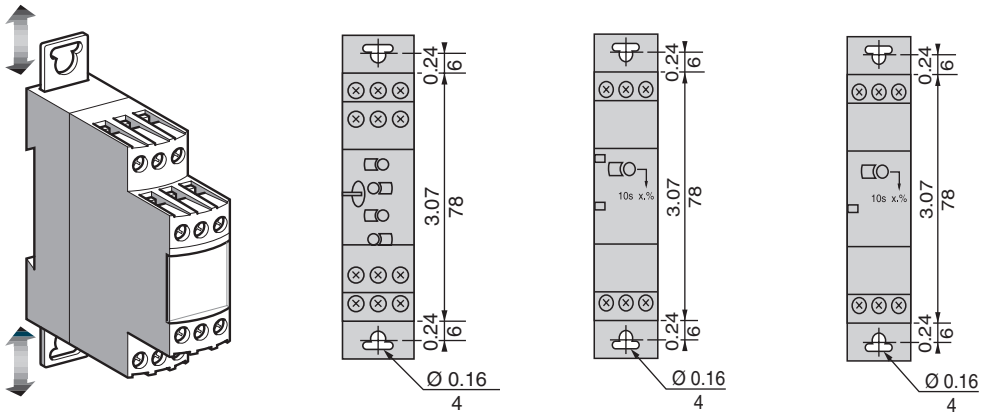
Rail mounting

RE7 **RE8** **RE9**



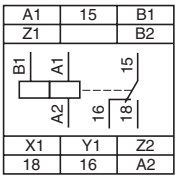
Direct panel mounting

RE7 **RE8** **RE9**

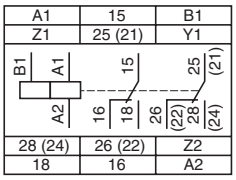


Wiring connection diagrams for RE7 models: Industrial multi-function timers

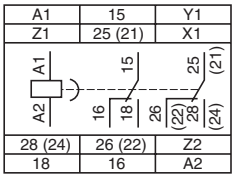
RE7ML11BU



RE7MY13BU

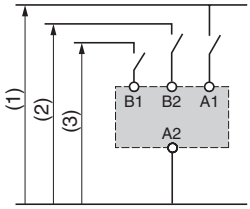


RE7MY13MW

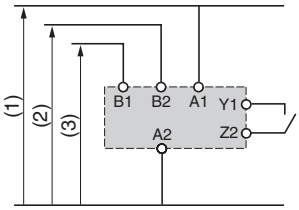


Recommended wiring diagrams

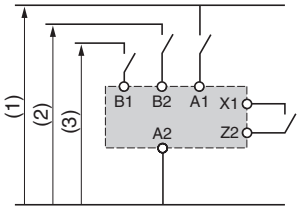
Start on energization
RE7ML11BU, RE7MY13BU, or *RE7MY13MW*



Start by external control
RE7ML11BU, RE7MY13BU, or *RE7MY13MW*



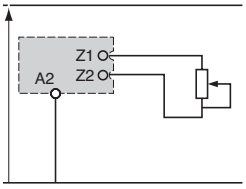
External control of partial stop
RE7ML11BU or *RE7MY13MW*



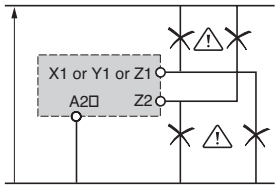
(1) 110-240 Vac: *RE7ML11BU* or *RE7MY13BU*; 24-240 Vdc or Vac: *RE7MY13MW*
(2) 42-48 Vac or Vdc: *RE7ML11BU*
(3) 24 Vac or Vdc: *RE7ML11BU* or *RE7MY13BU*

Potentiometer wiring

RE7ML11BU, RE7MY13BU, or *RE7MY13MW*



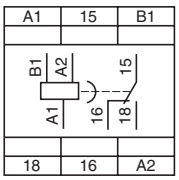
Wiring precautions



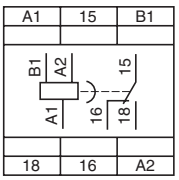
⚠ No electrical insulation between supply terminals A1, A2, B1, B2 and control inputs X1, Y1, Z1, Z2.

Wiring connection diagrams for RE8 models: Industrial single-function relay output timers

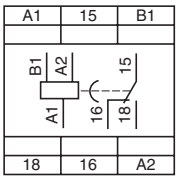
RE8TA, CL



RE8RA

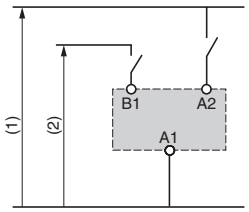


RE8RB

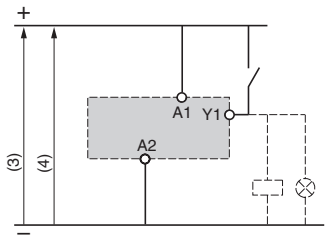


Recommended wiring diagrams

RE8TA, RB, CL

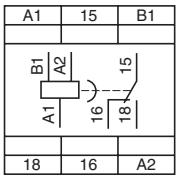


RE8RA

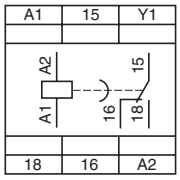


(1) 110-240 Vac (2) 24 Vdc or Vac (3) 24 Vdc (4) 24 Vac or 110-240 Vac

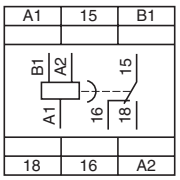
RE8TPE



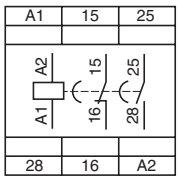
RE8PD



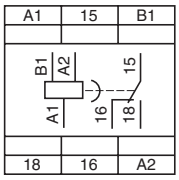
RE8PT



RE8YA

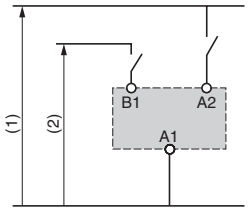


RE8YG

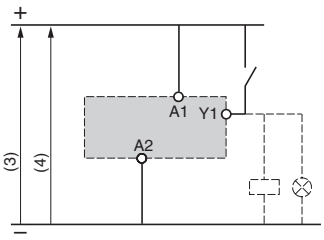


Recommended wiring diagrams - interval timers

RE8PE



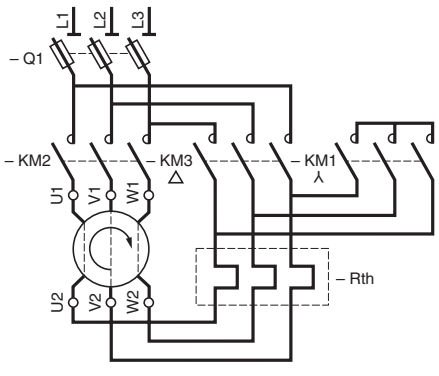
RE8PD



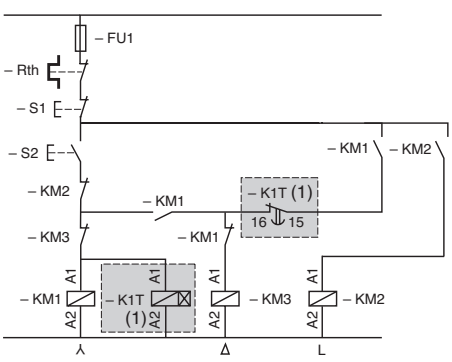
(1) 110-240 Vac (2) 24 Vdc or Vac (3) 24 Vdc (4) 24 Vac or 110-240 Vac

Recommended wiring diagrams - timers for star-delta starters

RE8YG, RE8YA

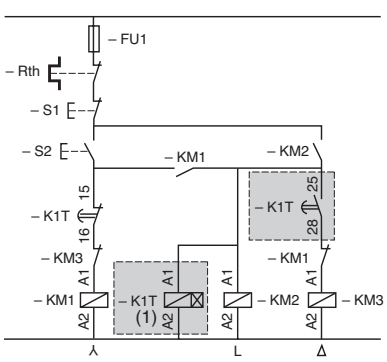


RE8YG



(1) K1T: RE8YG•1••TQ

RE8YA

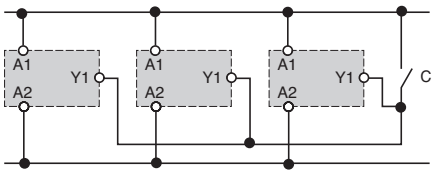


(1) K1T: RE8YA32••TQ

NOTE: Correct operation of the star-delta starter associated with the RE8YG is only possible if the wiring diagram is strictly followed.

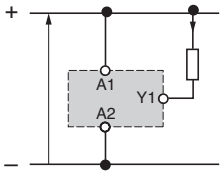
Control of several RE8 single-function relay output timers with a single external control contact

RE8RA, PD



The external control contact C may be an electronic control device, for example, a 2-wire sensor. In this case, A1 - A2 = 24 Vdc and the control device can only control up to a maximum of 4 timers.

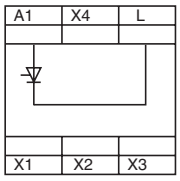
Connection of Telemecanique 2-wire VDC sensor



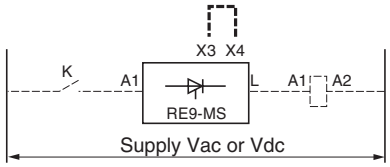
Leakage current
(open state) if < 1 mA

Wiring connection diagrams for RE9 models

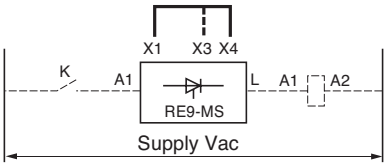
RE9MS



On-delay



Interval

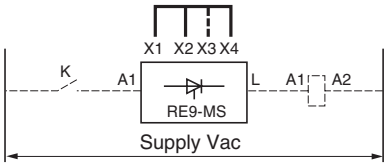


Jumper to be made between terminals X1 and X4

Selection of timing range:
X3-X4 not jumpered: range 3-300 s (factory configuration)
X3-X4 jumpered: range 0.1-10 s

Repeat cycle

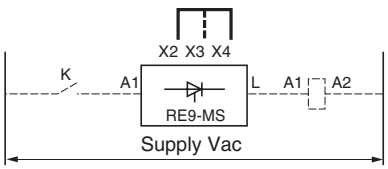
Start on energization of the load



Jumper to be made between terminals X2 and X4 on one side and X1 and X2 on the other side.

Repeat cycle

Start on de-energization of the load

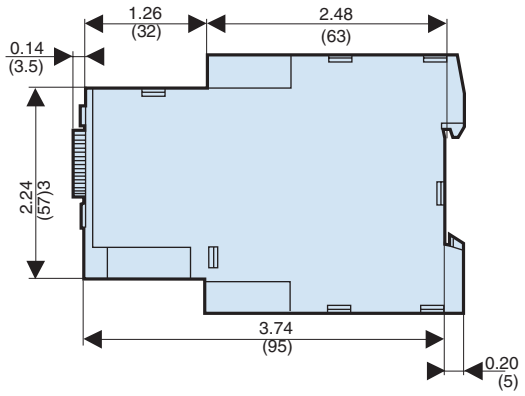


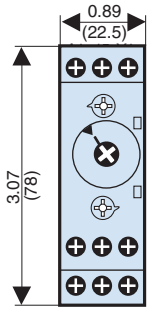
Jumper to be made between terminals X2 and X4.

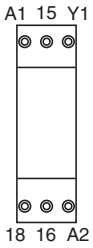
May need to be jumpered.
Must be jumpered

NOTE: For supply voltages greater than 30 V, the rated voltage of the load is equal to the supply voltage. For a supply voltage of 24 V, the voltage drop in the RE9 timer must be taken into account (about 3 V); select a coil with a nominal voltage of 21 V for the load.

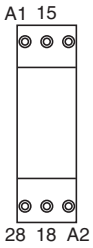
Dimensions and terminal locations for RE88865 models







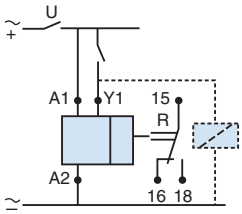
Function Q



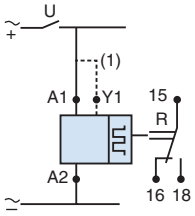
Dual dimensions = $\frac{\text{in.}}{\text{mm}}$

Wiring connection diagrams for RE88865 models

All functions except L and Li

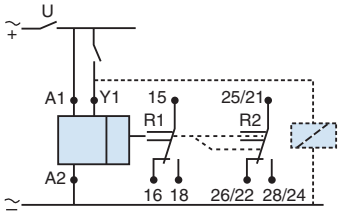


Functions L and Li

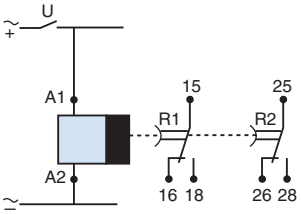


(1) Jumper A1-Y1 for function L only

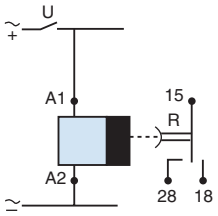
All functions except K

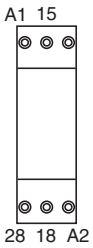


Function K



Function Q

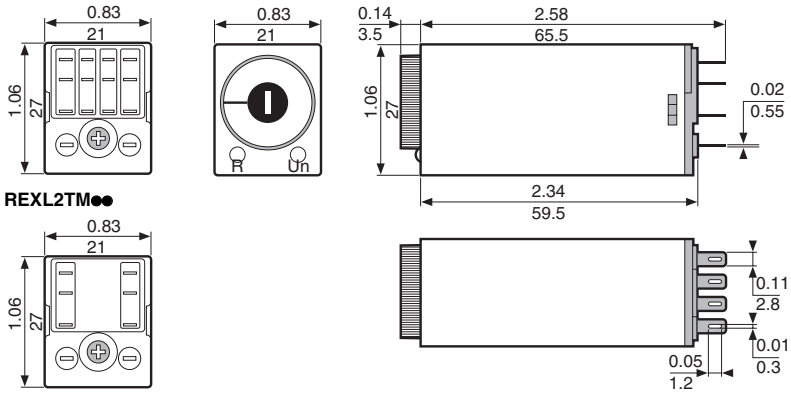




Dimensions and terminal locations for REXL models

Approximate dimensions

REXL4TM●●

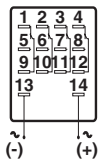


REXL2TM●●

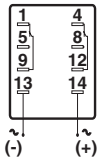
Dual dimensions = $\frac{\text{in.}}{\text{mm}}$

Terminal locations

REXL4TM●●

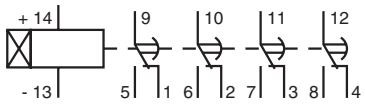


REXL2TM●●

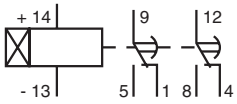


Wiring connection diagrams for REXL models

Timer with 4 C/O contacts



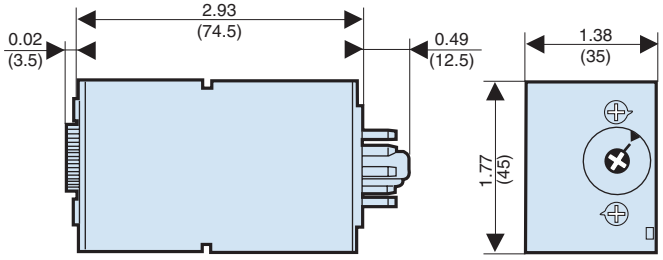
Timer with 2 C/O contacts

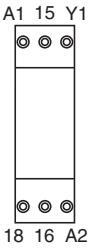


Zelio™ Timing Relays
Universal plug-in relays, 8-pin or 11-pin, relay output, width 35 mm (1.4 in.)

Dimensions and terminal locations for RE88867 plug-in timers (8-pin, relay output)

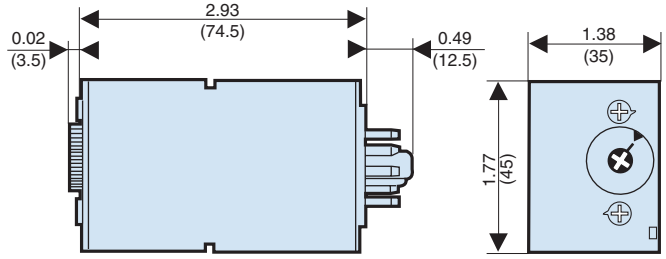
Approximate dimensions





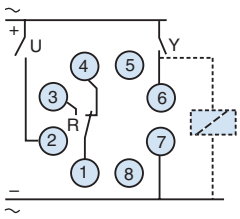
Dual dimensions = $\frac{\text{in.}}{\text{mm}}$

Dimensions and terminal locations for RE88867 plug-in timers (11-pin, relay output)

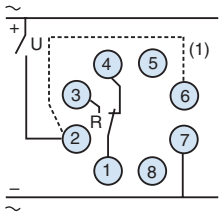


Wiring connection diagrams for RE88867 plug-in timers (8-pin, relay output)

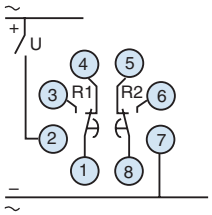
Timing relays with 1 relay output
All functions except L and Li



Functions L and Li



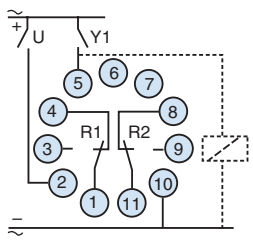
Timing relays with 2 relay outputs
Function A



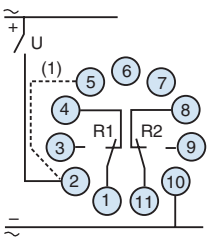
(1) Jumper between pins 2 and 6 for function L only

Wiring connection diagrams for RE88867 plug-in timers (11-pin, relay output)

All functions except L and Li



Functions L and Li

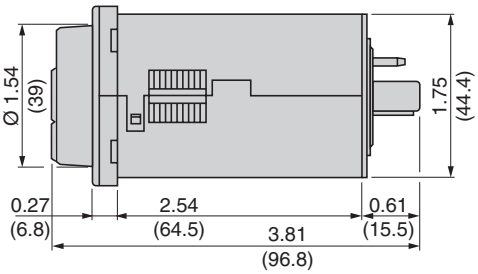


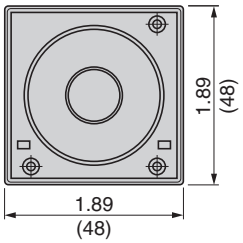
(1) Jumper between pins 2 and 5 for function L only

Dimensions for RE48 models

Approximate dimensions

RE48A●●1●MW

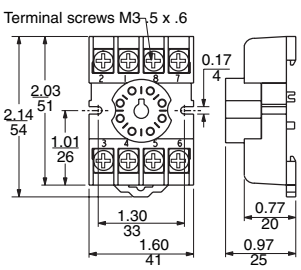




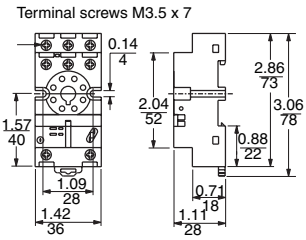
Dual dimensions = $\frac{\text{in.}}{\text{mm}}$

8-pin socket

8501NR51

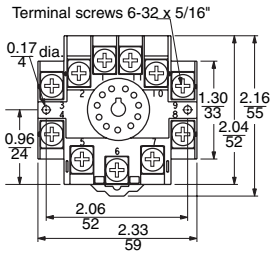


8501NR52

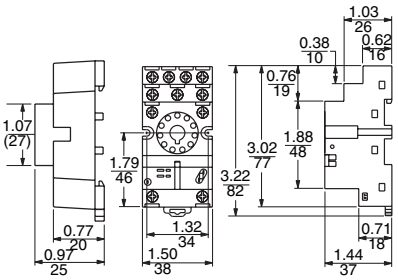


11-pin socket

8501NR61

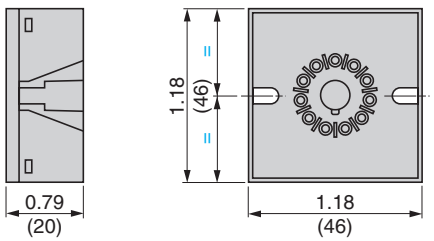


8501NR62



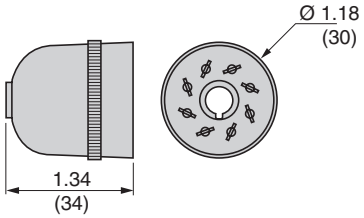
11-pin socket

RE48ASOC11AR



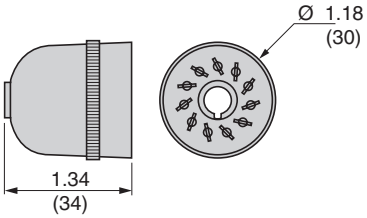
8-pin connector

RE48ASOC8SOLD



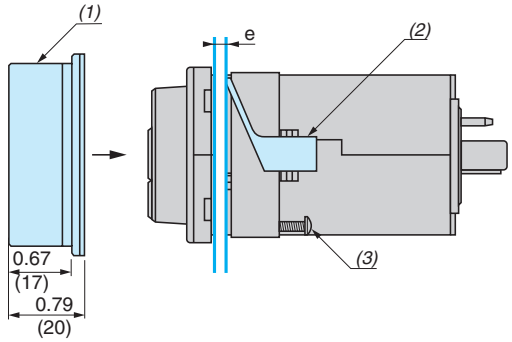
11-pin connector

RE48ASOC11SOLD

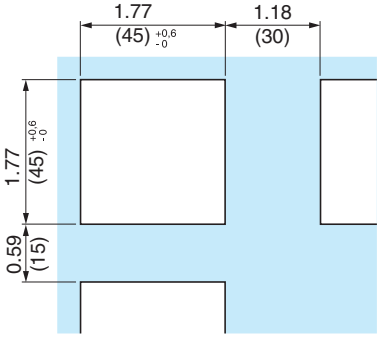


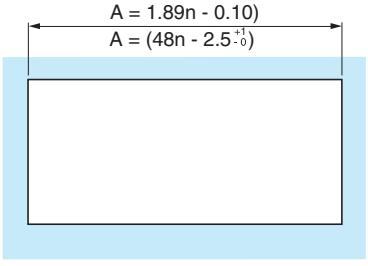
Mounting

Cover positioning and mounting



Panel cut-out



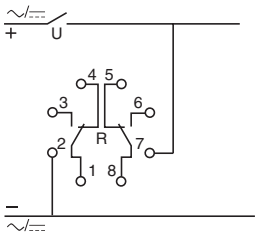


e: panel thickness
(1) IP64 protective cover: RE48AIPCOV
(2) Panel mounting frame
(3) Locating screw

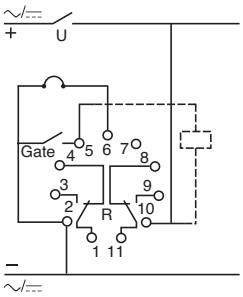
n: number of devices mounted side-by-side

Wiring connection diagrams for RE48 panel-mount timers

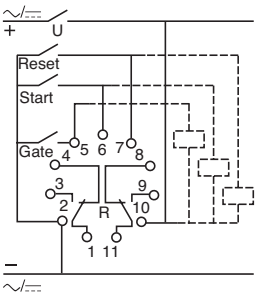
RE48ATM12MW



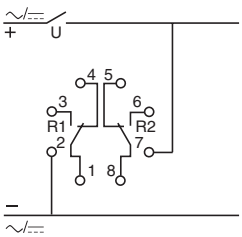
RE48ACV12MW



RE48AML12MW



RE48AMH13MW



www.schneider-electric.com

Schneider Electric USA, Inc.
8001 Knightdale Blvd.
Knightdale, NC 27545

USA Customer Care Center
Tel: 888-778-2733

Schneider Electric Canada
5985 McLaughlin Rd.
Missassauga, Ontario, Canada L5R 1B8

Canada Customer Care Center
Tel: 800-565-6699

Design: Schneider Electric
Photos: Schneider Electric

9050CT0001R04/13

7/2013