

# Product datasheet

Specifications



## multifunction timing relay - 1 s..100 h - 24..240 V AC - 1 contact

RE88865185

⚠ Discontinued on: 1 Nov 2020

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### Main

Range of product	Zelio Time
Product or component type	Industrial timing relay
Contacts type and composition	1 C/O timed contact, AgNi (cadmium free)
Component name	RE88865
Time delay type	Tl Pt N Ad P W O Ah Tt
Time delay range	10 min 100 h 10 h 1 s 1 h 1 min 10 s

### Complementary

Discrete output type	Relay
Width pitch dimension	22.5 mm
[Us] rated supply voltage	24 V DC 24...240 V AC 50/60 Hz
Voltage range	0.85...1.1 Us
Connections - terminals	Screw terminals, 2 x 1.5 mm <sup>2</sup> with cable end Screw terminals, 2 x 2.5 mm <sup>2</sup> without cable end
Housing material	Polycarbonate
Repeat accuracy	+/- 0.5 % conforming to IEC 61812-1
Temperature drift	+/- 0.05 %/°C
Voltage drift	+/- 0.2 %/V
Setting accuracy of time delay	+/- 10 % of full scale at 25 °C conforming to IEC 61812-1
Minimum pulse duration	100 ms under load 30 ms
maximum reset time	100 ms on de-energisation
On-load factor	100 %
maximum power consumption	32 VA at 240 V

<b>maximum power consumption</b>	0.6 W at 24 V 1.5 W at 240 V
<b>breaking capacity</b>	2000 VA
<b>breaking capacity</b>	80 W
<b>minimum switching current</b>	10 mA
<b>Maximum switching current</b>	8 A
<b>maximum switching voltage</b>	250 V
<b>Electrical durability</b>	100000 cycles at 8 A, 250 V for resistive load
<b>Mechanical durability</b>	5000000 cycles
<b>[Uimp] rated impulse withstand voltage</b>	5 kV for 1.2...50 µs conforming to IEC 60664-1 5 kV for 1.2...50 µs conforming to IEC 61812-1
<b>Marking</b>	CE
<b>Creepage distance</b>	4 kV/3 conforming to IEC 60664-1
<b>Surge withstand</b>	1 kV differential mode conforming to IEC 61000-4-5 level 3 2 kV common mode conforming to IEC 61000-4-5 level 3
<b>Mounting support</b>	35 mm symmetrical mounting rail conforming to EN 50022
<b>Local signalling</b>	LED indicator (green) for flashing: timing in progress LED indicator (green) for on steady: relay energised, no timing in progress LED indicator (green) for pulsing: relay energised, no timing in progress
<b>Net weight</b>	0.09 kg

## Environment

<b>Immunity to microbreaks</b>	10 ms
<b>Dielectric strength</b>	2.5 kV for 1 mA/1 minute at 50 Hz conforming to IEC 61812-1
<b>Standards</b>	EN 50081-1/2 IEC 61812-1 73/23/EEC 93/68/EEC IEC 60669-2-3 EN 50082-1/2 89/336/EEC
<b>Product certifications</b>	CSA cULus GL
<b>Ambient air temperature for operation</b>	-20...60 °C
<b>Ambient air temperature for storage</b>	-30...60 °C
<b>IP degree of protection</b>	IP20 (terminal block) conforming to IEC 60529 IP40 (housing) conforming to IEC 60529 IP50 (front face) conforming to IEC 60529
<b>Vibration resistance</b>	0.35 mm (f= 10...55 Hz) conforming to IEC 60068-2-6
<b>Relative humidity</b>	93 % without condensation conforming to IEC 60068-2-3
<b>Resistance to electrostatic discharge</b>	6 kV in contact conforming to EN/IEC 61000-4-2 level 3 8 kV in air conforming to EN/IEC 61000-4-2 level 3
<b>Resistance to electromagnetic fields</b>	10 V/m 80 MHz to 1 GHz conforming to ENV 50140/204 level 3 10 V/m 80 MHz to 1 GHz conforming to IEC 61000-4-3 level 3
<b>Resistance to fast transients</b>	1 kV (capacitive connecting clip) conforming to IEC 61000-4-4 level 3 2 kV (direct) conforming to IEC 61000-4-4 level 3
<b>Immunity to radioelectric fields</b>	10 V (0.15...80 MHz) conforming to ENV 50141 (IEC 61000-4-6)

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<b>Immunity to voltage dips</b>	30 % / 10 ms conforming to IEC 61000-4-11 60 % / 100 ms conforming to IEC 61000-4-11 95 % / 5 s conforming to IEC 61000-4-11
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<b>Disturbance radiated/conducted</b>	Class B conforming to EN 55022 (EN 55011 group 1)
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## **Contractual warranty**

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<b>Warranty (in months)</b>	18
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## Environmental Data

Schneider Electric aims to achieve Net Zero status by 2050 through supply chain partnerships, lower impact materials, and circularity via our ongoing “Use Better, Use Longer, Use Again” campaign to extend product lifetimes and recyclability.

[Environmental Data explained >](#)

[How we assess product sustainability >](#)

### Use Longer



#### Lifetime extension

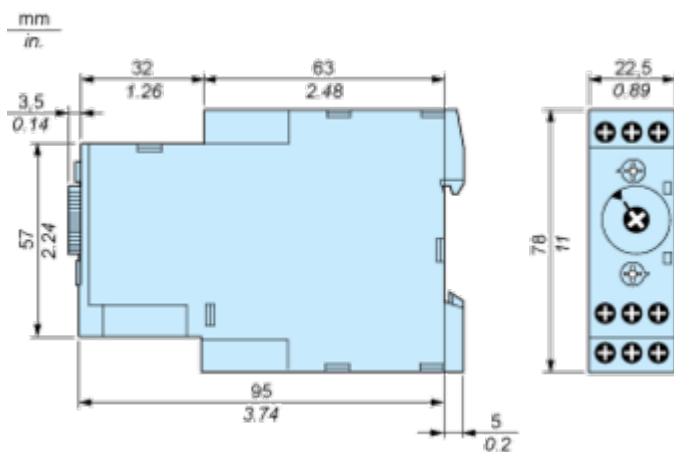
Repair

No

Dimensions Drawings

Width 22.5 mm

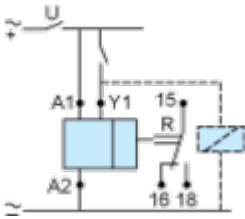
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Connections and Schema

Wiring Diagram

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Technical Description

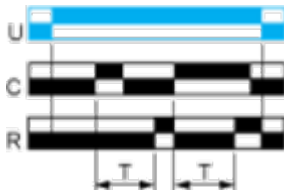
**Function Ad : Pulse Delayed Relay with Control Signal**

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**Description**

After power-up, pulsing or maintaining of 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: 1 Output**



**Function Ah : Pulse Delayed Relay (Single Cycle) with Control Signal**

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**Description**

After power-up, pulsing or maintaining of 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 closes 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.

**Function: 1 Output**



**Function N : Retriggerable Interval Relay with Control Signal On**

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**Description**

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 closes 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: 1 Output**



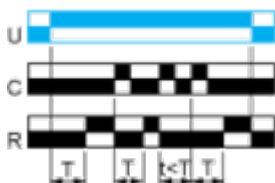
**Function O : Retriggerable Interval Delayed Relay with Control Signal On**

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**Description**

An initial timing period  $T$  begins on energisation. 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 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: 1 Output**



**Function P : Pulse Delayed Relay with Fixed Pulse Length**

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**Description**

The timing period T begins on energisation.

At the end of this period, the output R closes for a fixed time P.

**Function: 1 Output**



P = 500 ms

**Function Pt : Pulse Delayed Relay (Summation and Fixed Pulse Length) with Control Signal Off**

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**Description**

On energisation, 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: 1 Output**



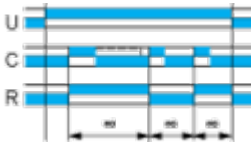
$T = t1 + t2 + \dots$   
 P = 500 ms

Function TI: Impulse Relay

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**Description**

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



**Function Tt : Retriggerable Bistable Relay with Control Signal On**

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**Description**

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

**Function: 1 Output**



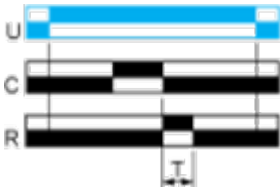
**Function W : Interval Relay with Control Signal Off**

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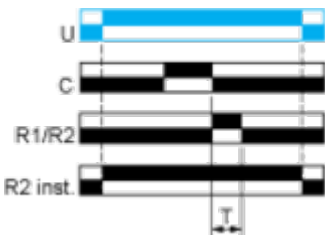
**Description**

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(s) to its/their initial state. The second output can be either timed or instantaneous.

**Function: 1 Output**







**Function: 2 Outputs**



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

**Legend**

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

C	Control contact
G	Gate
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
Ta -	Adjustable On-delay
Tr -	Adjustable Off-delay
U	Supply

Technical Illustration

Dimensions

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