

Product data sheet

Specifications



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

RE88865185

⚠ Discontinued on: Jan 29, 2021

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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 mm² with cable end Screw terminals, 2 x 2.5 mm² without cable end
Housing Material	Self-extinguishing
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 %

Disclaimer: This documentation is not intended as a substitute for and is not to be used for determining suitability or reliability of these products for specific user applications

Maximum Power Consumption	32 VA at 240 V
Maximum Power Consumption	0.6 W at 24 V 1.5 W at 240 V
Breaking Capacity	2000 VA
Breaking Capacity	80 W
Minimum Switching Current	10 mA
Maximum Switching Current	8 A
Maximum Switching Voltage	250 V
Electrical Durability	100000 cycles at 8 A, 250 V for resistive load
Mechanical Durability	5000000 cycles
[Uimp] Rated Impulse Withstand Voltage	5 kV for 1.2...50 µs conforming to IEC 60664-1 5 kV for 1.2...50 µs conforming to IEC 61812-1
Marking	CE
Creepage Distance	4 kV/3 conforming to IEC 60664-1
Surge Withstand	1 kV differential mode conforming to IEC 61000-4-5 level 3 2 kV common mode conforming to IEC 61000-4-5 level 3
Mounting Support	35 mm symmetrical mounting rail conforming to EN 50022
Local Signalling	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
Net Weight	0.09 kg

Environment

Immunity To Microbreaks	10 ms
Dielectric Strength	2.5 kV for 1 mA/1 minute at 50 Hz conforming to IEC 61812-1
Standards	EN 50081-1/2 IEC 61812-1 73/23/EEC 93/68/EEC IEC 60669-2-3 EN 50082-1/2 89/336/EEC
Product Certifications	CSA cULus GL
Ambient Air Temperature For Operation	-20...60 °C
Ambient Air Temperature For Storage	-30...60 °C
Ip Degree Of Protection	IP20 (terminal block) conforming to IEC 60529 IP40 (housing) conforming to IEC 60529 IP50 (front face) conforming to IEC 60529
Vibration Resistance	0.35 mm (f= 10...55 Hz) conforming to IEC 60068-2-6
Relative Humidity	93 % without condensation conforming to IEC 60068-2-3
Resistance To Electrostatic Discharge	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
Resistance To Electromagnetic Fields	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
Resistance To Fast Transients	1 kV (capacitive connecting clip) conforming to IEC 61000-4-4 level 3 2 kV (direct) conforming to IEC 61000-4-4 level 3
Immunity To Radioelectric Fields	10 V (0.15...80 MHz) conforming to ENV 50141 (IEC 61000-4-6)

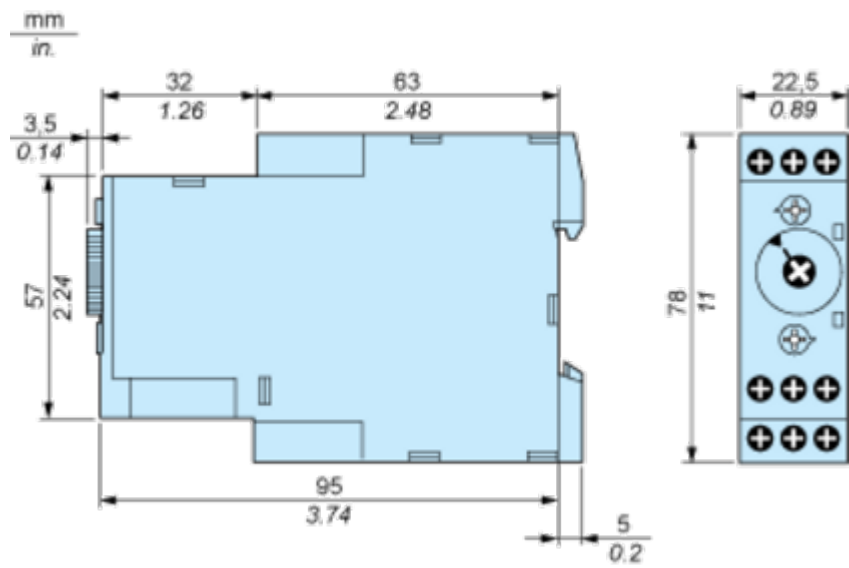
Immunity To Voltage Dips	30 % / 10 ms conforming to IEC 61000-4-11
	60 % / 100 ms conforming to IEC 61000-4-11
	95 % / 5 s conforming to IEC 61000-4-11
Disturbance Radiated/Conducted	Class B conforming to EN 55022 (EN 55011 group 1)

Contractual warranty

Warranty	18 months
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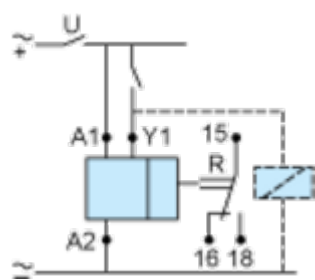
Dimensions Drawings

Width 22.5 mm



Connections and Schema

Wiring Diagram



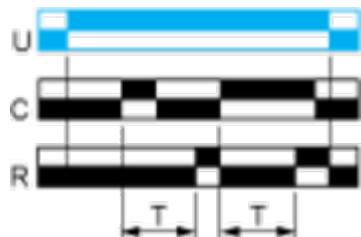
Technical Description

Function Ad : Pulse Delayed Relay with Control Signal

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

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

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

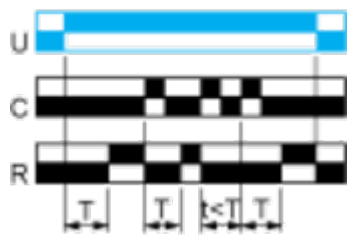


Function O : Retriggerable Interval Delayed Relay with Control Signal On

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

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



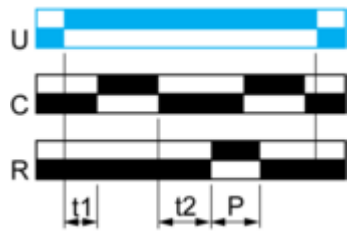
P = 500 ms

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

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



$T = t1 + t2 + \dots$
 $P = 500 \text{ ms}$

Function TI: Impulse Relay

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

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

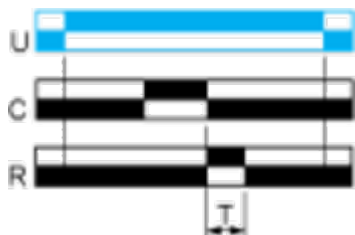


Function W : Interval Relay with Control Signal Off

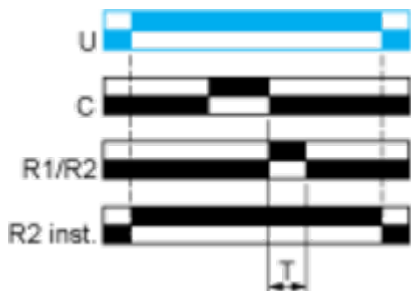
Description

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

-  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