

AWZ525 v.1.0 PC3 Time Relay Module



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EN**

The module's features:

- 10 ÷ 14V DC power supply
- extension of the trigger pulse for the time set
- time range from 1 second to 5 min.
- Relay output
- Activated by plus "S +" or ground (minus) "S-"
- Optical indication of power supply, triggering signal and relay output status
- Warranty 2 years from production date

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1. General description.

The PC3 time module is a transceiver that allows extending the trigger pulse for a short period of time set by the potentiometer. The device can operate in two modes: extension of time activated by the pulse or by the triggering signal loss. The range of the measured times is between 1s. - 5 minutes.

2. Components arrangement.

The figure below shows the arrangement of the most important components and connectors of the relay module.

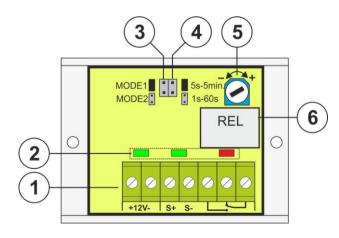


Fig.1. The view of the module.

Table 1. The description of components and connectors of the module.

No. [Fig.1]	Description
①	Connector: +12V The module's power supply, DC voltage S+ - control input supplied by the positive power supply - control input activated by the negative power supply (power supply minus) - REL relay connector CAUTION! In Fig.1 the set of contacts shows a potential-free status of the relay.
2	LED (green): – optical indication green – supply voltage green – trigger signal indication (S + or S-) red – The REL relay activation indication – (the LED is on when the relay is activated)
3	Operating mode jumper: mode 1 mode 2 Description: jumper on, jumper on
4	Time range jumper: 1s – 60s. time range 5s – 5 min. time range Description: jumper on, jumper on
5	Potentiometer for time adjustment
6	Relay

3. Specifications

Supply voltage	10 ÷ 14 V DC
Power consumption	5 mA / 25 mA (inactive/active relay) (±5%)
S+ input	10 ÷ 14 V DC control
S- input	0 V (GND) control
Time range	Range 1: 1 s ÷ 60 s
Time range	Range 2: 5 s ÷ 5 min
The number of relays	1
Maximum connection voltage	30 V DC / 48 V AC
Maximum connection current	1 A
Maximum contact resistance	<100 mOhm
Optical indication of operation	LED light
Operation parameters	-10°C - +40°C, relative humidity Rh=75% max. No condensation.
Dimensions	L=60, W=43, H=23 [mm, +/-2]
Mounting	mounting tape or dowel pins x 2 (holes∅3mm)
Connectors	Ф0,51÷2,05 mm (AWG 24-12)
Net/gross weight	0,03 / 0,05 [kg]

4. Operation modes.

The time module can operate in two modes:

- Mode 1 (jumper on)

- The triggering signal activates the relay. The system waits for a trigger signal loss. After the signal loss, the T time countdown begins.

Once the countdown is finished, if no new triggering signal is generated, the relay will switch off.

If a triggering signal is generated during the T time countdown, the T time countdown will start with the S triggering signal loss.

The triggering signal during the countdown of the T time restarts the T time countdown process after a loss of the "S" triggering signal

- Mode 2 • (jumper off)

- The S triggering signal activates the relay for the T time period. If a triggering signal is longer than the T time, the relay will switch off with the triggering signal loss.

Providing another triggering signal triggering during the countdown of the T time will have no effect on turning off the relay, provided the signal will not be longer than the T countdown time.

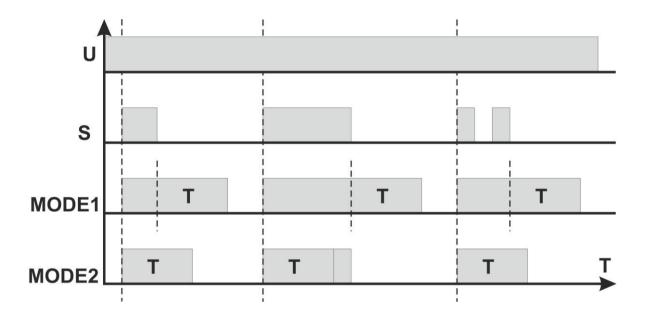


Fig.2 Time diagrams of the module.

WEEE Label

According to the European Union WEEE Directive, waste electrical and electronic equipment should be disposed of separately from normal household waste.

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