

Timer  
**ZTG - Pulse generator pulse beginning with 2 Changeovers**  
 17.5mm housing



### Application

Time control

### Description

The **ZTG Pulse generator (beginning with pulse)** offers an independent regulation of the pulse and pause times, which are each adjusted with two independent potentiometers and DIP switches which are located on the front panel of the unit. The timer can operate on either 230V AC using terminals A1 and A2 or 24V DC using terminals A3 and A2. The green LED indicates the connection of the power supply.

### Function

The timing begins with the connection of the power supply to the terminals A1 and A2 or A3 and A2. The timing begins with a pulse. This is indicated by the red LED. Upon completion of the selected delay time on the potentiometer  $t_i$ , the output contact switches into its rest position. After completion of the selected timing cycle on potentiometer  $t_p$ , the output relay again switches into its working position. This sequence will repeat itself as long as the power supply is connected. Should the power supply be interrupted during the reset time, then the relay returns to its original state. This also applies if the power is disconnected during the timing period.

### Options

Other timing ranges and voltage available upon request.

### Part number

**ZTG pulse – pulse timing range ; pause timing range**  
 for example:

**ZTG pulse – 1,5...30s ; 0,5...10h**

**Please specify timing range with order!!**

### Timing ranges

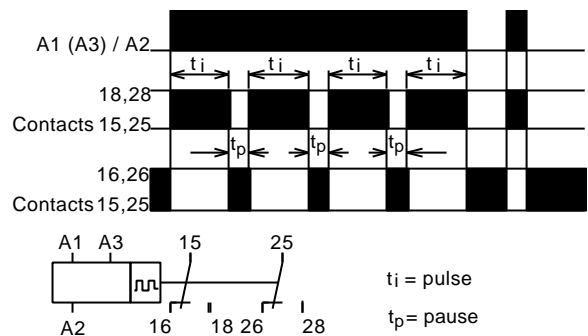
16 timing ranges adjustable with DIP switches

0.05 – 1 s	0.5 – 10 min
0.15 – 3 s	1.5 – 30 min
0.5 – 10 s	3 – 60 min
1.5 – 30 s	15 – 300 min
3 – 60 s	0.5 – 10 h
5 – 100 s	1.5 – 30 h
10 – 200 s	3 – 60 h
15 – 300 s	5 – 100 h

### Approvals



### Function diagram



### Mounting

Snap-on mounting using a standard DIN rail EN 50022. The unit is designed to allow side-by-side mounting, with an ambient temperature of < 60°C.

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**Technical data**

**Supply**

Supply voltage A1/A2: 230V AC -15 / +10%  
 A3/A2: 24V AC/DC -15 / +10%  
 Frequency range: 50 ... 60 / 0Hz  
 Power consumption: approx. 1.5W with DC;  
 approx. 6VA with AC  
 Operating mode: continuous

**Adjustment range**

Adjustment range pulse time: 0.15 – 3s  
 1.5 – 30s  
 15 – 300s  
 3 – 60min  
 Adjustment range pause time: 0.15 – 3s  
 1.5 – 30s  
 15 – 300s  
 3 – 60min

Supply voltage influence: < 0.01% over voltage range  
 Temperature influence: < 0.01% / C°  
 Repetitive accuracy: ± 0.2%  
 Recovery time: < 100ms

**Operation indicators**

Supply voltage: LED, green  
 Relay in working position: LED, red

**Contact**

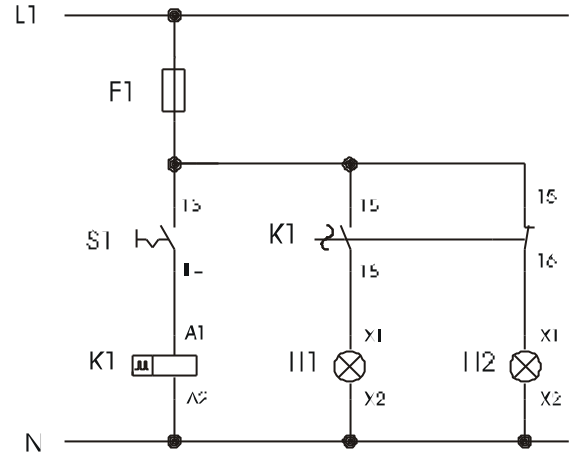
Number of changeovers: 2  
 Contact material: AgSnO<sub>2</sub>  
 Maximum switching voltage: 250V AC  
 Maximum switching current: 4A  
 Drop-off time of switching element: approx. 20ms  
 Mechanical life: 30 Mio.  
 Electrical life (with rated load): 0.8 Mio.

**General data**

Ambient temperature: - 25 ... + 60°C  
 Climate resistance: VDE 0435T.2021  
 Mounting position: any  
 Vibration resistance: VDE 0435T.2021  
 Test voltage: 2.5kV  
 Isolation group: VDE 0110 Group C 250  
 Protection class: Terminals IP 20  
 Housing IP 40

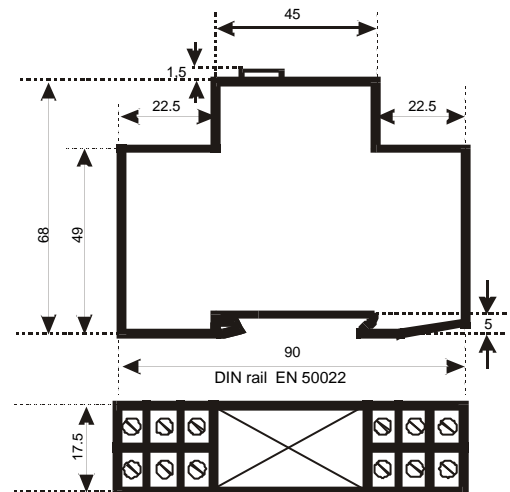
Connection terminals: Crosshead screws;  
 M3.5 self-opening  
 Connection cross section: Multi-strand wire with wire  
 sleeves 2 x 2.5mm<sup>2</sup>  
 single wire 2 x 2.5mm<sup>2</sup>  
 Finger touch protection: VDE 0106T.100 and  
 VBG4  
 Mounting: Symmetrical rail  
 DIN EN 50022  
 Dimensions l x w x h: 90mm x 17.5mm x  
 69.5mm  
 Weight: 104g

**Example**



When the contact S1 closes, the lights H1 and H2 blink alternately to the selected timing cycle (H1 begins with pulse).

**Dimensions**



**Connections**

The terminal assignment for the connections is located on the front panel of the relay. **Reading the front panel from top to bottom**, the connections are as follows:

LED side	Right:	nc – 16 – A3
	Left:	18 – 15 – A1
Potentiometer side	Right:	nc – 25 – 28
	Left:	nc – A2 – 26

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