

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



### Application

Time control

### Description

The **ZTG Pulse generator (beginning with pause)** 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 starts with connection of the power supply to the terminals A1 and A2 or A3 and A2. The timing begins with a pause. Upon completion of the selected delay time on the potentiometer  $t_p$ , the output contact switches to its working position. This is indicated by the red LED. After completion of the selected timing cycle on potentiometer  $t_i$ , the output contact switches into its rest position. This sequence will repeat itself as long as the power supply is connected. Should the power supply be interrupted during the duration 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 voltages available upon request.

### Part number

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

**ZTG pause – 1.5...30s ; 0.5...10h**

**Please specify time range with order!!**

### Timing ranges

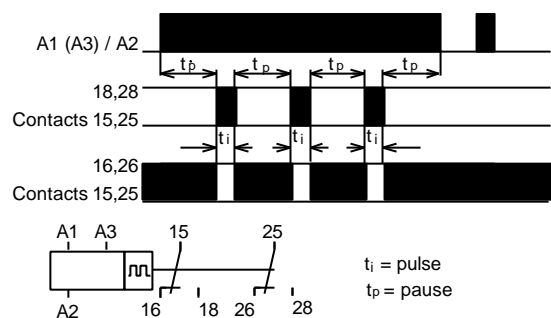
16 timing ranges with adjustable DIP switches

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  $< 60^\circ\text{C}$ .

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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
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**

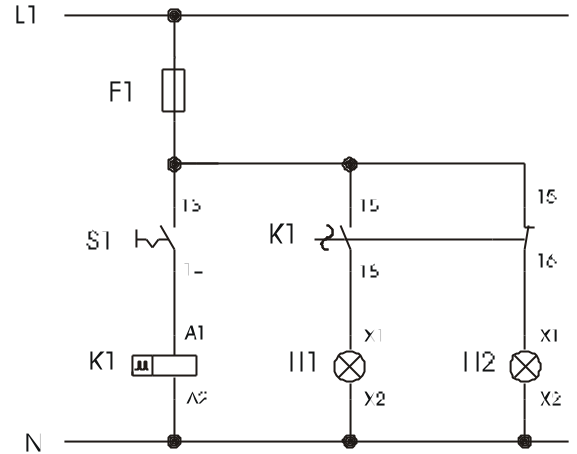
Number of changeovers:	2
Contact material:	AgSnO <sub>2</sub>
Maximum switching voltage:	250V AC
Maximum switching current:	4A
Drop-off time of switching element:	approx. 20ms
Mechanical life:	30 Mio.
Electrical (with rated load):	0.8 Mio.

**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

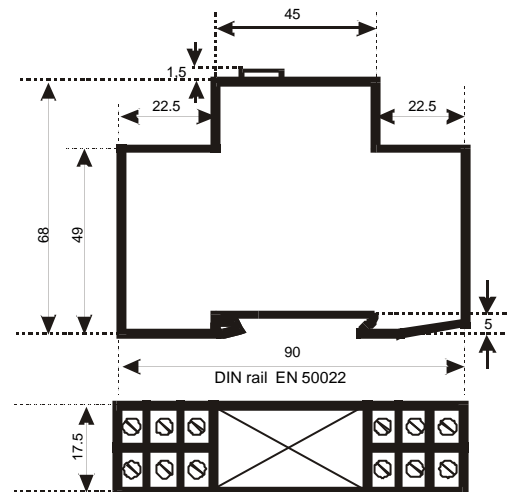
Connection terminals:	Crosshead screws; M3.5 self-opening
Connection cross section:	Multi-strand wire with wire sleeves 2 x 2.5mm <sup>2</sup> single wire 2 x 2,5mm <sup>2</sup>
Finger touch protection:	VDE 0106T.100 and VBG4
Mounting:	Symmetrical rail DIN EN 50022
Dimensions l x w x h:	90mm x 17.5mm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

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