

Watchdog WDG-01



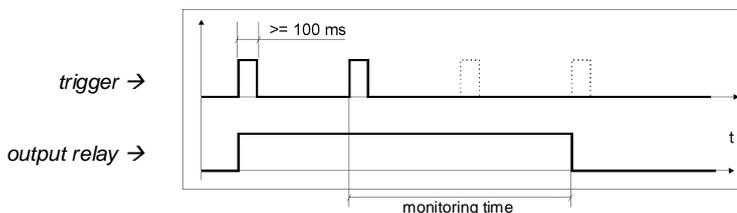


1 General remarks

The Watchdog WDG-01 is a re-triggerable mono-stable trigger circuit for the monitoring of cycles having pulse / break times up to 10 seconds. It can be used, for example for the surveillance of SPS – cycles or computer cycles. Another possible application is the conversion of proportional pulses into constant signals for dosing control systems for example for the valve triggering.

2 Principle of function

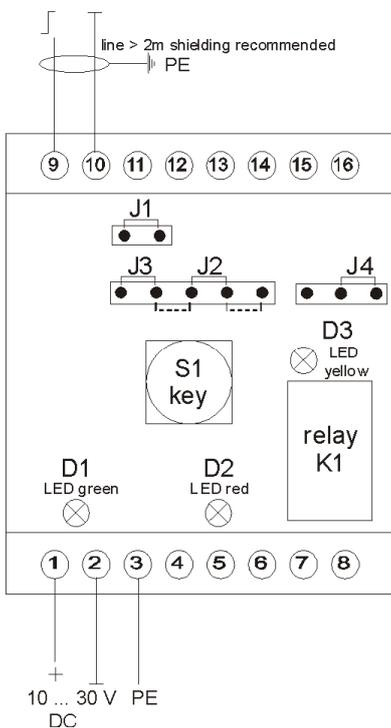
An - depending on the parameterisation - positive or negative change of level at the input causes the switchover of the relay. If within the monitoring time no further change of level of the pre-adjusted polarity (trigger) occurs, the output relay returns back again to the initial position and the message 'release' (red diode D2) is indicated. D2 can be set back by actuating the reset-key S1.



The elapse of monitoring time (5 or 10 seconds) always starts newly after the most recently detected level change (function re-triggerable).

3 Note

(triggering signal)



J1:
closed: monitoring time **5 sec**
opened: monitoring time **10 sec**

J4:
left: K1 **picks up** at triggering
right: K1 **releases** at triggering

J3, J2:
left: **trailing edge**
right: **rising edge**

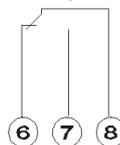
S1: reset-button

D1: operation-LED

D2: remanent message release

D3: state indication of relay K1

K1: relay



The input signal is rated as HIGH at a voltage of approx. 8 V and above, and as LOW in case of values below 5 V. The pulse duration has to be at least 100 ms. For longer impulse input lines shielded cable may be required in order to assure the correct function.

The monitoring time can be changed from 5 to 10 seconds by internal jumpers, the detection of edge can be converted from rising to trailing edge and the relay function can be inverted.

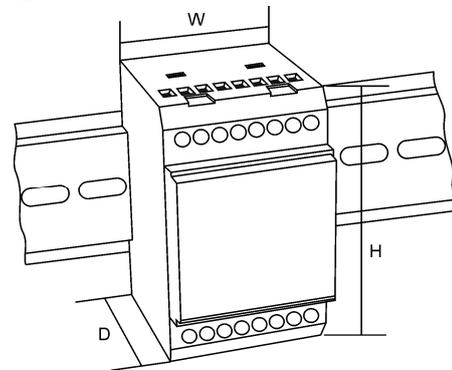
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4 Technical data



**Mounting and first commissioning only by qualified personnel.
Electrical connection in accordance to VDE 0160.**

Operating voltage	10 ... 30 V DC
Power consumption	approx. 0,6 W
Monitoring time	5 or 10 seconds
Minimum pulse length	>= 100 ms rising or trailing edge selectable
Relay outputs	invertible 230 V / 2 A / AC
Ambient temperature	-20 ... +55 °C
Air moisture	>30 % < 90 %
Housing dimensions	W / H / D : 45 x 78 x 52 mm



4.1 Ordering information

Watchdog WDG-01

Part number:

E1758

