DATA SHEET: TIMERS ZR5ER011

SCHRACK-INFO

- 2 functions
- 7 time ranges
- Wide input voltage range
- 1 change over contact
- Width 17.5 mm
- Installation design

TECHNICAL DATA

1. Functions
The function has to be set before connecting the relay to the supply voltage.
E  ON delay
R  OFF delay

2. Time ranges
Time range | Adjustment range
--- | ---
1 s | 50 ms | 1 s
10 s | 500 ms | 10 s
1 min | 3 s | 1 min
10 min | 30 s | 10 min
1 h | 3 min | 1 h
10 h | 30 min | 10 h
100 h | 5 h | 100 h

3. Indicators
Green LED U/t ON: indication of supply voltage
Green LED U/t flashes: indication of time period
Yellow LED R ON/OFF: indication of relay outputs

4. Mechanical design
Self-extinguishing plastic housing, IP rating IP40
Mounted on DIN-rail TS 35 according to EN 50022
Mounting position: any
Shockproof terminal connection according to VBG 4 (PZ1 required), IP rating IP20

5. Input circuit
Supply voltage: Terminals A1(+)-A2
Types ZR5..24-240 V AC/DC: 24 to 240 V AC/DC
Tolerance: 24 V-15% to 240 V+10%
Rated consumption: 4 VA (1.5 W)
Rated frequency: AC 48 to 63 Hz
Duty cycle: 100%
Reset time: 100 ms
Residual ripple for DC: 10%
Drop-out voltage: >30% of minimum rated supply voltage
Overvoltage category: III (according to IEC 60664-1)
Rated surge voltage: 4 kV

6. Output circuit
1 potential free change over contact
Rated voltage: 250 V AC
Switching capacity: 2000 VA (8 A / 250V)
Fusing: 8 A fast acting
Mechanical life: 20 x 10⁶ operations
Electrical life: 2 x 10⁵ operations at 1000 VA resistive load
Switching frequency: max. 60/min at 100 VA resistive load
max. 6/min at 1000 VA resistive load (according to IEC 947-5-1)
Overvoltage category: III. (according to IEC 60664-1)
Rated surge voltage: 4 kV

7. Control input
Input not potential free: Terminals A1-B1
Loadable: yes
Max. line length: 10m
Trigger level (sensitivity): automatic adaption to supply voltage
Min. control pulse length: DC 50 ms / AC 100 ms

8. Accuracy
Base accuracy: ±1% of maximum scale value
Adjustment accuracy: <5% of maximum scale value
Repetition accuracy: <0.5% or ±5 ms
Voltage influence: -
Temperature influence: ±0.01 % / °C

9. Ambient conditions
Ambient temperature: -25 to +55 °C (according to IEC 68-1)
Storage temperature: -25 to +70 °C
Transport temperature: -25 to +70 °C
Relative humidity: 15% to 85% (according to IEC 721-3-3 class 3K3)
Pollution degree: 2, if built in 3 (according to IEC 664-1)
Vibration resistance: 10 to 55 Hz 0.35 mm
Shock resistance: 15 g 11 ms (according to IEC 68-2-6)
Duty cycle: 100%
Reset time: 100 ms
## FUNCTIONS

**ON delay (E)**

When the supply voltage \( U \) is applied, the set interval \( t \) begins (green LED \( U/t \) flashes). After the interval \( t \) has expired (green LED \( U/t \) illuminated) the output relay \( R \) switches into on-position (yellow LED illuminated). This status remains until the supply voltage is interrupted. If the supply voltage is interrupted before the expiry of the interval \( t \), the interval already expired is erased and is restarted when the supply voltage is next applied.

**OFF delay (R)**

The supply voltage \( U \) must be constantly applied to the device (green LED \( U/t \) illuminated). When the control contact \( S \) is closed, the output relay \( R \) switches into on-position (yellow LED illuminated). If the control contact is opened, the set interval \( t \) begins (green LED flashes). After the interval \( t \) has expired (green LED \( U/t \) illuminated) the output relay switches into off-position (yellow LED not illuminated). If the control contact is closed again before the interval \( t \) has expired, the interval already expired is erased and is restarted.

## CONNECTIONS

- **with control input**
- **without control input**

## DIMENSIONS

- **WEIGHT**

  - Single packing: 72 g
  - Package 10 pcs: 670 g per Package

## ARTICLE NUMBER

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<th>DESCRIPTION</th>
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