

TIME RELAY 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
Tightening torque: max. 1 Nm
Terminal capacity:
1 x 0.5 to 2.5 mm² with/without multicore cable end
1 x 4 mm² without multicore cable end
2 x 0.5 to 1.5 mm² with/without multicore cable end
2 x 2.5 mm² flexible without multicore cable end

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

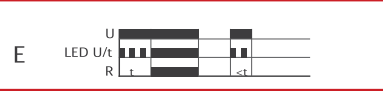
9. Ambient conditions

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
(according to IEC 68-2-6)
Shock resistance: 15 g 11 ms
(according to IEC 68-2-27)

FUNCTIONS

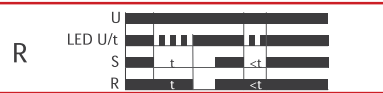
ON delay (E)

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)

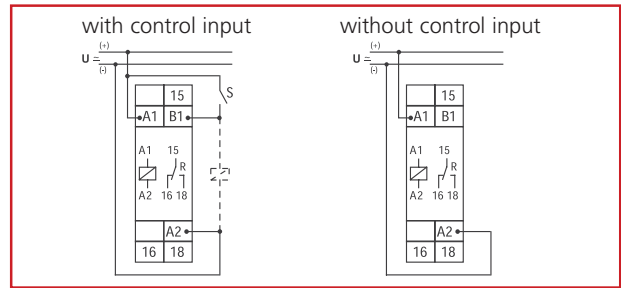
The supply voltage U must be constantly applied to the device (green LED U/t illuminated). When the control contact S is closed, the output relay R switches into on-position (yellow LED illuminated). If the control contact is opened, the set interval t begins (green LED flashes). After the interval t 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.



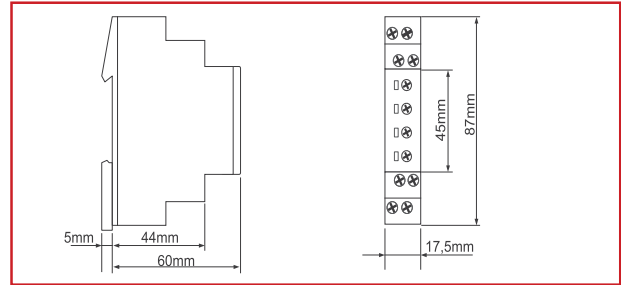
WEIGHT

Single packing: 72 g

CONNECTIONS



DIMENSIONS



DESCRIPTION	EAN CODE	AVAILABLE	ORDER NO.
Double function time relay E (ON delay) + R (OFF delay), 24-240VAC, 1 change over, 8A/250V	9004840459036		ZR5ER011