

- ▶ Industrial design
- ▶ Width 22.5mm
- ▶ 5 functions
- ▶ 8 time ranges
- ▶ 2 change over contacts



Technical data

1. Functions

Ip	Asymmetric flasher pause first	
Ii	Asymmetric flasher pulse first (A1-B2 bridged)	
ER	ON delay and OFF delay with control contact (A1-B3 bridged)	
EWs	ON delay single shot leading edge with control contact (A1-B2-B3 bridged)	
EWu	ON delay single shot leading edge voltage controlled (A1-B1-B2-B3 bridged)	

2. Time ranges

Time range	Adjustment range	
1s	50ms	1s
10s	500ms	10s
1min	3s	1min
10min	30s	10min
1h	3min	1h
10h	30min	10h
1d	72min	1d
10d	12h	10d

3. Indicators

Green LED ON:	indication of supply voltage
Green LED flashes fast:	indication of time period t2
Green LED flashes slow:	indication of time period t1
Yellow LED ON/OFF:	indication of relay output

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

5. Input circuit

Supply voltage:	24V DC	terminals A1(+)-A2 voltage selector engaged
	24V AC	terminals A1-A2 voltage selector engaged
	110 to 240V AC	terminals A1-A2 voltage selector not engaged
Tolerance:	24V DC	±10%
	24V AC	-15% to +10%
	110 to 240V AC	-15% to +10%
Rated frequency:	48 to 63Hz	
Rated consumption:	24V AC/DC	1.5VA (1W)
	110V AC	2VA (1W)
	230V AC	8VA (1.4W)
Duration of operation:		100%
Reset time:		100ms
Residual ripple for DC:		10%
Drop-out voltage:		>30% of the supply voltage

6. Output circuit

2 potential free change over contacts
 Switching capacity (distance < 5mm): 1250VA (5A / 250V AC)
 Switching capacity (distance > 5mm): 2000VA (8A / 250V AC)
 Fusing: 8A fast acting
 Mechanical life: 20 x 10⁵ operations
 Electrical life: 2 x 10⁵ operations
 at 1000VA resistive load
 max. 60/min with 100VA resistive load
 max. 6/min with 1000VA resistive load (according to IEC 947-5-1)
 Insulation voltage: 250V AC (according to IEC 664-1)
 Surge voltage: 4kV, overvoltage category III (according to IEC 664-1)

7. Control contact

Connections: not potential free, terminals A1-B1
 Loadable: yes, parallel load min. 1VA (0.5W) terminals A2-B1
 Line length: max. 10m
 Control pulse length: DC min. 50ms
 AC min. 50ms

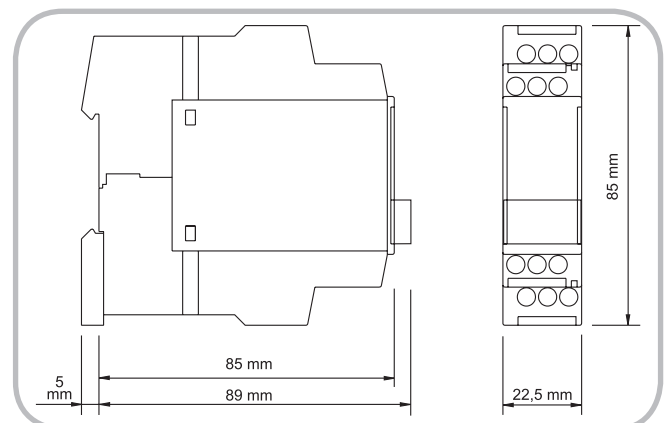
8. Accuracy

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

9. Ambient conditions

Ambient temperature: -25 to +55°C (according to IEC 68-1)
 -25 to +40°C (according to UL 508)
 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: 3 (according to IEC 664-1)

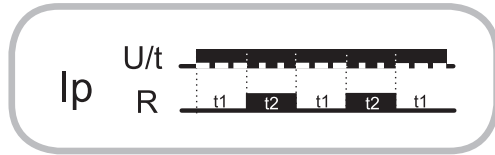
10. Dimensions



Functions

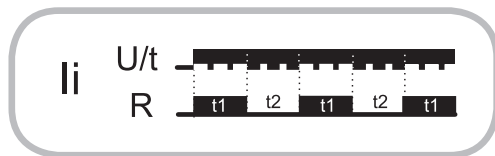
Asymmetric flasher pause first (Ip)

When the supply voltage U is applied, the set interval t1 begins (green LED flashes slow). After the interval t1 has expired, the output relay R switches into on-position (yellow LED illuminated) and the set interval t2 begins (green LED flashes fast). After the interval t2 has expired, the output relay switches into off-position (yellow LED not illuminated). The output relay is triggered at the ratio of t1:t2 until the supply voltage is interrupted.



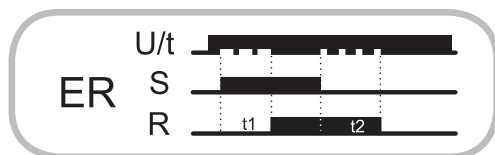
Asymmetric flasher pulse first (Ii)

When the supply voltage U is applied, the output relay R switches into on-position (yellow LED illuminated) and the set interval t1 begins (green LED flashes slow). After the interval t1 has expired, the output relay switches into off-position (yellow LED not illuminated) and the set interval t2 begins (green LED flashes fast). After the interval t2 has expired, the output relay switches into on-position (yellow LED illuminated). The output relay is triggered at the ratio of t1:t2 until the supply voltage is interrupted.

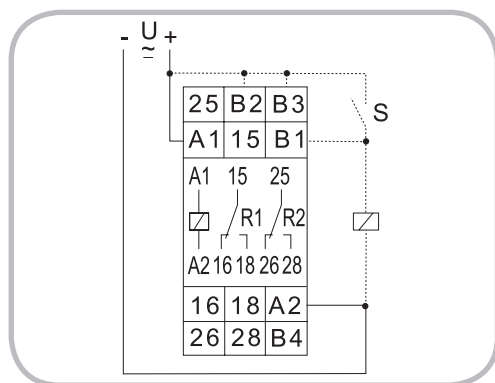


ON delay and OFF delay with control contact (ER)

The supply voltage U must be constantly applied to the device (green LED illuminated). When the control contact S is closed, the set interval t1 begins (green LED flashes slow). After the interval t1 has expired, the output relay R switches into on-position (yellow LED illuminated). If the control contact is opened, the set interval t2 begins (green LED flashes fast). After the interval t2 has expired (green LED illuminated) the output relay switches into off-position (yellow LED not illuminated). If the control contact is opened before the interval t1 has expired, the interval already expired is erased and is restarted with the next cycle.

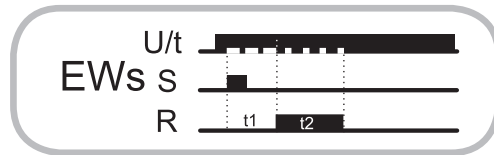


Connections



ON delay and single shot leading edge with control contact (EWS)

The supply voltage U must be constantly applied to the device (green LED illuminated). When the control contact S is closed, the set interval t1 begins (green LED flashes slow). After the interval t1 has expired, the output relay R switches into on-position (yellow LED illuminated) and the set interval t2 begins (green LED flashes fast). After the interval t2 has expired (green LED illuminated) the output relay switches into off-position (yellow LED not illuminated). During the interval, the control contact can be operated any number of times. A further cycle can only be started when the cycle run has been completed.



ON delay and single shot leading edge voltage controlled (EWu)

When the supply voltage U is applied, the set interval t1 begins (green LED flashes slow). After the interval t1 has expired the output relay R switches into on-position (yellow LED illuminated) and the set interval t2 begins (green LED flashes fast). After the interval t2 has expired (green LED illuminated) the output relay switches into off-position (yellow LED not illuminated). If the supply voltage is interrupted before the interval t1+t2 has expired, the interval already expired is erased and is restarted when the supply voltage is next applied.

