- Plug-in housing
- Width 38mm
- 5 functions
- 8 time-ranges
- 1 normally closed contact and 1 normally open contact
- For use with remote potentiometers only

Technical data

1. Functions

Ip	Asymmetric flasher pause first
Ii	Asymmetric flasher pulse first
ER	ON delay and OFF delay with control contact
EWs	ON delay and single shot leading edge with control contact
EWu	ON delay and single shot leading edge voltage controlled (S2-S5 bridged)

2. Time ranges

Time range	Adjustment range	
1s	100ms	1s
10s	1s	10s
1min	6s	1min
10min	1min	10min
1h	6min	1h
10h	1h	10h
1d	144min	1d
10d	1d	10d

Remote potentiometer is mandatory for adjusting the time range!

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 screw terminal socket 11 poles
according to IEC 67-1-18a (Type R11X or ES12)
Mounting position: any

5. Input circuit

Supply voltage:

24V DC	pins S2(+)-S7
24V AC	pins S2-S7
110 to 240V AC	pins S2-S10

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 (1.3W)
Duration of operation:	100%
Reset time:	200ms
Residual ripple for DC:	10%
Drop-out voltage:	>30% of the supply voltage

6. Output circuit

1 potential free normally closed contact and
1 potential free normally open contact
Switching capacity (distance < 5mm): 1250VA (5A / 250V AC)
Switching capacity (distance > 5mm): 2000VA (8A / 250V AC)

Fusing:	8A fast acting
Mechanical life:	20 x 10^6 operations
Electrical life:	2 x 10^5 operations at 1000VA resistive load
Switching frequency:	max. 60/min at 100VA resistive load max. 6/min at 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, pins S2-S5	
Loadable:	yes, parallel load min.1VA (0.5W) pins S5-S10	
Line length:	max.	10m
Control pulse length:	DC	min. 50ms
	AC	min. 50ms

8. Remote potentiometer

Connections:	1MΩ remote potentiometer (Type RONDO R2) pins S3-S6 resp. S6-S8
Line length:	max. 5m, twisted pair

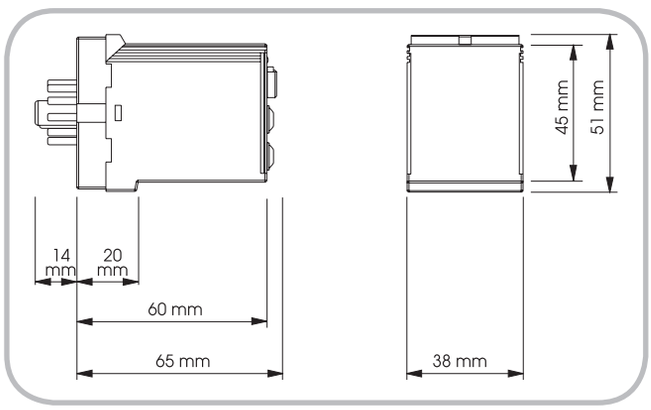
9. Accuracy

Base accuracy:	+5% (of maximum scale value) using 1MΩ remote potentiometers
Adjustment accuracy:	≤5% (of maximum scale value) using 1MΩ remote potentiometers
Repetition accuracy:	±5% or ±100ms
Voltage influence:	-
Temperature influence:	≤0.05% / °C

10. 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:	3 (according to IEC 664-1)

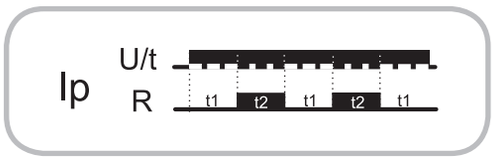
11. Dimensions



Functions

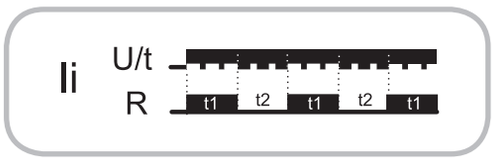
Asymmetric flasher pause first (Ip)

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.



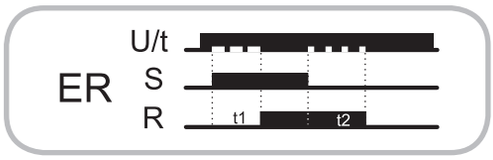
Asymmetric flasher pulse first (Ii)

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.



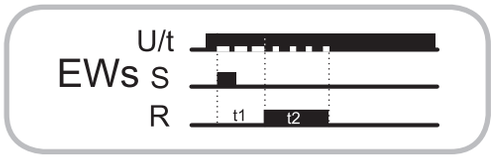
ON delay and OFF delay with control contact (ER)

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 (green LED illuminated), 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.



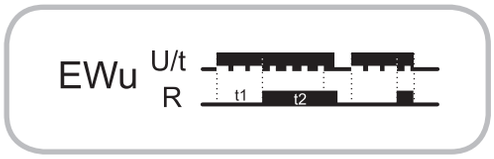
ON delay and single shot leading edge with control contact (EWs)

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.



Connections