- Pluggable
- Combinable to industrial relays with socket type TVE12
- Width 35mm
- 8 functions
- 8 time ranges
- Zoom voltage

Technical data

1. Functions

E	ON delay
R	OFF delay with control contact
Ws	Single shot leading edge with control contact
Wa	Single shot trailing edge with control contact
Wu	Single shot leading edge voltage controlled
Es	ON delay with control contact
Bp	Flasher pause first
Bi	Flasher pulse first

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:	indication of time period

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 TVE12)
Mounting position: any

5. Input circuit

Supply voltage:

24V to 240V AC/DC	terminals A1(+)-A2
Tolerance:	-15% to +10%
Rated frequency:	45 to 65Hz
Rated consumption:	
24V DC	60mW
240V DC	765mW
24V AC	80mVA (54mW)
230V AC	940mVA (520mW)
Duration of operation:	100%
Reset time:	150ms
Residual ripple for DC:	10%
Drop-out voltage:	10V AC resp. 10V DC

6. Output circuit

Depends on selected industrial relay

7. Control contact

Connection:	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. 60ms
	AC	min. 80ms

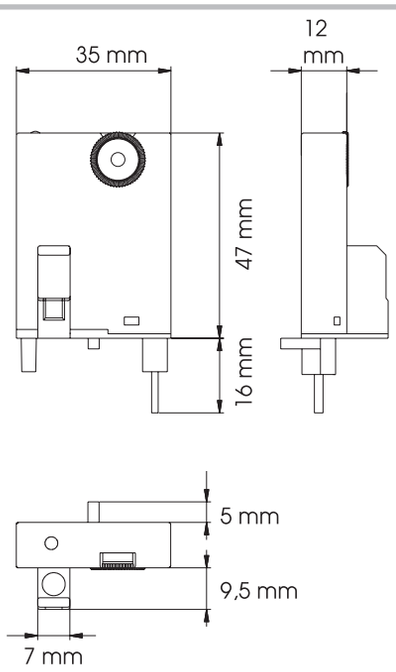
8. Accuracy

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)
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)

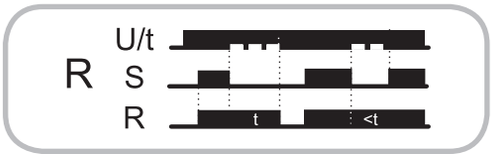
10. Dimensions



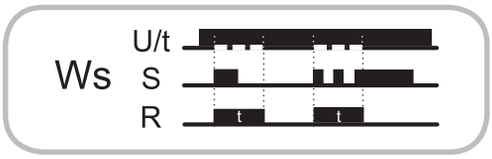
Functions

ON delay (E)
When the supply voltage U is applied, the set interval t begins (green LED flashes). After the interval t has expired (green LED illuminated) the output relay R switches into on-position. This status remains until the supply voltage is interrupted.
Additional option (ON delay adding):
If the control contact is closed the running interval is stopped (green LED illuminated) and the interval already expired is saved. When the control contact is opened once again the interval is continued (green LED flashes). After the interval t has expired, the control contact can be operated as you like.

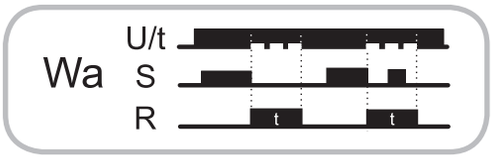
Off delay with control contact (R)
The supply voltage U must be constantly applied to the device (green LED illuminated).
When the control contact S is closed, the output relay R switches into on-position. If the control contact is opened, the set interval t begins (green LED flashes). After the interval t has expired (green LED illuminated) the output relay switches into off-position.
If the control contact is closed again before the interval t has expired, the interval already expired is erased and is restarted with the next cycle.



Single shot leading edge with control contact (Ws)
The supply voltage U must be constantly applied to the device (green LED illuminated).
When the control contact S is closed, the output relay R switches into on-position and the set interval t begins (green LED flashes). After the interval t has expired (green LED illuminated) the output relay switches into off-position.
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.

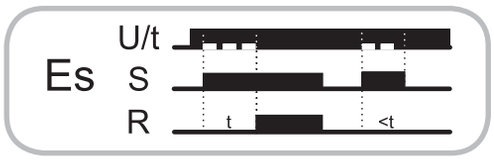


Single shot trailing edge with control contact (Wa)
The supply voltage U must be constantly applied to the device (green LED illuminated).
Closing the control contact S has no influence on the condition of the output relay R. When the control contact is opened, the output relay switches into on-position and the set interval t begins (green LED flashes). After the interval t has expired (green LED illuminated), the output relay switches into off-position.
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.

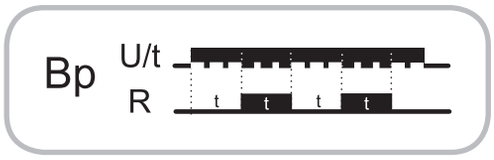


Single shot leading edge voltage controlled (Wu)
When the supply voltage U is applied, the output relay R switches into on-position and the set interval t begins (green LED flashes). After the interval t has expired (green LED illuminated) the output relay switches into off-position. This status remains until the supply voltage is interrupted.
If the supply voltage is interrupted before the interval t has expired, the output relay switches into off-position. The interval already expired is erased and is restarted when the supply voltage is next applied.
Additional option (Single shot leading edge adding):
If the control contact is closed the running interval is stopped (green LED illuminated) and the interval already expired is saved. When the control contact is opened once again the interval is continued (green LED flashes). After the interval t has expired, the control contact can be operated as you like.

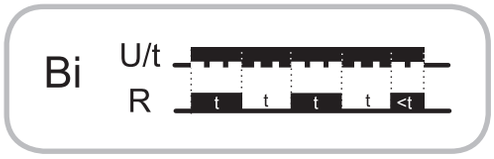
ON delay with control contact (Es)
The supply voltage U must be constantly applied to the device (green LED illuminated).
When the control contact S is closed, the set interval t begins (green LED flashes). After the interval t has expired (green LED illuminated) the output relay R switches into on-position. This status remains until the control contact is opened again.
If the control contact is opened before the interval t has expired, the interval already expired is erased and is restarted with the next cycle.



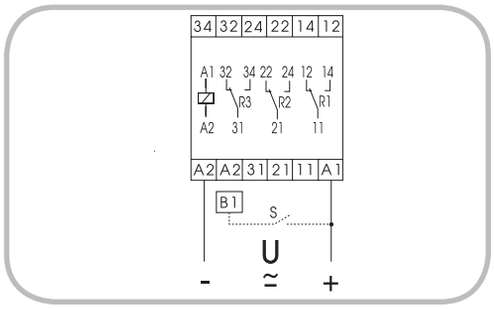
Flasher pause first (Bp)
When the supply voltage U is applied, the set interval t begins (green LED flashes). After the interval t has expired, the output relay R switches into on-position and the set interval t begins again. After the interval t has expired, the output relay switches into off-position.
The output relay is triggered at a ratio of 1:1 until the supply voltage is interrupted.



Flasher pulse first (Bi)
When the supply voltage U is applied, the output relay R switches into on-position and the set interval t begins (green LED flashes). After the interval t has expired, the output relay switches into off-position and the set interval t begins again.
The output relay is triggered at a ratio of 1:1 until the supply voltage is interrupted.



Connections



Automation Components