

Time-Relay SGR T01 1C 4

Multifunctional Time Relay 1pole 8A 4 Functions

ELESTA

Technical Data

Functions

E	ON delay
R	OFF delay with control input
Wu	Single shot leading edge voltage controlled
Bp	Flasher pause first

The function has to be set before connection the relay to the supply voltage.

Time Ranges

Time Range	Adjustment Range	
1s	50ms	1s
10s	500ms	10s
1min	3s	1min
10min	30s	10min
1h	3min	1h
10h	30min	10h
100h	5h	100h

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 output

Mechanical Design

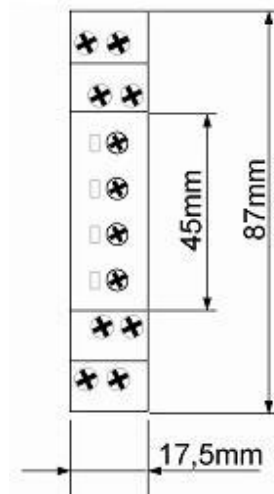
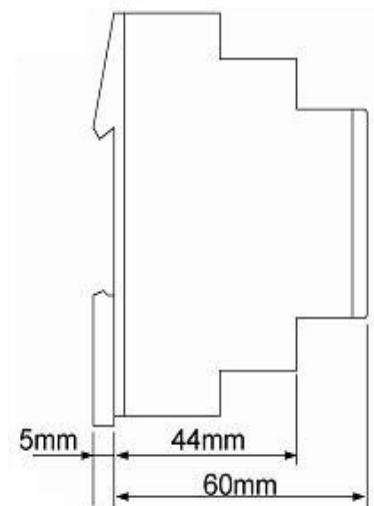
Housing	
Material	Self-extinguishing plastic
IP Rating	IP40
Mounting Parts	On DIN-Rail TS35 according to EN 50022
Mounting Position	Any
Circuit Points	
Kind/Construction	Shockproof terminal connection according to VBG 4
IP Rating	IP20
Tightening Torque	Max. 1Nm
Terminal Capacity	1 x 0.5 to 2.5mm ² with/without multicore cable end 1 x 4mm ² without multicore cable end 2 x 0.5 to 1.5mm ² with/without multicore cable end 2 x 2.5mm ² flexible without multicore cable end

Input Circuit

Supply Voltage	Terminals A1(+)-A2	24 to 240V AC/DC
Tolerance	24V -15% to 240V +10%	
Rated Consumption	4VA (1.5W)	
Rated Frequency	AV 48 to 63 Hz	
Duty Cycle	100%	
Reset Time	100ms	
Residual Ripple for DC	10%	
Drop-Out Voltage	>30% of the min. supply voltage	
Overvoltage Category (according to IEC 60664-1)	III.	
Rated Surge Voltage	4kV	



Dimension Diagram



View on circuit points.

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Output Circuit	
Type of Contact	1 potential free change-over contact
Rated Voltage	250V AC
Switching Capacity	2000VA (8A / 250V)
Fusing	8A fast acting
Mechanical Life	20×10^6
Electrical Life	2×10^5
Switching Frequency (according to IEC 947-5-1)	Max. 60/min at 100VA resistive load Max. 6/min at 1000VA resistive load
Overvoltage Category (according to IEC 60664-1)	III.
Rated surge voltage	4kV

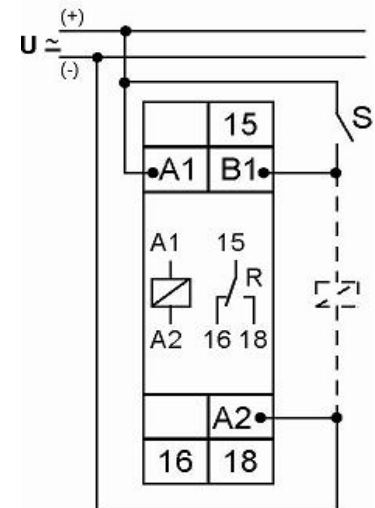
Control Input	
Input not potential free	Terminals A1-B1
Loadable	Yes
Max. Line Length	10m
Trigger Level	automatic adaption to supply voltage
Min. control pulse length	DC 50ms / AC 100ms

Accuracy	
Base Accuracy	$\pm 1\%$ of maximum scale value
Adjusting Accuracy	$< 5\%$ of maximum scale value
Repetition Accuracy	$< 0.5\%$ or $\pm 5\text{ms}$
Voltage Influence	-
Temperature Influence	$\leq 0.01\% / ^\circ\text{C}$

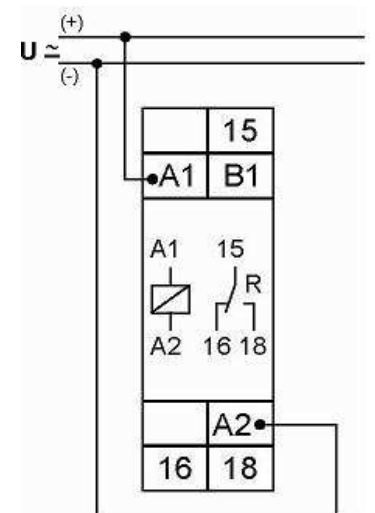
Ambient Conditions	
Ambient Temperature (according to IEC 68-1)	-25 to +55°C
Storage Temperature	-25 to +70°C
Transport Temperature	-25 to +70°C
Relative Humidity (according to IEC 721-3-3 class 3K3)	15% to 85%
Pollution Degree (according to IEC 664-1)	2, if built-in 3
Vibrations Resistance (according to IEC 68-2-6)	10 to 55 Hz 0.35mm
Shock Resistance (according to IEC 68-2-27)	15g 11ms

Weight	
Single Packing	72g
Package 10pcs	670g per Package

Connections with control input



Connections without control input



Functions

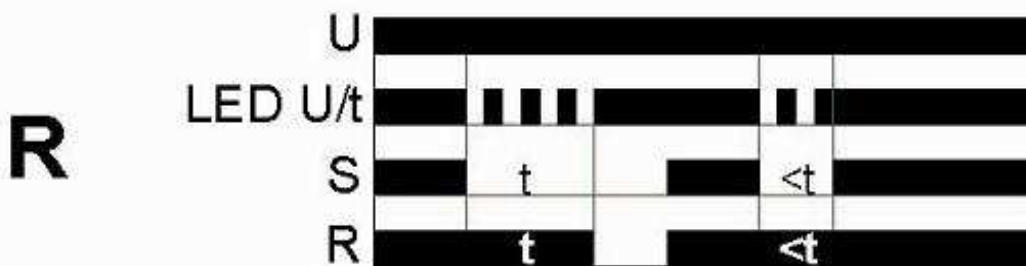
ON Delay (E)

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.



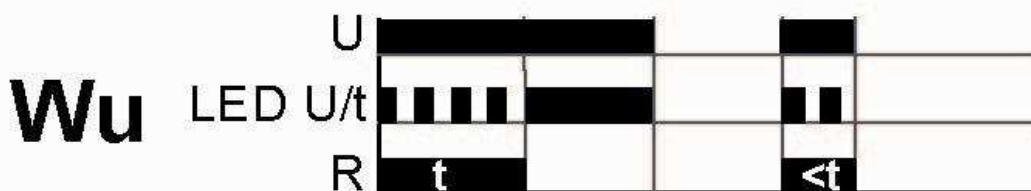
OFF Delay (R)

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 U/t 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.



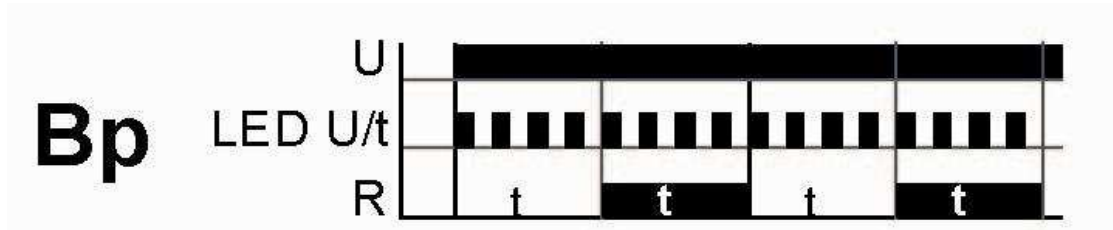
Single Shot Leading Edge Voltage Controlled (Wu)

When the supply voltage [U] is applied, the output relay [R] switches into on-position (yellow LED illuminated) and the set interval [t] begins (green LED U/t flashes). After the interval [t] has expired (green LED U/t illuminated) the output relay switches into off position (yellow LED not illuminated). 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 is erased and is restarted when the supply voltage is next applied.



Flasher Pause First (Bp)

When the supply voltage [U] is applied, the set interval [t] begins (green LED U/T flashes). After the interval [t] has expired, the output relay [R] switches into on-position (yellow LED illuminated) and the set interval [t] begins again. After the interval [t] has expired, the output relay switches into off-position (yellow LED not illuminated). The output relay is triggered at a ratio of 1:1 until the supply voltage is interrupted.



Order Type

