

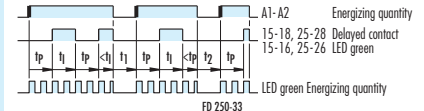
# NGB 12

## Fixed time flasher relay

- Multi-voltage for AC/DC 24 to 240 V
- 1 function, symmetrical flashing, starts OFF
- Fixed time 0.5 s/0.5 s
- 2 changeover contacts
- 2 LEDs for function display

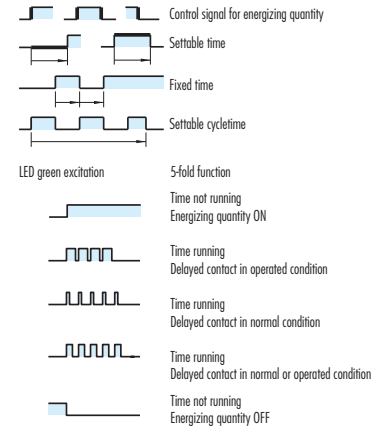
## Functions

Function code 41 = flashing, starts OFF



$t_p$  = Fixed OFF time  
 $t_1$  = Fixed ON time  
 $t_2$  = Break time, must be > recovery time 1  
 $t_2$  = Break time, must be > recovery time 2

### Legend



## Time ranges

Fixed time 0.5 s/0.5 s

## Features

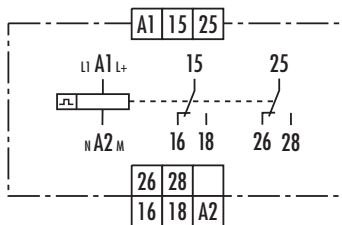
### Time delay

The NGB 12 time relay is supplied with fixed ON and OFF time.

ON time = 0.5 s  
OFF time = 0.5 s

LEDs show the state of the excitation input and the position of the contacts.

## Connection diagram

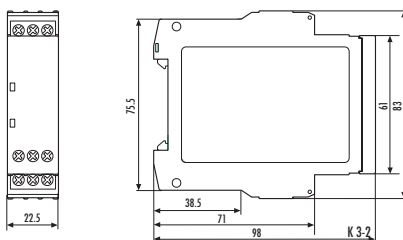


KS 250-20

## Note

The device is designed for multi-voltage. Connect phase L1 or L + to terminal A1 and neutral N or M to terminal A2.

## Dimensions



## Ordering designation

**NGB 12**

Price code: 86.1

## Technical data

<b>Device type</b>	<b>NGB 12</b>
<b>Product norm</b> (Time relays)	EN 61812-1:1999-08
Relay function	445-01-06
according to IEC 60050	
Function diagram	FD 250 - 33
Function display	2 LEDs green
Ambient operating temperature range	-25 to +60 °C
<b>Input circuit</b>	
Rated voltage A1 - A2	AC/DC 24 to 240 V
Rated power AC	3.5 VA/1.7 W
Rated power DC	1.6 W
Rated voltage limits	70 to 110 %
Rated frequency $f_N$	50 to 60 Hz $\pm$ 5 %
Release value of input voltage (line capacitance approx. 150 pF/m)	$\geq$ AC/DC 10 V; permissible line capacitance 0.2 $\mu$ F
Parallel load permitted	A1 - A2 yes
Internal one-way rectifier	A1 - A2 no
<b>Time circuit</b>	
Time setting / number of time ranges	analog/1 fixed time
Time delay ranges	0.5 s/0.5 s
Cycle start	OFF
Recovery time 1/2	$\leq$ 50/ $\leq$ 50 ms
Setting tolerance	$\leq \pm$ 5 %
Repeatability (to set value)	$\leq \pm$ 0.01 % + $\pm$ 10 ms
Influence of temperature (within range)	$\leq$ + 6,5 % / - 8 %, typ. approx. 1 %
Influence of voltage (within range)	$\leq \pm$ 0.002 %
<b>Output circuit</b>	
Contact equipment	2 changeover contacts
Contact material	AgNi 90/10
Rated operating voltage	AC/DC 24 to 240 V
Rated value for limiting continuous current $I_{th}$	5 A
Minimum contact load	$\geq$ AC/DC 5 V/ $\geq$ 10 mA
Utilization category according to IEC 60947-5-1	AC-15 $U_e$ AC 230 V, $I_e$ 3 A DC-13 $U_e$ DC 24 V, $I_e$ 2 A
Permissible switching frequency	$\leq$ 3600 switching cycles/h
Mechanical service life	30 x 10 <sup>6</sup> switching cycles
Electrical service life 20/2 A, AC 250 V, $\cos \varphi = 0,3$	0.12 x 10 <sup>6</sup> switching cycles AC-15
Operate time / release time for excitation A1 - A2	40 ms
<b>Other data</b>	
Clearance/creepage distances to IEC 60664 - 1	
Contamination level	3 outside, 2 inside
Overvoltage category	III
Rated voltage	AC/DC 275 V
Protection class housing / terminals acc. to IEC 60529	IP 40/IP 20
Interference immunity acc. to IEC 61000-4	Test level 3
Dimensions (housing)	K 3 - 2
Terminal connection diagram	KS 250 - 20
Connection cross sections single or fine wire	1 x 0,2 to 6 or 2 x 0,2 to 2,5 mm <sup>2</sup>
fine wire with connector sleeve	1 x 0,4 to 4 or 2 x 0,2 to 1,5 mm <sup>2</sup>
Weight	0.11 kg
<b>General Technical Specification</b>	NGG Catalogue