

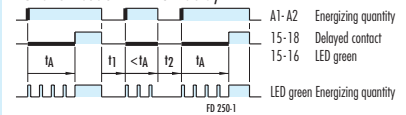
NGZ 11

ON-delay single-range time relay

- Multi-voltage for AC/DC 24 to 240 V
- 1 function, ON-delay
- 13 time ranges available
- 1 changeover contact
- 2 LEDs for function display

Functions

Function code 11 = ON-delay

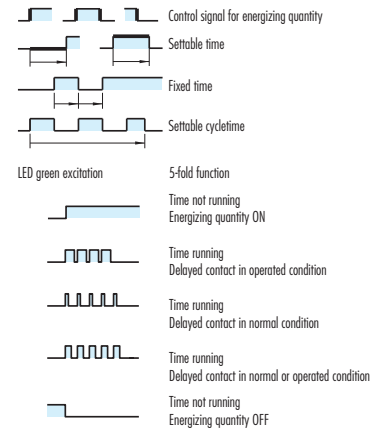


t_A = Operating time

t_1 = Break time, must be > recovery time 1

t_2 = Break time, must be > recovery time 2

Legend



Time ranges

Available time ranges:

≤ 0.1 to 1 s	0.5 to 10 min
0.15 to 3 s	1.5 to 30 min
0.5 to 10 s	3 to 60 min
1.5 to 30 s	0.5 to 10 h
5 to 100 s	1.5 to 30 h
15 to 300 s	5 to 100 h
50 to 1000 s	

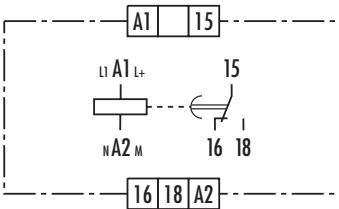
Features

Setting the time delay

The required delay time is set with a setting wheel. You can adjust it with a screwdriver.

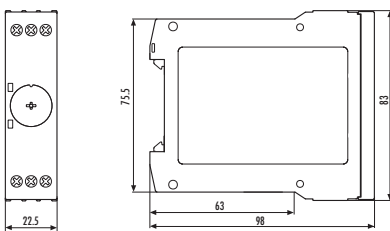
LEDs show the state of the excitation input and the position of the contacts. You can monitor the countdown on a flashing LED.

Connection diagram



KS 250-1

Dimensions



K 3-1

Note

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

You can change the delay time during operation. The change is effective immediately.

Ordering designation

NGZ 11 plus time range

Price code: 66.1

Technical data

	Device type	NGZ 11																					
	Product norm (Time relays)	EN 61812 - 1:1999 - 08																					
	Relay function according to IEC 60050	445 - 01 - 02																					
	Function diagram	FD 250 - 1																					
	Function display	2 LEDs green																					
	Ambient operating temperature range	-25 to + 60 °C																					
	Input circuit																						
	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 μ F																					
	Parallel load permitted	A1 - A2 yes																					
	Internal one-way rectifier	A1 - A2 no																					
	Time circuit																						
	Time setting / number of time ranges	analog/1																					
	Setting ranges for time delay	from \leq 0.1 s to 100 h, available in ranges:																					
		<table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">\leq 0.1 to 1 s</td> <td style="width: 33%;">0.5 to 10 min</td> <td style="width: 33%;"></td> </tr> <tr> <td>0.15 to 3 s</td> <td>1.5 to 30 min</td> <td></td> </tr> <tr> <td>0.5 to 10 s</td> <td>3 to 60 min</td> <td></td> </tr> <tr> <td>1.5 to 30 s</td> <td>0.5 to 10 h</td> <td></td> </tr> <tr> <td>5 to 100 s</td> <td>1.5 to 30 h</td> <td></td> </tr> <tr> <td>15 to 300 s</td> <td>5 to 100 h</td> <td></td> </tr> <tr> <td>50 to 1000 s</td> <td></td> <td></td> </tr> </table>	\leq 0.1 to 1 s	0.5 to 10 min		0.15 to 3 s	1.5 to 30 min		0.5 to 10 s	3 to 60 min		1.5 to 30 s	0.5 to 10 h		5 to 100 s	1.5 to 30 h		15 to 300 s	5 to 100 h		50 to 1000 s		
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	Recovery time 1/2	\leq 50/ \leq 50 ms																					
	Minimum ON time 1/2	- / - ms																					
	Setting tolerance	\leq \pm 5 %																					
	Repeatability (to set value)	\leq \pm 0.01 % + \pm 10 ms																					
	Influence of temperature (within range)	\leq \pm 0.002 %																					
	Influence of voltage (within range)	\leq \pm 0.002 %																					
	Output circuit																						
	Contact equipment	1 changeover contact																					
	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 ⁶ switching cycles																					
	Electrical service life																						
	20/2 A, AC 250 V, $\cos \varphi = 0.3$	0.12 x 10 ⁶ switching cycles AC-15																					
	Operate time / release time for excitation A1 - A2	40 ms																					
	Other data																						
	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 - 1																					
	Terminal connection diagram	KS 250 - 1																					
	Connection cross sections single or fine wire	1 x 0,2 to 6 or 2 x 0,2 to 2,5 mm ²																					
	fine wire with connector sleeve	1 x 0,4 to 4 or 2 x 0,2 to 1,5 mm ²																					
	Weight	0.1 kg																					
	General Technical Specifications	NGG Catalogue																					