

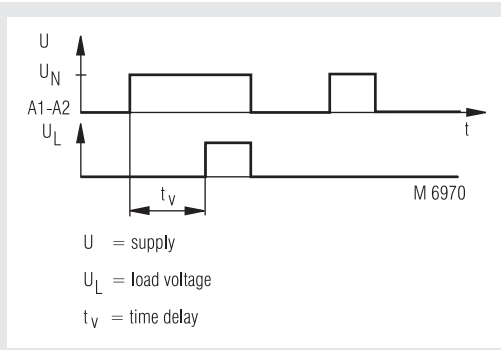
## MINITIMER

### Time Relay, With Operate Delay IK 8808



- For two-wire technology
- According to IEC/EN 61 812-1
- programmable time ranges between 0.06 ... 160 s or 0.06 ... 160 min
- Programmable nominal voltage AC/DC 24 ... 240 V
- Repeat accuracy  $\pm 1 \%$
- Thyristor output for 10 ... 800 mA
- Width 17.5 mm

#### Function Diagram



#### Approvals and Marking



#### Application

Time-based control equipment

#### Notes

The units must be connected in accordance with the connection examples. Voltage may not be applied to the time relay when it is not loaded; if this is done, the time relay will be destroyed. Connections A1 and A2 have advance pole protection.

#### Unit Programming

Terminals	Bridge	Time sec/min	Voltage AC/DC [V]
5 - 6 7 - 8		16 ... 160	
5 - 6 7 - 8	X	2 ... 20	
5 - 6 7 - 8	X	0.25 ... 2.5	
5 - 6 7 - 8	X	0.06 ... 0.6	
3 - 4	X		24 ... 60
3 - 4			60 ... 240

#### Technical Data

##### Time circuit

**Time ranges:** 0.06 ... 0.6 s or 0.06 ... 0.6 min  
0.25 ... 2.5 s 0.25 ... 2.5 min  
2 ... 20 s 2 ... 20 min  
16 ... 160 s 16 ... 160 min  
Infinitely variable, on relative scale

**Time setting:**  
**Recovery time**

tw 50 / 100:  $\leq 100 \text{ ms} / \leq 25 \text{ ms}$

**Repeat accuracy:**  $\pm 1 \%$  of the full scale

**Temperature influence:**  $\leq 0.15 \%$  / K

##### Input

**Nominal voltage U<sub>N</sub>:** AC/DC 24 ... 60 V and AC/DC 60 ... 240 V

**Voltage range:** 0.8 ... 1.1 U<sub>N</sub>

**Nominal frequency:** 50 / 60 Hz

**Frequency range:**  $\pm 20 \%$

**Residual current:**  $\leq 3 \text{ mA}$  during the operating time

**Voltage drop:**  $\leq 3.5 \text{ V}$  after the operating time has ended

##### Output

**Type of output:** Thyristor

**Load current (min.):** 10 mA

**Load current (max.):** 0.8 A (20°C)

**Load current reduction:** 10 mA

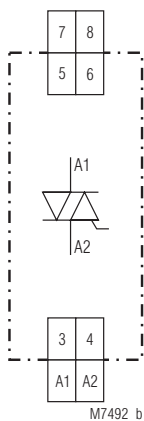
**Max. overload:** 25 A max. 10 ms

50 A max. 1 ms

**Dielectric strength:** 1 400 V max. 100  $\mu\text{s}$

**Thermal current I<sub>th</sub>:** 0.8 A

#### Circuit Diagram



## Technical Data

### General Data

<b>Nominal operating mode:</b>	Continuous operation	
<b>Temperature range:</b>	- 20 ... + 60°C	
<b>EMC</b>		
Electrostatic discharge:	8 kV (air)	IEC/EN 61 000-4-2
Fast transient:	1 kV	IEC/EN 61 000-4-4
Surge voltages between wires for power supply:	2 kV	IEC/EN 61 000-4-5
between wire and ground:	4 kV	IEC/EN 61 000-4-5
Interference suppression:	Limit value class B	EN 55 011
<b>Degree of protection</b>		
Housing:	IP 40	IEC/EN 60 529
Terminals:	IP 20	IEC/EN 60 529
<b>Housing:</b>	Thermoplastic with V0 behaviour according to UL subject 94	
<b>Vibration resistance:</b>	Amplitude 0.35 mm, frequency 10 ... 55 Hz IEC/EN 60 068-2-6	
<b>Climate resistance:</b>	20 / 060 / 04 IEC/EN 60 068-1	
<b>Wire connection:</b>	2 x 2.5 mm <sup>2</sup> solid or 2 x 1.5 mm <sup>2</sup> stranded ferruled DIN 46 228-1/-2/-3/-4	
<b>Wire fixing:</b>	Terminals with self-lifting clamping piece IEC/EN 60 999-1	
<b>Mounting:</b>	DIN rail IEC/EN 60 715	
<b>Weight:</b>	58 g	

### Dimensions

**Width x height x depth:** 17.5 x 89 x 58 mm

### Standard Type

IK 8808 0.06 ... 160 s		
Article number:	0023180	stock item
• Nominal voltage $U_N$ :	AC/DC 24 ... 240 V	
• Time range:	0.06 ... 160 s	
• Width:	17.5 mm	

### Connection Example

