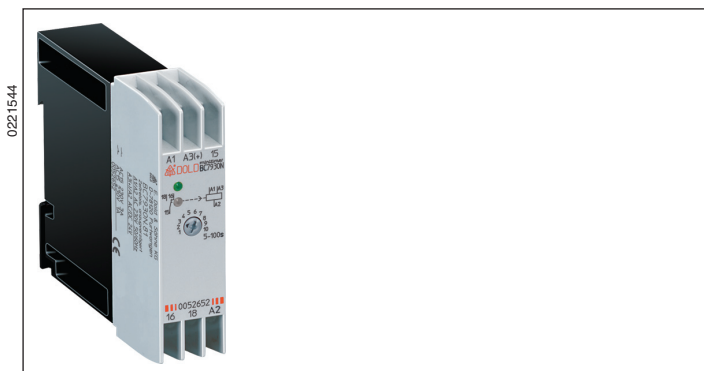


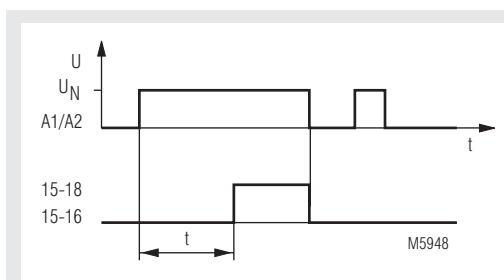
## MINITIMER

Timer, operate delay  
BC 7930N



- According to IEC/EN 61 812-1
- Time delay between 0.05 s ... 10 h
- Repeat accuracy  $\leq 0.5 \% + 10 \text{ ms}$
- Dual voltage supply
- LED indicator for contact position
- 1 changeover contact
- Wire connection: also 2 x 1.5 mm<sup>2</sup> stranded ferruled (isolated), DIN 46 228-1/-2/-3/-4 or 2 x 2.5 mm<sup>2</sup> stranded ferruled DIN 46 228-1/-2/-3
- Width 22.5 mm

### Function Diagram



### Approvals and Marking



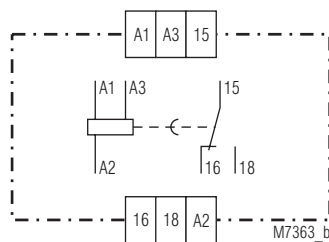
### Applications

Time dependent controllers

### Indication

LED: on when output relay activated (contacts 15-18 are closed)

### Circuit Diagram



### Technical Data

#### Time circuit

Time ranges:	0.05 ... 1 s	0.5 ... 10 min.
	0.15 ... 3 s	1.5 ... 30 min.
	0.5 ... 10 s	3 ... 60 min.
	1.5 ... 30 s	0.15 ... 3 h
	5 ... 100 s	0.5 ... 10 h
	15 ... 300 s	

**Time setting:** stepless 1:20  
**Recovery time:**  $\leq 100 \text{ ms}$   
**Repeat accuracy:**  $\leq 0.5 \% + 10 \text{ ms}$   
**Voltage influence:**  $\leq 1 \%$   
**Temperature influence:**  $\leq 0.25 \% / \text{K}$

#### Input

**Nominal voltage  $U_N$ :** AC/DC 24 V<sup>1)</sup> + AC 230 V<sup>2)</sup>  
 AC/DC 24 V<sup>1)</sup> + AC 110 ... 127 V<sup>2)</sup>  
 AC/DC 24 V<sup>1)</sup> + AC 42 V<sup>2)</sup>  
 AC/DC 12 V

<sup>1)</sup> at terminals A3-A2

<sup>2)</sup> at terminals A1-A2

**Voltage range:** 0.8 ... 1.1  $U_N$  at AC  
 0.9 ... 1.25  $U_N$  at DC

**Nominal consumption:** AC: 4 VA  
 DC: 0.4 W

**Nominal frequency:** 50 / 60 Hz

**Frequency range:**  $\pm 5 \% f_N$

**Release voltage:** 15 %  $U_N$

#### Output

**Contacts:** 1 changeover contact

**Thermal current  $I_{th}$ :** 4 A

**Switching capacity**  
 to AC 15

NO contact: 3 A / AC 230 V IEC/EN 60 947-5-1

NC contact: 1 A / AC 230 V IEC/EN 60 947-5-1

**Electrical life** IEC/EN 60 947-5-1  
 to AC 15 at 1 A, AC 230 V: 1.5 x 10<sup>5</sup> switching cycles

## Technical Data

<b>Short circuit strength</b>		
<b>max. fuse rating:</b>	4 A gL	IEC/EN 60 947-5-1
<b>Mechanical life:</b>	10 <sup>8</sup> switching cycles	

## General Data

<b>Operating mode:</b>	Continuous operation	
<b>Temperature range:</b>	- 20 ... + 60°C	
<b>Clearance and creepage distances</b>		
overvoltage category / pollution degree	4 kV / 2	IEC 60 664-1
<b>EMC</b>		
Electrostatic discharge:	8 kV (air)	IEC/EN 61 000-4-2
HF irradiation:	10 V/m	IEC/EN 61 000-4-3
Fast transients:	4 kV	IEC/EN 61 000-4-4
Surge voltages between wires for power supply:	1 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 IEC/EN 60 068-2-6 frequency 10 ... 55 Hz	
<b>Climate resistance:</b>	20 / 060 / 04 IEC/EN 60 068-1	
<b>Terminal designation:</b>	EN 50 005	
<b>Wire connection:</b>	1 x 4 mm <sup>2</sup> solid or 1 x 2.5 mm <sup>2</sup> stranded ferruled (isolated) or 2 x 1.5 mm <sup>2</sup> stranded ferruled (isolated) DIN 46 228-1/-2/-3/-4 or 2 x 2.5 mm <sup>2</sup> stranded ferruled DIN 46 228-1/-2/-3	
<b>Wire fixing:</b>	Terminal screws M 3.5 Box terminal with wire protection	
<b>Mounting:</b>	DIN rail IEC/EN 60 715	
<b>Weight:</b>	80 g	

## Dimensions

**Width x height x depth:** 22.5 x 84 x 97 mm

## Standard Type

BC 7930N.81	AC/DC 24 V + AC 230 V	5 ... 100 s
Article number:	0052652	
• Front colour grey, with box terminals		
• Output:	1 changeover contact	
• Nominal voltage U <sub>N</sub> :	AC/DC 24 V + AC 230 V	
• Time range:	5 ... 100 s	
• Width:	22.5 mm	

## Ordering Example

BC 7930N	.81	AC/DC 24 + AC 230 V	50 / 60 Hz	10 s
				Time range end value
				Nominal frequency
				Nominal voltage
				Contacts
				Type