

# Time Control Technique

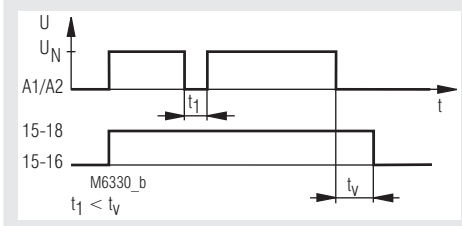
**MINITIMER**  
**Timer, Off-delay**  
**BA 7954**

Translation  
of the original instructions **DOLD** 



- Power OFF-delay relay according to EN 61812-1
- No-voltage safe
- Delay up to 300 s
- Repeat accuracy  $< \pm 1\%$
- For 2-wire proximity sensors
- 2 changeover contacts
- Width 45 mm

## Function Diagram



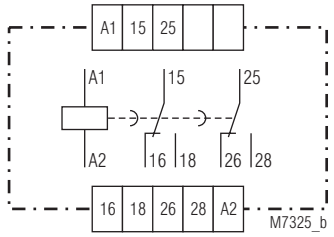
## Approvals and Markings



## Indication

LED: On, when supply connected

## Circuit Diagram



## Connection Terminals

Terminal designation	Signal description
A1, A2	Operating voltage
15, 16, 18	Changeover contacts (output relay)
25, 26, 28	Changeover contacts (2. output relay)

BA 7954.82

## Technical Data

### Time Circuit

<b>Time ranges:</b>	0.05 ... 1 s	0.15 ... 3 s
	0.5 ... 10 s	1.5 ... 30 s
	5 ... 100 s	15 ... 300 s
<b>Time setting:</b>	Stepless, on absolute scale	
<b>Repeat accuracy:</b>	≤ ± 1 %	
<b>Min. setting time:</b>	25 ms	
	<b>Attention!</b>	
	Time faults when min. setting time < 10 %. When setting time longer, the fault will be less.	
<b>Voltage influence:</b>	< ± 1 %	
<b>Temperature influence</b>	< 0.3 % / K	

### Input

<b>Nominal voltage <math>U_N</math>:</b>	AC 24, 42, 110, 127, 230, 240 V DC 24 V
<b>Voltage range:</b>	0.8 ... 1.1 $U_N$
<b>Permissible residual current:</b>	≤ 2.5 mA
<b>Nominal consumption:</b>	AC 3 VA DC 1.5 W
<b>Nominal frequency:</b>	50 / 60 Hz
<b>Recovery time:</b>	≥ 25 ms

### Output

<b>Contacts:</b>	2 changeover contacts, delayed	
<b>Contact material:</b>	AgSnO <sub>2</sub> , 0,2μm Au	
<b>Measured nominal voltage:</b>	AC 250 V	
<b>Operate time of the contacts:</b>	≤ 25 ms	
<b>Thermal current <math>I_{th}</math>:</b>	5 A	
<b>Switching capacity</b>		
To AC 15:		
NO contact:	3 A / AC 230 V	IEC/EN 60947-5-1
NC contact:	1 A / AC 230 V	IEC/EN 60947-5-1
<b>Electrical life</b>	IEC/EN 60947-5-1	
To AC 15 at 1 A, AC 230 V:	2.5 x 10 <sup>5</sup> switching cycles	
<b>Permissible switching frequency:</b>	6000 switching cycles / h	
<b>Short-circuit strength</b>		
<b>Max. fuse rating:</b>	4 A gG / gL	IEC/EN 60947-5-1
<b>Mechanical life:</b>	> 10 x 10 <sup>6</sup> switching cycles	

### General Data

<b>Operating mode:</b>	Continuous operation	
<b>Temperature range</b>		
Operation:	- 20 ... + 60 °C	
Storage:	- 20 ... + 60 °C	
<b>Altitude:</b>	≤ 2000 m	
<b>Clearance and creepage distances</b>		
Rated impulse voltage / pollution degree:	4 kV / 2	IEC 60664-1
Overvoltage category:	III	
Insulation test voltage, type test:	2.5 kV; 1 min	
<b>EMC</b>		
Electrostatic discharge:	8 kV (air)	IEC/EN 61000-4-2
HF irradiation		
80 MHz ... 1 GHz:	10 V / m	IEC/EN 61000-4-3
1 GHz ... 2 GHz:	10 V / m	IEC/EN 61000-4-3
2 GHz ... 2.7 GHz:	10 V / m	IEC/EN 61000-4-3
Fast transients:	2 kV	IEC/EN 61000-4-4
Surge voltages		
Between		
wires for power supply:	1 kV	IEC/EN 61000-4-5
Between wire and ground:	2 kV	IEC/EN 61000-4-5
Interference suppression:	Limit value class B	EN 55011
<b>Degree of protection</b>		
Housing:	IP 40	IEC/EN 60529
Terminals:	IP 20	IEC/EN 60529
<b>Housing:</b>	Thermoplast with V0 behaviour according to UL subject 94	

## Technical Data

<b>Vibration resistance:</b>	Amplitude 0.35 mm frequency 10...55Hz	IEC/EN 60068-2-6
<b>Climate resistance:</b>	20 / 060 / 04	IEC/EN 60068-1
<b>Terminal arrangement:</b>	DIN 46199-5	
<b>Terminal designation:</b>	EN 50005	
<b>Wire connection:</b>	2 x 2.5 mm <sup>2</sup> solid or 2 x 1.5 mm <sup>2</sup> stranded wire with sleeve DIN 46228-1/-2/-3/-4	
<b>Wire fixing:</b>	Flat terminals with self-lifting clamping piece	IEC/EN 60999-1
<b>Fixing torque:</b>	0.8 Nm	
<b>Mounting:</b>	DIN rail	IEC/EN 60715
<b>Weight:</b>	260 g	

### Dimensions

<b>Width x height x depth:</b>	45 x 73 x 133 mm
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### Standard Type

BA 7954.82	AC 230 V	50 / 60 Hz	0.5 ... 10 s
• Article number:	0024075		
• Nominal voltage $U_N$ :	AC 230 V		
• Time range:	0.5 ... 10 s		
• Width:	45 mm		

### Ordering Example for Variant

BA 7954	.82	/	DC 24 V	0.5 ... 10 s	
					Time range
					Nominal voltage
					Variant, if required
					Contacts
					Type

### Accessories

For BA 7954:	
ET 4762-5	Adaptor for screw fixing Article number: 0023119