

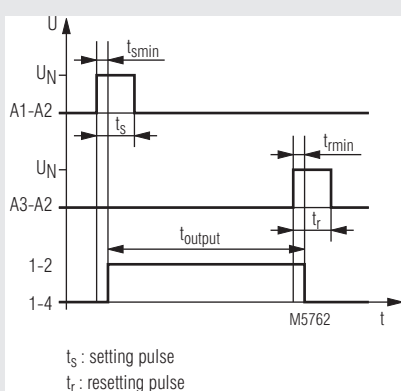
## Latching Relay MK 8852

Translation  
of the original instructions



- According to IEC/EN 61810-1
- Setting input A1 - A2
- Reset input A3 - A2
- Storage function
- Switch position indication
- Manual operation
- Width 22.5 mm

### Function Diagram



### Approvals and Markings



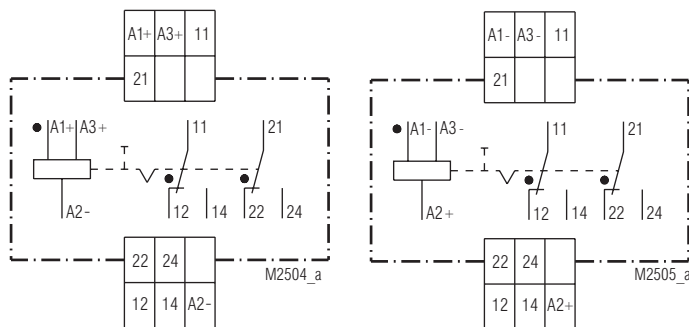
### Applications

Impulse conversion into a permanent function. (A pulse input s leading to a continuous function output).

### Notes

Latching relays are designed for pulse operation. In case of cyclic pulsed operation, the recommended pulse duration for  $t_s$  and  $t_r$  are within 0.03 ... 2 s each. A pulse-interval-ratio of 25 % duty cycle is recommended. In no case the permissible operating frequency may be exceeded. For single pulse operation pulse times of > 2 s are possible. A recovery time (min off time between 2 impulses) of > 6 s is required.

### Circuit Diagrams



MK 8852.12

MK 8852.12/002

In case of a failure a continuous control is possible.

Simultaneous energization of A1 and A3 ist not allowed!

### Connection Terminals

Terminal designation	Signal description
A1, A2	Setting input AC/DC (setting pulse)
A3, A2	Reset input AC/DC
11, 12, 14; 21, 22, 24	Changeover contacts

## Technical Data

### Input

<b>Operating mode:</b>	Impulse operation
<b>Nominal voltage <math>U_N</math>:</b>	AC / DC 24 V, 30 ... 80 V, 96 ... 150 V, 180 ... 240 V
<b>Voltage range:</b>	0.8 ... 1.1 $U_N$ (for limit range 30 V resp. 80 V or no range up to 24 V)
<b>Nominal consumption:</b>	1.35 W
<b>Nominal frequency:</b>	50 / 60 Hz
<b>Frequency range:</b>	± 5 %
<b>Min. pulse duration</b> ( $\hat{=}$ $t_{s, min}$ and $t_{r, min}$ ):	30 ms

### Output

<b>Contacts</b>	
MK 8852.12:	2 changeover contacts
<b>Operate time of contacts:</b>	10 ms
<b>Release time of contacts:</b>	10 ms
<b>Thermal current <math>I_{th}</math>:</b>	6 A
<b>Switching capacity</b>	IEC/EN 60947-5-1
To AC 15:	4 A / AC 230 V
To DC 13:	1.5 A / DC 24 V 0.2 A / DC 110 V 0.1 A / DC 230 V
<b>Electrical life</b>	IEC/EN 60947-5-1
At 6 A, AC 230 V $\cos \varphi = 1$ :	> 1 x 10 <sup>5</sup> switch. cycl. IEC/EN 60947-5-1
To AC 15 at 4 A, AC 230 V:	> 1 x 10 <sup>5</sup> switch. cycl. IEC/EN 60947-5-1
To DC 13 at 1 A, AC 24 V:	> 1 x 10 <sup>5</sup> switch. cycl. IEC/EN 60947-5-1
<b>Permissible switching frequency:</b>	3600 switching cycles / h ... continuous operation $\hat{=}$ $t_{output}$
<b>Short-circuit strength</b>	
<b>max. fuse range</b>	6 A gG / gL IEC/EN 60947-5-1
<b>Mechanical life:</b>	10 x 10 <sup>6</sup> switching cycles

## General Data

### Temperature range

Operation:	- 25 ... + 50 °C
Lagerung:	- 25 ... + 50 °C
<b>Altitude:</b>	< 2000 m

### Clearance and creepage distances

Rated impulse voltage / pollution degree:	4 kV / 2	IEC 60664-1
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### EMC

Electrostatic discharge:	8 kV (air)	IEC/EN 61000-4-2
HF irradiation		
80 MHz ... 2.7 GHz:	10 V/m	IEC/EN 61000-4-3
Fast transients:	4 kV	IEC/EN 61000-4-4
Surge voltages between		
Wires for power supply:	2 kV	IEC/EN 61000-4-5
Between wire and ground:	4 kV	IEC/EN 61000-4-5
HF-wire guided:	10 V	IEC/EN 61000-4-6
Interference suppression:	Limit value class B	EN 55011

### Degree of protection

Housing:	IP 40	IEC/EN 60529
Terminals:	IP 20	IEC/EN 60529

**Housing:** Thermoplast with V0 behaviour  
according to UL subject 94

### Vibration resistance:

Amplitude 0.35 mm frequency 10 ... 55 Hz	IEC/EN 60068-2-6
25 / 50 / 04	IEC/EN 60068-1

### Climate resistance:

EN 50005

### Terminal designation:

**Wire connection:** 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  
2 x 1.0 mm<sup>2</sup> stranded wire with sleeve  
DIN 46228-1/-2/-3/-4

### Wire fixing:

Flat terminals with self-lifting  
clamping piece IEC/EN 60999-1

### Fixing torque:

0.4 Nm

### Mounting:

DIN rail IEC/EN 60715

### Weight:

120 g

## Dimensions

<b>Width x height x depth:</b>	22.5 x 82 x 102 mm
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## Standard Type

MK 8852.12 AC/DC 180 ... 240 V	
Article number:	0059338
• Output:	2 changeover contacts
• Nominal voltage $U_N$ :	AC/DC 180 ... 240 V
• Width:	22,5 mm

## Variant

MK 8852.12/002:	For AC/DC-models; for DC operation observe reversed polarity on input
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## Ordering example for variant

MK 8852	.12	/	---	AC 230 V	50 / 60 Hz	
						Nominal frequency
						Nominal voltage
						Variant, if required
						Contacts
						Type