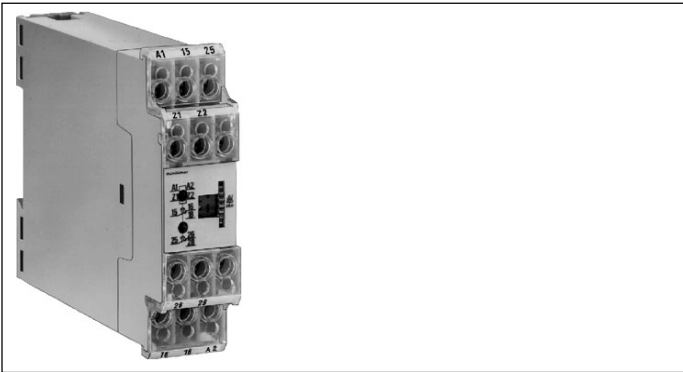


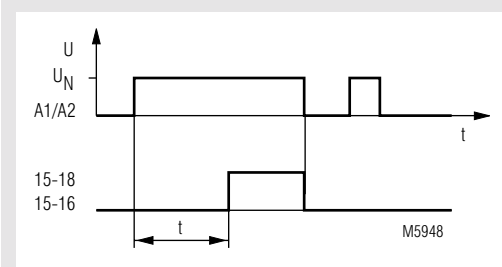
Timer MK 9908, delay on make minitimer

0226796

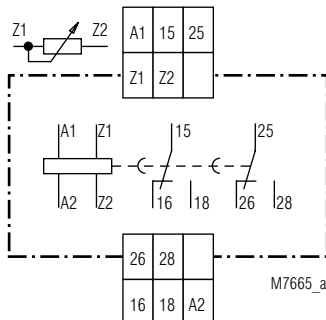


- According to DIN EN 61 812-1
- Delay up to 300 s
- Repeat accuracy $< \pm 1 \%$
- Remote potentiometer connection
- Control with 2-wire-initiators possible
- LED-indication for supply and contact position
- 2 changeover contacts
- Width 22,5 mm

Function diagram

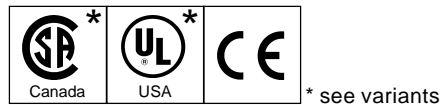


Circuit diagram



MK 9908.82

Approvals and marking



Application

Time dependent controls

Indication

upper LED: on when operating voltage applied
lower LED: on when output relay activated

Technical data

Time circuit

Time ranges:	0,05 ... 1 s
	0,15 ... 3 s
	0,5 ... 10 s
	1,5 ... 30 s
	5 ... 100 s
	15 ... 300 s

Time setting: stepless on absolute scale
remote setting by external potentiometer

Recovery time

tw 50 / 100: $< 200 \text{ ms} / < 100 \text{ ms}$

Repeat accuracy: $< \pm 1 \%$ of the max. scale value

Voltage influence: $\leq 2 \%$ at 0,8 ... 1,1 U_N

Temperature influence: $\leq 0,3 \%$ / K

Input

Nominal voltage U_N : AC 24, 42, 110 ... 127, 220 ... 240 V

DC 24 V with polarity protection

Voltage range: 0,8 ... 1,1 U_N at AC

Permissible residual current: 5 mA

Nominal consumption
AC 230 V: 7 VA

Nominal frequency: 50 / 60 Hz

Frequency range: $\pm 5 \%$ f_N

Output

Contacts: 2 changeover contacts delayed

Release time of the contacts: approx. 40 ms

Thermal current I_{th} : 5 A

Switching capacity

to AC 15:

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

NC contact: 2 A / AC 230 V EN 60 947-5-1

Electrical life EN 60 947-5-1

to AC 15 at 3 A, AC 230 V: 5×10^5 switching cycles

Technical data

Permissible switching frequency:	6 000 switching cycles / h	
Short circuit strength max. fuse rating:	6 A gL	EN 60 947-5-1
Mechanical life:	30 x 10 ⁶ switching cycles	

General data

Operating mode:	Continuous operation	
Temperature range:	- 20 ... + 60°C	
Clearance and creepage distances		
overvoltage category / contamination level:	4 kV / 2	DIN VDE 0110-1 (4.97)
EMC		
Electrostatic discharge:	8 kV (air)	EN 61 000-4-2
HF-irradiation:	10 V/m	EN 61 000-4-3
Fast transients:	4 kV	EN 61 000-4-4
Surge voltages between wires for power supply:	2 kV	EN 61 000-4-5
between wire and ground:	4 kV	EN 61 000-4-5
HF-wire guided:	10 V	EN 61 000-4-6
Interference suppression:	Limit value class B	EN 55 011
Degree of protection:	Housing: IP 40	EN 60 529
	Terminals: IP 20	EN 60 529
Housing:	Thermoplast with V0-behaviour according to UL subj. 94	
Vibration resistance	Amplitude 0,35 mm frequency 10 ... 55 Hz EN 60 068-2-6	
Climate resistance:	20 / 060 / 04 EN 60 068-1	
Terminal designation:	EN 50 005	
Wire connection:	2 x 1,5 mm ² solid or 2 x 1,0 mm ² stranded wire with sleeve DIN 46 228-1/-2/-3/-4	
Wire fixing:	Flat terminals with self-lifting clamping piece EN 60 999	
Mounting:	DIN rail EN 50 022	
Weight:	150 g	

Dimensions

Width x height x depth: 22,5 x 82 x 99 mm

Standard type

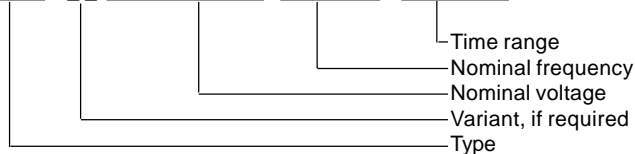
MK 9908 AC 220 ... 240 V	0,5 ... 10 s	
Article number:	0044923	stock item
• Output:	2 changeover contacts, delayed	
• Nominal voltage U _N :	AC 220 ... 240 V	
• Time range:	0,5 ... 10 s	
• Width:	22,5 mm	

Variants

MK 9908/60:	with CSA-approval
MK 9908/61:	with UL-approval

Ordering example of variants

MK 9908 / _ _ AC 220 ... 240 V 50 / 60 Hz 15 ... 300 s

**Accessories**

ET 4752-143:

Making plate

AD 3:

External potentiometers

0,05 ...	1 s	1 MΩ
0,15 ...	3 s	2,2 MΩ
0,5 ...	10 s	10 MΩ
1,5 ...	30 s	20 MΩ
5 ...	100 s	20 MΩ
15 ...	300 s	20 MΩ

