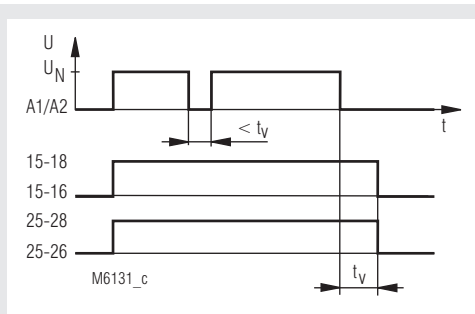


MINITIMER Timer, Release Delayed MK 7873, MK 7873N



- According to IEC/EN 61 812-1
- Delay up to 300 s
- Repeat accuracy $\leq \pm 0.5 \%$
- Without auxiliary voltage
- No recovery time
- With large voltage range AC/DC 24 ... 240 V
- LED display for power supply
- 2 changeover contacts
- Wire connection: also 2 x 1.5 mm² stranded ferruled, or 2 x 2.5 mm² solid DIN 46 228-1/-2/-3/-4
- as option with pluggable terminal blocks for easy exchange of devices
 - with screw terminals
 - or with cage clamp terminals
- Width 22.5 mm

Function Diagram



Approvals and Marking



* only for MK 7873N

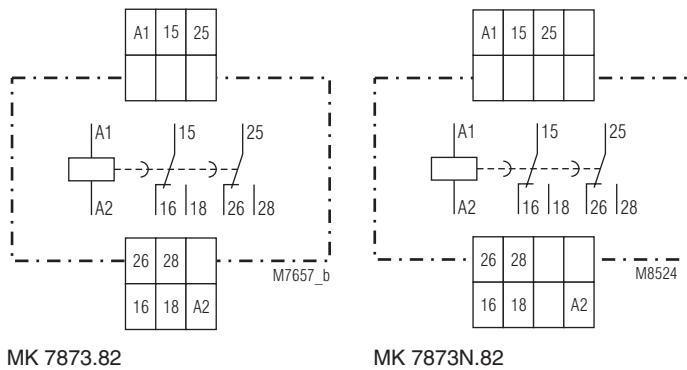
Applications

Time-dependent controllers

Indicators

LED: on, when supply connected

Circuit Diagram



MK 7873.82

MK 7873N.82

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: steppless

Minimum switch-on time of the control input

for DC 24 V:	150 ms
for UC 220 V:	25 ms

Recovery time

tw 50 / 100: 0

Repeat accuracy: $\leq \pm 0.5 \%$ of set value

Voltage influence: $\leq 0.5 \%$

Temperature influence: $< 0.2 \%$ / K

Input

Nominal voltage U_N:	AC/DC 24 ... 240 V
Voltage range:	AC 19.2 ... 264 V DC 21.6 ... 300 V

Nominal consumption

Effective power:	0.8 W
Frequency range:	45 ... 400 Hz
Release voltage:	10 V

Output

Contacts

MK 7873.82, MK 7873N.82: 2 delayed changeover contacts

Measured nominal voltage: AC 250 V

Thermal current I_{th} : 5 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 3 A, AC 230 V: 8 x 10⁵ switching cycles

Technical Data

Permissible operating frequency:

for time ranges ≤ 10 s: 1 400 switching cycles / h
for time ranges ≥ 30 s: 700 switching cycles / h

Short circuit strength

max. fuse rating: 6 A gL IEC/EN 60 947-5-1
Mechanical life: 30×10^6 switching cycles

General Data

Operating mode: Continuous operation
Temperature range: -20 ... +60°C

Clearance and creepage distances

rated impuls voltage: 4 kV IEC 60 664-1
pollution degree: 3
Overvoltage category: III

EMC

Electrostatic discharge: 4 kV (air) IEC/EN 61 000-4-2
Fast transients 2 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: 2 kV IEC/EN 61 000-4-5

Interference suppression: Limit value class B EN 55 011

Degree of protection: Housing: IP 40 IEC/EN 60 529

Housing:

Terminals: IP 20 IEC/EN 60 529
Thermoplastic with V0 behaviour according to UL subject 94

Vibration resistance:

Amplitude 0.35 mm, frequency 10 ... 55 Hz, IEC/EN 60 068-2-6
20 / 060 / 04 IEC/EN 60 068-1

Climate resistance:

Terminal designation: EN 50 005

Wire connection

Screw terminals (integrated): DIN 46 228-1/-2/-3/-4

1 x 4 mm² solid or
1 x 2.5 mm² stranded ferruled or
2 x 1.5 mm² stranded ferruled or
2 x 2.5 mm² solid

Insulation of wires or sleeve length:

8 mm

Plug in with screw terminals

max. cross section for connection:

1 x 2.5 mm² solid or
1 x 2.5 mm² stranded ferruled

Insulation of wires or sleeve length:

8 mm

Plug in with cage clamp terminals

max. cross section for connection:

1 x 4 mm² solid or
1 x 2.5 mm² stranded ferruled

min. cross section for connection:

0.5 mm²

Insulation of wires or sleeve length:

12 ±0.5 mm

Wire fixing:

Plus-minus terminal screws M 3.5
box terminals with wire protection or
cage clamp terminals

Mounting:

DIN rail IEC/EN 60 715

Weight:

132 g

Dimensions

Width x height x depth:

MK 7873: 22.5 x 82 x 99 mm
MK 7873N: 22.5 x 90 x 97 mm
MK 7873N PC: 22.5 x 111 x 97 mm
MK 7873N PS: 22.5 x 104 x 97 mm

UL-Data

Switching capacity:

Ambient temperature 60°C: Pilot duty B300
5A 250Vac G.P.
5A 24Vdc G.P.

Wire connection:

60°C / 75°C copper conductors only
Screw terminals fixed: AWG 20 - 12 Sol/Str Torque 0.8 Nm
Plug in screw: AWG 20 - 14 Sol Torque 0.8 Nm
AWG 20 - 16 Str Torque 0.8 Nm
Plug in cage clamp: AWG 20 - 12 Sol/Str



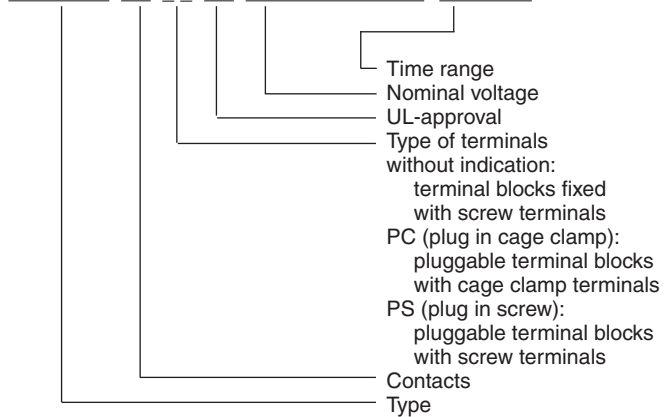
Technical data that is not stated in the UL-Data, can be found in the technical data section.

Standard Type

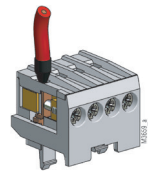
MK 7873N.82/61 AC/DC 24 ... 240V 1.5 ... 30 s
Article number: 0054462
• Output: 2 changeover contacts
• Nominal voltage U_N : AC/DC 24 ... 240 V
• Time range: 1.5 ... 30 s
• Width: 22.5 mm

Ordering example

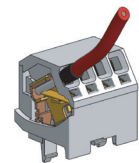
MK 7873N .82 _ _ /61 AC/DC 24 ... 240 V 5 ... 100 s



Options with Pluggable Terminal Blocks



Screw terminal (PS/plugin screw)

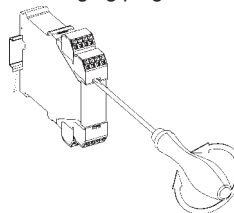


Cage clamp (PC/plugin cage clamp)

Notes

Removing the terminal blocks with cage clamp terminals

1. The unit has to be disconnected.
2. Insert a screwdriver in the side recess of the front plate.
3. Turn the screwdriver to the right and left.
4. Please note that the terminal blocks have to be mounted on the belonging plug in terminations.



Accessories

ET 4752-143: Marking plate for MK 7873
Article number: 0043203