

## Interface Relay MK 8804N



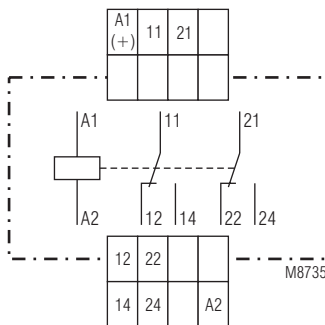
### Your Advantages

- Up to 4 changeover contacts in 22,5 mm width
- With various terminals

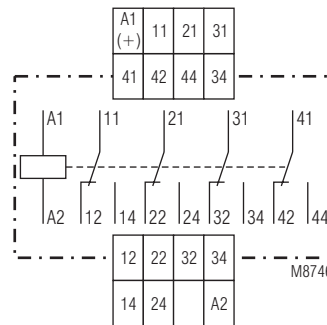
### Merkmale

- According to IEC/EN 61 810-1
- As option to switch low loads
- As option for 2-wire proximity sensor control
- Output: 4 changeover contacts
- With LED indicator
- Wire connection: also 2 x 1.5 mm<sup>2</sup> stranded ferruled, or 2 x 2.5 mm<sup>2</sup> 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

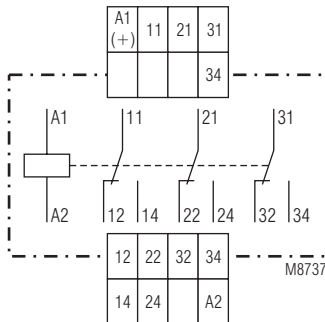
### Circuit Diagrams



MK 8804N.12



MK 8804N.14



MK 8804N.13

### Connection Terminals

Terminal designation	Signal designation
A1(+), A2	Auxiliary voltage AC or DC
11, 12, 14 (MK 8804N.12, .13, .14)	1. changeover contact
21, 22, 24 (MK 8804N.12, .13, .14)	2. changeover contact
31, 32, 34 (MK 8804N.13, .14)	3. changeover contact
41, 42, 44 (MK 8804N.14)	4. changeover contact

### Approvals and Marking



### Application

For separating potentials

### Indication

LED: on, when control signal applied

### Technical Data

#### Input

**Nominal voltage  $U_N$ :** AC/DC 12, 24, 42, 48, 60, 110, 127, 220 ... 240 V  
**Voltage range:** 0.8 ... 1.1  $U_N$   
**Nominal consumption:**  $\leq 1.4$  W  
**Nominal frequency:** 50 / 60 Hz  
**Frequency range:**  $\pm 5$  %

#### Output

#### Contacts

MK 8804N.12: 2 changeover contacts  
 MK 8804N.13: 3 changeover contacts  
 MK 8804N.14: 4 changeover contacts

**Operate time:**  $\leq 10$  ms

**Release time:**  $\leq 15$  ms

**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

IEC/EN 60 947-5-1

**Electrical life**  
 to AC 15 at 3 A, AC 230 V: 5 x 10<sup>5</sup> switching cycles

#### Permissible switching

**capacity:** 3 000 switching cycles / h

**Mechanical life:** > 30 x 10<sup>6</sup> switching cycles

## Technical Data

### General Data

<b>Operating mode:</b>	Continuous operation
<b>Temperature range:</b>	- 20 ... + 60 °C (sum of all contact current < 8 A) - 20 ... + 50 °C (sum of all contact current < 16 A)

### Clearance and creepage distances

rated impuls voltage / pollution degree:	4 kV / 2	IEC 60 664-1
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### EMC

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 devices $U_N \leq 48$ V:	1 kV	IEC/EN 61 000-4-5
devices $U_N > 60$ V:	2 kV	IEC/EN 61 000-4-5
between wire and ground:	4 kV	IEC/EN 61 000-4-5
HF-wire guided:	10 V	IEC/EN 61 000-4-6
Interference suppression:	Limit value class B	EN 55 011

### Degree of protection:

Housing:	IP 40	IEC/EN 60 529
Terminals:	IP 20	IEC/EN 60 529

### Housing:

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:

EN 50 005

### Terminal designation:

DIN 46 228-1/-2/-3/-4

### Wire connection

#### Screw terminals

#### (integrated):

1 x 4 mm<sup>2</sup> solid or  
1 x 2.5 mm<sup>2</sup> stranded ferruled or  
2 x 1.5 mm<sup>2</sup> stranded ferruled or  
2 x 2.5 mm<sup>2</sup> solid

#### Insulation of wires

#### or sleeve length:

8 mm

#### Plug in with screw terminals

#### max. cross section

#### for connection:

1 x 2.5 mm<sup>2</sup> solid or  
1 x 2.5 mm<sup>2</sup> stranded ferruled

#### Insulation of wires

#### or sleeve length:

8 mm

#### Plug in with cage clamp terminals

#### max. cross section

#### for connection:

1 x 4 mm<sup>2</sup> solid or  
1 x 2.5 mm<sup>2</sup> stranded ferruled

#### min. cross section

#### for connection:

0.5 mm<sup>2</sup>

#### 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:

150 g

## Dimensions

### Width x height x depth

MK 8804N:	22.5 x 90 x 97 mm
MK 8804N PC:	22.5 x 111 x 97 mm
MK 8804N PS:	22.5 x 104 x 97 mm

## Standard Type

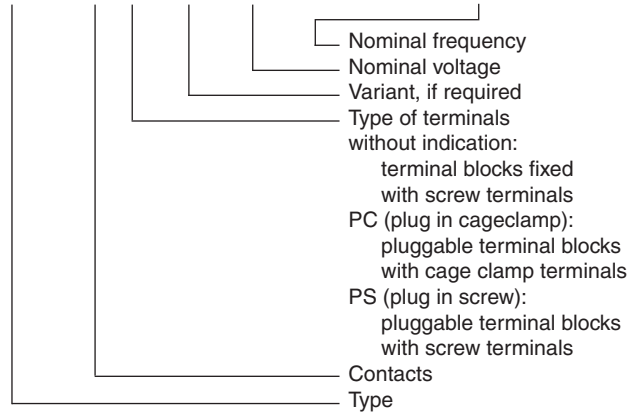
MK 8804N.12 AC/DC 24 V 50 / 60 Hz	
Article number:	0066201
• Output:	2 changeover contacts
• Nominal voltage $U_N$ :	AC/DC 24 V
• Width:	22.5 mm

## Variants

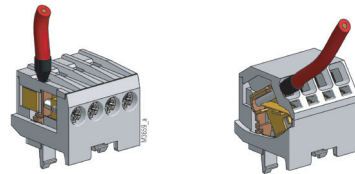
MK 8804N._._/001:	for low loads from 0.1 ... 60 V, 1 mA ... 300 mA
MK 8804N._._/004:	for 2-wire-proximity sensor control, permissible residual current ≤ 5 mA

## Ordering example for variants

MK 8804N. 14 \_ \_ / \_ \_ AC/DC 220 ... 240 V 50 / 60 Hz



## Options with Pluggable Terminal Blocks



Screw terminal (PS/plugin screw) Cage clamp terminal (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.

