

Interface Relay MK 8804N

Translation
of the original instructions



Your Advantages

- Up to 4 changeover contacts in 22.5 mm width
- With various terminals

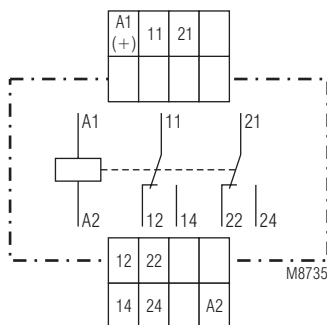
Features

- According to IEC/EN 60947-5-1
- With LED indicator
- As option: With 2, 3 or 4 changeover contacts
- As option to switch low loads
- As option for 2-wire proximity sensor control
- Wire connection: Also 2 x 1.5 mm² stranded ferruled, or 2 x 2.5 mm² solid DIN 46228-1/-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

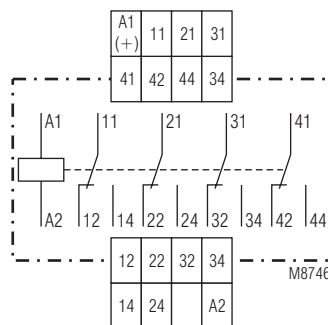
Product Description

The MK 8804N coupling relay is used for contact multiplication and is suitable as a link between the control and power levels.

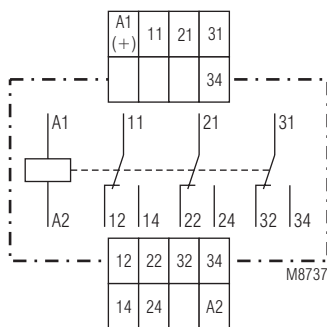
Circuit Diagrams



MK 8804N.12



MK 8804N.14



MK 8804N.13

Connection Terminals

Terminal designation	Signal description
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 Markings



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 ... 115, 127, 220 ... 240 V
Voltage range: 0.8 ... 1.1 U_N
Nominal consumption: ≤ 1.4 W
Nominal frequency: 50 / 60 Hz
Frequency range: ± 5 %

Output

Contacts
 MK 8804N.12: 2 changeover contacts
 MK 8804N.13: 3 changeover contacts
 MK 8804N.14: 4 changeover contacts
Operate time: ≤ 10 ms
Release time: ≤ 15 ms
Thermal current I_{th} : 5 A
Switching capacity
 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
Electrical life
 to AC 15 at 3 A, AC 230 V: 5 x 10⁵ switching cycles
Permissible switching capacity: 3000 switching cycles / h
Short circuit strength
max. fuse rating: 6 A gG / gL IEC/EN 60947-5-1
Mechanical life: > 30 x 10⁶ switching cycles

Technical Data

General Data

Operating mode:	Continuous operation	
Temperature range:	- 20 ... + 60 °C	
Operation:	(Sum of all contact current < 8 A)	
	- 20 ... + 50 °C	
	(Sum of all contact current < 16 A)	
Storage:	- 40 ... + 60 °C	
Altitude:	≤ 2000 m	
Clearance and creepage distances		
Rated impulse voltage / pollution degree:	4 kV / 2	IEC 60664-1
EMC		
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 ... 2.5 GHz:	3 V/m	IEC/EN 61000-4-3
2.5 GHz ... 2.7 GHz:	1 V/m	IEC/EN 61000-4-3
Fast transients:	4 kV	IEC/EN 61000-4-4
Surge voltages between wires for power supply devices $U_N \leq 48$ V:	1 kV	IEC/EN 61000-4-5
Devices $U_N \geq 60$ V:	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:	Thermoplastic with V0 behaviour according to UL subject 94	
Vibration resistance:	Amplitude 0.35 mm frequency 10 ... 55 Hz IEC/EN 60068-2-6 20 / 060 / 04 IEC/EN 60068-1 EN 50005	
Climate resistance:		
Terminal designation:	DIN 46228-1/-2/-3/-4	
Wire connection		
Screw terminals (integrated):	1 x 4 mm ² solid or 1 x 2.5 mm ² stranded ferruled or 2 x 1.5 mm ² stranded ferruled or 2 x 2.5 mm ² solid	
Insulation of wires or sleeve length:	8 mm	
Fixing torque:	0.8 Nm	
Plug in with screw terminals		
Max. cross section for connection:	1 x 2.5 mm ² solid or 1 x 2.5 mm ² stranded ferruled	
Insulation of wires or sleeve length:	8 mm	
Fixing torque:	0.8 Nm	
Plug in with cage clamp terminals		
Max. cross section for connection:	1 x 4 mm ² solid or 1 x 2.5 mm ² stranded ferruled	
Min. cross section for connection:	0.5 mm ²	
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 60715
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

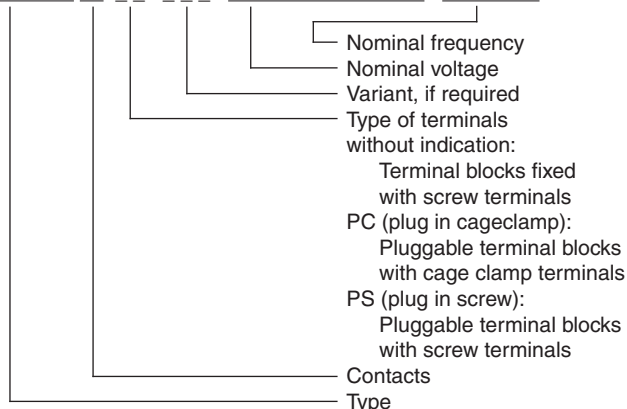
MK 8804N.12 AC/DC 24 V 50 / 60 Hz	
Article number:	0066201
• Output:	2 changeover contacts
• Nominal voltage U_N :	AC/DC 24 V
• Width:	22.5 mm

Variants

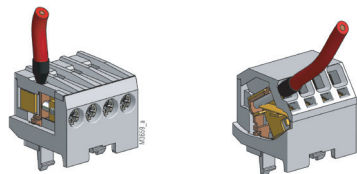
MK 8804N._._/001:	For low loads from 2 ... 60 V, 2 ... 300 mA, 10 mW ... 12 W / 10 mVA ... 12 VA
MK 8804N._._/004:	For 2-wire-proximity sensor control, permissible residual current ≤ 5 mA

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.

