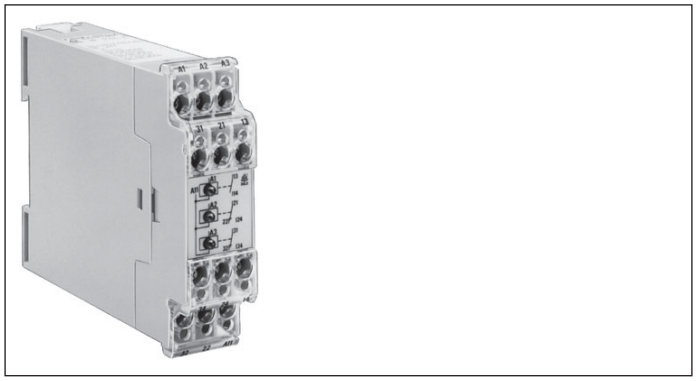
Interface Relay
MK 3046

Translation of the original instructions

DOLD



Your advantages
- According to IEC/EN 60947-5-1
- Compact version with 3 or 2 separate controllable relay systems

Features
- 2 x 1 changeover contact, 1 x 1 NO contact
- Or 1 x 1 changeover contact, 1 x 2 changeover contacts
- With LED indicators
- Available also for switching of low loads
- Width 22.5 mm

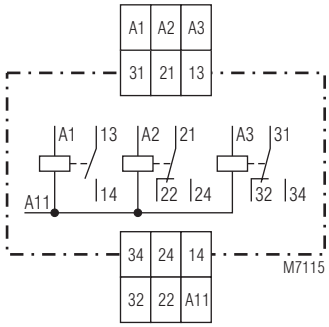
Product Description

The MK 3046 interface relay is used for contact multiplication and is suitable for potential separation between the control and power levels. The interface relays are available with different contact combinations and partly for switching small loads.

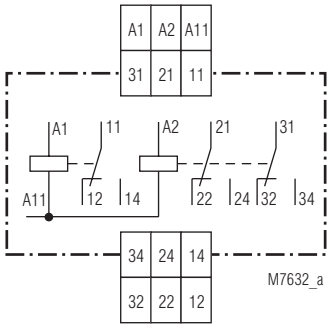
Approvals and Markings

CE

Circuit Diagrams



MK 3046.29



MK 3046.13

Application

For separating potentials

Indication

3 LEDs:	On, when associated output relay is energized

Connection Terminals

Terminal designation	Signal description
A1, A2, A3	+ / L
A11	- / N
11, 12, 14; 21, 22, 24; 31, 32, 34; 13, 14;	Changeover contacts

Technical Data

Input

Nominal voltage U_N:	DC 24 V
Voltage range:	0.8 ... 1.1 U_N
Nominal consumption:	0.5 W

Output

Contacts		
MK 3046.29:	2 x 1 changeover contacts, 1 x 1 NO contact	
MK 3046.13:	1 x 1 changeover contact, 1 x 2 changeover contacts	
Turn-on time:	5 ms	
Turn-off time:	7 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
To DC 13		
NO contact:	1 A / DC 24 V	IEC/EN 60947-5-1
NC contact:	1 A / DC 24 V	IEC/EN 60947-5-1
Electrical life		IEC/EN 60947-5-1
to AC 15 at 3 A, AC 230 V:	0.5 x 10^5 switching cycles	
Permisible switching frequency:	7200 switching cycles / h	
Short circuit strength max. fuse rating:	4 A gG / gL	IEC/EN 60947-5-1
Mechanical life:	30 x 10^6 switching cycles	

Technical Data

General Data

Operating mode:	Continuous operation	
Temperature range		
Operation:	- 20 ... + 60 °C	
Storage:	- 20 ... + 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 ... 2.7 GHz:	10 V/m	IEC/EN 61000-4-3
Fast transients:	2 kV	IEC/EN 61000-4-4
Surge voltages between		
wires for power supply:	1 kV	IEC/EN 61000-4-5
Between wire and ground:	2 kV	IEC/EN 61000-4-5
HF wire guided:	10 V/m	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:	Theromplastic with V0 behaviour according to UL subject 94	
Vibration resistance:	Amplitude 0.35 mm frequency 10 ... 55 Hz	IEC/EN 60068-2-6
Climate resistance:	20 / 060 / 04	IEC/EN 60068-1
Terminal designation:	EN 50005	
Wire connection:	2 x 1.5 mm² solid or 2 x 1.0 mm² stranded wire with sleeve DIN 46228-1/-2/-3/-4	
Insulation of wires or sleeve length:	7 mm	
Wire fixing:	Flat terminals with self-lifting clamping piece	IEC/EN 60999-1
Fixing torque:	0.8 Nm	
Mounting:	DIN rail	IEC/EN 60715
Weight:	135 g	

Dimensions

Width x height x depth:	22.5 x 82 x 99 mm

Standard Type

MK 3046.29 DC 24 V

Article number:	0034189
• Output:	2 x 1 changeover contact, 1 x 1 NO contact
• Nominal voltage U_N:	DC 24 V
• Width:	22.5 mm

Variants

Ordering example vor variants

MK 3046 .29 /_ _ _ DC 24 V

- DC 24 V — Nominal voltage
- /_ _ _ — Variant, if required
- .29 — Contacts
- MK 3046 — Type

MK 3046._ _/004:	With gold contacts for switching small loads 2 ... 60 V, 2 ... 300 mA, 10 mVA ... 12 VA or 10 mW ... 12 W
MK 3046._ _/100:	1. system for DC 48 V (connection A1 - A11) 2. and 3. system for DC 24 V (connections A2, A3 - A11)