

Interface relay ML 3045

Translation
of the original instructions



Your Advantages

- For 2 control voltages
- Output relay can be switched off via switch for test purposes
- Optionally safe separation according to IEC/EN 61140, IEC/EN 60 947-1 and for switching low loads

Features

- According to IEC/EN 60947-5-1, IEC/EN 61810-1
- With 1 changeover contact
- With LED indicator
- Width: 22.5 mm

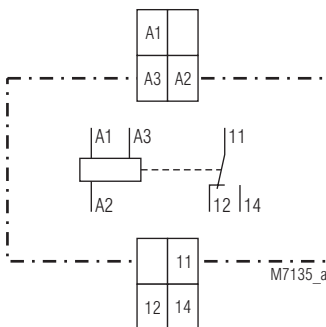
Product Description

The ML 3045 interface relay is used for contact multiplication and is suitable for potential separation between the control and power levels. The output relay can be switched off via a switch for test purposes. The coupling relay is also available for switching small loads and with safe isolation.

Approvals and Markings



Circuit Diagrams



ML 3045.11/100
A1/A2: AC/DC 24 V
A3/A2: AC 220 ... 240 V

ML 3045.11
A1/A2: AC 220 ... 240 V
A3/A2: AC/DC 24 V

Applications

- Link between control and power levels
- For separating potentials

Indicators

LED: On, when the relay is active

Notes

The gold plated contacts of the ML 3045.11/100 mean that this module is also suitable for switching small loads of 2 ... 60 V / 1 ... 300 mA / 10 mW ... 12 W e.g. 10 mVA ... 12 VA.

The contacts also permit the maximum switching current. However since the gold plating will be burnt off at this current level, the device is no longer suitable for switching small loads after this.

Connection Terminals

Terminal designation	Signal designation
A1, A2, A3	Operating voltage
11, 12, 14	Changeover contacts

Technical Data

Input

Nominal voltage U_N:	AC/DC 24 V + AC 220 ... 240 V
Voltage range:	AC 0.8 ... 1.1 U_N
Nominal consumption:	AC 24 V / 0.5 VA AC 230 V / 7 VA DC 24 V / 0.5 W
Nominal frequency:	50 / 60 Hz
Frequency range:	± 5 %

Output

Contacts

ML 3045.11:	1 changeover contact
Operating time:	< 15 ms
Release time:	< 20 ms
Thermal current I_{th}:	Max. 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 10 ⁵ switch. cycl. IEC/EN 60947-5-1
Permissible switching frequency:	6000 switching cycles / h
Short circuit strength	
max. fuse rating:	6 A gG / gL IEC/EN 60947-5-1
Mechanical life:	> 30 x 10 ⁶ switching cycles

General Data

Operating mode:	Continuous operation
Temperature range:	
Operation:	- 20 ... + 60 °C
Storage:	- 20 ... + 60 °C
Altitude:	≤ 2000 m
Clearance and creepage distances	
Rated impuls voltage / pollution degree:	4 kV / 2 IEC 60664-1
EMC	
Electrostatic discharge:	8 kV (air) IEC/EN 61000-4-2
HF-irradiation:	10 V/m IEC/EN 61000-4-3
Fast transients:	4 kV IEC/EN 61000-4-4
Surge voltages between	
wires for power supply:	1 kV IEC/EN 61000-4-5
Between wire and ground:	4 kV IEC/EN 61000-4-5
Interference suppression:	Limit value class B EN 55011
Degree of protection	
Housing:	IP 40 IEC/EN 60529
Terminals:	IP 20 IEC/EN 60529
Housing:	Thermoplast 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 2.5 mm ² solid or 2 x 1.5 mm ² stranded wire with sleeve DIN 46228-1/-2/-3/-4
Wire fixing:	Flat terminals with self-lifting clamping piece IEC/EN 60999-1
Mounting:	DIN rail IEC/EN 60715
Weight:	110 g

Dimensions

Width x height x depth:	22.5 x 81 x 98.5 mm
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Standard Type

ML 3045.11/100	AC/DC 24 V + AC 220 ... 240 V 50/60 Hz
Article number:	0034641
• Output:	1 changeover contact
• Nominal voltage U_N :	AC/DC 24 V + AC 220 ... 240 V
• Safe separation according to IEC/EN 61140	
• For switching of low loads with	
2 ... 60 V / 1 ... 300 mA / 10 mW ... 12 W bzw. 10 mVA ... 12 VA	
• Width:	22.5 mm

Variant

ML 3045.11:	Without gold plated contacts, Without safe separation
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Ordering example for variants

ML 3045	.11	/	_	_	_	AC/DC 24 V + AC 220 ... 240 V	50 / 60 Hz
							Nominal frequency
							Nominal voltage
							Variant, if required
							Contacts
							Type