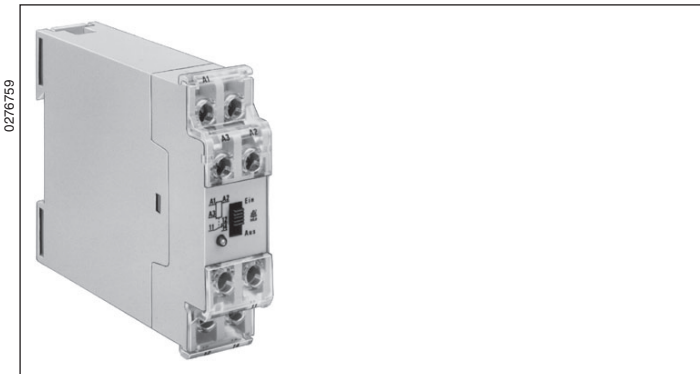
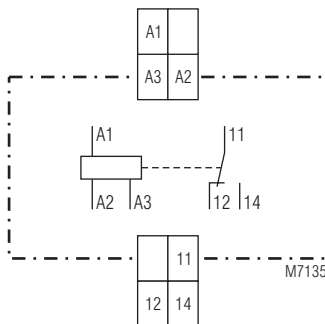


## Interface relay Input - Output ML 3045



- According to IEC/EN 60 255, IEC/EN 61 810-1
- With 1 changeover contact
- For 2 control voltages
- Output relay can be switched off via switch for test purposes
- With LED indicator
- Optionally safe separation according to IEC/EN 61 140, IEC/EN 60 947-1 and for switching low loads
- Width: 22,5 mm

### Circuit Diagrams



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

### Approvals and Markings



### Applications

- Link between control and power levels
- For separating potentials

### Indicators

LED: on, when the relay is active

### 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:**  $\pm 5 \%$

#### Output

**Contacts**  
 ML 3045.11: 1 changeover contact  
**Operating time:** < 15 ms  
**Release time:** < 20 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  
**Electrical life**  
 to AC 15 at 3 A, AC 230 V: 5 x 10<sup>5</sup> switch. cycl. IEC/EN 60 947-5-1  
**Permissible switching frequency:** 6 000 switching cycles / h  
**Short circuit strength**  
**max. fuse rating:** 6 A gL IEC/EN 60 947-5-1  
**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	
<b>Clearance and creepage distances</b>		
Rated impuls voltage / pollution degree:	4 kV / 2	IEC 60 664-1
<b>EMC</b>		
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:	1 kV	IEC/EN 61 000-4-5
between wire and ground:	4 kV	IEC/EN 61 000-4-5
Interference suppression:	Limit value class B	EN 55 011
<b>Degree of protection</b>		
Housing:	IP 40	IEC/EN 60 529
Terminals:	IP 20	IEC/EN 60 529
<b>Housing:</b>	Thermoplast with V0-behaviour according to UL subject 94	
<b>Vibration resistance:</b>	Amplitude 0.35 mm frequency: 10 ... 55 Hz IEC/EN 60 068-2-6	
<b>Climate resistance:</b>	20 / 060 / 04 IEC/EN 60 068-1	
<b>Terminal designation:</b>	EN 50 005	
<b>Wire connection:</b>	2 x 2.5 mm <sup>2</sup> solid or 2 x 1.5 mm <sup>2</sup> stranded wire with sleeve DIN 46 228-1/-2/-3/-4	
<b>Wire fixing:</b>	Flat terminals with self-lifting clamping piece IEC/EN 60 999-1	
<b>Mounting:</b>	DIN rail IEC/EN 60 715	
<b>Weight:</b>	110 g	

### Dimensions

**Width x heigth x depth:** 22.5 x 81 x 98.5 mm

### Standard Type

ML 3045.11/100	AC/DC 24 V + AC 220 ... 240 V	50/60 Hz
Article number:	0034641	stock item
• Output:	1 changeover contact	
• Nominal voltage $U_N$ :	AC/DC 24 V + AC 220 ... 240 V	
• Safe separation according to VDE 0106 part 101		
• For switching of low loads with 0.1 ... 60 V, 1 mA ... 300 mA		
• Width:	22.5 mm	

### Variant

ML 3045.11: without gold plated contacts,  
without safe separation

### Ordering example for variants

ML 3045 .11 / \_ \_ \_ AC/DC 24 V + AC 220 ... 240 V 50 / 60 Hz

