Relay Cards
MC 73-48-R
MC 73-48-RE

The MC73-48-R is a 4 channel relay card which provides isolation between output contacts and input circuits (8 mm/4 kV).

- Four relay outputs, each with two SPDT contacts
- Isolation as per VDE 0106 between control and output circuit
- With bridge rectifier to accept npn, pnp or AC inputs
- Relay as per VDE 0435
- Printed circuit boards and connectors as per VDE 0110

A carefully arranged layout of the printed circuit board ensures maximum clearances and creepage distances. A bridge rectifier connected to the relay coils allows the card to operate with either pnp (current sinking), npn (current sourcing) or AC input devices.

The use of silver-alloy and 3 µm Au contacts enables the cards to be used for large loads as well as general control tasks.

The relay cards are also available with input signal amplifiers (type: MC73-48-RE...). This makes them suitable for low power input signal processing. At a typical current consumption of 2 mA, the input voltages for the relay card vary as follows:

- 3...8 VDC (MC73-48-RE1)
- 7...18 VDC (MC73-48-RE2)
- 17...30 VDC (MC73-48-RE3)
### Couplers and Interface Devices

<table>
<thead>
<tr>
<th>Type</th>
<th>Ident-No.</th>
<th>MC73-48-R/24VUC</th>
<th>MC73-48-RE1/24VDC</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td>90 790</td>
<td>90 831</td>
</tr>
</tbody>
</table>

#### Clearances and Creepage Distances
- between control circuit and contacts: 8 mm/4 kV
- 8 mm/4 kV

#### Supply Voltage $U_B$
- $20.4...27.6$ VDC
- Ripple $W_{pp}$: $-\leq 10\%$
- Power/Current consumption: $\leq 120$ mA

#### Input Circuits
- Input voltage: $20.4...27.6$ VUC
- Power/current consumption per channel: $\leq 30$ mA per channel

#### Output Circuits
- relay output
- 2 SPDT contacts, silver-alloy + 3 µm Au
- Switching voltage: $\leq 250$ V
- Switching current/continuous current: $\leq 2$ A
- Switching capacity: $\leq 500$ VA/60 W
- Switching frequency: $\leq 10$ Hz

#### LED Indications
- Power "ON": green
- Status indication: yellow

#### Eurocard
- 100 x 160 mm (DIN 41494)
- glass-fiber reinforced epoxy resin, quality class FR4
- Front panel: plastic, $4\,TE = 20.32$ mm
- individually interlocking
- Connection: connector per DIN 41612, type F, 32-pole
- Operating temperature: $-25...+60$ °C

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## Relay Cards

**MC 73-48-R**

**MC 73-48-RE...**

<table>
<thead>
<tr>
<th>Type</th>
<th>MC73-48-RE2/24VDC</th>
<th>MC73-48-RE3/24VDC</th>
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<tbody>
<tr>
<td>Ident-No.</td>
<td>90 801</td>
<td>90 791</td>
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</table>

### Clearances and Creepage Distances
between control circuit and contacts
- 8 mm/4 kV
- 8 mm/4 kV

### Supply Voltage $U_B$
- 20.4...27.6 VDC
- 20.4...27.6 VDC

### Ripple $W_{pp}$
- $\leq 10 \%$
- $\leq 10 \%$

### Current consumption
- $\leq 120 \text{ mA}$
- $\leq 120 \text{ mA}$

### Input Circuits
- **Input voltage**: 7...18 VDC
- 7...18 VDC
- **Power/Current consumption**: $\leq 2 \text{ mA per channel}$
- $\leq 2 \text{ mA per channel}$

### Output Circuits
- relay output
- relay output

### Contacts
- 2 SPDT contacts, silver-alloy + 3 µm Au
- 2 SPDT contacts, silver-alloy + 3 µm Au

### Switching voltage
- $\leq 250 \text{ V}$
- $\leq 250 \text{ V}$

### Switching current/Continuous current
- $\leq 2 \text{ A}$
- $\leq 2 \text{ A}$

### Switching capacity
- $\leq 500 \text{ VA/60 W}$
- $\leq 500 \text{ VA/60 W}$

### Switching frequency
- $\leq 10 \text{ Hz}$
- $\leq 10 \text{ Hz}$

### LED Indications
- **Power "ON"**: green
- green
- **Status indication**: yellow
- yellow

### Eurocard
- 100 x 160 mm (DIN 41494)
- glass-fiber reinforced epoxy resin, quality class FR4
- Front panel
- plastic, 4TE = 20.32 mm
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- Connection
- connector per DIN 41612, type F, 32-pole
- Operating temperature
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