Relay Cards
MC73-441Ex0-R
MC73-442Ex0-R

- 4 channel relay card for switching of intrinsically safe current circuits
- Galvanic isolation of input and output circuits according to EN 50020
- Printed circuit boards and connectors according to VDE 0110
- High quality Reed relays with rhodium contacts

The 4 channel relay cards MC73-441Ex0-R and MC73-442Ex0-R are used to switch intrinsically safe current circuits. They provide isolation between output and control circuit (per EN 50020).

Four LEDs in the front of the device indicate the status of the respective output relay.

The relay cards are available with the following output configurations:
- MC73-441Ex0-R: four relays with one SPDT contact
- MC73-442Ex0-R: four relays with one N.O. contact

At 50 Hz, the switching frequency of the Reed relay is considerably higher than that of standard relays.

The Reed relay with rhodium contacts can be used for applications where conventional relay cards cannot be used due to their contact limitations.
# Couplers and Interface Devices

<table>
<thead>
<tr>
<th>Type</th>
<th>MC73-441Ex0-R/24VDC</th>
<th>MC73-442Ex0-R/24VDC</th>
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<td>Ident-No.</td>
<td>90 770 06</td>
<td>90 770 07</td>
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## Galvanic Isolation
- Between control circuit and contacts: 
  - $\leq 375$ V peak value
- Between two contact circuits: 
  - $\leq 90$ V peak value

## Input Circuits
- Input voltage: 10...30 VDC
- Current consumption: $\leq 20$ mA per channel
- Secure switch-off voltage: $< 3$ V

## Output Circuits
- Reed relay output for switching of intrinsically safe current circuits EEx ia IIC
  - Contact material: rhodium
  - Number of contacts: 1 SPDT contact
  - Switching voltage: $\leq 28$ V
  - Switching current/continuous current: $\leq 240$ mA
  - Switching capacity: $\leq 7$ W
  - Switching frequency: $\leq 50$ Hz

## Ex-Approvals acc. to Certification of Conformity
- BVS-No. 93.C.2016X
  - Li, Ci irrelevant

## LED Indications
- Status indication: yellow

## Eurocard
- Material: glass-fiber reinforced epoxy resin, quality class FR4
- Front panel: plastic, 4TE = 20.32 mm
- Connection: connector per DIN 41612, type F, 48-pole
- Operating temperature: -25...+60 °C
- Coding: No. 104

## Diagram
- [Diagram of the coupler and interface device]