# External Input/Output Modules PDOR02 <br> 8-Relay Module 

- 8 change-over relay contacts
- $\sim 250 \mathrm{~V} / 8 \mathrm{~A},=24 \mathrm{~V} / 8 \mathrm{~A}$
- Controlled with 8 logic signals
- Supplied by safety extra low voltage
- LED output indication



## Basic Characteristics

The module contains heavy-current relays, which are closed through drivers by supplied low logic level voltage, or ground (by a circuit with open collector or contact). The negative pole of inputs is shared. Relay closing is indicated with a lighting indication LED. Input signals are connected to a 16-pin X1 PSL16 connector. The supply voltage shares the negative pole with inputs and is connected to the X3 connector terminals. The change-over relay contacts are terminated on X2 connector terminals and are separated.

The module is built on a printed circuit board. It is supplied with a mounting frame for mounting on a DIN rail TS35 as standard. It can also be supplied without the frame and mounted using the holes in corners. The module is not encased and if connected to mains voltage, it must be provided with an additional case or mounted in an enclosed switchboard case.

## Technical Data

| Unit type |  | PDOR02/5 | PDOR02/24 |
| :--- | :--- | :--- | :--- |
| No. of outputs | 8 | 8 |  |
| Supply voltage | $5 \mathrm{~V} \pm 10 \%$ | $24 \mathrm{~V} \pm 10 \%$ |  |
| Supply current | max. 400 mA | max. 120 mA |  |
| Input voltage | L | -0.5 to 1 V | -0.5 to 5 V |
|  | H | 2.4 to 5.5 V | 15 to 30 V |
| Input current | L | -7.4 mA at 0 V | -3.5 mA at 0 V |
|  | H | 0.8 mA at 5 V | 0.7 mA at 24 V |
| Input logic level |  |  |  |
| relay closing <br> relay opening |  | L or grounded |  |
|  |  |  |  |


| Contact type | change-over |
| :--- | :--- |
| Switched current | max. $8 \mathrm{~A} / 250 \mathrm{VAC}, 24 \mathrm{VDC}$ |
| Switched voltage | max. 380 V |
| Switch on/off time | max. $6 / 2 \mathrm{~ms}$ |
| Lifetime of $0 \mathrm{~A} / 8 \mathrm{~A}$ contact | $2 \times 10^{7} / 10^{5}$ contacts |
| Electric strength |  |
| input terminals vs. output | $\quad 4000 \mathrm{VAC}$ |
| Between connector terminals of neighboring relays |  |
| 1500 VAC |  |
| Ambient working temp. | 0 to $+50^{\circ} \mathrm{C}$ |
| Dimensions | max. $90 \times 75 \times 54 \mathrm{~mm}$ |
| Connector terminals | crimping, wire 0.15 to $2.5 \mathrm{~mm}^{2}$ |

## Ordering Information

The basic models PDOR02/5 and PDOR02/24 are fitted with a mounting frame, with no accessories.
Please specify any special features in your order, such as:
PDOR02/05 without mounting frame
Specify accessories:
PFL16 connector (to supply input signals)
Varistors for 230 V (interference elimination 230VAC)

## Location of connector terminals and wiring



connector connection X1

example of input connection

## Interference Elimination on Output

## Circuits

When switching the lagging load (contactor coils, motors), interference must be eliminated using external quenching circuits that will absorb surges. These are, for instance, varistors and RC members for AC voltage, and diodes connected in impenetrable direction, varistors, and RC members for DC voltage Interference suppression components must be rated with respect to the switched voltage.

## Mounting dimension



Version with a mounting frame


Version without a mounting frame

