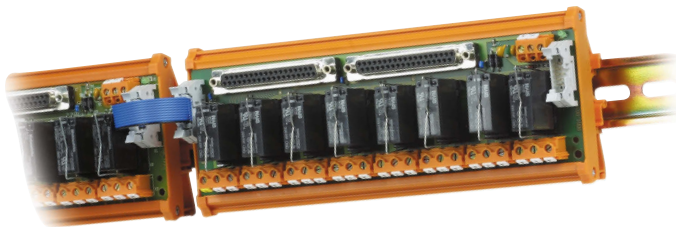


# 8-port relay output board



The PX8500 is an external 8-port relay board for the connection to digital output boards. It can be cascaded in 16, 24 and 32 relays and is intended for mounting on DIN rails. The board is an interface between the PC and industrial process equipment.

The change-over contacts of the relay are controlled through 24 V signals. The 24 V voltage supply is protected through varistors and transil diodes.

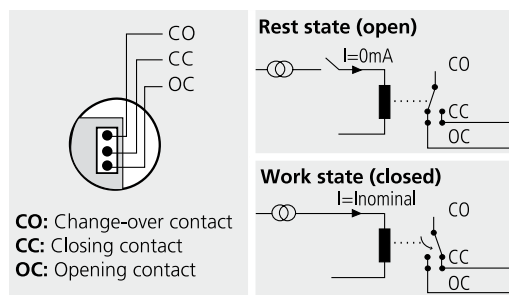
The board is intended for use with 220 V supply. The creeping distances (acc. to DIN VDE0110) and the conductor cross sections allow operations with high switching capacity (up to 2,500 VA). The board has a female D-Sub connector for connecting an ADDI-DATA digital 24 V output board through a standard I/O cable ST010. The red LEDs display the state of the relays (open/closed). A green LED displays the ON/OFF of the operating voltage.

The 37-pin cable shield can be grounded on both sides for the protection against high-frequency EMI.

## Features

- Relay output board with 8 relays, cascable in 16, 24 and 32 relays
- Max. switching voltage: 30 VDC / 277 VAC
- Max. switching current: 10 A
- All terminals intended for large conductor cross sections up to 2.5 mm<sup>2</sup>
- Operating voltage display through green LED
- Relay state display through red LED
- Relays mounted on sockets
- High switching capacity
- Long-lasting life

## Function principle of the relays



## PX8500

For the connection to digital output boards

Cascadable in 16/24/32 relays

8 relays on socket

DIN-rail mounting

30 VDC / 277 VAC

300 W / 2500 VA

10 A

## Safety features

- Overvoltage protection of the 24 V supply voltage through varistors and transil diodes
- Contact protection of the relays through varistors (PX8500-VtG)
- 4 mm creeping distance between change-over, closing and opening contact
- 6 mm creeping distance between change-over and closing contact of adjoining relays
- Free-wheeling diode in the coil circuit
- With housing for mounting on a standard DIN rail
- Operating safety tested according to the low-voltage directive: 73/23/EEC

## Applications

- Industrial digital I/O control
- Automatic test equipment
- External high power relay control
- Alarm monitoring
- Test automation
- Alarm monitoring
- Digital monitoring
- ON/OFF monitoring of motors, lights ...
- ...

## Specifications

### EMC – Electromagnetic compatibility

The product complies with the European EMC directive. The tests were carried out by a certified EMC laboratory in accordance with the norm from the EN 61326 series (IEC 61326). The limit values as set out by the European EMC directive for an industrial environment are complied with. The respective EMC test report is available on request.

### Contact side

Type of contacts:	8 change-over
Max. switching voltage:	30 VDC / 277 VAC
Max. switching capacity:	300 W / 2500 VA
Max. switching current:	10 A
Contact resistance:	< 100 mΩ
Response time:	15 ms
Release time:	5 ms
Mechanical life:	5 x 10 <sup>6</sup> operations
Life at max. switching capacity:	10 <sup>5</sup> operations

### Control side

Switching behaviour:	Monostable
Operating voltage:	24 VAC
Operating capacity:	533 mW
Switch. frequency at max. load:	20 switchings/minute
Response voltage at +20 °C:	16.8 V
Release voltage at +20 °C:	2.4 V

### Physical and environmental conditions

Operating voltage:	+24 V
Current consumption:	210 mA typ.
Dimensions:	212 x 87 x 72 mm (L x W x H)
Connector:	2 x 37-pin D-Sub female connector
<b>X1:</b>	For the connection to the PC board
<b>X2:</b>	For cascading the PX8500 in max. 32 relays, for example the digital output board APCI-2032. In this case the digital output signal 1 corresponds to the 24 V control signal of the relay 1, output 2 to relay 2, etc.
Temperature range:	0-60 °C
Humidity:	50 % at +40 °C 80 % at +31 °C



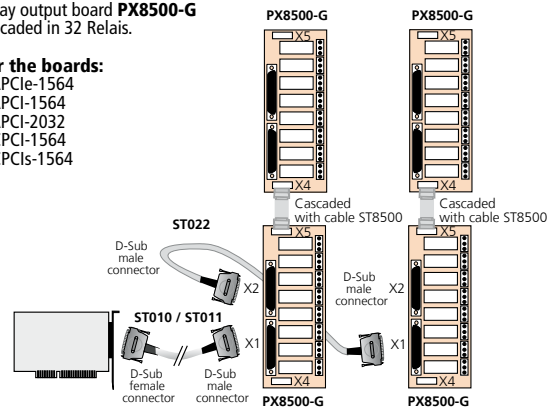
Standard round cable **ST010**

### PX8500 cascaded in 32 relays

Relay output board **PX8500-G** cascaded in 32 Relays.

**For the boards:**

- APCLe-1564
- APCI-1564
- APCI-2032
- CPCl-1564
- CPCIs-1564

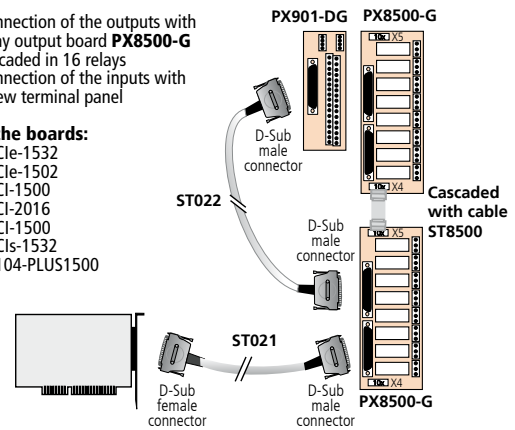


### PX8500 cascaded in 16 relays

- Connection of the outputs with relay output board **PX8500-G** cascaded in 16 relays
- Connection of the inputs with screw terminal panel

**For the boards:**

- APCLe-1532
- APCLe-1502
- APCI-1500
- APCI-2016
- CPCl-1500
- CPCIs-1532
- PC104-PLUS1500

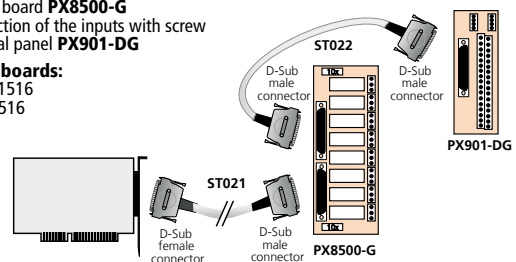


### Connection example – digital I/O board in 8 relays

- Connection of the outputs with relay output board **PX8500-G**
- Connection of the inputs with screw terminal panel **PX901-DG**

**For the boards:**

- APCLe-1516
- APCI-1516



## Ordering information

### PX8500

8-port relay output board. Incl. technical description.

**PX8500-G:** With housing for mounting on DIN rail (IP 20)

**PX8500-VtG:** PX8500 with varistors and housing for mounting on DIN rail (IP 20)

### Accessories

- ST8500:** Ribbon cable for cascading the board in 16, 24 or 32 relays. (Info: For 24 or 32 relays the cable ST022 is also required.)
- ST021:** Standard round cable, shielded, twisted pairs, 2 m. For connecting 37-pin digital I/O boards and MSX-E systems.
- ST022:** Standard round cable, shielded, twisted pairs, 2 m. For connecting the 37-pin screw terminal panel and for cascading.
- ST010:** Standard round cable, shielded, twisted pairs, 2 m. For connecting 37 pin digital I/O boards to relay output boards up to 32 relays.
- ST011:** Same as ST010, 5 m.