

# PCD3.A251

Digital output module, 8 relays,  
6 with changeover contacts,  
2 with make contacts

The module contains 8 relays for direct or alternating current up to 2 A, 48 VAC. 6 of them have changeover contacts and 2 of them make contacts. The module is especially suited wherever AC switching circuits with infrequent switching have to be controlled. For space reasons, there is no integrated contact protection.



Technical data									
Number of outputs	6 changeover contacts and 2 make contacts								
Relais type	RE 01 4024, SCHRACK								
Operating mode	> 12 V, > 100 mA								
Switching capacity: *) (contact lifetime)	<table border="0"> <tr> <td>2 A, 48 VAC AC1</td> <td>0.7 × 10<sup>6</sup> operations</td> </tr> <tr> <td>1 A, 48 VAC AC11</td> <td>1.0 × 10<sup>6</sup> operations</td> </tr> <tr> <td>2 A, 50 VDC DC1</td> <td>0.3 × 10<sup>6</sup> operations<sup>3)</sup></td> </tr> <tr> <td>1 A, 24 VDC DC11</td> <td>0.1 × 10<sup>6</sup> operations<sup>1)3)</sup></td> </tr> </table>	2 A, 48 VAC AC1	0.7 × 10 <sup>6</sup> operations	1 A, 48 VAC AC11	1.0 × 10 <sup>6</sup> operations	2 A, 50 VDC DC1	0.3 × 10 <sup>6</sup> operations <sup>3)</sup>	1 A, 24 VDC DC11	0.1 × 10 <sup>6</sup> operations <sup>1)3)</sup>
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1 A, 24 VDC DC11	0.1 × 10 <sup>6</sup> operations <sup>1)3)</sup>								
Relay coil supply <sup>2)</sup>	nominal 24 VDC smoothed or pulsed, 8 mA per relay coil								
Voltage tolerance, dependent on ambient temperature	<table border="0"> <tr> <td>20 °C: 17.0 ... 35 VDC</td> </tr> <tr> <td>30 °C: 19.5 ... 35 VDC</td> </tr> <tr> <td>40 °C: 20.5 ... 32 VDC</td> </tr> <tr> <td>50 °C: 21.5 ... 30 VDC</td> </tr> </table>	20 °C: 17.0 ... 35 VDC	30 °C: 19.5 ... 35 VDC	40 °C: 20.5 ... 32 VDC	50 °C: 21.5 ... 30 VDC				
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Output delay	typically 5 ms at 24 VDC								
Resistance to interference acc. to IEC 801-4	<table border="0"> <tr> <td>4 kV under direct coupling</td> </tr> <tr> <td>2 kV under capacitive coupling (whole trunk group)</td> </tr> </table>	4 kV under direct coupling	2 kV under capacitive coupling (whole trunk group)						
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2 kV under capacitive coupling (whole trunk group)									
Internal current consumption (from +5 V bus)	1 ... 25 mA typically 15 mA								
Internal current consumption (from V+ bus)	0 mA								
External current consumption	max. 64 mA								
Terminals	Pluggable 24-pole spring terminal block (4 405 4956 0), for Ø up to 1 mm <sup>2</sup>								

1) With external protective diode  
2) With reverse voltage protection  
3) These ratings are not UL-listed  
\*) Higher voltages are not allowed for this module because clearances between circuit paths are too small.



In the manual 27-600\_ENG, in the Chapter appendix A.4 relay contacts, are calculation data and wiring suggestions or the relay contacts. These data should be absolutely considered for safe switching and a long life span of the relays.



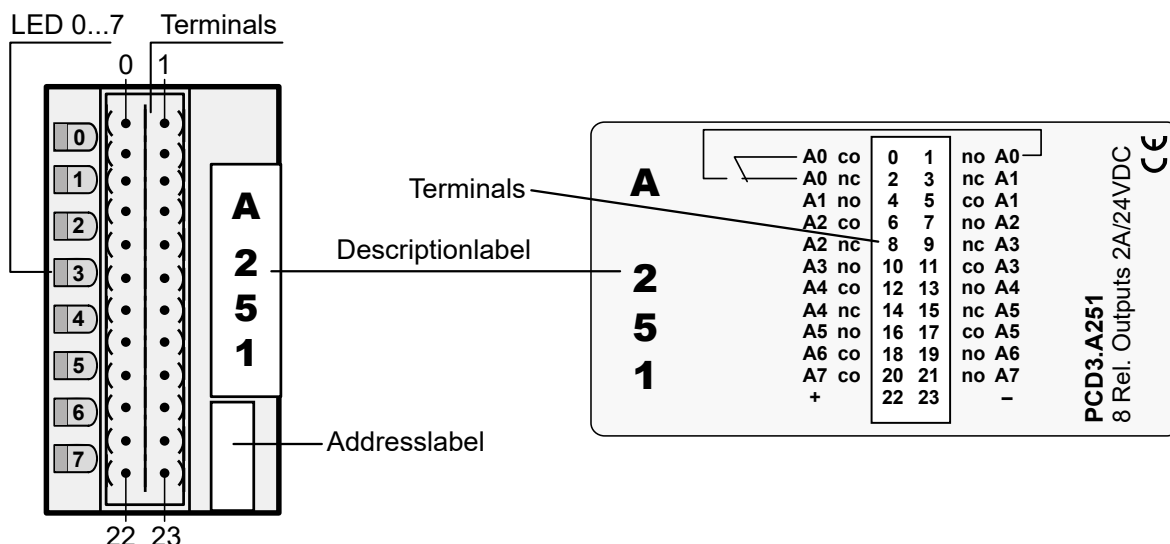
### Installation instructions

For reasons of safety it is not permissible to connect low voltages (up to 50 V) and higher voltages (50...250 V) to the same module.

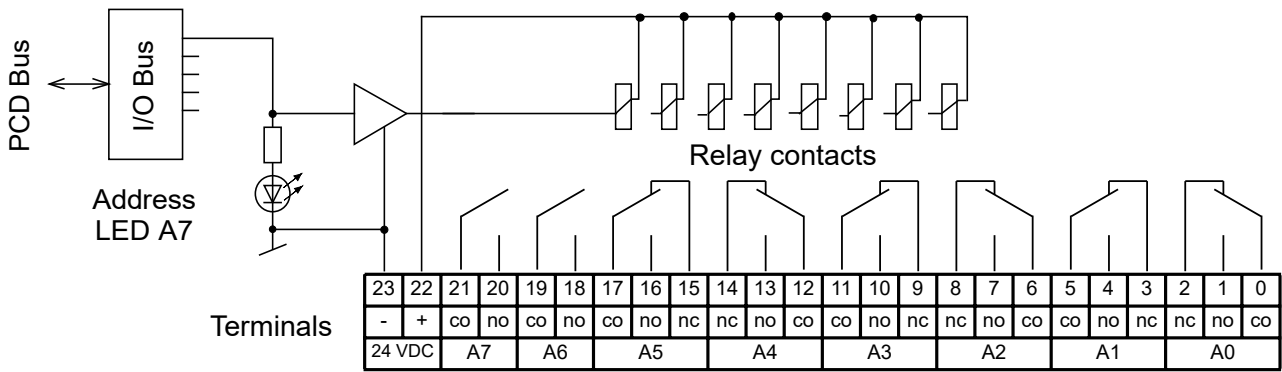
If a Saia PCD® module is connected to a higher voltage (50...250 V), approved components for this voltage must be used for all elements that are electrically connected to the system.

Using higher voltage (50...250 V), all connections to the relay contacts must be connected on the same circuit, i.e. in such a way that they are all protected against one AC phase by one common fuse. Each load circuit may also be protected individually. .

## LEDs and connection terminals



## Output circuits and terminal designation



Relay energized (contact closed): LED on  
 Relay reset (contact open): LED off  
 24 VDC must be connected to the ± terminals..

LED	Outputs
0	A0
1	A1
2	A2
3	A3
4	A4
5	A5
6	A6
7	A7



Watchdog: This module can be used on all base addresses; there is no interaction with the watchdog on the CPUs.



I/O modules and I/O terminal blocks may only be plugged in and removed when the Saia PCD® and the external +24 V are disconnected from the power supply.

## Ordering information

Type	Short description	Description	Weight
PCD3.A251	8 relays, 6 change-over contacts and 2 make-contacts	Digital output module, 8 relays, 48 VAC/2 A or 50 VDC/2 A	120 g

## Accessories

Type	Short description	Description	Weight
4 405 4956 0	Connector type "C"	Plug-in I/O spring terminal block, 2×12-pole up to 1.0 mm <sup>2</sup> , labelled 0 to 23 for modules with 16 I/Os or relay module ..A251, connector type "C"	15 g

**Honeywell** | Partner Channel

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