**PCD3.W210**

Analog input module, 8 channel, 10 bit, 0…20 mA (4…20 mA via software)

**Description**

Fast, analog 8 channel input module with 0…20 mA (4…20 mA via software) and 10 bit resolution per channel. With its short conversion time of <50 μs, this module is universally suitable for recording analogue signals.

**Technical specifications**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of inputs (channels)</td>
<td>8</td>
</tr>
<tr>
<td>Signal range</td>
<td>0…20 mA (4…20 mA via Software)</td>
</tr>
<tr>
<td>Resolution (representation)</td>
<td>10 bit (0… 1023)</td>
</tr>
<tr>
<td>Galvanic separation</td>
<td>no</td>
</tr>
<tr>
<td>Measuring principle</td>
<td>non-differential, single-ended</td>
</tr>
<tr>
<td>Input resistance</td>
<td>125 Ω / 0.1 %</td>
</tr>
<tr>
<td>Accuracy (of measured value)</td>
<td>± 3 LSB</td>
</tr>
<tr>
<td>Repeating accuracy (under same conditions)</td>
<td>within 1 LSB</td>
</tr>
<tr>
<td>Temperature error (0 … +55 °C)</td>
<td>± 0.3 % (± 3 LSB)</td>
</tr>
<tr>
<td>Conversion time A/D</td>
<td>≤ 50 μs</td>
</tr>
<tr>
<td>Overcurrent protection</td>
<td>± 40 mA</td>
</tr>
<tr>
<td>Burst protection (IEC1000-4-4)</td>
<td>± 1 kV, with unshielded cables</td>
</tr>
<tr>
<td>Temperature error (0 … +55 °C)</td>
<td>± 2 kV, with shielded cables</td>
</tr>
<tr>
<td>Time constant of input filter</td>
<td>typically 1 ms</td>
</tr>
<tr>
<td>Internal current consumption (from +5 V bus)</td>
<td>8 mA</td>
</tr>
<tr>
<td>Internal current consumption (from V+ bus)</td>
<td>5 mA</td>
</tr>
<tr>
<td>External current consumption</td>
<td>0 mA</td>
</tr>
<tr>
<td>Terminals</td>
<td>Pluggable 10-pole spring terminal block for Ø up to 2.5 mm², plug type A</td>
</tr>
</tbody>
</table>

**Indicators and connections**

- **LEDs not used**
- **Module-base-adresse**
- **Terminals**
Connection concept for two-wire transmitter

The input signals are connected directly to the 10-pole terminal block (E0 … E7 and COM). To minimize the amount of interference coupled into the module via the transmission lines, connection should be made according to the principle explained below.

Connection for 0…20 mA two-wire transmitter

The reference potentials of signal sources should be wired to a common GND connection ("-" and "COM" terminals). To obtain optimum measurement results, any connection to an earthing bar should be avoided.

If shielded cables are used, the shielding should be connected to an earthing rail.

Input signals with incorrect polarity significantly distort the measurements on the other channels.

Two-wire transducers (0…20 mA and 4…20 mA transmitters) need a 24 VDC supply in the measuring trunk.
### Configuration

#### Saia PCD® Classic

<table>
<thead>
<tr>
<th>PCD-System</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classic</td>
<td>The evaluation is performed by the firmware. It reads the values according to the configuration (Device Configurator or Network Configurator).</td>
</tr>
</tbody>
</table>

#### Saia PCD® IEC-Controller

<table>
<thead>
<tr>
<th>PCD-System</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>IEC-Controller</td>
<td>The evaluation is performed by the firmware. It reads the values according to the configuration (Device Configurator).</td>
</tr>
</tbody>
</table>
I/O modules and I/O terminal blocks may only be plugged in and removed when the Control Edge PCD and the external +24 V are disconnected from the power supply.

<table>
<thead>
<tr>
<th>Ordering information equipment</th>
<th>Type</th>
<th>Short description</th>
<th>Description</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>4 405 4954 0</td>
<td>Plug-in, type A</td>
<td>Plug-in I/O spring terminal block, 10-pole up to 2.5 mm2, labelled 0 … 9</td>
<td>15 g</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ordering information</th>
<th>Type</th>
<th>Short description</th>
<th>Description</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCD3.W210</td>
<td>8 analogue inputs 0…20 mA, 10 bit</td>
<td>Analogue input module, 8 inputs (channels), resolution 10 bit, signal range 0…20 mA (4…20 mA via software), the channels themselves not separated, connection with pluggable spring terminals, plug-in type A (4 405 4954 0) included</td>
<td>80 g</td>
<td></td>
</tr>
</tbody>
</table>
ATTENTION
These devices must only be installed by a professional electrician, otherwise there is the risk of fire or the risk of an electric shock.

WARNING
Product is not intended to be used in safety critical applications, using it in safety critical applications is unsafe.

WARNING - SAFETY
The unit is not suitable for the explosion-proof areas and the areas of use excluded in EN61010 Part 1.

WARNING - SAFETY
Check compliance with nominal voltage before commissioning the device (see type label). Check that connection cables are free from damage and that, when wiring up the device, they are not connected to voltage. Do not use a damaged device!

NOTE
In order to avoid moisture in the device due to condensate build-up, acclimatise the device at room temperature for about half an hour before connecting.

CLEANING
The device can be cleaned in dead state with a dry cloth or cloth soaked in soap solution. Do not use caustic or solvent-containing substances for cleaning.

MAINTENANCE
These devices are maintenance-free.
If damaged during, no repairs should be undertaken by the user.

Observe this instructions (data sheet) and keep them in a safe place.
Pass on the instructions (data sheet) to any future user.

WEEE Directive 2012/19/EC Waste Electrical and Electronic Equipment directive
The product should not be disposed of with other household waste. Check for the nearest authorized collection centers or authorized recyclers. The correct disposal of end-of-life equipment will help prevent potential negative consequences for the environment and human health.

EAC
EAC Mark of Conformity for Machinery Exports to Russia, Kazakhstan or Belarus.
Sales and Service
For application assistance, current specifications, pricing, or name of the nearest Authorized Distributor, contact one of the offices below.

**ASIA PACIFIC**
Honeywell Process Solutions,
(TAC) hfs-tac-support@honeywell.com

**Australia**
Honeywell Limited
Phone: +(61) 7-3846 1255
FAX: +(61) 7-3840 6481
Toll Free 1300-36-39-36
Toll Free Fax: 1300-36-04-70

**China – PRC - Shanghai**
Honeywell China Inc.
Phone: (86-21) 5257-4568
Fax: (86-21) 6237-2826

**Singapore**
Honeywell Pte Ltd.
Phone: +(65) 6580 3278
Fax: +(65) 6445-3033

**South Korea**
Honeywell Korea Co Ltd
Phone: +(822) 799 6114
Fax: +(822) 792 9015

**EMEA**
Honeywell Process Solutions,
Phone: +80012026455 or +44 (0)1344 656000

**AMERICA’S**
Honeywell Process Solutions,
Phone: (TAC) 1-800-423-9883 or 215/641-3610
(Sales) 1-800-343-0228

Specifications are subject to change without notice.

Process Solutions
Honeywell
1250 W Sam Houston Pkwy S
Houston, TX 77042

Honeywell Control Systems Ltd
Honeywell House, Skimped Hill Lane
Bracknell, England, RG12 1EB

Shanghai City Centre, 100 Jungi Road
Shanghai, China 20061

©2020 Honeywell International Inc.
Document No.: 51-52-03-79
Rev.2.1
May 2020

www.honeywellprocess.com