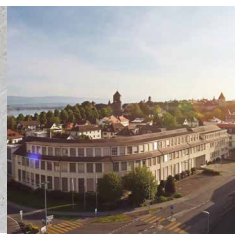
PCD3.W600

Analog output module, 4 channel, 12 Bit, 0 … 10 V



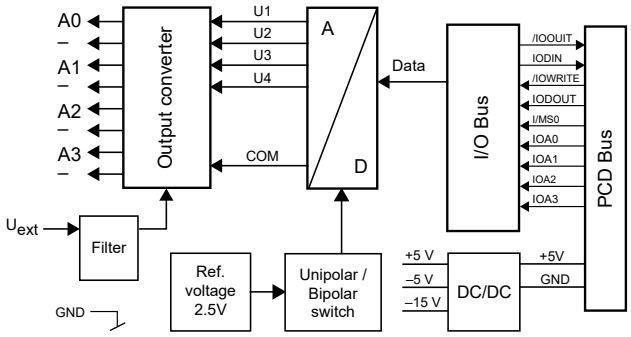
High-speed output module for general use with 4 channels, each with 12 bit resolution and voltage 0 … 10 V.

PCD3.W600

Technical specifications

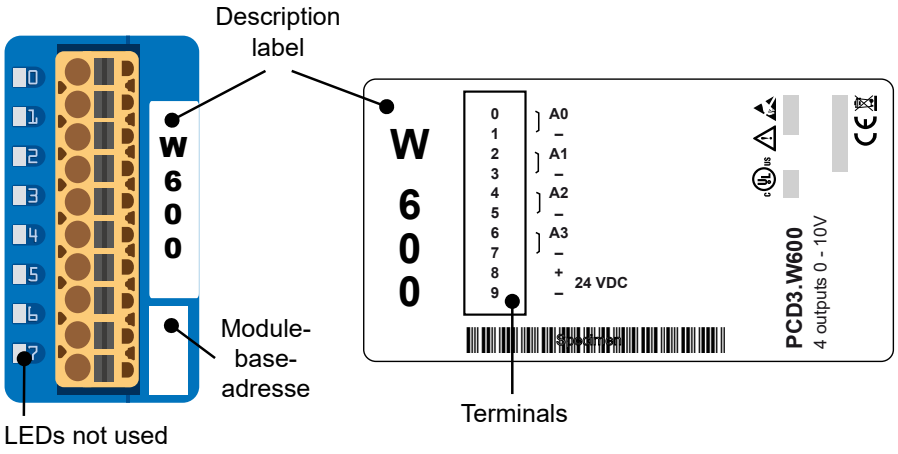
Number of outputs (channels)	4, short circuit protected
Signal range	0…10 V
Resolution (representation)	12 bit (0 … 4095)
Resolution (value of least significant bit[LSB])	2.442 mV
Galvanic separation	no
Conversion time A/D	typically 10 µs
Load impedance	Voltage: > 3 kΩ
Repeating accuracy (under same conditions)	Voltage: ± 0.5 %
Temperature error (over temperature range 0 … +55 °C)	Voltage: ± 0.1 %
Internal current consumption (from +5 V bus)	max. 4 mA
Internal current consumption (from V+ bus)	max. 20 mA
External current consumption	0 mA
Terminals	Pluggable 10-pole spring terminal block for Ø up to 2.5 mm², plug type A (4 405 4954 0)

Block schematic



Typ: PCD3.W600, PCD3.W610

Indicators and connections



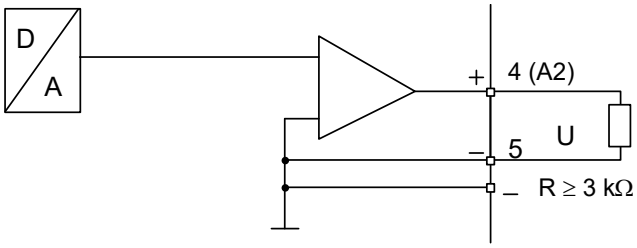
LED	Output
0	O0
1	O1
2	O2
3	O3

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

Watchdog ..
.. in classic system
The watchdog with his address 255 can influence this module if it is used at the base address 240.
.. in IEC-controller system
is not affected

Principle diagram of analog outputs

Output connection for 0 … 10 V



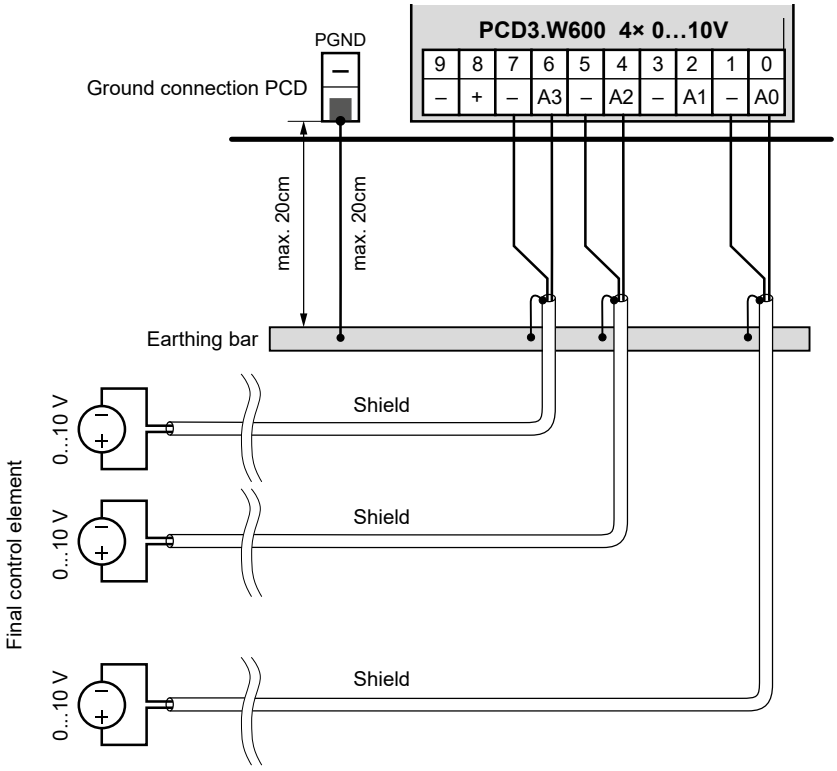
During start-up, a voltage of 5 V is sent to all outputs of the W600 module. The start-up phase lasts 40 ms, then 0 V is sent to the outputs.

The external power supply of 24 VDC at terminals 8 and 9 is not required.

Connection concept

The voltage input signals are connected directly to the 10-pole terminal block. 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 … 10 V

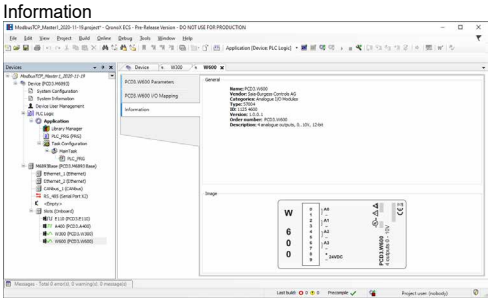
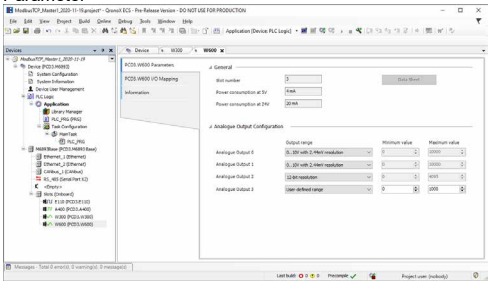
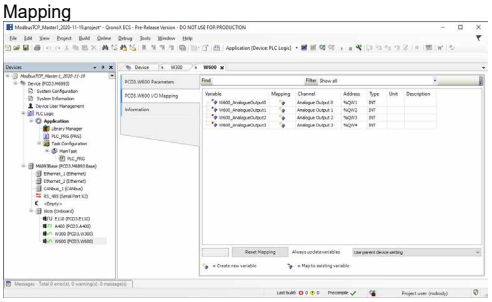


Configuration

Saia PG5® Controls Suite

PCD-System	Evaluation
Classic	The evaluation is performed by the firmware. It reads the values according to the configuration (Device Configurator or Network Configurator). **Properties** **Slot 2 : PCD3.W600, 4 Analogue Outputs, 0..+10V** **General** BaseAddress: 32 Connector Type: Type A, Spring Terminals 10-pole **Power Consumption** Power Consumption 5V [mA]: 4 Power Consumption V+ [mA]: 20 **Media Mapping** Media Mapping Enabled: No Media Type: Register Number Of Media: 4 **Analogue Output 0** Output 0 Range: 0..10V in mV resolution Minimum Value Output 0: 0 Maximum Value Output 0: 10000 **Analogue Output 1** Output 1 Range: 0..10V in mV resolution Minimum Value Output 1: 0 Maximum Value Output 1: 10000 **Analogue Output 2** Output 2 Range: **12 Bit resolution** Minimum Value Output 2: 0 Maximum Value Output 2: **4095** **Analogue Output 3** Output 3 Range: **User defined range** Minimum Value Output 3: 0 Maximum Value Output 3: **2000**
Alternatively	An FBox "PCD2/3.W2" exists for evaluation. FBox for PCD3.W600 (Inputs 0…7 selectable) PCD2/3.W6 -o0 -o1 -o2 -o3 Add I80 PCD2/3.W6 -o0 Add I80

Saia Qronox ECS Engineering and Commisioning Suite

PCD-System	Evaluation
IEC-Controller	The evaluation is performed by the firmware. It reads the values according to the configuration (Device Configurator) Information  Parameter  Mapping 

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 EN 61010 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 Mark of Conformity for Machinery Exports to Russia, Kazakhstan or Belarus.

PCD3.W600

4 405 4954 0

Ordering information

Type	Short description	Description	Weight
PCD3.W600	4 analogue outputs, 12 bit. 0 … 10 V	Analogue output modules, 4 inputs (channels), resolution 12 bit, signal range 0 … 10 V. The channels themselves not separated. Connection with pluggable spring terminals, plug-in type A (4 405 4954 0) included	80 g

Ordering information equipment

Type	Short description	Description	Weight
4 405 4954 0	Plug-in, type A	Plug-in I/O spring terminal block, 10-pole up to 2.5 mm², labelled 0 … 9	15 g

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