**PCD3.C200**

**Extension module holder for 4 I/O modules**

**Description**

The PCD3.Mxxxx controllers can be expanded with PCD3.Cxxx components, making additional module sockets available. On the PCD3.Mxxx0, up to 15 PCD3.Cxxx module holders can be attached (PCD3.M3020/3120 cannot be expanded). This allows the user to attach a maximum of 64 I/O modules, or 1023 digital inputs/outputs.

PCD3.C200 serves as a bus repeater and internally provides +5 V and +V* for a segment of I/O modules.

**Device design**

All standard I/O modules can be used in the expansion module holders. Communication modules or other intelligent modules can only be used in the slots of the Basic CPU.

**Example calculation for the current consumption of the internal +5V and +V (24V) bus of the I/O modules**

![Example calculation diagram]
Planning data
- Step files (3D)
- BIM objects

The data can be downloaded with the following link:
https://sbc-support.com/en/services/bim-building-information-model/

Connections of the PCD3.C200

- Bus connection from CPU or module carrier
- Bus connection to module carrier

Dismounting from DIN rail
To remove the housing, push upwards and pull out.

Internal supply of the LIO module carrier PCD3.C200

When planning PCD3 systems, it must be checked whether the two internal power supplies are not overloaded. This control is especially important when using analog, counting, and positioning and other special modules, as some of them consume a relatively large amount of power.
PCD3 I/O modules are not hot-plug capable:

- Carefully insert and remove the I/O modules after switching off the power supply (24V).

The PCD3.C200 is used to extend the I/O bus or for the internal power supply +5V and +V (24V) to a module segment. Please note the following rules:

- Mandatory: Insert a PCD3.C200 after the PCD3.M6893 and after each cable (at the start of a row).
- Do not use more than six PCD3.C200s in a single configuration, or the time delay will exceed the I/O access time.
- If an application is mounted in a single row (max. 15 module holders), then after five PCD3.C100 a PCD3.C200 must be used to amplify the bus signal (unless the configuration ends with the fifth PCD3.C100).
- If the application is mounted in multiple rows, the restricted length of cable means that only three module holders (1× PCD3.C200 and 2× PCD3.C100) may be mounted in one row.

The following aspects should be considered when planning PCD3 applications:

- In keeping with lean automation, it is recommended to leave the first slot in the CPU basic module free for any subsequent expansions. This slot can accommodate simple I/O modules but also communication modules.
- The total length of the I/O bus is limited by technical factors; the shorter, the better.

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.

Over 40 modules available with different functionalities

Types

- PCD3.Axxx Digital output modules
- PCD3.Exxx Digital input modules
- PCD3.Fxxx Communication modules
- PCD3.Wxxx Analogue input/output modules

Insertion of I/O modules

The PCD3.C200 is used to extend the I/O bus or for the internal power supply +5V and +V (24V) to a module segment. Please note the following rules:

- Mandatory: Insert a PCD3.C200 after the PCD3.M6893 and after each cable (at the start of a row).
- Do not use more than six PCD3.C200s in a single configuration, or the time delay will exceed the I/O access time.
- If an application is mounted in a single row (max. 15 module holders), then after five PCD3.C100 a PCD3.C200 must be used to amplify the bus signal (unless the configuration ends with the fifth PCD3.C100).
- If the application is mounted in multiple rows, the restricted length of cable means that only three module holders (1× PCD3.C200 and 2× PCD3.C100) may be mounted in one row.
The calculation example shows that internal capacity is maintained in the CPU basic module PCD3.M6893 and the holder module PCD3.C200. The CPU basic module has a sufficient reserve to receive an additional communication module in the empty slot 0. The holder module PCD3.C200 also has sufficient reserves to connect an additional PCD3.C100 or PCD3.C110 holder module. The power consumption of the internal +5V and +V (24V) bus for the I/O modules is automatically calculated in the QronoX I/O-Calculator Excel-sheet.
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, 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.
### Ordering information

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<td>Extension module holder for 4 I/O modules</td>
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### Accessories

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<td>Connection plug PCD3.M/T/C to PCD3.Cx00</td>
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