## PCD3.M3330

## PCD3.M3330 CPU basic module with Ethernet TCP/IP, 1023 I/Os, 512 kByte of program memory

The Saia PCD3.M3, with its modular cassette configuration, is designed as the smallest base device for simple applications. The products available include four different CPU base modules with USB, Ethernet and RS-485 interfaces.
64 or 1023 inputs/outputs are available depending on the module, along with 128 or 512 kB of program memory. The integrated on-board interface functions can be expanded via the various slots. The Saia PCD3 also supports a wide range of protocols.

| Technical Data | PCD3.M3120 | PCD3.M3330 | PCD3.M3160 | PCD3.M3360 |
| :---: | :---: | :---: | :---: | :---: |
|  | Basic | Basic | Basic Power | Basic Power |
| Number of inputs/outputs | 64 | 1023 | 64 | 1023 |
| or I/O module slots | 4 | 64 | 4 | 64 |
| I/O expansion connection for PCD3.Cxxx module holder | No | Yes | No | Yes |
| $\begin{array}{ll}\text { Processing times }[\mu \mathrm{s}] & \begin{array}{l}\text { bit operation } \\ \text { word operation }\end{array}\end{array}$ | $\begin{gathered} 0.3 \ldots 1.5 \mu \mathrm{~s} \\ 0.9 \mu \mathrm{~s} \end{gathered}$ |  | $\begin{gathered} 0.1 \ldots 0.8 \mu \mathrm{~s} \\ 0.3 \mu \mathrm{~s} \end{gathered}$ |  |
| Real-time clock (RTC) | Yes |  |  |  |

Onboard memory

| Main memory (RAM) for program and DB/text | 128 kByte | 512 kByte | No |
| :--- | :---: | :---: | :---: |
| Program memory, DB/text (FLASH) | No | 512 kByte |  |
| Working memory, DB/text (RAM) | No | 128 kByte |  |
| Flash memory (S-RIO, configuration and backup) | 2 MByte | 128 MByte |  |
| User flash file system (INTFLASH) | No | 128 MByte |  |
| Data backup |  | 4 hours with SuperCap |  |

Onboard interfaces

| USB 1.1 | Yes |
| :--- | :---: |
| Ethernet 10/100 Mbits, full-duplex, auto-sensing/auto-crossing | Yes |
| RS-485 on terminal block (Port 2) or | up to 115 kbits |
| RS-485 Profibus-DP Slave, Profi-S-Net on terminal block (Port 2) | up to 187.5 kbits |

## Options

The data memory can be expanded to 4 GB with flash memory modules (with file system).

Optional data interfaces

| I/O slot 0 | PCD3.F1xx modules for RS-232, RS-422, RS-485 and Belimo MP-Bus |
| :--- | :--- |
| I/O slot $0 \ldots 3$ - up to 4 modules or 8 interfaces: | PCD3.F2xx modules for RS-232, RS-422, RS-485, BACnet ${ }^{\oplus}$ MS/TP, Belimo MP-Bus, DALI and M-Bus |

## General specifications

| Supply voltage (in accordance with EN/IEC 61131-2) | $24 \mathrm{VDC},-20 /+25 \%$ max. incl. $5 \%$ ripple or $19 \mathrm{VAC} \pm 15 \%$ two-way rectified (18 VDC) |
| :--- | :--- |
| Power consumption | typically 15 W for $64 \mathrm{I} / \mathrm{Os}$ |
| Capacity $5 \mathrm{~V} /+\mathrm{V}(24 \mathrm{~V})$ internal | max. $600 \mathrm{~mA} / 100 \mathrm{~mA}$ |

## Connections

| Terminal block (Order number: 44054995 0) for supply, watchdog, interrupt inputs and Port \#2 |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Pin | Signal | Explanation |
|  | 8 | GND | Voltage supply |
|  | 7 | +24V |  |
|  | 6 | WD | Watchdog |
|  | 5 | WD |  |
|  | 4 | Int1 | 2 interrupt inputs 24 VDC or 1 rapid counter 24 VDC |
|  | 3 | Int0 |  |
| $\square^{9}$ | 2 | /D | Port \#2 <br> RS-485 up to 115.2 kbit/s usable as free user interface or Profi-S-Bus up to 187.5 kbits/s |
|  | 1 | D |  |
| RS-485 terminator switch |  |  |  |
| Switch position | Designation |  | Explanation |
| left | 0 |  | without termination resistors |
| right | C |  | with termination resistors |


| Profibus |  |
| :---: | :---: |
| Signal | Wiring |
| RxD/TxD-N | A:green |
| RxD/TxD-P | B: red |

## Dimensions



Details about this CPU can be found in the manual 26-789 ENG "PCD3 series".

I/O modules and I/O terminal blocks may only be plugged in and removed when the Saia $P C D^{\circledR}$ and the external +24 V are disconnected from the power supply.


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

## Ordering information

| Type | Short description | Description | Weight |
| :--- | :--- | :--- | :--- |
| PCD3.M3330 | CPU base units for 4 plug-in I/O modules | PCD3 processor unit with Ethernet TCP/IP, <br> web and FTP server, file system, <br> CPU with 512 KByte user program, <br> backup with on-board Flash memory, clock (RTC), <br> USB port for PG5, up to 1024 I/O, 2 interrupt inputs, <br> RS-485 for Prof-S-Net or S-Bus | 640 g |
|  |  |  |  |

## Accessories

| Type | Short description | Description | Weight |
| :--- | :--- | :--- | :--- |
| $\mathbf{4 4 0 5 4 9 9 5 0}$ | 8-pin spring terminal block | Pluggable spring block, 8-pin up to $2.5 \mathrm{~mm}^{2}$ (orange terminal block), <br> for power supply to PCD3.Mxxx0 | 12 g |
| $\mathbf{4 1 0 4 7 5 1 5 0}$ | Slot cover for unused PCD3 I/O slots | Slot cover for unused PCD3 I/O slots (with SBC logo) | 8 g |

## Saia-Burgess Controls AG

Bahnhofstrasse 18|3280 Murten, Switzerland
T +41 $265803000 \mid$ F +41 265803499
www.saia-pcd.com
support@saia-pcd.com | www.sbc-support.com

