

Performance overview PCD3 series



PCD3.M3020



PCD3.M3230



PCD3.M3120



PCD3.M3330

Basic

Technical data CPUs

Number of inputs/outputs or I/O module sockets	64 4	1023 ¹⁾ 64
Extension module holder connector	no	yes
Processing time [µs]	<ul style="list-style-type: none"> ■ bit operation 0.3...1.5 µs ■ word operation 0.9 µs 	0.3...1.5 µs 0.9 µs
Integrated Web server + USB + Date-time (RTC)	yes	yes
On-board memory		
User memory (RAM)	128 KByte	512 KByte ²⁾
Backup memory flash	128 KByte on board	512 KByte on board ²⁾
Data protection	8 hours with SuperCap	8 hours with SuperCap
Optional memory		
	up to 4 GByte	up to 4 GByte
On-board data interfaces		
	2...3	2...3
S 485 on terminal block (Profibus DP-Slave, Profi-S-Net (S-I/O, S-Bus))	up to 115.2 kBit/s or Profi-S-Net up to 187.5 kBit/s	up to 115.2 kBit/s or Profi-S-Net up to 187.5 kBit/s
USB 1.1	yes	yes
Ethernet-TCP/IP 10/100 MBit/s	with PCD3.M3120	with PCD3.M3330
RS 232 up to 115.2 kBit/s	no	no
RS 422/RS 485 on port #3	no	no
Profibus DP-Slave, Profi-S-Net (S-I/O, S-Bus), up to 1.5 MBit/s	no	no
Controller Area Network (CAN 2.0B)	no	no
Profibus DP Master up to 12 MBit/s	no	no
Optional data interfaces		
	up to 8	up to 8
Optional PCD3.F1xx module for RS 232, RS 485, RS 422, TTY/20 mA and Belimo MP-Bus	only used on Slot #0	only used on Slot #0
Optional PCD3.F2xx modules for RS 232, RS 485, RS 422, TTY/20 mA and Belimo MP-Bus	Slot #0...3 up to 8 ports	Slot #0...3 up to 8 ports

General

Supply voltage (according EN/IEC 61 131-2)	24 Vdc -20/+25% max. incl. 5% ripples	24 Vdc -20/+25% max. incl. 5% ripples
Current draw from internal 5 V Bus/+V Bus	max. 600 mA/100 mA	max. 600 mA/100 mA
Programmable via USB	PG5 starting from version 1.4.100	PG5 starting from version 1.3.100

¹⁾ when using PCD3.Cxxx and digital I/O-modules with 16 I/Os each.

²⁾ starting from hardware (HW) version D + matching firmware (FW).

System resources

Flags	8192 × 1 bit, volatile or non-volatile, division programmable	Timing range:	31 bit, unsigned (0...2147483647) timing signals, selectable (10 ms to 10 s)
Registers	16384 × 32 bits, non volatile	Texts and DBs	8192
Computational ranges	Integers: -2147483648... +2147483647 (-2 ³¹ ...+2 ³¹ -1) Floating-point numbers: ±9.22337 × 10 ¹⁸ ...±5.42101 × 10 ⁻²⁰ Formats: decimal, binary, BCD, hexadecimal or floating point	Date-time (RTC)	Time values: s/min/h, week/day of week, month/day of month, year
Index registers	17 × 13 bit (1 each per COB and XOB)	Accuracy	better than 1 min/month
Timers/Counters	1600 volatile timers or non-volatile counters, division programmable	Power reserve	8 hours for PCD3.M3xx0 1 to 3 years for PCD3.M5xx0 and PCD3.M6xx0
Counting range	31 bit, unsigned (0...2147483647)		