

Controller @PLC-C202-PB

CPU



- IEC-61131-3 PLC
- Profibus DP slave
- Automatic baudrate detection 9,6kBd to 12MBd
- 10/100Mbit Ethernet Interface
- TCP/IP, RS232 for programming and diagnostic
- Serial RS232 Modbus Interface
- Program download by ftp

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Pinout, Display

LED:	
RUN	CPU: ok
DIAG	CPU: diagnostic LED
ERR	CPU: Error LED
S DX	CPU: system data transmission @BUS
ACT	Ethernet: Transmit
LINK	Ethernet: link ok
SP	Ethernet: Off: 10Mbit; on:100Mbit
COLL	Ethernet: Collision
Rotary switch for Profibus address	
Hi:	Decimal place of the addr
Lo:	Unit place of the addr
Connectors	
Profibus-DP:	Pin 3: PB_B Pin 4: PB_RT Pin 5: PB_GND Pin 6: +5V= Pin 8: PB_A
Ethernet:	RJ45 10/100Mbit
Serial:	Mini USB RS232 Pin 1: RX Pin 2: TX Pin 3: GND
Power:	Phoenix Minicombicon Pin 1:24 V Pin 2: 0 V

Attributes

Fieldbus Interface:
The @PLC-C202-PB connects the Profibus-DP bus system to the IO-Moduls. The profibus address can be adjusted via rotary switches.
The @PLC-C202-PB contains a ARM7 core controller.

Ethernet:
The @PLC-C202-PB includes a 10/100Mbit fast ethernet interface. The IP-Address can be adjusted by the software @ctiveIO-Toolkit.

CPU specifications:
Flash memory : 4 MByte (16 Bit)
SDRAM : 8 MByte (32 Bit)
Buffered SRAM : 2 MByte (16 Bit)
.....(Buffered for 24h)
NVRAM : 32 kByte (8 Bit)
CPU clock :44 MHz
RTC:.....Real Time Calendar Clock

Functionality:
PLC function : IEC 61131-3 CoDeSys CSP32E V 2.3

System specifications:
Hardware supervisor system :

- temperature control
- power control
- hardware watchdog
- power fail system
- supports UPS*

*) on request

Electrical Data

Power supply external.....	+24V= ± 20%, see notes
Operating Current	200mA at +24V
Protection	30V overvoltage, surge
Interfaces	RS232, 10/100Mbit Ethernet

Controller @PLC-C202-PB

System Information

System ID	0x5203
System Dataformat PLC.....	Motorola, big endian

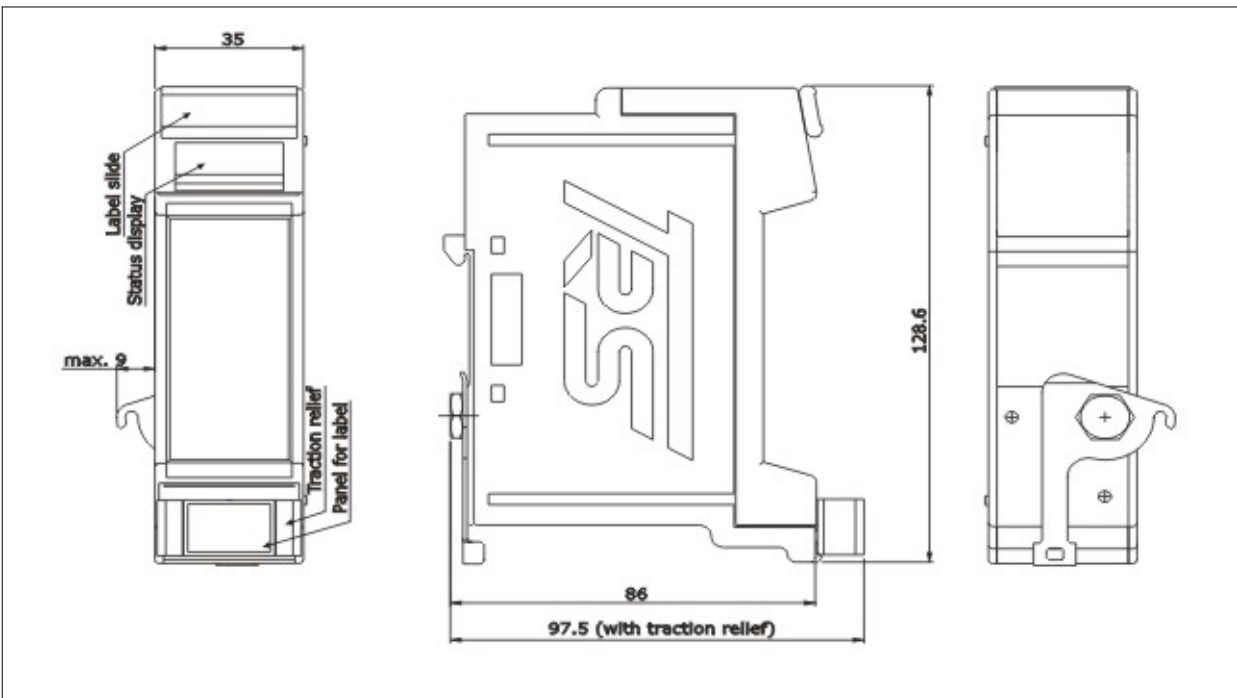
Environmental Conditions

EMC	EN 61000-4-2 (IEC-801-2) / EN 61000-4-4 (IEC-801-4)
Operating temperature [°C]	0 .. +55
Storage temperature [°C]	-20 .. +70
Humidity (rel)	98 % (non condensing)
* Protection class.....	IP 20 (DIN 40 050)
* The protection class is valid only with housing and connector installed	

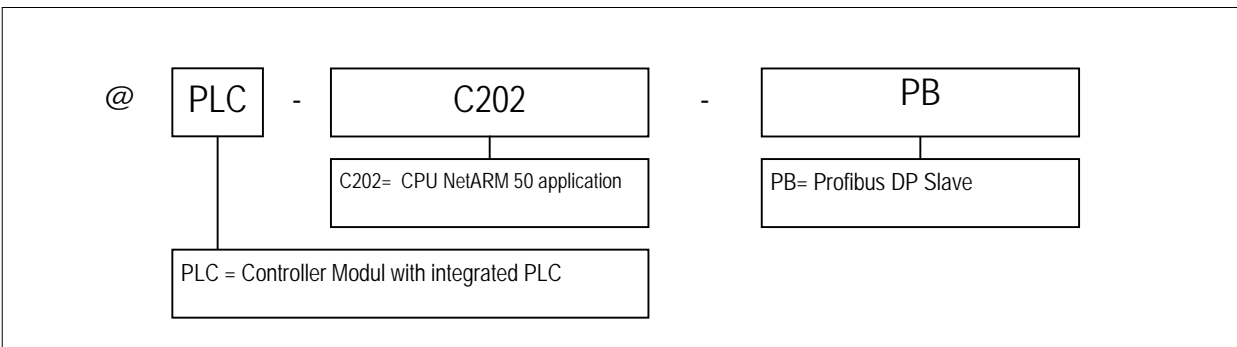
Mechanical Data

Weight	approx. 0.28 kg including connector
Dimension	105 x 80 mm

Drawing (effective if mounted in @M housing)



Ordering Key



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The product @PLC-C202-PB is a IEC-61131-3 based programmable logic controller unit. It offers the following options.

@PLC-C202-EN	
Controller	basic
CPU	NetARM 50
CPU clock	44,2 MHz
FLASH memory	4MB x 16
SDRAM	8 MB x 32
Buffered SRAM	2 MB x 16
NVRAM	32 KB x 8
Serial	RS232 / RS485 (opt.)
diag. LED; fieldbus	X
@ctiveIO-Bus support	X
Profibus DP	N
second fieldbus support	N
Buffered Real time calendar clock	X
Processing time	
Bit	0,8 µs
Word	1,1 µs
DWord	1,2 µs
Fixed-Point arithmetik	1,6 µs
Floating Point arithmetik	7,9 µs
Basic firmware functions	
Firmware download	ftp-Server
@ctiveIO-Toolkit diagnostic	X
PLC functions	IEC-61131-3
runtime system	CSP32E V 2.3
Memory for IEC program	768 kByte
IEC data	3 Mbyte
IEC retain data	32 kByte
Programming	
Serial	X
TCP/IP	X
monitoring	X
breakpoints	X
online change	X
source code save	X
Libraries	
standard library / timer	X
serial communication	X
boot project	X
retain data (NVRAM)	X
PLC browser	X
object dictionary	X
network variables	X
Configuration	
watchdog	X
multitasking	N
exception handling	N
Modbus(RS232)	
Interface connection	Slave
Transmission protocols	RTU/ ASCII
Memory size	(adjustable)
digital Output(coil)	max 131072 Bit
digital Input(input)	max 131072 Bit
Holding Register	max 8192 Word
Input Register	max 8192 Word
Function code	1,2,3,4,5,6,8,15, 16 ,23

X : standard
 O : option
 N : not supported by @PLC-C202-PB

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notes:

Description of the LEDs:

LED	Status	Description
RUN	ON	CPU is running
DIAG	ON	Diagnostic information available: Warning / Error
ERR	ON Flashing	Error on fieldbus, no diagnostic information available Error (see diagnostic information)
SDX	ON	Data on @Bus
ACT		Datatransfer on network
LINK	ON	Network connected
SP	ON	Netspeed 100Mbit

Special operating modes (DIAG and ERR LED):

ftp server active:DIAG and ERR in alternating blink mode
 System init in progress:.....DIAG and ERR in concurrent blink mode

Dataformat PLC I/O function: Big Endian (Motorola)

var dataformat	variable as Byte	variable as Word	variable as Dword
PLC configuration			
module as Byte		X	X
module as Word			X
module as Dword			

Caution:

If using interface moduls of type @5xxx power 0V of the controller has to be directly connected with power 0V of the @5xxx-modul and power 0V of the interface partner of the @5xxx-modul.

Revision change

Version	Description	Date (m/y)
00	serie 0	08/04

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