@ctiveIO

virtual encoder 5190

I/O

- **virtual encoder**
- **data input / output voltage 5V RS485**
- **1 interface**
- **differential input / output**

Pinout

LED:	0	A	activity
	1	B	activity
	4	Zero	activity
	5	I 0	
	6	I 1	
	E:	failure, red	
	P:	power supply, red	
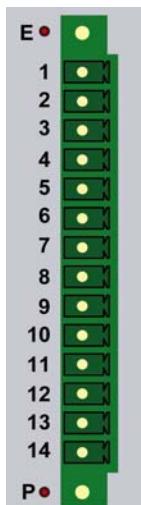
Pin	Signal	
1	A	5VDC diff.
2	/A	5VDC diff.
3	B	5VDC diff.
4	/B	5VDC diff.
5	zero	5VDC diff.
6	/zero	5VDC diff.
7	I 0	input
8	/I 0	input
9	I 1	input
10	/I 1	input
11	Power	VCC
12	Power	0V
13	Power	VCC
14	Power	0V

All Power VCC and Power 0V are internal connected

Attributes

Dataformat:

Applications:
This print contains a programmable virtual 16 bit incremental counter. Two different operating modes are possible:

- Master: The virtual encoder distributes position-signals.
- Slave: The virtual encoder is reading in position-signals.

available prints :

- @P5190L: virtual encoder, 5VDC input/output

Related Applications:
The virtual encoder works only together with the virtual encoder repeater.

- @P5191R:virtual encoder repeater, 5V output

digital

output

Electrical Data

Power supply external..GND required, see notes, VCC max. 24V= ±20%, optional
Supply current ....5mA at 24 V
Operating current @ctiveBus.....................................45mA at 3,3V / 20mA at 5V
Input protection ....30V overvoltage, 5V overvoltage
Counter ....16 bit
Limiting frequency 0,65kHz-333,3kHz

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System Information

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System ID ...............................................................0X0281
System adress space ................................................48 bit in, 48 bit out
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Environmental Conditions

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Electromagnetic compatibility (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
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Mechanical Data (effective if mounted in @M housing)

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Weight ...................................................................approx. 0.05 kg including connector (PCB only)
Dimension .............................................................105mm x 80mm x 12mm (PCB only)
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Drawing (effective if mounted in @M housing)

Ordering Key

P5190L works only if used with
P5191R (virtual encoder repeater).
Single use is not possible.

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M servo motor

incremental signals

master mode:
turn control singnal of
position, speed
pass on of data

PC @C570

left slot: @P5190
right slot: @P5191R

slave mode:
analysis of
position, speed
pass on of data

PC @C570

left slot: @P5190
right slot: @P5191R

etc.

I/O

digital

output
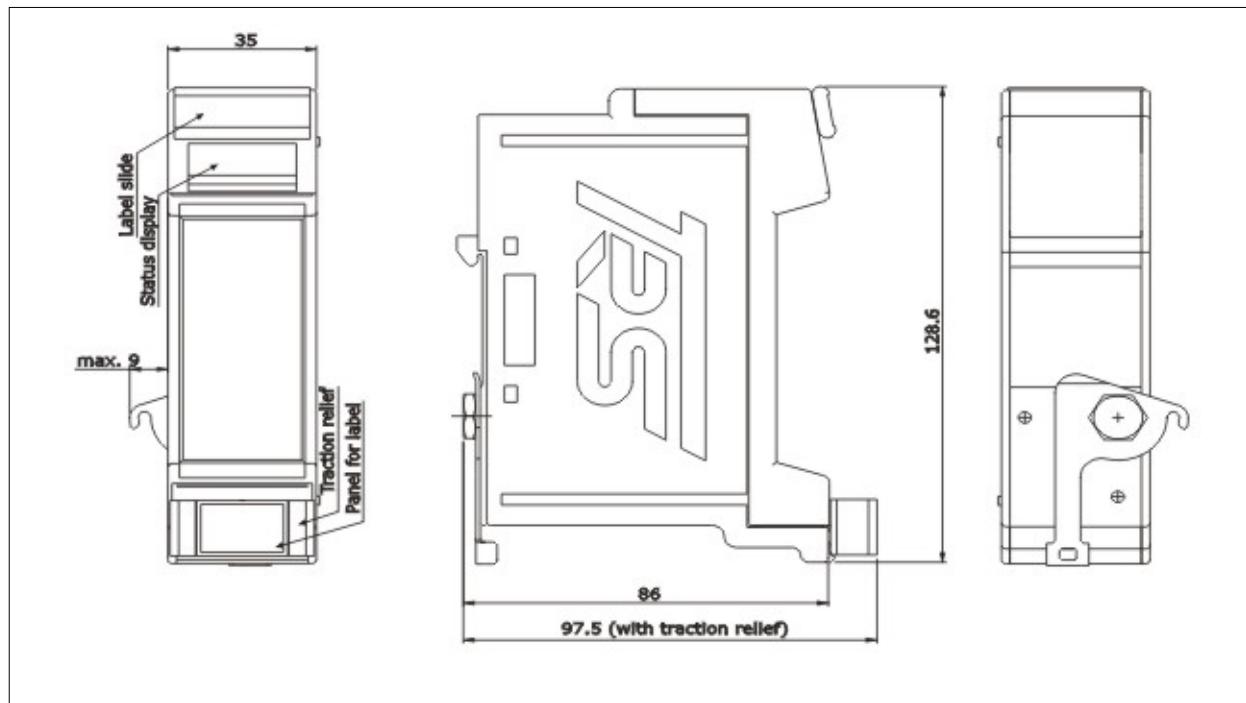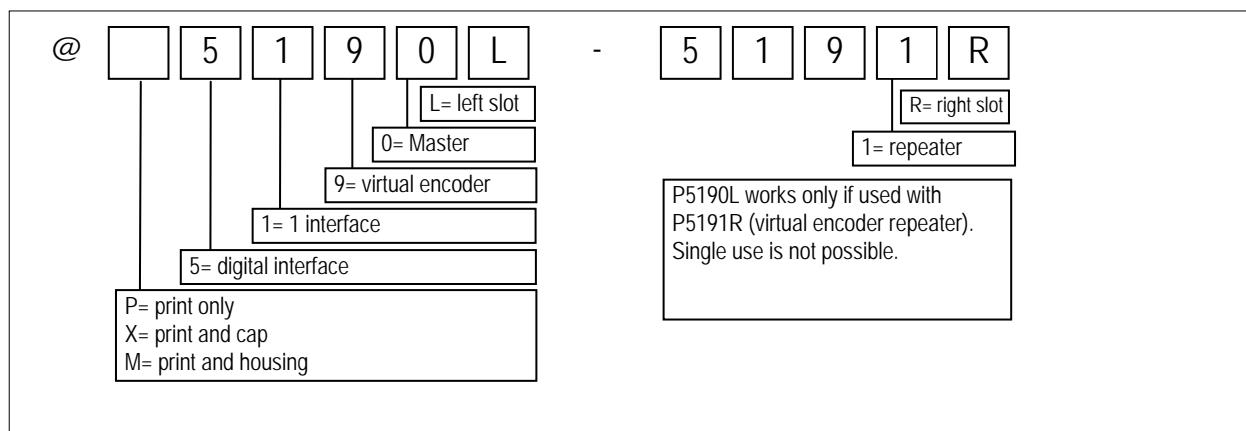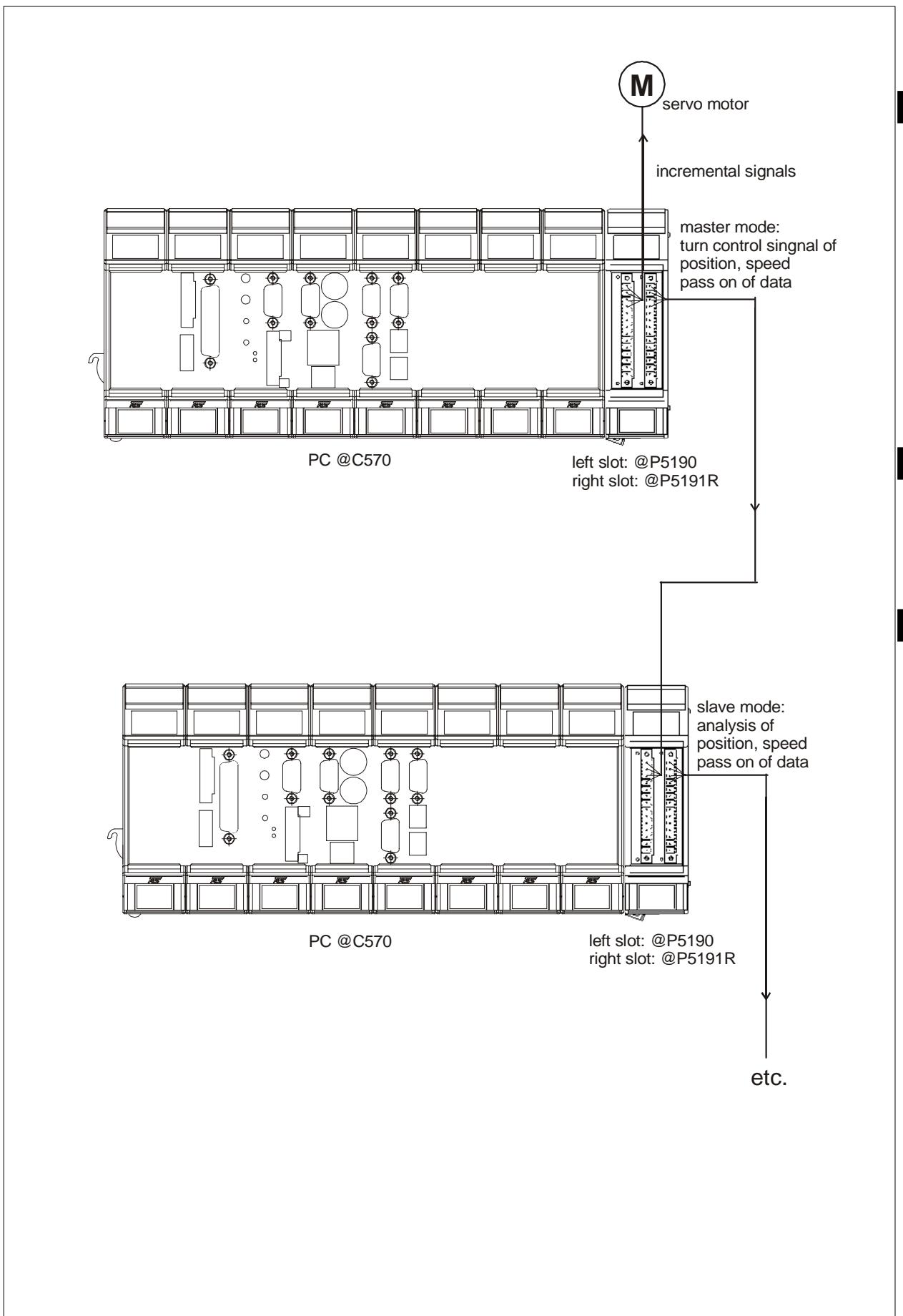
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notes:

Caution:
Power 0V has to be directly connected with power 0V of the interface partner and power 0V of the controller-module.

Revision change

Revision	Description	Date (m/y)
00	created	07/02
01	Added: electrical data	09/03