

# Controller @C100-DN

CPU



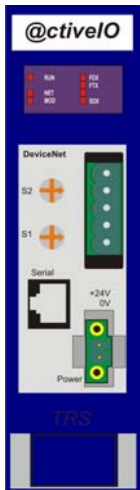
- Controller with DeviceNet Fieldbus protocol
- Baudrate 125kBaud, 250k and 500kBaud
- RS232 for programming and diagnostics

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## Pinout

<span style="color:red">■</span> RUN	<span style="color:red">■</span> FDX
<span style="color:red">■</span> NET	<span style="color:red">■</span> FTX
<span style="color:red">■</span> MOD	<span style="color:red">■</span> SDX

<b>LED:</b>	RUN	see notes
	NET	
	MOD	
	FDX	
	FTX	
	SDX	



<b>Node ID / Baudrate:</b>	
S1	see Notes
S2	
<b>DeviceNet X1:</b>	
Pin 1	V-
Pin 2	CAN-L
Pin 3	Shield
Pin 4	CAN-H
Pin 5	n.c.
<b>Serial:</b>	
Pin 1	TxD RS232
Pin 2	RxD RS232
Pin 3	reserved
Pin 4	reserved
Pin 5	0V
Pin 6	nc.
Pin 7	reserved for RS485+
Pin 8	reserved for RS485-
<b>Power:</b>	
Pin 1	+24V=
Pin 2	0V

## Attributes

### Fieldbus Interface:

The @C100-DN connects the DeviceNet bus system to the I/O-Modules.  
The @C100-DN contains a C165 µController.

### Address:

The DeviceNet MAC-ID and Baud Rate can be adjusted with two HEX-rotary-switches.

### CPU specifications:

Flash memory : ..... 1 MByte (16 Bit)  
SRAM : ..... 512 kByte (16 Bit)  
CPU clock : ..... 44 MHz

### DeviceNet specifications/features:

CAN Controller: .....SJA1000  
Device Type: .....Generic Device  
I/O Slave Messaging: ..... Polling  
Configuration Method: ..... EDS File  
..... Custom Software

### System specifications:

Hardware supervisor system:

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

## Electrical Data

Power supply external .....	24V DC ± 20%, see notes
Operating Current .....	< 120mA at 24V DC
Input protection .....	30V overvoltage, surge
Serial Interface .....	RS232

## Controller @C100-DN

### System Information

System ID .....0x1131  
 System address space .....max Systembus (256Byte)

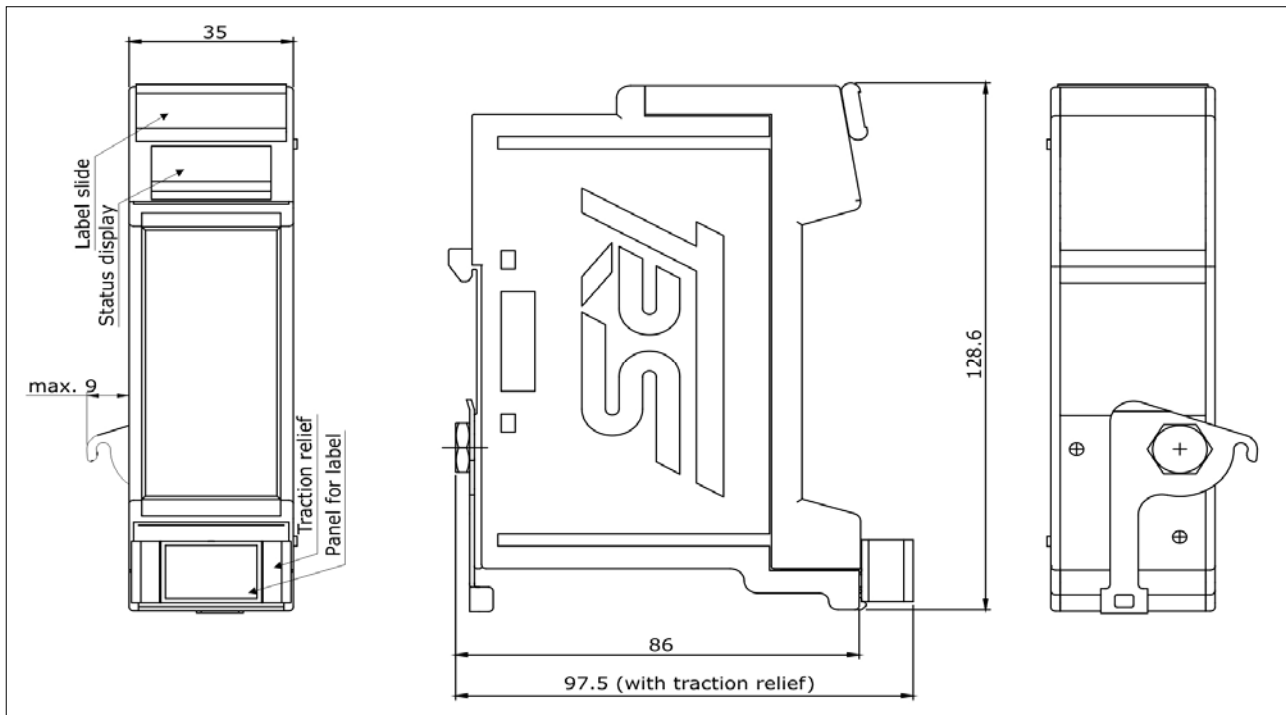
### Environmental Conditions

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

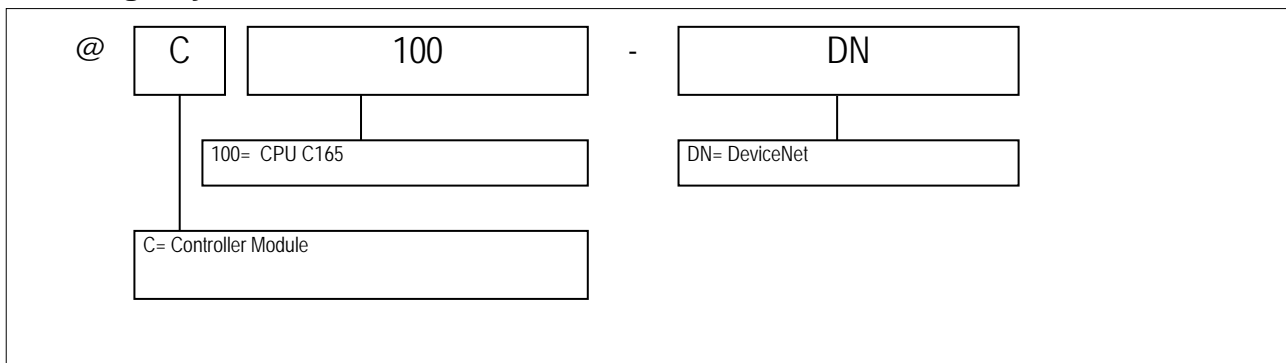
### Mechanical Data

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

### Drawing (effective if mounted in @M housing)



### Ordering Key



notes:

Description of the LEDs:

LED	Status	Description
RUN	ON	CPU has finished initialising
NET		
MOD		
FDX	ON	Transmitting DeviceNet Data
FTX	not used	
SDX	ON	Data on @Bus

Switches S2 and S1:

S2				S1			
2 <sup>7</sup>	2 <sup>6</sup>	2 <sup>5</sup>	2 <sup>4</sup>	2 <sup>3</sup>	2 <sup>2</sup>	2 <sup>1</sup>	2 <sup>0</sup>
Baud Rate				MAC-ID			

S2 Bits 3,2	S2 S1 Bits 1,0 Bits 4,3,2,1,0	MAC-ID	Baud Rate	Max. Cable Length
0	0 ... 63	0 ... 63	125kBaud	500 m
1	0 ... 63	0 ... 63	250kBaud	250 m
2	0 ... 63	0 ... 63	500kBaud	100 m

S2-S1	Baud Rate	MAC-ID
00 ... 3F	125kBaud	0 ... 63
40 ... 7F	250kBaud	0 ... 63
80 ... BF	500kBaud	0 ... 63
C0 ... FF	Not Used	Not Used

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	11/03