

**Connector pin assignment Profibus Encoder with PNO-Profile Class 2
Design with COMBICON terminals, Preset and SSI-Interface**

General note:

If the encoder is the last station in the profibus line, the DIP switches *DIP1* and *DIP2* for the profibus terminator (switching-on of the terminal resistance) must be switched on. Otherwise they must be switched off.

The profibus also works when the encoder is removed. Is the encoder the last station in the profibus line, the reference potential of the terminator resistances is missing!

In order to enable a separate wiring of incoming and outgoing signals the profibus terminals have two connection possibilities.

TR-Electronic recommends for the operation to use only bus cables certified by the Profibus User Organization (PNO). For the + and - signals of SSI cycle and SSI data twisted core pairs are to be used.

With the BCD address switches 10^0 and 10^1 the station address for the profibus is set from 3 to 99.

Explanation of terms:

MINI-COMBICON 5/6-pole:	Connector Phoenix MINI-COMBICON 8A/125V, grid 3.5 mm		
Connection:	inflexible 0,14 - 1,5 mm ²	flexible 0,14 - 1 mm ²	Conductor size (AWG) 26 - 16
	flexible with wire end sleeve without plastic sleeve: 0,25 - 0,5 mm ²		flexible with wire end sleeve with plastic sleeve: 0,25 - 0,5 mm ²
US:	Supply voltage, 11 - 27 V DC		
US-input:	1-level > +8V, 0-level < +2V, up to ±35V, 5 kOhm		
US-output:	1-level > US-2V, 0-level < 1 V, up to 100mA		
Opto-input:	Opto coupler for cable transmitter (RS485)		

X1 - MINI-COMBICON 5-pole

- Pin 1 Profibus DataB
- Pin 2 Profibus DataA
- Pin 3 Profibus M5V2
- Pin 4 *Do not wire!*
- Pin 5 Opto-input for SSI-Clock +

X2 - MINI-COMBICON 5-pole

- Pin 1 RS485-output for SSI-Data +
- Pin 2 US-input for Preset 1
- Pin 3 US-input for Preset 2
- Pin 4 0V-Ground
- Pin 5 US-Power Supply

X3 - MINI-COMBICON 6-pole

- Pin 1 Profibus DataB
- Pin 2 Profibus DataA
- Pin 3 Profibus M5V2
- Pin 4 *Do not wire!*
- Pin 5 Opto-input for SSI-Clock -
- Pin 6 RS485-output for SSI-Data -

