SIEMENS

Product Information on

PROFIBUS-bus connector with/without PG socket to 12 MBaud
6ES7972-0Bx42-0XA0
A5E02361260-AE

Application area

Using the PROFIBUS bus connector:

- Nodes with an electrical 9-pin sub-D interface complying with IEC 61158-2 can be connected directly to the SIMATIC NET PROFIBUS
- Electrical segments or individual nodes can be connected to the optical link module (OLM, OBT).
- Nodes or programming devices can be connected to a repeater.

Additional information

Additional information on the PROFIBUS bus connector can be found in the *SIMATIC NET PROFIBUS Manual.* This manual can be requested from a Siemens representative in an office in your area, or free of charge on the Internet at:
http://support.automation.siemens.com/WW/view/en/35222591

Maintenance

The PROFIBUS bus connector is maintenance free. If problems occur, please contact your local Siemens-Contacts Spare Parts/Repairs:
http://support.automation.siemens.com/WW/view/en/16604999

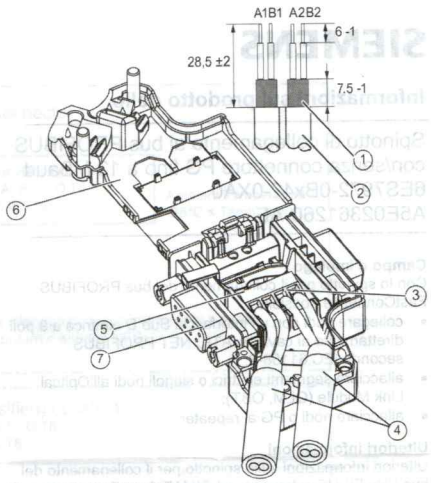
Certification

ATEX Ⓔx **II 3 G Ex nA II T6**
KEMA 04 ATEX 1151X
oder CE
Ⓔx **II 3 G Ex nA IIC T6 Gc**
DEKRA 14ATEX0049X

⚠ **Note**
The PROFIBUS bus connector of device category 3G may be used in zone 2 hazardous areas.

Module-specific data			
Interface			RS 485
Connectable terminating resistance			integrated
Voltages, currents, potentials			
Electrical isolation			
• between cable shield and electronics			yes
Insulation tested with			AC 500 V
Safety-related data			
U_i	$= V_{max}$	=	24 V / 150 mA
I_i	$= I_{sc}$	=	5 V / 90 mA
T_A		=	-25 to +60 °C

Tip:
If switch setting is ON, the PROFIBUS will be disconnected from the other nodes at this point (e.g., for service purposes).



Bus cable installation

(1) Cable shield
(2) Bus cable (e.g. 6XV1 830-0EH10)
- strip insulation, e.g. with stripping tool 6GK1905-6AA00

(3) Screw-type terminal block on connector p.c.b. for connecting the bus cable
Insert the green and red cores in the screw terminal block
(A1, B1 or A2, B2; Recommendation: A = green, B = red)

(4) Press the cable sheath between the two cable clips. The cable shield must lie bare on the contact.
(5) Screw the green and red cores tightly in the screw terminal.
(6) Close the housing cover and screw it shut.
(7) PG socket (only with 6ES7972-0BB42-0XA0)

Bus connection for the first and last node on PROFIBUS

Cable must always be connected on the left (see label A1, B1)
Switch position **must** be "ON" for the first and last node on the PROFIBUS.
(terminating resistance connected).

Bus connection for all other nodes on PROFIBUS

Cable feed must always be connected on the left (see label A1, B1). Cable extension must always be connected on the right (see label A2, B2).
Switch position **must** be "OFF" for all other nodes on the PROFIBUS.
(terminating resistance disconnected).

⚠ **Warning:**

1. Explosion hazard – Do not disconnect equipment from the power supply unless the area is known to be non-hazardous.
2. Explosion hazard – Substitution of components may impair suitability for Device Group I, Category 2 or Zone 2.
3. This device is approved for operation in Device Group 1, Category 2 Groups A,B,C,D, Device Group 1, Zone 2, Device Group IIC or non-hazardous areas.