

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

SIEMENS

6ES7972-0BB51-0XA0

PROFIBUS BUS CONNECTOR

Used with the applicable Simatic DP configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Siemens product data sheet

Order numbers:	6ES7 972-0BA30-0XA0	6ES7 972-0BA52-0XA0 6ES7 972-0BB52-0XA0	6ES7 972 0BA60-0XA0 6ES7 972 0BB60-0XA0	6GK1 500-0FC10
S7-200		X	X	
S7-300	X	X	X	
S7-400	X	X	X	
C7-633 DP		X	X	
C7-634 DP	X	X	X	
C7 -635	X	X	X	
C7 -636	X	X	X	
S5-115U to 155U	X	X	X	
CP 5613 /	X	X	X	X
CP 5614				X
CP 5512	X	X	X	X
CP 5511	X	X	X	X
CP 5611	X	X	X	X
CP 5621	X	X	X	X
CP 5431	X	X	X	
FMS/DP				
CP 342-5		X	X	
CP 343-5		X	X	
CP 443-5		X	X	
ET 200B	X	X	X	
ET 200L	X	X	X	
ET 200M	X	X	X	
ET 200S	X	X	X	
PG 720/720C	X			X
PG 740	X			X
PG 760	X			X
RS-485 repeater	X	X	X	
OP			X	X
OLM/OBT	X	X	X	X

Technical specifications

The following table shows the technical data of the various bus connectors:

Table 6- 2 Technical specifications of the IP20 bus connectors

Order numbers:	6ES7 972-0BA30-0XA0	6ES7 972-0BA52-0XA0 6ES7 972-0BB52-0XA0	6ES7 972-0BA60-0XA0 6ES7 972-0BB60-0XA0	6GK1 500-0FC10
PG socket	No	0BA52: No 0BB52: Yes	0BA60: No; 0BB60: Yes	No
Max. transmission speed	1.5 Mbps	9.6 kbps to 12 Mbps	9.6 kbps to 12 Mbps	9.6 Kbps to 12 Mbps

Disconnecting a station

The bus connector allows you to disconnect a node from the bus without interrupting the data traffic on the bus.

Removing the bus connector when the terminating resistor is activated at the ends of the cable causes disruptions on the bus and is not permitted.

Bus connector with a programming device socket

We recommend that you include at least one bus connector with a PG socket in each bus segment. This makes it easier to commission using a programming device or PC.

In the bus connectors with a PG socket, all the contacts are connected 1:1 with the connector pins; in other words, the pinout is the same as the pinout of the attached device.

Pinout of the D-sub male connector

The following table shows the pinout of the 9pin D-sub male connector.

Table 6- 3 Pinout of the 9-pin D-sub male connector

Pin no.	Signal name	Description
1	-	-
2	-	-
3	RxD/TxD-P	Data line B
4	-	-
5	M5V2	Data reference potential (from node)
6	P5V2	Power supply plus (from node)
7	-	-
8	RxD/TxD-N	Data line A
9	-	-