#### Data sheet

### 6ES7972-0AA02-0XA0



SIMATIC DP, RS485 repeater For connection of PROFIBUS/MPI bus systems with max. 31 nodes max. baud rate 12 Mbit/s, Degree of protection IP20 Improved user handling

Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Input current	
Current consumption, max.	100 mA; 100 mA without loads at PG/OP socket; 130 mA load at PG/OP socket (5 V/90 mA); 200 mA load at PG/OP socket (24 V/100 mA)
Power loss	
Power loss, typ.	0.7 W
Interfaces	
PROFIBUS DP	
<ul> <li>Transmission rate, max.</li> </ul>	12 Mbit/s; 9.6 kbit/s to 12 Mbit/s
Degree and class of protection	
IP degree of protection	IP20
Ambient conditions	
Ambient temperature during operation	
• min.	0 °C
• max.	60 °C
Ambient temperature during storage/transportation	
• min.	-40 °C
• max.	70 °C
Relative humidity	
<ul> <li>Operation, max.</li> </ul>	95 %; at 25 °C
connection method	
Design of electrical connection for supply voltage	Terminal module
Design of electrical connection for PROFIBUS cables	2 terminal blocks
Dimensions	
Width	45 mm
Height	128 mm
Depth	59.3 mm
Weights	
Weight, approx.	350 g
last modified:	8/21/2023 🖸

#### Data sheet

#### 6ES7972-0AB01-0XA0



SIMATIC S7, Diagnostic repeaters for PROFIBUS DP, for online diagnostics of the PROFIBUS cable, DP standard slave up to 12 Mbit/s, Degree of protection IP20, FastConnect connection method

Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Power loss	
Power loss, typ.	4 W
Interfaces	
PROFIBUS DP	
<ul> <li>Transmission rate, max.</li> </ul>	12 Mbit/s; 9.6 kbit/s to 12 Mbit/s
Degree and class of protection	
IP degree of protection	IP20
Ambient conditions	
Ambient temperature during operation	
• min.	0°C
• max.	60 °C
Ambient temperature during storage/transportation	
• min.	-40 °C
• max.	70 °C
Relative humidity	
Operation, max.	95 %; at 25 °C
connection method	
Design of electrical connection for supply voltage	Terminal module
Design of electrical connection for PROFIBUS cables	FastConnect insulation displacement, 10 clamping cycles possible
Dimensions	
Width	80 mm
Height	125 mm
Depth	67.5 mm
Weights	
Weight, approx.	300 g
last modified:	8/16/2023 🖸

#### Data sheet

### 6ES7972-0BA12-0XA0

product type designation product description



**PROFIBUS** connector

PROFIBUS bus connector, RS 485, screw, without programming port, 90° SIMATIC DP, Connection plug for PROFIBUS up to 12 Mbit/s 90° cable outlet, 15.8x 64x 35.6 mm (WxHxD), terminating resistor with isolating function, without PG socket

suitability for use	For connecting PROFIBUS stations to the PROFIBUS bus cable
transfer rate	
transfer rate / with PROFIBUS DP	9.6 kbit/s 12 Mbit/s
interfaces	
number of electrical connections	
<ul> <li>for PROFIBUS cables</li> </ul>	2
<ul> <li>for network components or terminal equipment</li> </ul>	1
type of electrical connection	
<ul> <li>for PROFIBUS cables</li> </ul>	Screw
<ul> <li>for network components or terminal equipment</li> </ul>	9-pin sub D connector
type of electrical connection / FastConnect	No
mechanical data	
design of terminating resistor	Resistor combination integrated and connectable via slide switch
material / of the enclosure	plastic
locking mechanism design	Screwed joint
design, dimensions and weights	
type of cable outlet	90 degree cable outlet
width	15.8 mm
height	64 mm
depth	35.6 mm
net weight	36 g
ambient conditions	
ambient temperature	
<ul> <li>during operation</li> </ul>	-25 +60 °C
<ul> <li>during storage</li> </ul>	-40 +70 °C
during transport	-40 +70 °C
protection class IP	IP20
product features, product functions, product components / gene	əral
product feature	
silicon-free	Yes
product component	
<ul> <li>PG connection socket</li> </ul>	No
strain relief	Yes
standards, specifications, approvals	
certificate of suitability	
RoHS conformity	Yes
UL approval	Yes
reference code	

according to IEC 81346-2	XG
further information / internet links	
internet link	
• to website: Selection guide for cables and connectors	https://sie.ag/2QdlxcP
last modified:	8/16/2023 🖸

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11/29/2023

#### Data sheet

suitability for use

### 6ES7972-0BA30-0XA0

product type designation product description



#### **PROFIBUS** connector

PROFIBUS bus connector, RS 485, Fast Connect, without programming port,  $30^\circ$ 

SIMATIC DP, bus connection plug f. PROFIBUS w. inclined cable outlet, max. 1.5 Mbaud, insulation displacement method, 15x 57.6x 39.5 mm (WxHxD), without bus terminating resistor and programming device socket

For connecting PROFIBUS stations to the PROFIBUS bus cable

transfer rate	
transfer rate / with PROFIBUS DP	9.6 kbit/s 1.5 Mbit/s
interfaces	
number of electrical connections	
<ul> <li>for PROFIBUS cables</li> </ul>	2
<ul> <li>for network components or terminal equipment</li> </ul>	1
type of electrical connection	
for PROFIBUS cables	Integrated insulation displacement terminals for 2-core PB FC installation cables
<ul> <li>for network components or terminal equipment</li> </ul>	9-pin sub D connector
type of electrical connection / FastConnect	Yes
mechanical data	
design of terminating resistor	No integrated terminating resistor
material / of the enclosure	plastic
locking mechanism design	Screwed joint
design, dimensions and weights	
type of cable outlet	30 degree cable outlet
width	15 mm
height	57.6 mm
depth	39.5 mm
net weight	30 g
ambient conditions	
ambient temperature	
<ul> <li>during operation</li> </ul>	-25 +60 °C
<ul> <li>during storage</li> </ul>	-40 +70 °C
during transport	-40 +70 °C
protection class IP	IP20
product features, product functions, product components / gene	eral
product feature	
silicon-free	Yes
product component	
PG connection socket	No
strain relief	Yes
standards, specifications, approvals	
certificate of suitability	
RoHS conformity	Yes
UL approval	Yes

reference code	
<ul> <li>according to IEC 81346-2</li> </ul>	XG
further information / internet links	
internet link	
• to website: Selection guide for cables and connectors	https://sie.ag/2QdlxcP

1/20/2023 🖸

#### Data sheet

#### 6ES7972-0BA42-0XA0

product type designation product description



**PROFIBUS** connector

PROFIBUS bus connector, RS 485, screw, without programming port, 35° SIMATIC DP, Connection plug for PROFIBUS up to 12 Mbit/s with inclined cable outlet, 15.8x 54x 39.5 mm (WxHxD), terminating resistor with isolating function, without PG socket

suitability for use	For connecting PROFIBUS stations to the PROFIBUS bus cable
transfer rate	
transfer rate / with PROFIBUS DP	9.6 kbit/s 12 Mbit/s
interfaces	
number of electrical connections	
<ul> <li>for PROFIBUS cables</li> </ul>	2
<ul> <li>for network components or terminal equipment</li> </ul>	1
type of electrical connection	
<ul> <li>for PROFIBUS cables</li> </ul>	Screw
<ul> <li>for network components or terminal equipment</li> </ul>	9-pin sub D connector
type of electrical connection / FastConnect	No
mechanical data	
design of terminating resistor	Resistor combination integrated and connectable via slide switch
material / of the enclosure	plastic
locking mechanism design	Screwed joint
design, dimensions and weights	
type of cable outlet	35 degree cable outlet
width	15.8 mm
height	54 mm
depth	39.5 mm
net weight	29 g
ambient conditions	
ambient temperature	
during operation	-25 +60 °C
<ul> <li>during storage</li> </ul>	-40 +70 °C
during transport	-40 +70 °C
protection class IP	IP20
product features, product functions, product components / gene	eral
product feature	
silicon-free	Yes
product component	
<ul> <li>PG connection socket</li> </ul>	No
• strain relief	Yes
standards, specifications, approvals	
certificate of suitability	
RoHS conformity	Yes
UL approval	Yes
reference code	

according to IEC 81346-2	XG
further information / internet links	
internet link	
• to website: Selection guide for cables and connectors	https://sie.ag/2QdlxcP
last modified:	8/16/2023 🖸

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### Data sheet

### 6ES7972-0BA52-0XA0

product type designation product description



**PROFIBUS** connector

PROFIBUS bus connector, RS 485, Fast Connect, without programming port, 90° SIMATIC DP, Connection plug for PROFIBUS up to 12 Mbit/s 90° cable outlet, Insulation displacement method FastConnect, without PG socket 15.8x 59x 35.6 mm (BxHxD)

suitability for use	For connecting PROFIBUS stations to the PROFIBUS bus cable
transfer rate	
transfer rate / with PROFIBUS DP	9.6 kbit/s 12 Mbit/s
interfaces	
number of electrical connections	
<ul> <li>for PROFIBUS cables</li> </ul>	2
<ul> <li>for network components or terminal equipment</li> </ul>	1
type of electrical connection	
• for PROFIBUS cables	Integrated insulation displacement terminals for 2-core PB FC installation cables
<ul> <li>for network components or terminal equipment</li> </ul>	9-pin sub D connector
type of electrical connection / FastConnect	Yes
mechanical data	
design of terminating resistor	Resistor combination integrated and connectable via slide switch
material / of the enclosure	plastic
locking mechanism design	Screwed joint
design, dimensions and weights	
type of cable outlet	90 degree cable outlet
width	15.8 mm
height	59 mm
depth	35.6 mm
net weight	36 g
ambient conditions	
ambient temperature	
<ul> <li>during operation</li> </ul>	-25 +60 °C
<ul> <li>during storage</li> </ul>	-40 +70 °C
during transport	-40 +70 °C
protection class IP	IP20
product features, product functions, product components / gen	eral
product feature	
silicon-free	Yes
product component	
<ul> <li>PG connection socket</li> </ul>	No
strain relief	Yes
standards, specifications, approvals	
certificate of suitability	
RoHS conformity	Yes
• UL approval	Yes

reference code	
<ul> <li>according to IEC 81346-2</li> </ul>	XG
further information / internet links	
internet link	
<ul> <li>to website: Selection guide for cables and connectors</li> </ul>	https://sie.ag/2QdlxcP

#### Data sheet

#### 6ES7972-0BA52-0XB0



SIMATIC DP, Connection plug for PROFIBUS up to 12 Mbps 90° cable outlet, 15.8x 59x 35.6 mm (WxHxD), Insulation displacement method FastConnect, without PG socket 100 units 6ES7972-0BA52-0XA0 per packing unit

Figure simila
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General information		
Product type designation	PROFIBUS connector	
Ambient conditions		
Ambient temperature during operation		
• min.	0 °C	
• max.	60 °C	
Mechanics/material		
Design of housing	plastic	
Dimensions		
Width	15.8 mm	
Height	59 mm	
Depth	35.6 mm	
Weights		
Weight, approx.	10 g	
	_	

last modified:

### Data sheet

#### 6ES7972-0BA61-0XA0

product type designation	PROFIBUS connector	
product description	PROFIBUS bus connector, RS 485, Fast Connect, without programming port, 35	
	SIMATIC DP, Connection plug for PROFIBUS up to 12 Mbit/s 35 degree cable outlet, Insulation displacement method FastConnect, without PG socket 15.8x 54x 39.5 mm (BxHxD)	
suitability for use	For connecting PROFIBUS stations to the PROFIBUS bus cable	
transfer rate		
transfer rate / with PROFIBUS DP	9.6 kbit/s 12 Mbit/s	
interfaces		
number of electrical connections		
<ul> <li>for PROFIBUS cables</li> </ul>	2	
<ul> <li>for network components or terminal equipment</li> </ul>	1	
type of electrical connection		
for PROFIBUS cables	Integrated insulation displacement terminals for 2-core PB FC installation cables	
<ul> <li>for network components or terminal equipment</li> </ul>	9-pin sub D connector	
type of electrical connection / FastConnect	Yes	
mechanical data		
design of terminating resistor	Resistor combination integrated and connectable via slide switch	
material / of the enclosure	plastic	
locking mechanism design	Screwed joint	
design, dimensions and weights		
type of cable outlet	35 degree cable outlet	
width	15.8 mm	
height	54 mm	
depth	39.5 mm	
net weight	29 g	
ambient conditions		
ambient temperature		
during operation	-25 +60 °C	
during storage	-40 +70 °C	
during transport	-40 +70 °C	
protection class IP	IP20	
product features, product functions, product components / ger	neral	
product feature		
• silicon-free	Yes	
product component		
<ul> <li>PG connection socket</li> </ul>	No	
strain relief	Yes	
standards, specifications, approvals		
certificate of suitability		
RoHS conformity	Yes	
UL approval	Yes	
reference code		
according to IEC 81346-2	XG	
further information / internet links		
internet link		
• to website: Selection guide for cables and connectors	https://sie.ag/2QdlxcP	
last modified:	8/16/2023 🖸	

#### Data sheet

suitability for use

### 6ES7972-0BA70-0XA0

product type designation product description



#### **PROFIBUS** connector

PROFIBUS bus connector, RS 485, Fast Connect, without programming port, 90° SIMATIC DP, Connection plug for PROFIBUS up to 12 Mbit/s 90° cable outlet, 15.8x 72.2x 36.4 mm (WxHxD), Insulation displacement method FastConnect, without PG socket

For connecting PROFIBUS stations to the PROFIBUS bus cable

transfer rate	
transfer rate / with PROFIBUS DP	9.6 kbit/s 12 Mbit/s
interfaces	
number of electrical connections	
<ul> <li>for PROFIBUS cables</li> </ul>	2
<ul> <li>for network components or terminal equipment</li> </ul>	1
type of electrical connection	
<ul> <li>for PROFIBUS cables</li> </ul>	Integrated insulation displacement contacts for 2-core PB FC installation cables
<ul> <li>for network components or terminal equipment</li> </ul>	9-pin sub D connector
type of electrical connection / FastConnect	Yes
mechanical data	
design of terminating resistor	Resistor combination integrated and connectable via slide switch. Isolation function: When resistor is connected, outgoing bus is disconnected
material / of the enclosure	plastic
locking mechanism design	Screwed joint
design, dimensions and weights	
type of cable outlet	90 degree cable outlet
width	15.8 mm
height	72 mm
depth	36.4 mm
net weight	34 g
ambient conditions	
ambient temperature	
<ul> <li>during operation</li> </ul>	-25 +60 °C
during storage	-40 +70 °C
during transport	-40 +70 °C
protection class IP	IP20
product features, product functions, product components / gene	eral
product feature	
silicon-free	Yes
product component	
<ul> <li>PG connection socket</li> </ul>	No
strain relief	Yes
standards, specifications, approvals	
certificate of suitability	
RoHS conformity	Yes
• UL approval	Yes

reference code	
<ul> <li>according to IEC 81346-2</li> </ul>	XG
further information / internet links	
internet link	
<ul> <li>to website: Selection guide for cables and connectors</li> </ul>	https://sie.ag/2QdlxcP

#### Data sheet

### 6ES7972-0BB12-0XA0

product type designation product description



**PROFIBUS** connector

PROFIBUS bus connector, RS 485, screw, with programming port,  $90^\circ$ 

SIMATIC DP, Connection plug for PROFIBUS up to 12 Mbit/s 90° cable outlet, 15.8x 64x 35.6 mm (WxHxD), terminating resistor with isolating function, With PG receptacle

suitability for use	For connecting PROFIBUS stations to the PROFIBUS bus cable
transfer rate	
transfer rate / with PROFIBUS DP	9.6 kbit/s 12 Mbit/s
interfaces	
number of electrical connections	
<ul> <li>for PROFIBUS cables</li> </ul>	2
<ul> <li>for network components or terminal equipment</li> </ul>	1
type of electrical connection	
<ul> <li>for PROFIBUS cables</li> </ul>	Screw
<ul> <li>for network components or terminal equipment</li> </ul>	9-pin sub D connector
type of electrical connection / FastConnect	No
mechanical data	
design of terminating resistor	Resistor combination integrated and connectable via slide switch
material / of the enclosure	plastic
locking mechanism design	Screwed joint
design, dimensions and weights	
type of cable outlet	90 degree cable outlet
width	15.8 mm
height	64 mm
depth	35.6 mm
net weight	45 g
ambient conditions	
ambient temperature	
during operation	-25 +60 °C
during storage	-40 +70 °C
during transport	-40 +70 °C
protection class IP	IP20
product features, product functions, product components / gene	eral
product feature	
silicon-free	Yes
product component	
<ul> <li>PG connection socket</li> </ul>	Yes
strain relief	Yes
standards, specifications, approvals	
certificate of suitability	
RoHS conformity	Yes
• UL approval	Yes
reference code	

according to IEC 81346-2	XF
further information / internet links	
internet link	
<ul> <li>to website: Selection guide for cables and connectors</li> </ul>	https://sie.ag/2QdlxcP
last modified:	8/16/2023 🖸

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#### Data sheet

#### 6ES7972-0BB42-0XA0

product type designation product description



**PROFIBUS** connector

PROFIBUS bus connector, RS 485, screw, with programming port, 35°

SIMATIC DP, Connection plug for PROFIBUS up to 12 Mbit/s with inclined cable outlet, 15.8x 54x 39.5 mm (WxHxD), terminating resistor with isolating function, With PG receptacle

suitability for use	For connecting PROFIBUS stations to the PROFIBUS bus cable
transfer rate	
transfer rate / with PROFIBUS DP	9.6 kbit/s 12 Mbit/s
interfaces	
number of electrical connections	
<ul> <li>for PROFIBUS cables</li> </ul>	2
<ul> <li>for network components or terminal equipment</li> </ul>	1
type of electrical connection	
<ul> <li>for PROFIBUS cables</li> </ul>	Screw
<ul> <li>for network components or terminal equipment</li> </ul>	9-pin sub D connector
type of electrical connection / FastConnect	No
mechanical data	
design of terminating resistor	Resistor combination integrated and connectable via slide switch
material / of the enclosure	plastic
locking mechanism design	Screwed joint
design, dimensions and weights	
type of cable outlet	35 degree cable outlet
width	15.8 mm
height	54 mm
depth	39.5 mm
net weight	34 g
ambient conditions	
ambient temperature	
<ul> <li>during operation</li> </ul>	-25 +60 °C
<ul> <li>during storage</li> </ul>	-40 +70 °C
during transport	-40 +70 °C
protection class IP	IP20
product features, product functions, product components / gene	eral
product feature	
silicon-free	Yes
product component	
PG connection socket	Yes
• strain relief	Yes
standards, specifications, approvals	
certificate of suitability	
RoHS conformity	Yes
UL approval	Yes
reference code	

according to IEC 81346-2	XG
further information / internet links	
internet link	
<ul> <li>to website: Selection guide for cables and connectors</li> </ul>	https://sie.ag/2QdlxcP
last modified:	8/16/2023 🖸

### Data sheet

### 6ES7972-0BB52-0XA0

product type designation product description



**PROFIBUS** connector

PROFIBUS bus connector, RS 485, Fast Connect, with programming port, 90° SIMATIC DP, Connection plug for PROFIBUS up to 12 Mbit/s 90° cable outlet, Insulation displacement method FastConnect, With PG receptacle 15.8x 59x 35.6 mm (BxHxD)

suitability for use	For connecting PROFIBUS stations to the PROFIBUS bus cable	
transfer rate		
transfer rate / with PROFIBUS DP	9.6 kbit/s 12 Mbit/s	
interfaces		
number of electrical connections		
<ul> <li>for PROFIBUS cables</li> </ul>	2	
<ul> <li>for network components or terminal equipment</li> </ul>	1	
type of electrical connection		
<ul> <li>for PROFIBUS cables</li> </ul>	Integrated insulation displacement terminals for 2-core PB FC installation cables	
<ul> <li>for network components or terminal equipment</li> </ul>	9-pin sub D connector	
type of electrical connection / FastConnect	Yes	
mechanical data		
design of terminating resistor	Resistor combination integrated and connectable via slide switch	
material / of the enclosure	plastic	
locking mechanism design	Screwed joint	
design, dimensions and weights		
type of cable outlet	90 degree cable outlet	
width	15.8 mm	
height	59 mm	
depth	35.6 mm	
net weight	45 g	
ambient conditions		
ambient temperature		
<ul> <li>during operation</li> </ul>	-25 +60 °C	
<ul> <li>during storage</li> </ul>	-40 +70 °C	
during transport	-40 +70 °C	
protection class IP	IP20	
product features, product functions, product components / gene	əral	
product feature		
silicon-free	Yes	
product component		
<ul> <li>PG connection socket</li> </ul>	Yes	
strain relief	Yes	
standards, specifications, approvals		
certificate of suitability		
RoHS conformity	Yes	
UL approval	Yes	

reference code	
<ul> <li>according to IEC 81346-2</li> </ul>	XG
further information / internet links	
internet link	
<ul> <li>to website: Selection guide for cables and connectors</li> </ul>	https://sie.ag/2QdlxcP

#### Data sheet

#### 6ES7972-0BB52-0XB0



SIMATIC DP, Connection plug for PROFIBUS up to 12 Mbps 90° cable outlet, 15.8x 59x 35.6 mm (WxHxD), Insulation displacement method FastConnect, with PG socket 100 units 6ES7972-0BB52-0XA0 per packing unit

	F	ig	ure	5	imi	lar	
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General information				
Product type designation	PROFIBUS connector			
Ambient conditions				
Ambient temperature during operation				
• min.	0°C			
• max.	60 °C			
Mechanics/material				
Design of housing	plastic			
Dimensions				
Width	15.8 mm			
Height	59 mm			
Depth	35.6 mm			
Weights				
Weight, approx.	10 g			

last modified:

### Data sheet

#### 6ES7972-0BB61-0XA0

product type designation	PROFIBUS connector	
product description	PROFIBUS bus connector, RS 485, Fast Connect, with programming port, 35°	
F	SIMATIC DP, Connection plug for PROFIBUS up to 12 Mbit/s 35 degree cable outlet, Insulation displacement method FastConnect, With PG receptacle 15.8x 54x 39.5 mm (BxHxD)	
suitability for use	For connecting PROFIBUS stations to the PROFIBUS bus cable	
transfer rate		
transfer rate / with PROFIBUS DP	9.6 kbit/s 12 Mbit/s	
interfaces		
number of electrical connections		
<ul> <li>for PROFIBUS cables</li> </ul>	2	
<ul> <li>for network components or terminal equipment</li> </ul>	1	
type of electrical connection		
• for PROFIBUS cables	Integrated insulation displacement terminals for 2-core PB FC installation cables	
<ul> <li>for network components or terminal equipment</li> </ul>	9-pin sub D connector	
type of electrical connection / FastConnect	Yes	
mechanical data		
design of terminating resistor	Resistor combination integrated and connectable via slide switch	
material / of the enclosure	plastic	
locking mechanism design	Screwed joint	
design, dimensions and weights		
type of cable outlet	35 degree cable outlet	
width	15.8 mm	
height	54 mm	
depth	39.5 mm	
net weight	34 g	
ambient conditions		
ambient temperature		
<ul> <li>during operation</li> </ul>	-25 +60 °C	
during storage	-40 +70 °C	
during transport	-40 +70 °C	
protection class IP	IP20	
product features, product functions, product components / gen	neral	
product feature		
• silicon-free	Yes	
product component		
PG connection socket	Yes	
strain relief	Yes	
standards, specifications, approvals		
certificate of suitability		
RoHS conformity	Yes	
UL approval	Yes	
reference code		
according to IEC 81346-2	XG	
further information / internet links		
internet link		
<ul> <li>to website: Selection guide for cables and connectors</li> </ul>	https://sie.ag/2QdlxcP	
last modified:	8/16/2023 🖸	

#### Data sheet

#### 6ES7972-0BB70-0XA0

product type designation product description



#### **PROFIBUS** connector

PROFIBUS bus connector, RS 485, Fast Connect, with programming port, 90° SIMATIC DP, Connection plug for PROFIBUS up to 12 Mbit/s 90° cable outlet, 15.8x 72.2x 36.4 mm (WxHxD), Insulation displacement method FastConnect, With PG receptacle

suitability for use	For connecting PROFIBUS stations to the PROFIBUS bus cable	
transfer rate		
transfer rate / with PROFIBUS DP	9.6 kbit/s 12 Mbit/s	
interfaces		
number of electrical connections		
<ul> <li>for PROFIBUS cables</li> </ul>	2	
<ul> <li>for network components or terminal equipment</li> </ul>	1	
type of electrical connection		
<ul> <li>for PROFIBUS cables</li> </ul>	Integrated insulation displacement terminals for 2-core PB FC installation cables	
<ul> <li>for network components or terminal equipment</li> </ul>	9-pin sub D connector	
type of electrical connection / FastConnect	Yes	
mechanical data		
design of terminating resistor	Resistor combination integrated and connectable via slide switch	
material / of the enclosure	plastic	
locking mechanism design	Screwed joint	
design, dimensions and weights		
type of cable outlet	90 degree cable outlet	
width	15.8 mm	
height	72 mm	
depth	36.4 mm	
net weight	45 g	
ambient conditions		
ambient temperature		
during operation	-25 +60 °C	
<ul> <li>during storage</li> </ul>	-40 +70 °C	
during transport	-40 +70 °C	
protection class IP	IP20	
product features, product functions, product components / gen	eral	
product feature		
silicon-free	Yes	
product component		
<ul> <li>PG connection socket</li> </ul>	Yes	
strain relief	Yes	
standards, specifications, approvals		
certificate of suitability		
RoHS conformity	Yes	
UL approval	Yes	

reference code	
<ul> <li>according to IEC 81346-2</li> </ul>	XG
further information / internet links	
internet link	
<ul> <li>to website: Selection guide for cables and connectors</li> </ul>	https://sie.ag/2QdlxcP

#### Data sheet

#### 6ES7972-0DA00-0AA0



SIMATIC DP, RS485 terminating resistor for terminating PROFIBUS/MPI networks

Figure similar	
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Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Input current	
Current consumption, typ.	30 mA
Power loss	
Power loss, max.	0.72 W
Interfaces	
PROFIBUS DP	
Transmission rate, max.	12 Mbit/s; 9.6 kbit/s to 12 Mbit/s
Degree and class of protection	
IP degree of protection	IP20
Ambient conditions	
Ambient temperature during operation	
• min.	0° 0
• max.	60 °C
Ambient temperature during storage/transportation	
• min.	-40 °C
• max.	70 °C
Relative humidity	
Operation, max.	95 %; at +25 °C
connection method	
Design of electrical connection for supply voltage	Screw terminal block
Design of electrical connection for PROFIBUS cables	Screw terminal block
Dimensions	
Width	60 mm
Height	70 mm
Depth	43 mm
Weights	
Weight, approx.	95 g
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