## **SIEMENS**

## **Data sheet**

## 6AG1972-0BA12-2XA0

product description



PROFIBUS bus connector, RS 485, screw, without programming port, 90°

SIPLUS DP PROFIBUS plug with R - without PG - 90 degrees based on 6ES7972-0BA12-0XA0 with conformal coating, -25...+70 °C, connection plug for PROFIBUS up to 12 Mbps, 90° cable outlet, terminating resistor with isolating function, without PG socket

suitability for use	for connecting PROFIBUS nodes 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
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	10 g
ambient conditions	
ambient temperature	
<ul> <li>during operation</li> </ul>	-40 +70 °C
<ul><li>during storage</li></ul>	-40 +70 °C
<ul> <li>during transport</li> </ul>	-40 +70 °C
<ul> <li>in horizontal mounting position / during operation</li> </ul>	7040 °C
during storage and transport	7040 °C
installation altitude / at height above sea level / maximum	5000 m
ambient condition / relating to ambient temperature - air pressure - installation altitude	Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m) // Tmin (Tmax - 10 K) at 795 hPa 658 hPa (+2 000 m +3 500 m) // Tmin (Tmax -20 K) at 658 hPa 540 hPa (+3 500 m +5 000 m)
relative humidity	
with condensation / maximum	100 %; RH incl. condensation/frost permitted (no commissioning in bedewed state)
with condensation / acc. to IEC 60068-2-38 / maximum	100 %; RH including condensation/frost (no commissioning when condensation is present), horizontal installation
resistance to biologically active substances	
• conformity acc. to EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request

• conformity acc. to EN 60721-3-6	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
resistance to chemically active substances	
• conformity acc. to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); $^{\star}$
• conformity acc. to EN 60721-3-6	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); $^{\star}$
resistance to mechanically active substances	
<ul><li>conformity acc. to EN 60721-3-3</li></ul>	Yes; Class 3S4 incl. sand, dust, *
<ul><li>conformity acc. to EN 60721-3-6</li></ul>	Yes; Class 6S3 incl. sand, dust; *
environmental category / acc. to IEC 60721 / note	* The supplied plug covers must remain in place over the unused interfaces during operation!
coating / for equipped printed circuit board / acc. to EN 61086	Yes; Class 2 for high reliability
type of coating	
<ul> <li>protection against pollution according to EN 60664-</li> <li>3</li> </ul>	Yes; Type 1 protection
<ul> <li>for electronic devices in railway applications acc. to EN 50155</li> </ul>	Yes; protective coating of the Class PC2 according to EN 50155:2020
type of test / of the coating / acc. to MIL-I-46058C	Yes; Discoloration of coating possible during service life
product conformity / of the coating / Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies acc. to IPC-CC-830A	Yes; Conformal coating, Class A
protection class IP	IP20
product features, product functions, product components	/ general
product feature	
product feature  • silicon-free	Yes
·	Yes
• silicon-free	Yes
silicon-free  product component	
silicon-free  product component      PG connection socket      strain relief	No
silicon-free  product component     PG connection socket     strain relief  standards, specifications, approvals	No
silicon-free  product component      PG connection socket      strain relief	No
silicon-free  product component     PG connection socket     strain relief  standards, specifications, approvals certificate of suitability	No Yes
silicon-free  product component     PG connection socket     strain relief  standards, specifications, approvals  certificate of suitability     RoHS conformity	No Yes
silicon-free  product component     PG connection socket     strain relief  standards, specifications, approvals  certificate of suitability     RoHS conformity  reference code	No Yes Yes
silicon-free  product component     PG connection socket     strain relief  standards, specifications, approvals  certificate of suitability     RoHS conformity  reference code     acc. to IEC 81346-2	No Yes Yes
silicon-free  product component     PG connection socket     strain relief  standards, specifications, approvals  certificate of suitability     RoHS conformity  reference code     acc. to IEC 81346-2  further information / internet-Links	No Yes Yes
silicon-free  product component     PG connection socket     strain relief  standards, specifications, approvals  certificate of suitability     RoHS conformity  reference code     acc. to IEC 81346-2  further information / internet-Links  Internet-Link	No Yes Yes
silicon-free  product component     PG connection socket     strain relief  standards, specifications, approvals  certificate of suitability     RoHS conformity  reference code     acc. to IEC 81346-2  further information / internet-Links  Internet-Link     to web page: selection aid TIA Selection Tool	No Yes  Yes  XG  http://www.siemens.com/snst http://www.siemens.com/simatic-net
silicon-free  product component     PG connection socket     strain relief  standards, specifications, approvals  certificate of suitability     RoHS conformity  reference code     acc. to IEC 81346-2  further information / internet-Links  Internet-Link     to web page: selection aid TIA Selection Tool     to website: Industrial communication     to website: Industry Mall	Yes  Yes  XG  http://www.siemens.com/snst http://www.siemens.com/simatic-net https://mall.industry.siemens.com
silicon-free  product component     PG connection socket     strain relief  standards, specifications, approvals  certificate of suitability     RoHS conformity  reference code     acc. to IEC 81346-2  further information / internet-Links  Internet-Link     to web page: selection aid TIA Selection Tool     to website: Industrial communication	No Yes  Yes  XG  http://www.siemens.com/snst http://www.siemens.com/simatic-net
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silicon-free  product component     PG connection socket     strain relief  standards, specifications, approvals  certificate of suitability     RoHS conformity  reference code     acc. to IEC 81346-2  further information / internet-Links  Internet-Link     to web page: selection aid TIA Selection Tool     to website: Industrial communication     to website: Industry Mall     to website: Information and Download Center     to website: Selection guide for cables and connectors     to website: Image database	Yes  XG  http://www.siemens.com/snst http://www.siemens.com/simatic-net https://mall.industry.siemens.com http://www.siemens.com/industry/infocenter https://sie.ag/2QdlxcP  http://automation.siemens.com/bilddb

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