SIEMENS

Data sheet

6ES7972-0BB12-0XA0

product type designation

product description



PROFIBUS connector

PROFIBUS bus connector, RS 485, screw, with 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, With PG receptacle

transfer rate / with PROFIBUS DP	suitability for use	for connecting PROFIBUS stations to the PROFIBUS bus cable
Interfaces number of electrical connections • for PROFIBUS cables • for network components or terminal equipment 1 type of electrical connection • for PROFIBUS cables • for network components or terminal equipment 1 type of electrical connection / FastConnect mechanical data design of terminating resistor raterial / of the enclosure locking mechanism design design, dimnissions and weights type of cable outlet width 15.8 mm height 64 mm depth 15.8 mm net weight 15.8 mm net weight 15.8 mm net weight 15.9 mm ambient conditions ambient temperature • during operation • during storage • during transport product features, product functions, product components / general product ceatures, product functions, product components / yes standards, specifications, approvals certificate of suitability • RoRIS conformity • RoRIS conformity • RoRIS conformity • Yes • UL approval	transfer rate	
number of electrical connections • for PROFIBUS cables 2 • for network components or terminal equipment 1 type of electrical connection • for PROFIBUS cables Screw • for network components or terminal equipment 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 eable outlet 90 degree cable outlet width 15.8 mm height 64 mm depth 35.6 mm net weight 45 g ambient conditions ambient conditions ambient temperature • during operation -25 +60 °C • during storage -40 +70 °C • during transport -40 +70 °C product features -70 connection special spe	transfer rate / with PROFIBUS DP	9.6 kbit/s 12 Mbit/s
• for PROFIBUS cables • for network components or terminal equipment type of electrical connection • for PROFIBUS cables • for network components or terminal equipment type of electrical connection / FastConnect design of terminating resistor mechanical data design of terminating resistor material / of the enclosure locking mechanism design design, dimonsions and weights type of cable outlet width 15.8 mm height depth 35.6 mm net weight depth 35.6 mm net weight ambient conditions ambient temperature • during operation • during storage • during transport viduring transport protection class IP product features, product functions, product components / general product feature • silicon-free PG connection socke • strain relief PG connection socke • strain relief Yes standards, specifications, approvals certificate of suitability • RoRIS Conformity • Yes Yes Yes	interfaces	
• for network components or terminal equipment type of electrical connection • for PROFIBUS cables • for network components or terminal equipment type of electrical connection / FastConnect No mechanical data design of terminating resistor material / of the enclosure locking mechanism design design, dimensions and weights type of cable outlet width 15.8 mm height 64 mm depth 64 mm depth 65 mm net weight 64 s g mabient conditions ambient emperature • during operation • during poeration • during storage • during transport product features, product functions, product components / general product feature • silicon-free product feature • silicon-free product opponent • Pes • strain relief Yes standards, specifications, approvals certificate of suitability • RoHS conformity • Res • Yes • Strain relief • Resistor combination integrated and connectable via slide switch No Measure 9-pin sub D connection 9-pin s	number of electrical connections	
type of electrical connection • for PROFIBIUS cables • for network components or terminal equipment type of electrical connection / FastConnect Mo mechanical data design of terminating resistor material / of the enclosure locking mechanism design design, dimensions and weights type of cable outlet width 15.8 mm height depth aghine toonditions ambient conditions ambient temperature • during operation • during storage • during transport product feature • product feature • product feature • Strain relief provals in the strain relief yes standards, specifications, approvals certificate of suitability • RoHS conformity • Resistor combination integrated and connectable via silide switch Mo g-pin sub D connector No Resistor combination integrated and connectable via silide switch plastic Screwed joint design, dimensions and weights 15.8 mm 15.8 mm 16.8 mm 16.8 mm 16.8 mm 16.9 degree cable outlet width 15.8 mm 16.8 mm 16.9 degree cable outlet width 15.8 mm 16.8 mm 16.9 degree cable outlet width 15.8 mm 16.9 degree cable outlet width 16.9 degree cable outlet width 16.9 degree cable outlet width 16.8 mm 16.9 degree cable outlet width 16.8 mm 16.9 degree cable outlet width 16.8 mm 16.9 degree 16.9 degree 16.9 degree 16.9 degree 16.9 degree 16.9 degree 1	• for PROFIBUS cables	2
• for PROFIBUS cables • for network components or terminal equipment type of electrical connection / FastConnect No mechanical data design of terminating resistor material / of the enclosure locking mechanism design design, dimensions and weights type of cable outlet width height depth 35.6 mm net weight ambient conditions ambient temperature • during operation • during storage • during transport • during transport protection class IP product features • product features • strain relief ponders yes standards, specifications, approvals resistor combination integrated and connectable via slide switch material / of the enclosure 90 degree cable outlet 40 design, dimensions and weights 15.8 mm 45.8 mm 45.9 g ambient conditions ambient temperature • during operation • 25 +60 °C • during storage • 40 +70 °C • during transport product features, product functions, product components / general product features • silicon-free Pes product features, product functions, approvals certificate of suitability • RoHS conformity • Yes • RoHS conformity • Yes • UL approval	 for network components or terminal equipment 	1
• for network components or terminal equipment type of electrical connection / FastConnect mechanical data design of terminating resistor material / of the enclosure locking mechanism design design, dimensions and weights type of cable outlet width 15.8 mm height depth 35.6 mm net weight ambient conditions ambient temperature • during operation • during storage • during storage • during transport product features • silicon-free • strain relief • Strandards, specifications, approvals certificate of suitability • Resistor combination integrated and connectable via slide switch Moo Resistor combination integrated and connectable via slide switch Moo Resistor combination integrated and connectable via slide switch material / of the enclosure plastic Screwed joint 90 degree cable outlet 90 degree cab	type of electrical connection	
type of electrical connection / FastConnect mechanical data design of terminating resistor material / of the enclosure locking mechanism design design, dimensions and weights type of cable outlet width 15.8 mm height 64 mm depth 35.6 mm net weight 35.6 mm net weight 45 g ambient conditions ambient temperature during operation during storage during storage during transport eduring storage during transport product features, product functions, product components / general product feature elicitor el	• for PROFIBUS cables	Screw
mechanical data design of terminating resistor material / of the enclosure locking mechanism design locking design d	 for network components or terminal equipment 	9-pin sub D connector
design of terminating resistor material / of the enclosure locking mechanism design design, dimensions and weights type of cable outlet width height depth depth depth depth depth depth depth during operation during storage during transport during transport product features, product functions, product components / general product feature e Silicon-free yes product component e PG connection sa, paprovals certificate of suitability e RoHS conformity e RoHS conformity e RoHS conformity e RoHS conformity e Screwed joint plastic pla	type of electrical connection / FastConnect	No
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 emperature • 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 / general 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	mechanical data	
locking mechanism design design, dimensions and weights type of cable outlet width 15.8 mm height depth net weight ambient conditions ambient temperature during operation during storage during storage during transport protection class IP product features, product functions, product components / general product feature silicon-free product component PG connection socket strain relief standards, specifications, approvals certificate of suitability RoHS conformity Residued RoH and degree cable outlet 90 degree cable	design of terminating resistor	Resistor combination integrated and connectable via slide switch
type of cable outlet width height depth ambient conditions ambient temperature during operation during storage during transport product features, product functions, product components / general product feature silicon-free product connection socket PG connection socket strain relief strain relief tyes tuned the socket socket strain relief tyes standards, specifications, approvals certificate of suitability ROHS conformity Yes Yes Yes Yes Yes Lapproval	material / of the enclosure	plastic
type of cable outlet width 15.8 mm height 64 mm depth 35.6 mm net weight 45 g amblent conditions amblent temperature • during operation • during storage • during transport protection class IP product features, product functions, product components / general product feature • sillcon-free PG connection socket • Strain relief Yes standards, specifications, approvals certificate of suitability • RoHS conformity • RoHS conformity • Yes Ves Yes Ves Ves Ves Ves Ves	locking mechanism design	Screwed joint
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 / general 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	design, dimensions and weights	
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 / general 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	type of cable outlet	90 degree cable outlet
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 / general 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	width	15.8 mm
net weight ambient conditions ambient temperature • during operation • during storage • during transport protection class IP product features, product functions, product components / general product feature • silicon-free PG connection socket • PG connections approvals certificate of suitability • RoHS conformity • RoHS conformity • Ves • UL approval	height	64 mm
ambient conditions ambient temperature • during operation • during storage • during transport • during transport protection class IP product features, product functions, product components / general product feature • silicon-free PG connection socket • Yes • strain relief standards, specifications, approvals certificate of suitability • RoHS conformity • RoHS conformity • UL approval	depth	35.6 mm
ambient temperature • during operation • during storage • during transport • protection class IP product features, product functions, product components / general product feature • silicon-free • silicon-free • Yes product component • PG connection socket • Yes • strain relief • Yes standards, specifications, approvals certificate of suitability • RoHS conformity • RoHS conformity • Yes • UL approval	net weight	45 g
 during operation during storage during transport during transport 40 +70 °C protection class IP IP20 product features, product functions, product components / general product feature silicon-free yes product component PG connection socket strain relief Yes standards, specifications, approvals certificate of suitability RoHS conformity UL approval Yes UL approval Yes Yes UL approval Yes Yes UL approval 	ambient conditions	
 during storage during transport 40 +70 °C protection class IP IP20 product features, product functions, product components / general product feature silicon-free Yes product component PG connection socket strain relief Yes standards, specifications, approvals certificate of suitability RoHS conformity Yes UL approval Yes 	ambient temperature	
• during transport protection class IP IP20 product features, product functions, product components / general product feature • silicon-free Yes product component • PG connection socket • strain relief Yes standards, specifications, approvals certificate of suitability • RoHS conformity Yes • UL approval PA	 during operation 	-25 +60 °C
protection class IP product features, product functions, product components / general product feature • silicon-free PG connection socket • strain relief standards, specifications, approvals certificate of suitability • RoHS conformity • UL approval IP20 Pes Yes Yes Yes Yes Yes Yes Yes	 during storage 	-40 +70 °C
product features, product functions, product components / general product feature • silicon-free • yes product component • PG connection socket • strain relief * Yes * standards, specifications, approvals certificate of suitability • RoHS conformity • UL approval Yes	during transport	-40 +70 °C
product feature • silicon-free PG connection socket • strain relief standards, specifications, approvals certificate of suitability • RoHS conformity • UL approval Yes Yes Yes Yes Yes	protection class IP	IP20
silicon-free product component PG connection socket	product features, product functions, product components / general	
product component PG connection socket strain relief Yes standards, specifications, approvals certificate of suitability RoHS conformity UL approval Yes	product feature	
PG connection socket strain relief Yes standards, specifications, approvals certificate of suitability RoHS conformity UL approval Yes Yes	• silicon-free	Yes
strain relief Yes standards, specifications, approvals certificate of suitability RoHS conformity Yes UL approval Yes	product component	
standards, specifications, approvals certificate of suitability • RoHS conformity • UL approval Yes	 PG connection socket 	Yes
certificate of suitability • RoHS conformity • UL approval Yes	strain relief	Yes
 RoHS conformity UL approval Yes 	standards, specifications, approvals	
• UL approval Yes	certificate of suitability	
	 RoHS conformity 	Yes
reference code	UL approval	Yes
	reference code	

• according to IEC 81346-2

• according to IEC 81346-2:2019

XF XGA

further information / internet links

internet link

• to website: Selection guide for cables and connectors

• to web page: selection aid TIA Selection Tool

• to website: Industrial communication

• to web page: SiePortal • to website: Image database

• to website: CAx-Download-Manager • to website: Industry Online Support

https://support.industry.siemens.com/cs/ww/en/view/109766358

https://www.siemens.com/tstcloud

https://www.siemens.com/simatic-net

https://sieportal.siemens.com

https://www.automation.siemens.com/bilddb

https://www.siemens.com/cax

https://support.industry.siemens.com

security information

security information

Siemens provides products and solutions with industrial cybersecurity functions that support the secure operation of plants, systems, machines and networks. In order to protect plants, systems, machines and networks against cyber threats, it is necessary to implement – and continuously maintain – a holistic, state-of-the-art industrial cybersecurity concept. Siemens' products and solutions constitute one element of such a concept. Customers are responsible for preventing unauthorized access to their plants, systems, machines and networks. Such systems, machines and components should only be connected to an enterprise network or the internet if and to the extent such a connection is necessary and only when appropriate security measures (e.g. firewalls and/or network segmentation) are in place. For additional information on industrial cybersecurity measures that may be implemented, please visit www.siemens.com/cybersecurity-industry. Siemens' products and solutions undergo continuous development to make them more secure. Siemens strongly recommends that product updates are applied as soon as they are available and that the latest product versions are used. Use of product versions that are no longer supported, and failure to apply the latest updates may increase customer's exposure to cyber threats. To stay informed about product updates, subscribe to the Siemens Industrial Cybersecurity RSS Feed under https://www.siemens.com/cert. (V4.7)

Approvals / Certificates

General Product Approval

EMV







Manufacturer Declara-<u>tion</u>





For use in hazardous locations



FM

CCC-Ex



FM



Type Examination Certificate

For use in hazardous locations

Marine / Shipping



IECEx



LRS



last modified:

12/18/2024

