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Data sheet 6AG1153-1AA03-2XB0



Figure similar

spare part SIPLUS ET 200M IM153-1 based on 6ES7153-1AA03-0XB0 with conformal coating, -40…+70 °C, start up -25 °C, interface for ET 200M, for max. 8 S7-300 modules

General information	
Product type designation	IM 153-1 DP ST
Vendor identification (VendorID)	801Dh
based on	6ES7153-1AA03-0XB0
Engineering with	
● STEP 7 configurable/integrated from version	see entry ID: 109746275
Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
external protection for power supply lines (recommendation)	not necessary
Mains buffering	
● Mains/voltage failure stored energy time	5 ms
Input current	
Current consumption, max.	350 mA; At 24 V DC
Inrush current, typ.	2.5 A
I^2t	0.1 $A^2 \cdot s$
Output voltage	
Rated value (DC)	5 V
Output current	
for backplane bus (5 V DC), max.	1 A
Power loss	
Power loss, typ.	3 W
Address area	
Addressing volume	
● Inputs	128 byte
● Outputs	128 byte
Hardware configuration	
number of modules per DP device interface, max.	8
Interfaces	
Transmission procedure	RS 485
Transmission rate, max.	12 Mbit/s
1. Interface	
automatic detection of transmission rate	Yes
Interface types	
● Output current of the interface, max.	90 mA
● Design of the connection	9-pin sub D socket
PROFIBUS DP device	

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● GSD file	(for DPV1) SIEM801D.GSD; SI01801D.GSG
● automatic baud rate search	Yes
Protocols	
Bus protocol/transmission protocol	PROFIBUS DP to EN 50170
Protocols (Ethernet)	
● TCP/IP	No
PROFIBUS DP	
● Number of node addresses, max.	1 to 125 permitted
Services	
— SYNC capability	Yes
— FREEZE capability	Yes
— Direct data exchange (slave-to-slave communication)	Yes; Sender
Potential separation	
Potential separation exists	Yes
Isolation	
Isolation tested with	Isolation voltage 500 V
Degree and class of protection	
IP degree of protection	IP20
Ambient conditions	
Ambient temperature during operation	
● min.	-40 °C; = Tmin
● max.	70 °C; = Tmax; 60 °C @ UL/cUL, ATEX and FM use
● At cold restart, min.	-25 °C
Ambient temperature during storage/transportation	
● min.	-40 °C
● max.	70 °C
Altitude during operation relating to sea level	
● Installation altitude above sea level, max.	5 000 m
● Ambient air temperature-barometric pressure-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, tested in accordance with IEC 60068-2-38, max.	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)
Resistance	
Use in stationary industrial systems	
— to biologically active substances according to EN 60721-3-3	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
— to chemically active substances according to EN 60721-3-3	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
— to mechanically active substances according to EN 60721-3-3	Yes; Class 3S4 incl. sand, dust, *
Use on ships/at sea	
— to biologically active substances according to EN 60721-3-6	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
— to chemically active substances according to EN 60721-3-6	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
— to mechanically active substances according to EN 60721-3-6	Yes; Class 6S3 incl. sand, dust; *
Usage in industrial process technology	
— Against chemically active substances acc. to EN 60654-4	Yes; Class 3 (excluding trichlorethylene)
— Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04	Yes; Level GX group A/B (excluding trichlorethylene; harmful gas concentrations up to the limits of EN 60721-3-3 class 3C4 permissible); level LC3 (salt spray) and level LB3 (oil)
Remark	
— Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04	* The supplied plug covers must remain in place over the unused interfaces during operation!
Configuration	
Configuration software	
● STEP 7	STEP 7 / COM PROFIBUS / non-Siemens tools via GSD file

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Dimensions	
Width	40 mm
Height	125 mm
Depth	117 mm

Weights	
Weight, approx.	360 g

Classifications

	Version	Classification
eClass	16	27-24-26-08
eClass	14	27-24-26-08
eClass	12	27-24-26-08
eClass	9.1	27-24-26-08
eClass	9	27-24-26-08
eClass	8	27-24-26-08
eClass	7.1	27-24-26-08
eClass	6	27-24-26-08
ETIM	10	EC001604
ETIM	9	EC001604
ETIM	8	EC001604
ETIM	7	EC001604
IDEA	4	3564
UNSPSC	15	32-15-17-05

Approvals / Certificates

General Product Approval

Manufacturer Declaration

China RoHS

General Product Approval	EMV	For use in hazardous locations

For use in hazardous locations

CCC-Ex

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