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Data sheet 6AG1153-4BA00-7XB0

SIPLUS ET 200M IM 153-4 PN IO HF -40...+70°C start up temperature:-25°C with conformal coating based on 6ES7153-4BA00-0XB0 . DP, Connection ET 200M for max. 12 S7-300 modules, supports fail-safe module, HART modules, shared device, Medium Redundancy Protocol



Figure similar

General information	
Product type designation	IM 153-4 PN HF
Vendor identification (VendorID)	002AH
Device identifier (DeviceID)	0302H

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)	In a construction with grounded reference potential, a fuse is necessary for redundant interface modules (Recommendation: 2.5 A)
Mains buffering	
• Mains/voltage failure stored energy time	5 ms

Input current	
Current consumption, max.	600 mA; with 24 V DC supply
Inrush current, typ.	4 A
I^2t	0.09 $A^2 \cdot s$

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Output voltage	
Rated value (DC)	5 V
Output current	
for backplane bus (5 V DC), max.	1.5 A
Power loss	
Power loss, typ.	6 W
Address area	
Addressing volume	
• Inputs	672 byte; Extended HART user data
• Outputs	192 byte
Hardware configuration	
Number of modules per DP slave interface, max.	12
Protocols	
Bus protocol/transmission protocol	PROFINET IO
Protocols (Ethernet)	
• TCP/IP	Yes
• SNMP	Yes
• LLDP	Yes
• ping	Yes
• ARP	Yes
PROFINET IO Device	
Services	
— IRT	Yes
— PROFIenergy	No
— Prioritized startup	Yes
— Shared device	Yes
— Number of IO Controllers with shared device, max.	2
Redundancy mode	
• PROFINET system redundancy (S2)	Yes
Media redundancy	
— MRP	Yes
Interrupts/diagnostics/status information	
Diagnostics indication LED	
• LINK LED	Yes; green LED
• RX/TX LED	Yes; Yellow LED
• for module diagnostics	Yes
Potential separation	
Potential separation exists	Yes; Only direction PROFINET, RWB is not separated

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Isolation	
Isolation tested with	Between PROFINET and 24 V supply: 1 500 V AC, between functional grounding and 24 V supply: 500 V DC
Degree and class of protection	
IP degree of protection	IP20
Ambient conditions	
Ambient temperature during operation	
• min.	-40 °C; = Tmin; Startup @ -25 °C
• max.	70 °C; = Tmax; Tmax > 60 °C output current for backplane bus (5 V DC) max. 0.9 A
• 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)

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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!

Dimensions	
Width	40 mm
Height	125 mm
Depth	118 mm

Weights	
Weight, approx.	215 g

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