6AG1591-1AB10-2AA0

Data sheet



SIPLUS S7-1500 display CPU 35 mm V3.0 based on 6ES7591-1AB10-0AA0 with conformal coating -40...+70 $^{\circ}\text{C}$ replacement display for SIPLUS CPUs: CPU 1511 (F)-1 PN, CPU 1513 (F)-1 PN as of V3.0

General information				
based on	6ES7591-1AB10-0AA0			
Ambient conditions				
Ambient temperature during operation				
 horizontal installation, min. 	-40 °C; = Tmin (incl. condensation/frost)			
 horizontal installation, max. 	70 °C; = Tmax; display: 50 °C, the display is switched off at an operating temperature of typically 50 °C -40 °C; = Tmin			
 vertical installation, min. 				
vertical installation, max.	40 °C; = Tmax; display: 40 °C, at an operating temperature of typically 40 °C, the display is switched off			
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 in bedewed state), horizontal installation			
Resistance				
Coolants and lubricants				
 Resistant to commercially available coolants and lubricants 	Yes; Incl. diesel and oil droplets in the air			
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, fungal and dry rot spores (excluding fauna)			
 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!

Conformal coating

Coatings for printed circuit board assemblies acc. to EN 61086

• Protection against fouling acc. to EN 60664-3

• Military testing according to MIL-I-46058C, Amendment 7

 Qualification and Performance of Electrical Insulating Compound for Printed Board Assemblies according to IPC-CC-830A Yes; Class 2 for high reliability

Yes; Type 1 protection

Yes; Discoloration of coating possible during service life

Yes; Conformal coating, Class A

Classifications

	Version	Classification
eClass	14	27-24-22-92
eClass	12	27-24-22-92
eClass	9.1	27-24-22-92
eClass	9	27-24-22-92
eClass	8	27-24-92-90
eClass	7.1	27-24-92-90
eClass	6	27-24-92-90
ETIM	10	EC002584
ETIM	9	EC002584
ETIM	8	EC002584
ETIM	7	EC002584

Approvals / Certificates

General Product Approval

Manufacturer Declaration





China RoHS

last modified:

6/18/2025