## **SIEMENS**

## Data sheet

## 6AG1326-1RF01-4AB0

SIPLUS S7-300 SM 326F DI8 NAMUR for medial exposure with conformal coating based on 6ES7326-1RF01-0AB0 . Digital "input ""SM 326, 8 DI; 24 V DC," "NAMUR,"" fail-safe NAMUR input" for SIMATIC S7 F-systems, up to Category 4 (EN 954-1)/ SIL3 (IEC 61508)/PLE (ISO 13849),  $1x\ 40$ -pole



Supply voltage	
Reverse polarity protection	Yes
Input current	
from load voltage L+ (without load), max.	160 mA
from backplane bus 5 V DC, max.	90 mA
Encoder supply	
Number of outputs	8
Type of output voltage	8.2 V DC
Power loss	
Power loss, typ.	4.5 W
Digital inputs	
Number of digital inputs	8
Number of simultaneously controllable inputs	
all mounting positions	
— up to 40 °C, max.	8
— up to 60 °C, max.	8
Input voltage	

Type of input voltage	DC
Input current	
<ul> <li>for signal "0", max. (permissible quiescent current)</li> </ul>	0.35 to 1.2 mA
• for signal "1", typ.	2.1 to 7 mA
Input delay (for rated value of input voltage)	
for NAMUR inputs	
— at "0" to "1", max.	1.2 to 3 ms
— at "1" to "0", max.	1.2 to 3 ms
Cable length	
• shielded, max.	200 m
• unshielded, max.	100 m
Interrupts/diagnostics/status information	
Alarms	
Diagnostic alarm	Yes; Parameterizable
Diagnostics indication LED	
Fail-safe operation	Yes
• Group error SF (red)	Yes
Ex(i) characteristics	
Module for Ex(i) protection	Yes
Maximum values of input circuits (per channel)	
<ul> <li>Co (permissible external capacity), max.</li> </ul>	3 μF
<ul><li>lo (short-circuit current), max.</li></ul>	13.9 mA
<ul> <li>Lo (permissible external inductivity), max.</li> </ul>	80 mH
<ul><li>Po (power of load), max.</li></ul>	33.1 mW
<ul><li>Uo (output no-load voltage), max.</li></ul>	10 V
<ul><li>Um (fault voltage), max.</li></ul>	60 V DC/30 V AC
<ul> <li>Ta (permissible ambient temperature), max.</li> </ul>	60 °C
Potential separation	
Potential separation digital inputs	
<ul><li>between the channels</li></ul>	Yes
<ul><li>between the channels and backplane bus</li></ul>	Yes
• between the channels and the power supply of	Yes
the electronics	
Isolation	
tested with	
<ul> <li>Channels against backplane bus and load voltage L+</li> </ul>	1500 V AC
Between channels	1500 V AC
<ul> <li>Load voltage L+ against backplane bus</li> </ul>	500 V DC/350 V AC

Standards, approvals, certificates	
CE mark	Yes
Highest safety class achievable in safety mode	
● acc. to EN 954	Cat. 4
• SIL acc. to IEC 61508	SIL 2 (single-channel), SIL 3 (two-channel)
Ambient conditions	
Ambient temperature during operation	
● min.	0 °C; = Tmin
• max.	60 °C; = Tmax
Altitude during operation relating to sea level	
<ul> <li>Installation altitude above sea level, max.</li> </ul>	2 000 m
<ul> <li>Ambient air temperature-barometric pressure- altitude</li> </ul>	Tmin Tmax at 1 140 hPa 795 hPa (-1 000 m +2 000 m)
Relative humidity	
<ul> <li>With condensation, tested in accordance with IEC 60068-2-38, max.</li> </ul>	100 %; RH incl. condensation/frost (no commissioning under condensation conditions)
Resistance	
Use in stationary industrial systems	
<ul> <li>to biologically active substances according to EN 60721-3-3</li> </ul>	Yes; Class 3B2 mold, fungus and dry rot spores (with the exception of fauna); Class 3B3 on request
<ul> <li>to chemically active substances according to EN 60721-3-3</li> </ul>	Yes; Class 3C4 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); $^{\star}$
<ul> <li>to mechanically active substances according to EN 60721-3-3</li> </ul>	Yes; Class 3S4 incl. sand, dust, *
Use on ships/at sea	
<ul> <li>to biologically active substances according to EN 60721-3-6</li> </ul>	Yes; Class 6B2 mold and fungal spores (excluding fauna); Class 6B3 on request
<ul> <li>to chemically active substances according to EN 60721-3-6</li> </ul>	Yes; Class 6C3 (RH < 75 %) incl. salt spray acc. to EN 60068-2-52 (severity degree 3); *
<ul> <li>to mechanically active substances according to EN 60721-3-6</li> </ul>	Yes; Class 6S3 incl. sand, dust; *
Usage in industrial process technology	
<ul> <li>Against chemically active substances acc.</li> <li>to EN 60654-4</li> </ul>	Yes; Class 3 (excluding trichlorethylene)
<ul> <li>Environmental conditions for process, measuring and control systems acc. to ANSI/ISA-71.04</li> </ul>	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	
<ul> <li>Note regarding classification of environmental conditions acc. to EN 60721, EN 60654-4 and ANSI/ISA-71.04</li> </ul>	* The supplied plug covers must remain in place over the unused interfaces during operation!
Connection method	
required front connector	1x 40-pin

Dimensions	
Width	80 mm
Height	125 mm
Depth	120 mm
Weights	
Weight, approx.	482 g
last modified:	08/31/2019