SIEMENS

Data sheet 6AG1326-1BK02-2AB0

SIPLUS S7-300 SM 326F DI24 40-pole -25...+60°C (70°C with forced convection) with conformal coating based on 6ES7326-1BK02-0AB0 . Digital input F-DI 24x24 V DC Fail-safe digital input for SIMATIC S7 F-systems with diagnostic alarm

Figure similar

Supply voltage	
Rated value (DC)	24 V
Input current	
from load voltage L+ (without load), max.	450 mA
from backplane bus 5 V DC, max.	100 mA
Encoder supply	
Number of outputs	4; Isolated
Output current	
• Rated value	400 mA
Power loss	
Power loss, typ.	10 W
Digital inputs	
Number of digital inputs	24
Number of simultaneously controllable inputs	
all mounting positions	
— up to 40 °C, max.	24

— up to 60 °C, max.	24; (at 24 V) or 18 (at 28.8 V)
Input voltage	
• Type of input voltage	DC
• Rated value (DC)	24 V
• for signal "0"	-30 to +5 V
• for signal "1"	+11 to +30V
Input current	
• for signal "0", max. (permissible quiescent current)	2 mA
• for signal "1", typ.	10 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— at "0" to "1", max.	3.4 ms
— at "1" to "0", max.	3.4 ms
Cable length	
• shielded, max.	200 m
• unshielded, max.	100 m

Encoder	
Connectable encoders	
• 2-wire sensor	Yes; if short-circuit test is deactivated
— permissible quiescent current (2-wire sensor), max.	2 mA

Interrupts/diagnostics/status information	
Diagnostics function	Yes
Alarms	
• Diagnostic alarm	Yes
Diagnoses	
• Diagnostic information readable	Yes
Diagnostics indication LED	
• Fail-safe operation	Yes
• Group error SF (red)	Yes

Ex(i) characteristics	
Max. values of input circuits for gas group IIC (per channel)	
• Ta (permissible ambient temperature), max.	60 °C

Potential separation	
Potential separation digital inputs	
• between the channels	Yes
• between the channels, in groups of	12
• between the channels and backplane bus	Yes

Isolation

Isolation tested with	500 V DC/350 V AC

Standards, approvals, certificates	
CE mark	Yes
UL approval	Yes; File E239877
RCM (formerly C-TICK)	Yes
KC approval	Yes
EAC (formerly Gost-R)	Yes
Highest safety class achievable in safety mode	
• acc. to DIN VDE 0801	AK 6
• acc. to EN 954	Cat. 4
• Performance level according to ISO 13849-1	e
• SIL acc. to IEC 61508	SIL 3

Ambient conditions	
Ambient temperature during operation	
• min.	-25 °C; = Tmin
• max.	60 °C; = Tmax; *+70 °C where forced convection with a minimum air velocity of 0.7 m/s through the modules and rated voltage of 24 V ±5 % are ensured. If in the course of maintenance or automatic diagnosis it is determined that the admissible specified parameters have been exceeded, the modules should be subjected to a proof test (function check) by the manufacturer.
Altitude during operation relating to sea level	
• Installation altitude above sea level, max.	2 000 m
• Ambient air temperature-barometric pressure-altitude	Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 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!

Connection method	
required front connector	40-pin

Dimensions	
Width	80 mm
Height	125 mm
Depth	120 mm

Weights	
Weight, approx.	442 g

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