

SIPLUS S7-300 SM 326F DI24 with conformal coating With conformity with EN 50155 T1 Kat 1 KI A/B based on 6ES7326-1BK02-0AB0 . Digital input Fail-safe digital input for SIMATIC S7 F-systems with diagnostic alarm, 1x 40-pole



Figure similar

Supply voltage	
Rated value (DC)	24 V; A power supply according to EN 50155 shall be used
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"	-28.8 ... +5V
• for signal "1"	+11 to +28.8V
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
Diagnostic messages	
• Diagnostic information readable	Yes
Diagnostics indication LED	
• Fail-safe operation	Yes
• Group error SF (red)	Yes
Ex(i) characteristics	
Maximum values of input circuits (per channel)	
• Ta (permissible ambient temperature), max.	60 °C; = Tmax; the rated temperature range of -25 ... +55 °C (T1) applies for the use on railway vehicles according to EN50155
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	500V AC for 1 min (internal voltage limiting to ±120V)
Standards, approvals, certificates	
CE mark	Yes
UL approval	Yes; File E239877
Highest safety class achievable in safety mode	
<ul style="list-style-type: none"> • acc. to DIN VDE 0801 • acc. to EN 954 • SIL acc. to IEC 61508 	AK 6 Cat. 4 SIL 3
Railway application	
<ul style="list-style-type: none"> • EN 50155 	Yes; Sections 4, 5 and 12; no further agreements apply; T1, Category 1, Class A/B, EN 50155:2007
Ambient conditions	
Ambient temperature during operation	
<ul style="list-style-type: none"> • min. • max. 	-25 °C; = Tmin 60 °C; = Tmax; the rated temperature range of -25 ... +55 °C (T1) applies for the use on railway vehicles according to EN50155
Altitude during operation relating to sea level	
<ul style="list-style-type: none"> • Installation altitude above sea level, max. • Ambient air temperature-barometric pressure-altitude 	2 000 m Tmin ... Tmax at 1 140 hPa ... 795 hPa (-1 000 m ... +2 000 m)
Relative humidity	
<ul style="list-style-type: none"> • 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 land craft, rail vehicles and special-purpose vehicles	
— to biologically active substances according to EN 60721-3-5	Yes; Class 5B2 mold, fungus and dry rot spores (with the exception of fauna); Class 5B3 on request
— to chemically active substances according to EN 60721-3-5	Yes; Class 5C3 (RH < 75 %) incl. salt spray acc. to EN 50155 (ST2); *
— to mechanically active substances according to EN 60721-3-5	Yes; Class 5S3 incl. sand, dust; *
Remark	
— Note regarding classification of environmental conditions acc. to EN 60721	* 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
- Electronic equipment on rolling stock acc. to EN 50155
- 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 availability

Yes; Class PC2 protective coating acc. to EN 50155:2017

Yes; Discoloration of coating possible during service life

Yes; Conformal coating, Class A

Connection method

required front connector 40-pin

Dimensions

Width 80 mm

Height 125 mm

Depth 120 mm

Weights

Weight, approx. 442 g

last modified: 12/14/2018