

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)
<b>Input voltage</b>	
• Type of input voltage	DC
• Rated value (DC)	24 V
• for signal "0"	-28.8 ... +5V
• for signal "1"	+11 to +28.8V
<b>Input current</b>	
• for signal "0", max. (permissible quiescent current)	2 mA
• for signal "1", typ.	10 mA
<b>Input delay (for rated value of input voltage)</b>	
for standard inputs	
— at "0" to "1", max.	3.4 ms
— at "1" to "0", max.	3.4 ms
<b>Cable length</b>	
• shielded, max.	200 m
• unshielded, max.	100 m
<b>Encoder</b>	
<b>Connectable encoders</b>	
• 2-wire sensor	Yes; if short-circuit test is deactivated
— permissible quiescent current (2-wire sensor), max.	2 mA
<b>Interrupts/diagnostics/status information</b>	
Diagnostics function	Yes
<b>Alarms</b>	
• Diagnostic alarm	Yes
<b>Diagnostic messages</b>	
• Diagnostic information readable	Yes
<b>Diagnostics indication LED</b>	
• Fail-safe operation	Yes
• Group error SF (red)	Yes
<b>Ex(i) characteristics</b>	
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
<b>Potential separation</b>	
<b>Potential separation digital inputs</b>	
• 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"> <li>• acc. to DIN VDE 0801</li> <li>• acc. to EN 954</li> <li>• SIL acc. to IEC 61508</li> </ul>	AK 6 Cat. 4 SIL 3
Railway application	
<ul style="list-style-type: none"> <li>• EN 50155</li> </ul>	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"> <li>• min.</li> <li>• max.</li> </ul>	-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"> <li>• Installation altitude above sea level, max.</li> <li>• Ambient air temperature-barometric pressure-altitude</li> </ul>	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"> <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	
— 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, 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

**last modified:** 08/31/2019