## **SIEMENS**

## **Data sheet**

6ES7326-1BK02-0AB0



SIMATIC S7, Digital input SM 326, F-DI 24x24 V DC, Fail-safe digital input for SIMATIC S7 F-systems with diagnostic alarm, up to Category 4 (EN 954-1)/ SIL3 (IEC61508)/PLE (ISO13849), 1x 40-pole

Figure similar

Supply voltage	
Rated value (DC)	24 V
Reverse polarity protection	Yes
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	
<ul> <li>Type of input voltage</li> </ul>	DC
<ul> <li>Rated value (DC)</li> </ul>	24 V
• for signal "0"	-30 to +5 V
• for signal "1"	+11 to +30V
Input current	
<ul> <li>for signal "0", max. (permissible quiescent current)</li> </ul>	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	
<ul> <li>Diagnostic information readable</li> </ul>	Yes
Diagnostics indication LED	
Fail-safe operation	Yes
<ul> <li>Group error SF (red)</li> </ul>	Yes
Potential separation	
Potential separation digital inputs	
<ul> <li>between the channels</li> </ul>	Yes
<ul> <li>between the channels, in groups of</li> </ul>	12
<ul> <li>between the channels and backplane bus</li> </ul>	Yes
Isolation	
Isolation tested with	500 V DC/350 V AC
Standards, approvals, certificates	
Highest safety class achievable in safety mode	
• acc. to DIN VDE 0801	AK 6
• acc. to EN 954	Cat. 4
<ul> <li>Performance level according to ISO 13849-1</li> </ul>	е
• SIL acc. to IEC 61508	SIL 3
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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last modified: