



SIMATIC S7, DIGITAL INPUT SM 326,
 F-DI 24 X DC 24V,
 FAILSAFE DIGITAL INPUTS FOR SIMATIC S7 FAILSAFE
 SYSTEMS WITH DIAGNOST. INTERRUPT,
 UP TO CATEGORY 4 (EN954-1)/ SIL3 (IEC61508)/PLE
 (ISO13849),
 1 X 40 PIN

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	
Output current, rated value	400 mA
Power losses	
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 30 V
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	
Cable length, shielded, max.	200 m
Cable length 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	
Alarms	
Diagnostic alarm	Yes
Diagnostic messages	
Diagnostic functions	Yes
Diagnostic information readable	Yes
Diagnostics indication LED	
Fail-safe operation	Yes
Group error SF (red)	Yes
Ex(i) characteristics	
Max. values of input circuits (per channel)	
Ta (permissible ambient temperature), max.	60 °C
Galvanic isolation	
Galvanic isolation digital inputs	
between the channels	Yes
between the channels, in groups of	12
between the channels and the backplane bus	Yes
Isolation	
Isolation checked 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
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
Status	Jun 3, 2014