



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, 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	
Rated value, DC	24 V

for signal "0"	-30 to +5 V
for signal "1"	11 to 30 V
<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>	
<b>for standard inputs</b>	
at "0" to "1", max.	3.4 ms
at "1" to "0", max.	3.4 ms
<b>Cable length</b>	
Cable length, shielded, max.	200 m
Cable length 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>	
<b>Alarms</b>	
Diagnostic alarm	Yes
<b>Diagnostic messages</b>	
Diagnostic functions	Yes
Diagnostic information readable	Yes
<b>Diagnostics indication LED</b>	
Fail-safe operation	Yes
Group error SF (red)	Yes
<b>Ex(i) characteristics</b>	
<b>Max. values of input circuits (per channel)</b>	
Ta (permissible ambient temperature), max.	60 °C
<b>Galvanic isolation</b>	
<b>Galvanic isolation digital inputs</b>	
between the channels	Yes
between the channels, in groups of	12
between the channels and the backplane bus	Yes
<b>Isolation</b>	
Isolation checked with	500 V DC / 350 V AC
<b>Standards, approvals, certificates</b>	
<b>Highest safety class achievable in safety mode</b>	
acc. to DIN VDE 0801	AK 6

<b>acc. to EN 954</b>	Cat. 4
<b>acc. to IEC 61508</b>	SIL 3
<b>Connection method</b>	
<b>required front connector</b>	40-pin
<b>Dimensions</b>	
<b>Width</b>	80 mm
<b>Height</b>	125 mm
<b>Depth</b>	120 mm
<b>Weights</b>	
<b>Weight, approx.</b>	442 g
Status	Jan 23, 2014