

SIMATIC DP, ELECTRON. MODULE F. ET 200SP, F-DI 8X24VDC HF, 15 MM WIDTH, UP TO PL E (ISO 13849-1)/ SIL3 (IEC 61508)



General information	
Product type designation	F-DI 8x24VDC HF
Product function	
• I&M data	Yes; I&M0 to I&M3
Engineering with	
• STEP 7 TIA Portal configurable/integrated as of version	V12
• STEP 7 configurable/integrated as of version	V5.5 SP3 / -
Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	20.4 V
permissible range, upper limit (DC)	28.8 V
Reverse polarity protection	Yes
Input current	
Current consumption (rated value)	75 mA; without load
Current consumption, max.	21 mA; From the backplane bus
Encoder supply	
Number of outputs	8

Short-circuit protection	Yes; Electronic (response threshold 0.7 A to 1.8 A)
<b>Output current</b>	
• up to 60 °C, max.	0.3 A
<b>24 V encoder supply</b>	
• 24 V	Yes; min. L+ (-1.5 V)
• Short-circuit protection	Yes
• Output current, max.	800 mA; Total current of all encoders
<b>Power</b>	
Power available from the backplane bus	70 mW
<b>Power loss</b>	
Power loss, typ.	4 W
<b>Address area</b>	
Address space per module	
• Inputs	6 byte
• Outputs	4 byte
<b>Hardware configuration</b>	
Automatic encoding	Yes
• Electronic coding element type F	Yes
<b>Digital inputs</b>	
Number of digital inputs	8
Source/sink input	Yes; P-reading
Input characteristic curve in accordance with IEC 61131, type 1	Yes
<b>Input voltage</b>	
• Type of input voltage	DC
• Rated value (DC)	24 V
• for signal "0"	-30 to +5V
• for signal "1"	+15 to +30V
<b>Input current</b>	
• for signal "1", typ.	3.7 mA
<b>Input delay (for rated value of input voltage)</b>	
for standard inputs	
— parameterizable	Yes
— at "0" to "1", min.	0.4 ms
— at "0" to "1", max.	20 ms
— at "1" to "0", min.	0.4 ms
— at "1" to "0", max.	20 ms
for counter/technological functions	
— parameterizable	No
<b>Cable length</b>	

- shielded, max. 1 000 m
- unshielded, max. 500 m

### Interrupts/diagnostics/status information

Diagnostics function Yes, "Alarms/diagnostic messages" section in the manual

#### Alarms

- Diagnostic alarm Yes
- Hardware interrupt No

#### Diagnostics indication LED

- RUN LED Yes; Green LED
- ERROR LED Yes; Red LED
- Monitoring of the supply voltage (PWR-LED) Yes; green PWR LED
- Channel status display Yes; Green LED
- for channel diagnostics Yes; Red LED
- for module diagnostics Yes; green/red DIAG LED

### Potential separation

#### Potential separation channels

- between the channels No
- between the channels and backplane bus Yes
- between the channels and the power supply of the electronics No

### Permissible potential difference

between different circuits 75 V DC/60 V AC

### Isolation

Isolation tested with 707 V DC (type test)

### Ambient conditions

#### Ambient temperature during operation

- horizontal installation, min. 0 °C
- horizontal installation, max. 60 °C
- vertical installation, min. 0 °C
- vertical installation, max. 50 °C

### Dimensions

Width 15 mm

### Weights

Weight, approx. 49 g

**last modified:** 08/12/2017