



SIMATIC ET 200SP, digital input module, DI 8x NAMUR High Feature, suitable for BU type A0, Color code CC01, channel diagnostics

General information	
Product type designation	DI 8xNAMUR HF
HW functional status	from FS04
Firmware version	
• FW update possible	Yes
usable BaseUnits	BU type A0
Color code for module-specific color identification plate	CC01
Product function	
• I&M data	Yes; I&M0 to I&M3
• Isochronous mode	No
Engineering with	
• STEP 7 TIA Portal configurable/integrated from version	V13 / V13
• STEP 7 configurable/integrated from version	V5.5 SP3 / -
• PROFIBUS from GSD version/GSD revision	GSD Revision 5
• PROFINET from GSD version/GSD revision	GSDML V2.3
Operating mode	
• DI	Yes
• Counter	No
• Oversampling	No
• MSI	No
Supply voltage	
Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
Reverse polarity protection	Yes
Input current	
Current consumption (rated value)	17 mA
Current consumption, max.	54 mA
Encoder supply	
Number of outputs	8
Short-circuit protection	Yes
24 V encoder supply	
• 24 V	No
• Short-circuit protection	No
Power loss	
Power loss, typ.	1.5 W
Address area	
Address space per module	
• Address space per module, max.	1 byte; + 1 byte for QI information
Hardware configuration	

Automatic encoding	
<ul style="list-style-type: none"> Type of mechanical coding element 	Type A
Selection of BaseUnit for connection variants	
<ul style="list-style-type: none"> 1-wire connection 2-wire connection 3-wire connection 4-wire connection 	BU type A0 BU type A0 BU type A0 + external terminals BU type A0 + external terminals
Digital inputs	
Number of digital inputs	8; NAMUR
Digital inputs, parameterizable	Yes
Pulse extension	Yes; 0.5 s, 1 s, 2 s
Edge evaluation	Yes; rising edge, falling edge, edge change
Signal change flutter	Yes; 2 to 32 signal changes
Flutter observation window	Yes; 0.5 s, 1 s to 100 s in 1-s steps
Input voltage	
<ul style="list-style-type: none"> Rated value (DC) 	8.2 V
Input current	
for unswitched contact	
<ul style="list-style-type: none"> for signal "0", max. (permissible quiescent current) 	0.5 mA
for NAMUR encoders	
<ul style="list-style-type: none"> for signal "0", min. for signal "0", max. for signal "1", min. for signal "1", max. 	0.35 mA 1.2 mA 2.1 mA 7 mA
Input delay (for rated value of input voltage)	
<ul style="list-style-type: none"> tolerated changeover time for changeover contacts 	300 ms
for standard inputs	
<ul style="list-style-type: none"> parameterizable 	No
for NAMUR inputs	
<ul style="list-style-type: none"> at "0" to "1", max. at "1" to "0", max. 	12 ms 12 ms
Cable length	
<ul style="list-style-type: none"> shielded, max. 	200 m
Encoder	
Connectable encoders	
<ul style="list-style-type: none"> NAMUR encoder/changeover contact according to EN 60947 Single contact / changeover contact unconnected Single contact / changeover contact connected with 10 kΩ 	Yes Yes Yes
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Alarms	
<ul style="list-style-type: none"> Diagnostic alarm Hardware interrupt 	Yes; channel by channel Yes; Parameterizable, channels 0 to 7
Diagnoses	
<ul style="list-style-type: none"> Diagnostic information readable Monitoring the supply voltage <ul style="list-style-type: none"> parameterizable Monitoring of encoder power supply Wire-break Short-circuit 	Yes Yes Yes No Yes; channel by channel Yes; channel by channel
Diagnostics indication LED	
<ul style="list-style-type: none"> Monitoring of the supply voltage (PWR-LED) Channel status display <ul style="list-style-type: none"> for channel diagnostics for module diagnostics 	Yes; green PWR LED Yes; green LED Yes; red LED Yes; green/red DIAG LED
Potential separation	
Potential separation channels	
<ul style="list-style-type: none"> between the channels between the channels and backplane bus 	No Yes

- between the channels and the power supply of the electronics

Yes

Isolation

Isolation tested with 707 V DC (type test)

Standards, approvals, certificates

Suitable for safety functions No

Ambient conditions

Ambient temperature during operation

- horizontal installation, min. -30 °C
- horizontal installation, max. 60 °C
- vertical installation, min. -30 °C
- vertical installation, max. 50 °C

Altitude during operation relating to sea level

- Installation altitude above sea level, max. 5 000 m; Restrictions for installation altitudes > 2 000 m, see manual

Dimensions

Width 15 mm

Height 73 mm

Depth 58 mm

Weights

Weight, approx. 32 g

last modified: 10/13/2023 