SIEMENS

Data sheet

6ES7131-6TF00-0CA0

SIMATIC ET 200SP, DIGITAL INPUT MODULE, DI 8X NAMUR HIGH FEATURE, FITS TO BU-TYPE A0, COLOR CODE CC01, CHANNEL DIAGNOSIS



DI 8xNAMUR HF
V1.0
Yes
BU type A0
CC01
Yes; I&M0 to I&M3
V13 / V13
V5.5 SP3 / -
GSD Revision 5
GSDML V2.3
Yes
No
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
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	
Selection of BaseUnit for connection variants	
1-wire connection	BU type A0
• 2-wire connection	BU type A0
• 3-wire connection	BU type A0 + external terminals
• 4-wire connection	BU type A0 + external terminals
Digital inputs	
Number of digital inputs	8
Digital inputs, parameterizable	Yes
Туре	NAMUR
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	
 Type of input voltage 	DC
 Rated value (DC) 	8.2 V
Input current	
for 10 k switched contact	
— for signal "0"	0.35 to 1.2 mA
— for signal "1"	2.1 to 7 mA
for unswitched contact	

	4 • • • • • • • • • • • • • •	0.5	
for NAMUR encoders 0.35 to 1.2 mA - for signal "0" 0.35 to 1.2 mA - for signal "1" 2.1 to 7 mA Input delay (for rated value of input voltage) 300 ms • tolerated changeover time for changeover contacts 300 ms for standard inputs No - parameterizable No for NAMUR inputs 12 ms - at "0" to "1", max. 12 ms Cable length 200 m • shielded, max. 200 m Encoder Connectable encoders • NAMUR encoder/changeover contact according to EN 60947 Yes • Single contact / changeover contact unconnected Yes • Single contact / changeover contact connected with 10 kQ Yes • Single contact / changeover contact connected with 10 kQ No • Diagnostics /status information Yes Diagnostics information Yes • Diagnostic information readable Yes • Monitoring of en	 for signal "0", max. (permissible quiescent current) 	0.5 mA	
for signal '0" 0.35 to 1.2 mA for signal '1" 2.1 to 7 mA Input delay (for rated value of input voltage) 300 ms - tolerated changeover time for changeover contacts 300 ms for standard inputs - - parameterizable No for NAMUR Inputs - - at '0" to '1", max. 12 ms - at '0" to '1", max. 12 ms - at '0" to '1", max. 12 ms - at '1" to '0", max. 200 m Encoder - Connectable encoders Ves • NAMUR encoder/changeover contact according to EN 60947 Yes • Single contact / changeover contact unconnected with 10 kO Yes Inscriptional for the main of the main	— for signal "1"	typ. 8 mA	
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• tolerated changeover time for changeover contacts 300 ms for standard inputs No - parameterizable No for NAMUR inputs 12 ms - at "0" to "1", max. 12 ms - at "1" to "0", max. 200 m Cable length 200 m Cable length 200 m Encoder Connectable encoders • NAMUR encoder/changeover contact according to EN 60947 Yes • Single contact / changeover contact with 10 kΩ Yes • Single contact / changeover contact connected with 10 kΩ Yes Isochronous operation (application synchronized up to terminal) No Interrupts/diagnostics/status information No Diagnostic alarm Yes; Parameterizable, channels 0 to 7 Diagnostic information readable Yes • Monitoring the supply voltage Yes •	— for signal "1"	2.1 to 7 mA	
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• NAMUR encoder/changeover contact according to EN 60947 Yes • Single contact / changeover contact unconnected Yes • Single contact / changeover contact connected with 10 kΩ Yes Isochronous mode Yes Isochronous operation (application synchronized up to terminal) No Interrupts/diagnostics/status information No Diagnostics Yes • Diagnostic alarm Yes; channel by channel • Hardware interrupt Yes; Parameterizable, channels 0 to 7 Diagnostic information readable Yes • Diagnostic information readable Yes; Parameterizable, channels 0 to 7 Diagnostic information readable Yes • Diagnostic information readable Yes • Diagnostic information readable Yes • Monitoring the supply voltage Yes • Monitoring of encoder power supply Yes; channel by channel • Wire-break Yes; channel by channel • Short-circuit Yes; channel by channel • Group error Yes	Encoder		
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• Diagnostic alarmYes; channel by channel• Hardware interruptYes; Parameterizable, channels 0 to 7Diagnostic messagesYes• Diagnostic information readableYes• Monitoring the supply voltageYes- parameterizableYes• Monitoring of encoder power supplyYes; channel by channel• Wire-breakYes; channel by channel• Short-circuitYes; channel by channel• Group errorYes		Yes	
• Hardware interruptYes; Parameterizable, channels 0 to 7Diagnostic messagesYes• Diagnostic information readableYes• Monitoring the supply voltageYes- parameterizableYes• Monitoring of encoder power supplyYes; channel by channel• Wire-breakYes; channel by channel• Short-circuitYes; channel by channel• Group errorYes	Alarms		
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• Wire-break Yes; channel by channel • Short-circuit Yes; channel by channel • Group error Yes	— parameterizable	Yes	
 Short-circuit Group error Yes 	 Monitoring of encoder power supply 	Yes; channel by channel	
• Group error Yes	• Wire-break	Yes; channel by channel	
	Short-circuit	Yes; channel by channel	
· · · · · · · · · · · · · · · · · · ·	• Group error	Yes	
	Diagnostics indication 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 	Yes
the electronics	
Permissible potential difference	
between different circuits	75 V DC/60 V AC (base isolation)
la slation	
Isolation	
Isolation tested with	707 V DC (type test)
Dimensions	
Dimensions Width	15 mm
Width	15 mm
Width Height Depth	15 mm 73 mm
Width Height Depth Weights	15 mm 73 mm 58 mm
Width Height Depth	15 mm 73 mm