

SIMATIC ET 200SP, Digital input module, DI 4x 120..230V AC Standard, type 3 (IEC 61131), Packing unit: 1 piece, fits to BU-type B1, Colour Code CC41, module diagnostics



General information	
Product type designation	DI 4x120 ... 230 V AC ST
HW functional status	From FS02
Firmware version	V0.0
<ul style="list-style-type: none"> <li>FW update possible</li> </ul>	No
usable BaseUnits	BU type B1
Color code for module-specific color identification plate	CC41
Product function	
<ul style="list-style-type: none"> <li>I&amp;M data</li> </ul>	Yes; I&M0 to I&M3
Engineering with	
<ul style="list-style-type: none"> <li>STEP 7 TIA Portal configurable/integrated as of version</li> </ul>	V14
<ul style="list-style-type: none"> <li>STEP 7 configurable/integrated as of version</li> </ul>	V5.5 SP3
<ul style="list-style-type: none"> <li>PROFIBUS as of GSD version/GSD revision</li> </ul>	One GSD file each, Revision 3 and 5 and higher
<ul style="list-style-type: none"> <li>PROFINET as of GSD version/GSD revision</li> </ul>	GSDML V2.3
Operating mode	
<ul style="list-style-type: none"> <li>DI</li> </ul>	Yes
<ul style="list-style-type: none"> <li>Counter</li> </ul>	No

• Oversampling	No
• MSI	No
<b>Supply voltage</b>	
Rated value (AC)	230 V
Reverse polarity protection	No
<b>Input current</b>	
Current consumption (rated value)	10 mA
<b>Encoder supply</b>	
Number of outputs	4
Short-circuit protection	No; when using BU type B1, a fuse with 10 A tripping current must be provided
<b>Output current</b>	
• up to 60 °C, max.	10 A
<b>Power loss</b>	
Power loss, typ.	1 W; Active power, load voltage 230 V, all inputs connected with 230 V, 50 Hz
<b>Address area</b>	
Address space per module	
• Inputs	1 byte; + 1 byte for QI information
<b>Hardware configuration</b>	
Automatic encoding	Yes
• Mechanical coding element	Yes
<b>Selection of BaseUnit for connection variants</b>	
• 1-wire connection	BU type B1
• 2-wire connection	BU type B1
• 3-wire connection	BU type B1
• 4-wire connection	BU type B1 + potential distributor module
<b>Digital inputs</b>	
Number of digital inputs	4
Input characteristic curve in accordance with IEC 61131, type 3	Yes
<b>Input voltage</b>	
• Rated value (AC)	230 V
• for signal "0"	0V AC to 40V AC
• for signal "1"	74 V AC to 264 V AC
<b>Input current</b>	
• for signal "1", typ.	10.8 mA
<b>Input delay (for rated value of input voltage)</b>	
for standard inputs	
— parameterizable	No

— at "0" to "1", min.	1.5 ms
— at "0" to "1", max.	4 ms
— at "1" to "0", min.	10 ms
— at "1" to "0", max.	10 ms
<b>Cable length</b>	
• shielded, max.	1 000 m
• unshielded, max.	600 m
<b>Encoder</b>	
<b>Connectable encoders</b>	
• 2-wire sensor	Yes
<b>Interrupts/diagnostics/status information</b>	
<b>Alarms</b>	
• Diagnostic alarm	No
• Hardware interrupt	No
<b>Diagnostic messages</b>	
• Monitoring the supply voltage	No
• Wire-break	No
• Short-circuit	No
<b>Diagnostics indication LED</b>	
• Monitoring of the supply voltage (PWR-LED)	Yes; green PWR LED
• Channel status display	Yes; green LED
• for channel diagnostics	No
• for module diagnostics	Yes; green/red DIAG LED
<b>Potential separation</b>	
<b>Potential separation channels</b>	
• between the channels	No
• between the channels and backplane bus	Yes
• between the channels and the power supply of the electronics	No
<b>Isolation</b>	
Isolation tested with	2 545 V DC/2 s (routine test)
<b>Standards, approvals, certificates</b>	
Suitable for safety functions	No
<b>Ambient conditions</b>	
<b>Ambient temperature during operation</b>	
• 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.

2 000 m; On request: Installation altitudes greater than 2 000 m

#### Dimensions

Width	20 mm
Height	73 mm
Depth	58 mm

#### Weights

Weight, approx. 36 g

**last modified:** 04/10/2020