



SIMATIC ET 200SP, digital input module, DI 8x 24 V AC..48 V UC Basic, packing quantity: 1 unit, suitable for BU type U0, color code CC20, module diagnostics

General information	
Product type designation	DI 8x24VAC/48VUC BA
HW functional status	From FS02
Firmware version	V0.0
• FW update possible	No
usable BaseUnits	BU type U0
Product function	
• Isochronous mode	No
Engineering with	
• STEP 7 TIA Portal configurable/integrated from version	V15
• STEP 7 configurable/integrated from version	V5.6
• PROFIBUS from GSD version/GSD revision	One GSD file each, Revision 3 and 5 and higher
• PROFINET from GSD version/GSD revision	GSDML V2.3
Operating mode	
• DI	Yes
• Counter	No
• Oversampling	No
• MSI	No
Supply voltage	
Rated value (DC)	48 V
permissible range, lower limit (DC)	40.8 V
permissible range, upper limit (DC)	57.6 V
Rated value (AC)	48 V; 24 V/48 V; 50 Hz/60 Hz
permissible range, lower limit (AC)	40.8 V
permissible range, upper limit (AC)	52.8 V
Reverse polarity protection	Yes
Input current	
Current consumption, max.	70 mA; without sensor supply
Encoder supply	
Number of outputs	8
Short-circuit protection	Yes; Per module, 5x 20 mm fuse, 2 A/250 V, quick-response, replaceable
Output current	
• up to 60 °C, max.	1 A
24 V encoder supply	
• 24 V	No
Power loss	

Power loss, typ.	1.5 W
<b>Address area</b>	
Address space per module	
• Address space per module, max.	1 byte
<b>Hardware configuration</b>	
Automatic encoding	
• Mechanical coding element	Yes
Selection of BaseUnit for connection variants	
• 1-wire connection	BU type U0
• 2-wire connection	BU type U0
• 3-wire connection	BU type U0 + Potential distributor module
• 4-wire connection	BU type U0 + Potential distributor module
<b>Digital inputs</b>	
Number of digital inputs	8
Source/sink input	P-reading
Input characteristic curve in accordance with IEC 61131, type 1	Yes
Input characteristic curve in accordance with IEC 61131, type 2	No
Input characteristic curve in accordance with IEC 61131, type 3	No
Pulse extension	No
Input voltage	
• for signal "0"	AC/DC < 10 V
• for signal "1"	AC > 14 V, DC > 34 V
Input current	
• for signal "1", typ.	3.5 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— parameterizable	No
— at "0" to "1", max.	15 ms
— at "1" to "0", max.	20 ms
Cable length	
• shielded, max.	1 000 m
• unshielded, max.	600 m
<b>Encoder</b>	
Connectable encoders	
• 2-wire sensor	Yes
<b>Interrupts/diagnostics/status information</b>	
Diagnostics function	Yes
Alarms	
• Diagnostic alarm	Yes
Diagnoses	
• Diagnostic information readable	Yes
• Monitoring the supply voltage	Yes
• Monitoring of encoder power supply	Yes
• 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	No
• for module diagnostics	Yes; green/red DIAG LED
<b>Potential separation</b>	
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

Isolation	
Isolation tested with	1 200 V DC between supply voltage and backplane bus
Standards, approvals, certificates	
Suitable for safety functions	No
Ambient conditions	
Ambient temperature during operation	
<ul style="list-style-type: none"> <li>• horizontal installation, min.</li> <li>• horizontal installation, max.</li> <li>• vertical installation, min.</li> <li>• vertical installation, max.</li> </ul>	<ul style="list-style-type: none"> <li>-30 °C</li> <li>60 °C</li> <li>-30 °C</li> <li>50 °C</li> </ul>
Altitude during operation relating to sea level	
<ul style="list-style-type: none"> <li>• Installation altitude above sea level, max.</li> </ul>	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.	40 g
<b>last modified:</b>	2/1/2021 