

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
<ul style="list-style-type: none"> FW update possible 	No
usable BaseUnits	BU type U0
Product function	
<ul style="list-style-type: none"> Isochronous mode 	No
Engineering with	
<ul style="list-style-type: none"> STEP 7 TIA Portal configurable/integrated as of version 	V15
<ul style="list-style-type: none"> STEP 7 configurable/integrated as of version 	V5.6
<ul style="list-style-type: none"> PROFIBUS as of GSD version/GSD revision 	One GSD file each, Revision 3 and 5 and higher
<ul style="list-style-type: none"> PROFINET as of GSD version/GSD revision 	GSDML V2.3
Operating mode	
<ul style="list-style-type: none"> DI 	Yes
<ul style="list-style-type: none"> Counter 	No
<ul style="list-style-type: none"> Oversampling 	No
<ul style="list-style-type: none"> 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	
<ul style="list-style-type: none"> up to 60 °C, max. 	1 A
24 V encoder supply	
<ul style="list-style-type: none"> 24 V 	No

Power loss	
Power loss, typ.	1.5 W

Address area	
Address space per module	
<ul style="list-style-type: none"> Address space per module, max. 	1 byte

Hardware configuration	
Automatic encoding	
<ul style="list-style-type: none"> Mechanical coding element 	Yes
Selection of BaseUnit for connection variants	
<ul style="list-style-type: none"> 1-wire connection 	BU type U0
<ul style="list-style-type: none"> 2-wire connection 	BU type U0
<ul style="list-style-type: none"> 3-wire connection 	BU type U0 + Potential isolation module
<ul style="list-style-type: none"> 4-wire connection 	BU type U0 + Potential isolation module

Digital inputs	
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
Encoder	
Connectable encoders	
• 2-wire sensor	Yes
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Alarms	
• Diagnostic alarm	Yes
Diagnostic messages	
• 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
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
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

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|---------------------------------|--------|
| • 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

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|---|--|
| • Installation altitude above sea level, max. | 2 000 m; On request: Installation altitudes greater than 2 000 m |
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Dimensions

Width	20 mm
Height	73 mm
Depth	58 mm

Weights

Weight, approx.	40 g
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last modified: 04/10/2020