

SIMATIC DP, fail-safe electronics module for ET200iSP, 8F-DI NAMUR Ex I, up to Category 4 (EN954-1)/ SIL3 (IEC61508)/PLE (ISO13849),



Input current	
Current consumption, typ.	145 mA
from supply voltage L+, max.	150 mA; int. Powerbus
Encoder supply	
Number of outputs	8
Type of output voltage	8 V DC
Power loss	
Power loss, typ.	1.4 W
Address area	
Address space per module	
• Inputs	6 byte
• Outputs	4 byte
Digital inputs	
Number of digital inputs	8
Number of NAMUR inputs	8
Input current	
• for signal "1", typ.	9.5 mA

<b>Input delay (for rated value of input voltage)</b>	
for standard inputs	
— at "0" to "1", min.	0.7 ms
— at "0" to "1", max.	16 ms; Parameterizable
— at "1" to "0", min.	0.7 ms
— at "1" to "0", max.	16 ms; Parameterizable
<b>Cable length</b>	
• shielded, max.	500 m
• unshielded, max.	200 m
<b>Encoder</b>	
Number of connectable encoders, max.	8
<b>Connectable encoders</b>	
• NAMUR encoder	Yes
<b>NAMUR encoder</b>	
• Input current for signal "0", max.	1.2 mA
• Input current for signal "1", min.	2.1 mA
<b>Interrupts/diagnostics/status information</b>	
Status indicator	Yes
Diagnostics function	Yes
<b>Alarms</b>	
• Diagnostic alarm	Yes; Parameterizable
• Hardware interrupt	No
<b>Diagnostic messages</b>	
• Diagnostic information readable	Yes
• Wire-break	Yes; NAMUR encoders or single contact with 10 kOhm parallel resistor
• Short-circuit	Yes; R load < 150 ohms with NAMUR sensor/sensor and NAMUR changeover contact/sensor to DIN 19234
<b>Diagnostics indication LED</b>	
• Group error SF (red)	Yes
<b>Potential separation</b>	
<b>Potential separation digital inputs</b>	
• between the channels	No
• between the channels and backplane bus	Yes
<b>Permissible potential difference</b>	
between different circuits	60 V DC/30 V AC
<b>Isolation</b>	
Isolation tested with	350 V AC/1 min between the shield and backplane bus connection 350 V AC/1 min between the shield and I/O 2830 V AC/1 min between backplane bus connection and I/O

## Standards, approvals, certificates

CE mark	Yes
<b>Highest safety class achievable in safety mode</b>	
• Performance level according to ISO 13849-1	PLe
• SIL acc. to IEC 61508	SIL 3
<b>Use in hazardous areas</b>	
• Type of protection acc. to EN 50020 (CENELEC)	II 2 G (1) GD Ex ib[ia Ga][ia IIIC Da] IIC T4 GB and I M2 Ex ib[ia Ma] I Mb
• Type of protection acc. to KEMA	10 ATEX 0056

## Dimensions

Width	30 mm
Height	129 mm
Depth	136.5 mm

## Weights

Weight, approx.	288 g
<b>last modified:</b>	11/21/2019