



SIMATIC DP, fail-safe electronics module for ET200iSP, 8F-DI NAMUR Ex I, up to Category 4 (EN954-1)/ SIL3 (IEC61508)/PLE (ISO13849), Ex ib (ia Ga) IIC T4 Gb, Ex ib [ia IIIC Da] IIC T4 Gb, Ex ib [ia] I Mb

General information	
Product type designation	8F-DI ExNAMUR
Input current	
Current consumption, typ.	145 mA
from supply voltage L+, max.	150 mA; int. Powerbus
Encoder supply	
Number of outputs	8
Output voltage (DC)	8 V
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
Input current	
• for signal "0", max. (permissible quiescent current)	1.2 mA
• for signal "1", min.	2.1 mA
• for signal "1", typ.	9.5 mA
Input delay (for rated value of input voltage)	
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
Cable length	
• shielded, max.	500 m
• unshielded, max.	200 m
Encoder	
Number of connectable encoders, max.	8
Connectable encoders	
• NAMUR encoder	Yes
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Alarms	
• Diagnostic alarm	Yes; Parameterizable
• Hardware interrupt	No
Diagnoses	
• Diagnostic information readable	Yes

<ul style="list-style-type: none"> <li>• Wire-break</li> <li>• Short-circuit</li> </ul>	<p>Yes; NAMUR encoders or single contact with 10 kOhm parallel resistor</p> <p>Yes; R load &lt; 150 ohms with NAMUR sensor/sensor and NAMUR changeover contact/sensor to DIN 19234</p>
<b>Diagnostics indication LED</b>	
<ul style="list-style-type: none"> <li>• Group error SF (red)</li> </ul>	Yes
<b>Potential separation</b>	
Potential separation digital inputs	
<ul style="list-style-type: none"> <li>• between the channels</li> </ul>	No
<ul style="list-style-type: none"> <li>• between the channels and backplane bus</li> </ul>	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
<b>Standards, approvals, certificates</b>	
CE mark	Yes
Highest safety class achievable in safety mode	
<ul style="list-style-type: none"> <li>• Performance level according to ISO 13849-1</li> </ul>	PLe
<ul style="list-style-type: none"> <li>• SIL acc. to IEC 61508</li> </ul>	SIL 3
Use in hazardous areas	
<ul style="list-style-type: none"> <li>• ATEX marking</li> <li>• ATEX certificate</li> </ul>	II 2 G (1) GD Ex ib[ia Ga][ia IIIC Da] IIC T4 GB and I M2 Ex ib[ia Ma] I Mb 10 ATEX 0056
<b>Dimensions</b>	
Width	30 mm
Height	129 mm
Depth	136.5 mm
<b>Weights</b>	
Weight, approx.	288 g
<b>last modified:</b>	8/30/2023 