

SIMATIC ET 200AL, DI 8X24VDC, 4XM12, DEGREE OF PROTECTION IP67



General information	
HW functional status	E01
Firmware version	V1.0.x
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>	STEP 7 V13 SP1 or higher
<ul style="list-style-type: none"> <li>STEP 7 configurable/integrated as of version</li> </ul>	V5.5 SP4 Hotfix 7 or higher
<ul style="list-style-type: none"> <li>PROFIBUS as of GSD version/GSD revision</li> </ul>	GSD as of Revision 5
<ul style="list-style-type: none"> <li>PROFINET as of GSD version/GSD revision</li> </ul>	GSDML V2.3.1
Supply voltage	
Load voltage 1L+	
<ul style="list-style-type: none"> <li>Rated value (DC)</li> </ul>	24 V
<ul style="list-style-type: none"> <li>permissible range, lower limit (DC)</li> </ul>	20.4 V
<ul style="list-style-type: none"> <li>permissible range, upper limit (DC)</li> </ul>	28.8 V
<ul style="list-style-type: none"> <li>Reverse polarity protection</li> </ul>	Yes; Against destruction; encoder power supply outputs applied with reversed polarity

Input current	
Current consumption (rated value)	25 mA; without load
from load voltage 1L+ (unswitched voltage)	4 A; Maximum value
from load voltage 2L+, max.	4 A; Maximum value
Encoder supply	
Number of outputs	4
24 V encoder supply	
<ul style="list-style-type: none"> <li>• Short-circuit protection</li> </ul>	Yes; per module, electronic
<ul style="list-style-type: none"> <li>• Output current, max.</li> </ul>	0.7 A; Total current of all encoders
Power loss	
Power loss, typ.	1.9 W
Digital inputs	
Number of digital inputs	8
Input characteristic curve in accordance with IEC 61131, type 3	Yes
Number of simultaneously controllable inputs	
all mounting positions	
— up to 55 °C, max.	8
Input voltage	
<ul style="list-style-type: none"> <li>• Type of input voltage</li> </ul>	DC
<ul style="list-style-type: none"> <li>• Rated value (DC)</li> </ul>	24 V
<ul style="list-style-type: none"> <li>• for signal "0"</li> </ul>	-30 to +5V
<ul style="list-style-type: none"> <li>• for signal "1"</li> </ul>	+11 to +30V
Input current	
<ul style="list-style-type: none"> <li>• for signal "1", typ.</li> </ul>	3.2 mA
Input delay (for rated value of input voltage)	
for standard inputs	
— at "0" to "1", min.	1.2 ms
— at "0" to "1", max.	4.8 ms
— at "1" to "0", min.	1.2 ms
— at "1" to "0", max.	4.8 ms
Cable length	
<ul style="list-style-type: none"> <li>• unshielded, max.</li> </ul>	30 m
Encoder	
Connectable encoders	
<ul style="list-style-type: none"> <li>• 2-wire sensor</li> </ul>	Yes
<ul style="list-style-type: none"> <li>— permissible quiescent current (2-wire sensor), max.</li> </ul>	1.5 mA
Interrupts/diagnostics/status information	
Alarms	

• Diagnostic alarm	Yes; Parameterizable
<b>Diagnostic messages</b>	
• Short-circuit	Yes; Sensor supply to M; module by module
<b>Diagnostics indication LED</b>	
• Channel status display	Yes; Green LED
• for module diagnostics	Yes; Green/red LED

<b>Potential separation</b>	
between the load voltages	Yes
<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	707 V DC (type test)

<b>Degree and class of protection</b>	
Degree of protection acc. to EN 60529	
• IP65	Yes
• IP67	Yes

<b>Ambient conditions</b>	
Ambient temperature during operation	
• min.	-25 °C
• max.	55 °C

<b>Connection method</b>	
Design of electrical connection for the inputs and outputs	M12, 5-pole
Power supply	M8, 4-pole
<b>ET-Connection</b>	
• ET-Connection	M8, 4-pin, shielded

<b>Dimensions</b>	
Width	30 mm
Height	159 mm
Depth	40 mm

<b>Weights</b>	
Weight, approx.	145 g
<b>last modified:</b>	09/21/2017