

SIMATIC ET 200AL, DI 8x24VDC, 8xM8, DEGREE OF PROTECTION IP67



General information	
Product type designation	DI 8x24VDC, 8xM8
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>	From V5.5 SP4 Hotfix 3
<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

- Reverse polarity protection

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	8
<b>24 V encoder supply</b>	
• Short-circuit protection	Yes; per module, electronic
• Output current, max.	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

<b>Number of simultaneously controllable inputs</b>	
all mounting positions	
— up to 55 °C, max.	8

<b>Input voltage</b>	
• Type of input voltage	DC
• Rated value (DC)	24 V
• for signal "0"	-30 to +5V
• for signal "1"	+11 to +30V

<b>Input current</b>	
• for signal "1", typ.	3.2 mA

<b>Input delay (for rated value of input voltage)</b>	
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

<b>Cable length</b>	
• unshielded, max.	30 m

### Encoder

<b>Connectable encoders</b>	
• 2-wire sensor	Yes
— permissible quiescent current (2-wire sensor), max.	1.5 mA

Interrupts/diagnostics/status information	
<b>Alarms</b>	
• 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
Potential separation	
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
Isolation	
Isolation tested with	707 V DC (type test)
Degree and class of protection	
Degree of protection acc. to EN 60529	
• IP65	Yes
• IP67	Yes
Ambient conditions	
Ambient temperature during operation	
• min.	-25 °C
• max.	55 °C
Connection method	
Inputs/outputs	M8, 3-pole
Power supply	M8, 4-pole
<b>ET-Connection</b>	
• ET-Connection	M8, 4-pin, shielded
Dimensions	
Width	30 mm
Height	159 mm
Depth	40 mm
Weights	
Weight, approx.	145 g
<b>last modified:</b>	10/25/2016