



SIMATIC ET 200AL, DI 8X24VDC, 8XM8, DEGREE OF PROTECTION IP67

Product type designation	
General information	
HW functional status	E01
Firmware version	V1.0.0
Product function	
• I&M data	Yes; I&M0 to I&M3
Engineering with	
• STEP 7 TIA Portal can be configured/integrated as of version	STEP 7 V13 SP1 or higher
• PROFIBUS as of GSD version/GSD revision	GSD as of Revision 5
• PROFINET as of GSD version/GSD revision	GSDML V2.3.1
Supply voltage	
Load voltage 1L+	
• Rated value (DC)	24 V
• permissible range, lower limit (DC)	20.4 V
• permissible range, upper limit (DC)	28.8 V
• Reverse polarity protection	Yes; Against destruction; encoder power supply outputs applied with reversed polarity
Load voltage 2L+	
• Rated value (DC)	24 V
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
24 V encoder supply	
<ul style="list-style-type: none"> • short-circuit protection • Output current, max. 	Yes; per module, electronic 0.7 A
Power losses	
Power loss, typ.	2.1 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"> • Rated value (DC) • for signal "0" • for signal "1" 	24 V -30 to +5V +11 to +30V
Input current	
<ul style="list-style-type: none"> • for signal "1", typ. 	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"> • Unshielded, max. 	30 m
Encoder	
Connectable encoders	
<ul style="list-style-type: none"> • 2-wire sensor — Permissible quiescent current (2-wire sensor), max. 	Yes 1.5 mA
Interrupts/diagnostics/status information	
Alarms	
<ul style="list-style-type: none"> • Diagnostic alarm 	Yes; Parameterizable
Diagnostic messages	
<ul style="list-style-type: none"> • Short circuit 	Yes; Sensor supply to M; module by module
Diagnostics indication LED	
<ul style="list-style-type: none"> • Channel status display • for module diagnostics 	Yes; Green LED Yes; Green/red LED

Galvanic isolation	
between the load voltages	Yes
Electrical isolation channels	
• between the channels	No
• between the channels and the backplane bus	Yes
• between the channels and the supply voltage of the electronics	No
Permissible potential difference	
between different circuits	60 V DC/50 V AC (basic insulation)
Isolation	
Isolation checked with	707 V DC (type test)
Degree and class of protection	
Degree of protection to EN 60529	
• IP65	Yes
• IP67	Yes
Ambient conditions	
Ambient temperature in operation	
• Min.	-25 °C
• max.	55 °C
Connection method	
Inputs/outputs	M8, 3-pole
Power supply	M8, 4-pole
ET-Connection	
• ET-Connection	M8, 4-pin, shielded
Dimensions	
Width	30 mm
Height	159 mm
Depth	34 mm; Without connector
Weights	
Weight, approx.	145 g
last modified:	12.03.2015