



SIMATIC ET 200AL, CM 4X IO-LINK, 4XM12, 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
• STEP 7 can be configured/integrated as of version	From V5.5 SP4 Hotfix 3
• 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
• permissible range, lower limit (DC)	20.4 V
• permissible range, upper limit (DC)	28.8 V

- Reverse polarity protection

Yes; against destruction; load increasing

Input current

Current consumption (rated value)	40 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	
• short-circuit protection	Yes; per module, electronic
• Output current, max.	0.8 A; Total current of all ports

Power losses

Power loss, typ.	2.6 W
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IO-Link

Number of ports	4
• of which simultaneously controllable	4
IO-Link protocol 1.0	Yes
IO-Link protocol 1.1	Yes
Transmission rate	4.8 kBaud (COM1); 38.4 kBaud (COM2), 230 kBaud (COM3)
Cycle time, min.	2 ms
Size of process data, input per port	32 byte
Size of process data, input per module	32 byte
Size of process data, output per port	32 byte
Size of process data, output per module	32 byte
Memory size for device parameter	2 kbyte; for each port
Cable length unshielded, max.	20 m

Operating modes

• IO-Link	Yes
• DI	Yes
• DQ	Yes; max. 100 mA

Connection of IO-Link devices

• Port type A	Yes; via 3-core cable
• Port type B	Yes; Additional device supply: 1.6 A total current of all ports

Interrupts/diagnostics/status information

Alarms

• Diagnostic alarm	Yes; Parameterizable
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Diagnostic messages

• Diagnostic functions	Yes
• Diagnostic information readable	Yes
• Monitoring the supply voltage	Yes
• Short circuit	Yes

Diagnostics indication LED	
• Channel status display	Yes; Green LED
• for module diagnostics	Yes; Green/red LED
Potential separation	
between the load voltages	Yes
Potential separation 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	M12, 5-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.	168 g
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