

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

ET 200X

6ES7141-1BF12-0XB0

DIGITAL I/O ELECTRONIC MODULE

Used with the applicable SIMATIC ET 200X configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official manufacturer pages follow this cover.

Source: Siemens official manufacturer documentation

Spare part SIMATIC DP, Basic module BM 141 ET 200X, 8 DE
24 V DC, 5-pole M12, double assigned, IP66/67 int. PROFIBUS DP
interface 12MBit/s, int. SV connections



Supply voltage	
Load voltage 1L+	
• Rated value (DC)	24 V
• Short-circuit protection	Yes; Electronic
• Reverse polarity protection	Yes
Load voltage 2L+	
• Rated value (DC)	24 V
• Reverse polarity protection	No
Input current	
from supply voltage 1L+, max.	180 mA
Encoder supply	
Number of outputs	4
Short-circuit protection	Yes; Electronic
Output current	
• up to 40 °C, max.	0.9 A
• up to 55 °C, max.	0.7 A
Power loss	

Power loss, typ.	3.5 W
Hardware configuration	
Expansion modules	
• Number of expansion modules, max.	7
— of which motor starters/frequency converters, max.	6
— of which pneumatic interfaces, max.	6
Digital inputs	
Number of digital inputs	8
Input characteristic curve in accordance with IEC 61131, type 1	Yes
Number of simultaneously controllable inputs	
all mounting positions	
— up to 55 °C, max.	8
Input voltage	
• Rated value (DC)	24 V
• for signal "0"	-3 to +5V
• for signal "1"	13 to 30V
Input current	
• for signal "1", typ.	7 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	
• unshielded, max.	30 m
Encoder	
Connectable encoders	
• 2-wire sensor	Yes
— permissible quiescent current (2-wire sensor), max.	1.5 mA
Interfaces	
PROFIBUS DP	
• SYNC capability	Yes
• FREEZE capability	Yes
1. Interface	
Protocols	
• PROFIBUS DP slave	Yes
PROFIBUS DP slave	

• Transmission rate, max.	12 Mbit/s
Services	
— Direct data exchange (slave-to-slave communication)	Yes
Protocols	
PROFIBUS DP	Yes
Interrupts/diagnostics/status information	
Diagnostic functions	Parameterizable
Alarms	
• Diagnostic alarm	Yes
Diagnostic messages	
• Diagnostic information readable	Yes
Diagnostics indication LED	
• Bus fault BF (red)	Yes
• Group error SF (red)	Yes
• Status indicator digital input (green)	Yes
• Monitoring 24 V voltage supply ON (green)	Yes
• Load voltage monitoring 24 V DC (green)	Yes
Potential separation	
between load voltage and all other switching components	Yes
between PROFIBUS DP and all other circuit components	Yes
Potential separation digital inputs	
• between the channels	No
Potential separation digital outputs	
• between the channels	No
Dimensions	
Width	134 mm
Height	110 mm
Depth	55 mm
Weights	
Weight, approx.	500 g
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