

6ES7131-6BF00-0BA0

ET 200SP, DI 8x24VDC ST

Technical data



spare part SIMATIC ET 200SP, digital input module, DI 8x 24 V DC Standard, suitable for BU type A0, Color code CC01, Module diagnostics

General information

Product type designation	DI 8x24 VDC ST
Firmware version	V1.1
FW update possible	Yes
usable BaseUnits	BU type A0
Color code for module-specific color identification plate	CC01

Product function

I&M data	Yes; I&M0 to I&M3
Isochronous mode	No

Engineering with

STEP 7 TIA Portal configurable/integrated as of version	V11 SP2 / V13
STEP 7 configurable/integrated as of version	V5.5 SP3 / -
PCS 7 configurable/integrated as of version	V8.1 SP1
PROFIBUS as of GSD version/GSD revision	GSD Revision 5
PROFINET as of GSD version/GSD revision	GSDML V2.3

Operating mode

DI	Yes
Counter	No
Oversampling	No
MSI	No

Supply voltage

Rated value (DC)	24 V
permissible range, lower limit (DC)	19.2 V
permissible range, upper limit (DC)	28.8 V
Reverse polarity protection	Yes

Input current

Current consumption, max.	50 mA
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Encoder supply

Number of outputs	8
Output voltage encoder supply, min.	19.2 V
Short-circuit protection	Yes; per module

24 V encoder supply

24 V	Yes
Short-circuit protection	Yes
Output current, max.	700 mA; Total current of all encoders

Power loss

Power loss, typ.	1 W
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Address area

Address space per module

Address space per module, max.	1 byte; + 1 byte for QI information
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Hardware configuration

Selection of BaseUnit for connection variants

1-wire connection	BU type A0
2-wire connection	BU type A0
3-wire connection	BU type A0 with AUX terminals
4-wire connection	BU type A0 + external terminals

Digital inputs

Number of digital inputs	8
Source/sink input	P-reading
Input characteristic curve in accordance with IEC 61131, type 1	Yes
Input characteristic curve in accordance with IEC 61131, type 2	No
Input characteristic curve in accordance with IEC 61131, type 3	Yes
Pulse extension	No

Input voltage

Rated value (DC)	24 V
for signal "0"	-30 to +5 V
for signal "1"	+11 to +30V

Input current

for signal "1", typ.	2.5 mA
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Input delay (for rated value of input voltage)

for standard inputs	
— parameterizable	Yes; 0.05 / 0.1 / 0.4 / 0.8 / 1.6 / 3.2 / 12.8 / 20 ms (in each case + delay of 30 to 500 µs, depending on line length)

for interrupt inputs

— parameterizable	No
for technological functions	
— parameterizable	No
Cable length	
• shielded, max.	1 000 m
• unshielded, max.	600 m
Encoder	
Connectable encoders	
• 2-wire sensor	Yes
— permissible quiescent current (2-wire sensor), max.	1.5 mA
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Alarms	
• Diagnostic alarm	Yes
Diagnostic messages	
• Diagnostic information readable	Yes
• Monitoring the supply voltage	Yes
— parameterizable	Yes
• Monitoring of encoder power supply	Yes; Module-wise
• Wire-break	Yes; Module-by-module, optional protective circuit for preventing wire-break diagnostics in the case of simple encoder contacts: 25 kOhm to 45 kOhm
• Short-circuit	Yes; Module-wise
Diagnostics indication LED	
• Monitoring of the supply voltage (PWR-LED)	Yes; green PWR LED
• Channel status display	Yes; green LED
• for channel diagnostics	No
• for module diagnostics	Yes; green/red DIAG LED
Potential separation	
Potential separation channels	
• 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)
Standards, approvals, certificates	
Suitable for safety functions	No
Dimensions	
Width	15 mm
Height	73 mm
Depth	58 mm
Weights	
Weight, approx.	28 g
last modified:	03/03/2020
Last changes: 03/03/2020	