

6ES7132-6BH00-0BA0

(EAN: 4025515080787 / UPC: 040892933062)

ET 200SP, DQ 16X24VDC/0,5A ST

Technical data



*** Spare part *** SIMATIC ET 200SP, digital output module, DQ 16x 24VDC/0.5A Standard, suitable for BU type A0, Color code CC00, module diagnostics

General information

Product type designation	DQ 16x24 VDC/0.5 A ST
Firmware version	V1.0
• FW update possible	Yes
usable BaseUnits	BU type A0
Color code for module-specific color identification plate	CC00

Product function

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

Engineering with

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

Operating mode

• DQ	Yes
• DQ with energy-saving function	No
• PWM	No
• Oversampling	No
• MSO	No

Redundancy

• Redundancy capability	Yes
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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

Reverse polarity protection	Yes
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Input current

Current consumption, max.	60 mA; without load
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Output voltage / header

Rated value (DC)	24 V
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Power loss

Power loss, typ.	1 W
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Address area

Address space per module	2 byte
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Address space per module

• Address space per module, max.	2 byte
Hardware configuration	
Automatic encoding	
• Mechanical coding element	Yes
Selection of BaseUnit for connection variants	
• 1-wire connection	BU type A0
• 2-wire connection	BU type A0 + Potential distributor module
• 3-wire connection	BU type A0 + Potential distributor module
• 4-wire connection	BU type A0 + Potential distributor module

Digital outputs

Type of digital output	Source output (PNP, current-sourcing)
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Number of digital outputs

Number of digital outputs	16
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Current-sinking

Current-sinking	No
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Current-sourcing	Yes
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Digital outputs, parameterizable	Yes
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Short-circuit protection	Yes
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• Response threshold, typ.	0.7 to 1.3 A
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Limitation of inductive shutdown voltage to	Typ. L+ (-50 V)
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Controlling a digital input	Yes
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Switching capacity of the outputs	
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• with resistive load, max.	0.5 A
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• on lamp load, max.	5 W
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Load resistance range	
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• lower limit	48 Ω
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• upper limit	12 kΩ
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Output current	
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• for signal "1" rated value	0.5 A
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• for signal "0" residual current, max.	0.1 mA
Output delay with resistive load	
• "0" to "1", typ.	50 µs
• "1" to "0", typ.	100 µs
Parallel switching of two outputs	
• for uprating	No
• for redundant control of a load	Yes
Switching frequency	
• with resistive load, max.	100 Hz
• with inductive load, max.	2 Hz
• on lamp load, max.	10 Hz
Total current of the outputs	
• Current per channel, max.	0.5 A
• Current per module, max.	8 A
Total current of the outputs (per module)	
horizontal installation	
— up to 30 °C, max.	8 A
— up to 40 °C, max.	8 A
— up to 50 °C, max.	6 A
— up to 60 °C, max.	4 A
vertical installation	
— up to 30 °C, max.	8 A
— up to 40 °C, max.	6 A
— up to 50 °C, max.	4 A
— up to 60 °C, max.	4 A
Cable length	
• shielded, max.	1 000 m
• unshielded, max.	600 m
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Substitute values connectable	Yes
Alarms	
• Diagnostic alarm	Yes
Diagnoses	
• Monitoring the supply voltage	Yes
• Wire-break	Yes; Module-wise
• Short-circuit to M	Yes; Module-wise
• Short-circuit to L+	Yes; Module-wise
• Group error	Yes
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
Suitable for safety-related tripping of standard modules	Yes
Highest safety class achievable in safety mode	
• Performance level according to ISO 13849-1	PL d
• SIL acc. to IEC 61508	SIL 2
Ambient conditions	
Ambient temperature during operation	
• horizontal installation, min.	0 °C
• horizontal installation, max.	60 °C
• vertical installation, min.	0 °C; in all other mounting positions
• vertical installation, max.	50 °C; in all other mounting positions
Altitude during operation relating to sea level	
• Ambient air temperature-barometric pressure-altitude	On request: Negative ambient temperature down to -30 °C (without condensation), installation altitudes between 2 000 m and 5 000 m
Dimensions	
Width	15 mm
Height	73 mm
Depth	58 mm
Weights	
Weight, approx.	28 g
last modified:	3/12/2021
Last changes:	10/01/2021