SIEMENS

Data sheet

6ES7132-6BF01-0BA0

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SIMATIC ET 200SP, Digital output module, DQ 8x 24V DC/0,5A Standard, Source output (PNP,P-switching) Packing unit: 1 piece, fits to BU-type A0, Colour Code CC02, substitute value output, module diagnostics for: short-circuit to L+ and ground, wire break, supply voltage

General information	
Product type designation	DQ 8x24VDC/0.5A ST, PU 1
Firmware version	V0.0
 FW update possible 	No
usable BaseUnits	BU type A0
Color code for module-specific color identification plate	CC02
Product function	
● I&M data	Yes; I&M0 to I&M3
Engineering with	
 STEP 7 TIA Portal configurable/integrated as of version 	V14
 STEP 7 configurable/integrated as of version 	V5.5 SP3 or higher
 PCS 7 configurable/integrated as of version 	V8.1 SP1
 PROFIBUS as of GSD version/GSD revision 	One GSD file each, Revision 3 and 5 and higher
 PROFINET as of 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
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.	35 mA; without load
Output voltage	
Rated value (DC)	24 V
Device loss	
Power loss Power loss, typ.	1 W
Address area	
Address space per module	
● Inputs	+ 1 byte for QI information
Outputs	1 byte
Hardware configuration	
Automatic encoding	Yes
 Mechanical coding element 	Yes
Submodules	
 Number of configurable submodules, max. 	4
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 + Potential isolation module
Digital outputs	
Type of digital output	Source output (PNP, current-sourcing)
Number of digital outputs	8
Current-sourcing	Yes
Short-circuit protection	Yes
 Response threshold, typ. 	1 A
Limitation of inductive shutdown voltage to	Typ. L+ (-50 V)
Controlling a digital input	Yes
Switching capacity of the outputs	
 with resistive load, max. 	0.5 A
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• on lamp load, max. 5 W Load resistance range 48 Ω • lower limit 48 Ω • upper limit 12 kΩ Output voltage	
• lower limit48 Ω• upper limit12 kΩOutput voltageL• for signal "1", min.L+ (-0.8 V)Output current0.5 A• for signal "1" permissible range, max.0.5 A• for signal "0" residual current, max.0.1 mAOutput delay with resistive load	
• upper limit12 kΩOutput voltageL+ (-0.8 V)• for signal "1", min.L+ (-0.8 V)Output current0.5 A• for signal "1" reted value0.5 A• for signal "0" residual current, max.0.1 mAOutput delay with resistive load0.1 mAOutput delay with resistive load50 µs; at rated load• "0" to "1", max.50 µs; at rated load• "0" to "1", max.100 µs; at rated load• "0" to "1", max.100 µs; at rated load• for upratingNo• for redundant control of a loadYesSwitching frequency100 Hz• with resistive load, max.100 Hz• with nductive load, max.10 Hz• on lamp load, max.0.5 A• Current of the outputs0.5 A• Current per channel, max.0.5 A• Current per module, max.4 A• Total current of the outputs (per module)4 A	
Output voltage • for signal "1", min. L+ (-0.8 V) Output current 0.5 A • for signal "1" rated value 0.5 A • for signal "0" residual current, max. 0.1 mA Output delay with resistive load 0.1 mA Output delay with resistive load 50 µs; at rated load • "0" to "1", max. 50 µs; at rated load • "0" to "1", max. 100 µs; at rated load • "1" to "0", max. 100 µs; at rated load Parallel switching of two outputs Ves • for redundant control of a load Yes Switching frequency 100 Hz • with inductive load, max. 100 Hz • on lamp load, max. 10 Hz • Output per channel, max. 0.5 A • Current per channel, max. 0.5 A • Current per module, max. 4 A • Current per module, max. 4 A	
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Current per module, max. 4 A Total current of the outputs (per module) horizontal installation	
Total current of the outputs (per module) horizontal installation	
horizontal installation	
— up to 30 °C, max. 4 A	
— up to 40 °C, max. 4 A	
— up to 50 °C, max. 4 A	
— up to 60 °C, max. 4 A	
vertical installation	
— up to 30 °C, max. 4 A; in all other mounting positions	
— up to 40 °C, max. 4 A; in all other mounting positions	
— up to 50 °C, max. 4 A; in all other mounting positions	
Cable length	
• shielded, max. 1 000 m	
• unshielded, max. 600 m	
Isochronous mode	
Isochronous operation (application synchronized up No	
to terminal)	
Interrupts/diagnostics/status information	
Diagnostics function Yes	

Substitute values connectable	Yes
Alarms	
Diagnostic alarm	Yes
Diagnostic messages	
 Monitoring the supply voltage 	Yes
• Wire-break	Yes; Module-wise
Short-circuit to M	Yes; Module-wise
 Short-circuit to L+ 	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)
	707 V DC (type test)
Isolation tested with	707 V DC (type test)
Isolation tested with Ambient conditions	707 V DC (type test) 0 °C
Isolation tested with Ambient conditions Ambient temperature during operation	
Isolation tested with Ambient conditions Ambient temperature during operation • horizontal installation, min.	0 °C
Isolation tested with Ambient conditions Ambient temperature during operation horizontal installation, min. horizontal installation, max.	0 °C 60 °C
Isolation tested with Ambient conditions Ambient temperature during operation horizontal installation, min. horizontal installation, max. vertical installation, min.	0 °C 60 °C 0 °C; in all other mounting positions
Isolation tested with Ambient conditions Ambient temperature during operation horizontal installation, min. horizontal installation, max. vertical installation, max.	0 °C 60 °C 0 °C; in all other mounting positions
Isolation tested with Ambient conditions Ambient temperature during operation horizontal installation, min. horizontal installation, max. vertical installation, min. vertical installation, max. Altitude during operation relating to sea level Ambient air temperature-barometric pressure- altitude Dimensions	0 °C 60 °C 0 °C; in all other mounting positions 50 °C; in all other mounting positions On request: Ambient temperatures lower than 0 °C (without condensation) and/or installation altitudes greater than 2 000 m
Isolation tested with Ambient conditions Ambient temperature during operation horizontal installation, min. horizontal installation, max. vertical installation, max. Attitude during operation relating to sea level Ambient air temperature-barometric pressure- altitude Dimensions Width	0 °C 60 °C 0 °C; in all other mounting positions 50 °C; in all other mounting positions On request: Ambient temperatures lower than 0 °C (without condensation) and/or installation altitudes greater than 2 000 m 15 mm
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