SIEMENS

Data sheet

6ES7132-6BH01-0BA0



SIMATIC ET 200SP, Digital output module, DQ 16x 24V DC/0,5A Standard, Source output (PNP,P-switching) Packing unit: 1 piece, fits to BU-type A0, Colour Code CC00, substitute value output, module diagnostics for: short-circuit to L+ and ground, wire break, supply voltage

Product type designation DQ 46x24VDC/0.5A ST HW functional status From FS03 Firmware version V0.0 • FW update possible No usable BaseUnits BU type A0 Color code for module-specific color identification plate CC00 Product function CC00 • I&M data Yes; I&M0 to I&M3 • IsoChronous mode No • STEP 7 TIA Portal configurable/integrated from version V5.5 SP3 • STEP 7 configurable/integrated from version V5.5 SP3 • PROFIBUS from GSD version/GSD revision One GSD file each, Revision 3 and 5 and higher • PROFIBUS from GSD version/GSD revision One GSD file each, Revision 3 and 5 and higher • DQ Yes • DQ with energy-saving function No • PWM No • Oversampling No • MSO No Supply voltage Z4 V Rated value (DC) 24 V permissible range, uoper limit (DC) 28.8 V reserver polarity protection Yes Input current Current consumption, max. Current consumption, max. 60 mA; without load Output voltage / hoader Z4 V Power loss, typ. 1 W Address space per module, max. 2	General information	
Firmware version V0.0 • FW update possible No usable BaseUnits BU type A0 Color code for module-specific color identification plate CC00 Product function CC00 Product function V14 • Is&M data Yes; I&M0 to I&M3 • Isochronous mode No Engineering with V14 • STEP 7 TiA Portal configurable/integrated from version V5.5 SP3 • PCS 7 configurable/integrated from version V5.5 SP3 • PROFINET from GSD version/GSD revision One GSD file each, Revision 3 and 5 and higher • PROFINET from GSD version/GSD revision GSDML V2.3 Operating mode Yes • DQ Yes • DQ (sersampling) No • MSO No Supprivoltage Current consumption, max.	Product type designation	DQ 16x24VDC/0.5A ST
• FW update possible No usable BaseUnits BU type A0 Color code for module-specific color identification plate CO0 Product function * • I&M data Yes; I&M0 to I&M3 • Isochronous mode No Engineering with * • STEP 7 TIA Fortal configurable/integrated from version V5.5 SP3 • PCS 7 configurable/integrated from version V5.1 SP1 • PROFINET from GSD version/GSD revision One GSD file each, Revision 3 and 5 and higher • PROFINET from GSD version/GSD revision Ges DML V2.3 Operating mode * • DQ Yes • PWM No • Octrase range, lower limit (DC) <td>HW functional status</td> <td>From FS03</td>	HW functional status	From FS03
usable BaseUnits BU type A0 Color code for module-specific color identification plate CC00 Product function CC00 • I&M data Yes; I&M0 to I&M3 • ISCP 7 TIA Portal configurable/integrated from version V14 • STEP 7 TIA Portal configurable/integrated from version V5.5 SP3 • CSC 7 configurable/integrated from version V5.1 SP1 • PROFIBUS from GSD version/GSD revision One GSD file each, Revision 3 and 5 and higher • DQ Yes • DQ with energy-saving function No • DQ with energy-saving function No • Oversampling No • MSO No Supply voltage Z4 V permissible range, lower limit (DC) 24 V permissible range, upper limit (DC) 28.8 V Reverse polarity protection Yes Input current Current consumption, max. Ourge fileses area Go mA; without load Output voltage / header Power loss, typ. Power loss, typ. 1 W Address space per module • Address space per module • Address	Firmware version	V0.0
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 V5.5 SP3 • PCS 7 configurable/integrated from version V5.5 SP3 • PCS 7 configurable/integrated from version V8.1 SP1 • PROFINET from GSD version/GSD revision GSD file each, Revision 3 and 5 and higher • PQO with energy-saving function No • DQ Yes • DQ Yes • DQ with energy-saving function No • NSO No • Oversampling No • MSO No Supply voltage Rated value (DC) permissible range, lower limit (DC) 28.8 V Perver nos Power loss, typ. Input current Current consumption, max. Current consumption, max. 60 mA; without load output voltage / header Rated value (DC) Power loss, typ. 1 W Address space per module • Address space per module <td< td=""><td>FW update possible</td><td>No</td></td<>	FW update possible	No
Product function I&M data Isochronous mode No estEP 7 TIA Portal configurable/integrated from version STEP 7 configurable/integrated from version V14 STEP 7 configurable/integrated from version V5.5 SP3 PCS 7 configurable/integrated from version V8.1 SP1 PROFIBUS from GSD version/GSD revision GDFINET from GSD version/GSD revision GDFINET from GSD version/GSD revision GDA PROFINET from GSD version/GSD revision GDA PROFINET from GSD version/GSD revision GDA PROFINET from GSD version/GSD revision SDML V2.3 Operating mode V0 Vers DQ with energy-saving function No Oversampling No No No Supply voltage	usable BaseUnits	BU type A0
• I&M data Yes; I&M0 to I&M3 • Isochronous mode No Engineering with • STEP 7 TIA Portal configurable/integrated from version • STEP 7 configurable/integrated from version V5.5 SP3 • PCS 7 configurable/integrated from version V8.1 SP1 • PROFIBUS from GSD version/GSD revision One GSD file each, Revision 3 and 5 and higher • PROFINET from GSD version/GSD revision GSDML V2.3 Operating mode • DQ • DQ Yes • PWM No • Orersampling No • MsO Yes Permissible range, upper limit (DC) 28.8 V Reverse polarity protection Yes Input current Current consu	Color code for module-specific color identification plate	CC00
• Isochronous mode No Engineering with • STEP 7 T1A Portal configurable/integrated from version V14 • STEP 7 configurable/integrated from version V5.5 SP3 • PCS 7 configurable/integrated from version V8.1 SP1 • PROFIBUS from GSD version/GSD revision One GSD file each, Revision 3 and 5 and higher • PROFINET from GSD version/GSD revision GBDML V2.3 Operating mode • • DQ Yes • DQ Yes • DQ with energy-saving function No • PWM No • Oversampling No • MSO No Supply voltage 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. Current consumption, max. 60 mA; without load output voltage / header 1 W Address space per module - • Address space per module -	Product function	
Engineering with STEP 7 TIA Portal configurable/integrated from version V14 • STEP 7 configurable/integrated from version V5.5 SP3 • PCS 7 configurable/integrated from version V8.1 SP1 • PROFIBUS from GSD version/GSD revision One GSD file each, Revision 3 and 5 and higher • PROFINET from GSD version/GSD revision GSDML V2.3 Operating mode • • DQ Yes • DQ Yes • DQ with energy-saving function No • PWM No • Oversampling No • MSO No Supply voltage	• I&M data	Yes; I&M0 to I&M3
• STEP 7 TIA Portal configurable/integrated from version V14 • STEP 7 configurable/integrated from version V5.5 SP3 • PCS 7 configurable/integrated from version V8.1 SP1 • PROFIBUS from GSD version/GSD revision One GSD file each, Revision 3 and 5 and higher • PROFINET from GSD version/GSD revision GSDML V2.3 Operating mode V04 • DQ Yes • DQ No • DQ No • Oversampling No • MSO No • MSO No Supply voltage Zet V Permissible range, lower limit (DC) 24 V permissible range, upper limit (DC) 28.8 V Reverse polarity protection Yes Input current Current consumption, max. Current consumption, max. 60 mA; without load output voltage / header Power loss Power loss 1 W Address space per module Address space per module, max. <	Isochronous mode	No
version V5.5 SP3 • PCS 7 configurable/integrated from version V8.1 SP1 • PROFIBUS from GSD version/GSD revision One GSD file each, Revision 3 and 5 and higher • 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 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. current consumption, max. 60 mA; without load output voltage / header Rated value (DC) 24 V Power loss Power loss, typ. 1 W Address space per module • Address space per module, max. 2 byte; + 2 bytes for Ql information	Engineering with	
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PROFINET from GSD version/GSD revision GSDML V2.3 Operating mode DQ Ves DQ with energy-saving function No PWM No Oversampling No Oversampling 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. 60 mA; without load output voltage / header Rated value (DC) 24 V Power loss type Address space per module	 PCS 7 configurable/integrated from version 	V8.1 SP1
Operating mode Yes • DQ Yes • DQ with energy-saving function No • PWM No • Oversampling No • MSO No Supply voltage 24 V Permissible range, lower limit (DC) 24 V permissible range, upper limit (DC) 28.8 V Reverse polarity protection Yes Input current Current consumption, max. Current consumption, max. 60 mA; without load output voltage / header 24 V Power loss Power loss typ. Power loss space per module 4 UW Address space per module, max. 2 byte; + 2 bytes for QI information Hardware configuration 2 byte; + 2 bytes for QI information	 PROFIBUS from GSD version/GSD revision 	One GSD file each, Revision 3 and 5 and higher
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Reverse polarity protection Yes Input current 60 mA; without load Output voltage / header 60 mA; without load Rated value (DC) 24 V Power loss 7 Power loss 1 W Address area 4ddress space per module • Address space per module, max. 2 byte; + 2 bytes for QI information Hardware configuration 1	permissible range, lower limit (DC)	19.2 V
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Current consumption, max. 60 mA; without load output voltage / header 7 Rated value (DC) 24 V Power loss 7 Power loss, typ. 1 W Address area 7 Address space per module 2 byte; + 2 bytes for QI information Hardware configuration 7	Reverse polarity protection	Yes
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Power loss, typ. 1 W Address area Address space per module • Address space per module, max. 2 byte; + 2 bytes for QI information Hardware configuration Image: Configuration	Rated value (DC)	24 ∨
Address area Address space per module • Address space per module, max. 2 byte; + 2 bytes for QI information Hardware configuration	Power loss	
Address space per module 2 byte; + 2 bytes for QI information Hardware configuration 4 byte; + 2 bytes for QI information	Power loss, typ.	1 W
Address space per module, max. 2 byte; + 2 bytes for QI information Hardware configuration	Address area	
Hardware configuration	Address space per module	
	Address space per module, max.	2 byte; + 2 bytes for QI information
	Hardware configuration	
Automatic encoding	Automatic encoding	Yes

 Mechanical coding element 	Yes
Type of mechanical coding element	Туре А
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)
Number of digital outputs	16
Current-sinking	No
Current-sourcing	Yes
Digital outputs, parameterizable	Yes
Short-circuit protection	Yes
Response threshold, typ.	1 A; 0.7 to 1.3 A
Open-circuit detection	Yes
Limitation of inductive shutdown voltage to	Typ. L+ (-50 V)
Controlling a digital input	Yes
Switching capacity of the outputs	0.5.4
with resistive load, max.	0.5 A
on lamp load, max.	5 W
Load resistance range	40.0
lower limit	48 Ω 12 kΩ
• upper limit	12 kΩ
Output current	0.5.4
• for signal "1" rated value	0.5 A
• 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 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
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	165
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
· ·	tes
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; see FAQ Entry ID: 39198632
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. 	-30 °C; < 0 °C as of FS03
 horizontal installation, max. 	0° C
 vertical installation, min. 	-30 °C; < 0 °C as of FS03
 vertical installation, max. 	50 °C
Altitude during operation relating to sea level	
 Installation altitude above sea level, max. 	5 000 m; Restrictions for installation altitudes > 2 000 m, see manual
Dimensions	
Width	15 mm
Height	73 mm
Depth	58 mm
Weights	
Weight, approx.	30 g
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