SIEMENS

Data sheet

6ES7132-6BH01-2BA0



SIMATIC ET 200SP, Digital output module, DQ 16x 24V DC/0.5A STANDARD, Source output (PNP,P-switching) Packing unit: 10 pieces, 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 16k24 VDC/0.5 A ST HW functional status From FS03 Fittmware 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 Engineering with STEP 7 TA Portal configurable/integrated from version • STEP 7 configurable/integrated from version V5.5 SP3 • PCS 7 configurable/integrated from version V5.5 SP3 • PROFINET from GSD version/GSD revision GSDML V2.3 Operating mode Vers • DQ Yes Input curront Concol Cu	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 • I&M data Yes; I&M0 to I&M3 • Isochronous mode No • STEP 7 TIA Portal configurable/integrated from version V5.5 SP3 • PCF 7 configurable/integrated from version V5.5 SP3 • PCF 7 configurable/integrated from version V6.1 SP1 • 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 • PWM No • No No • Supply voltage Zet V permissible range, upper limit (DC) 19.2 V permissible range, upper limit (DC) 28.8 V Rated value (DC) 24 V Power loss, typ. 1 W <	Product type designation	DQ 16x24 VDC/0.5 A ST
• FW update possible No usable BaseUnits BU type A0 Color code for module-specific color identification plate CC00 Product function CC0 • Isochronous mode No • Isochronous mode No • STEP 7 TIA Portal configurable/integrated from version V14 • STEP 7 configurable/integrated from version V5.5 SP3 • PCS 7 configurable/integrated from version V1.1 SP1 • ROFINET 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 • Matter anage, lowper limit (DC) 24 V	HW functional status	From FS03
usable BaseUnits BU type A0 Color code for module-specific color identification plate CC00 Product function CC00 • (BM data Yes; IBM0 to IBM3 • (Spectronous mode No Engineering with Yes; TA Portal configurable/integrated from version • STEP 7 TIA Portal 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 with energy-saving function No • DQ with energy-saving function No • DQ with energy-saving function No • MSO No Supply voltage Rated value (DC) permissible range, lower limit (DC) 24 V permissible range, lower limit (DC) 28.8 V Reverse polarity protection Yes Input current Current consumption, max. Current consumption, max. 60 mA; without load <tr< td=""><td>Firmware version</td><td>V0.0</td></tr<>	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 V6.1 SP1 • PROFINET from GSD version/GSD revision GSD file each, Revision 3 and 5 and higher • PROFINET from GSD version/GSD revision GSD file each, Revision 3 and 5 and higher • DQ Yes • MSO No • Supply voltage Input current Rated value (DC) 24 V permissible range, lower limit (DC) 28.8 V Reverse polarity protection Yes Input current Current consumption, max. <td< td=""><td> FW update possible </td><td>No</td></td<>	 FW update possible 	No
Product function I&M data Yes; I&M0 to I&M3 Sochronous mode No 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 with energy-saving function No • PVWM No • Oversampling No • MSO No Supply voltage Rated value (DC) 24 V permissible range, lower 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, typ. 1 W Address space per module	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 V14 • 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 One GSD file each, Revision 3 and 5 and higher • DQ Yes • PWM No • Oversampling No • MSO No Supply voltage Rated value (DC) permissible range, lower limit (DC) 28.8 V Reverse polarity protection Yes Input current Current consumption, max. Current consumpti	Color code for module-specific color identification plate	CC00
• Isochronous mode No 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 One GSD file each, Revision 3 and 5 and higher • DQ Yes • MSO No Supply voltage Z4 V Permissible range, upper limit (DC) 19.2 V permissible range, upper limit (DC) 28.8 V Reverse polarity protection Yes Input current 60 mA; without load output voltage / header	Product function	
Engineering with V14 • 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 Yes • DQ with energy-saving function 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 • DQ Yes • DQ Yes • DQ Yes • DQ No • Oversampling No • MSO No • MSO No Supply voltage 24 V permissible range, lower 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, typ. 1 W Address space per module 4 Weston • Address space per module 2 byte; + 2 bytes for Ql information	Isochronous mode	No
version VS 5 SP3 • STEP 7 configurable/integrated from version VS.5 SP3 • PCS 7 configurable/integrated from version V8.1 SP1 • PROFIBUS from GSD version/GSD revision GSD file each, Revision 3 and 5 and higher • PROFINET from GSD version/GSD revision GSDML V2.3 Operating mode Ves • DQ Yes • DQ with energy-saving function No • PWM No • Oversampling No • MSO No Supply voltage Rated value (DC) Permissible range, lower limit (DC) 19.2 V permissible range, lower limit (DC) 28.8 V Reverse polarity protection Yes Input current 60 mA; without load output voltage / header Current consumption, max. Power loss, typ. 1 W Address space per module - • Address space per module 2 byte; + 2 bytes for Ql information	Engineering with	
• PCS 7 configurable/integrated from versionV8.1 SP1• PROFIBUS from GSD version/GSD revisionOne GSD file each, Revision 3 and 5 and higher• PROFINET from GSD version/GSD revisionGSDML V2.3Operating mode• DQYes• DQ with energy-saving functionNo• PWMNo• OversamplingNo• MSONoSupply voltage24 VPermissible range, lower limit (DC)28.8 VReverse polarity protectionYesInput currentCurrent consumption, max.60 mA; without loadoutput voltage / headerRated value (DC)24 VPower loss, typ.1 WAddress space per module4 VAddress space per module2 byte; + 2 bytes for Ql informationHardware configuration2 byte; + 2 bytes for Ql information	• •	V14
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PROFINET from GSD version/GSD revision GSDML V2.3 Operating mode DQ Yes DQ with energy-saving function No DQ with energy-saving function No OVersampling 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 typ. 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) 19.2 V permissible range, upper limit (DC) 28.8 V Reverse polarity protection Yes Input current Current consumption, max. Cutrent consumption, max. 60 mA; without load output voltage / header 24 V Power loss Power loss Power loss space per module 1 W Address space per module, max. 2 byte; + 2 bytes for Ql information Hardware configuration 2 byte; + 2 bytes for Ql information	 PROFIBUS from GSD version/GSD revision 	One GSD file each, Revision 3 and 5 and higher
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• PWM No • Oversampling No • MSO No 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 24 V Power loss, typ. 24 V Power loss, typ. 1 W Address space per module 2 byte; + 2 bytes for QI information Hardware configuration 2 byte; + 2 bytes for QI information	• DQ	Yes
• OversamplingNo• MSONoSupply voltageRated value (DC)24 Vpermissible range, lower limit (DC)19.2 Vpermissible range, upper limit (DC)28.8 VReverse polarity protectionYesInput currentCurrent consumption, max.Current consumption, max.60 mA; without loadoutput voltage / header24 VRated value (DC)24 VPower loss1 WAddress space per module1 WAddress space per module, max.2 byte; + 2 bytes for Ql informationHardware configuration2	 DQ with energy-saving function 	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. 60 mA; without load output voltage / header Rated value (DC) 24 V Power loss 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	• PWM	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 60 mA; without load Output voltage / header 60 mA; without load Rated value (DC) 24 V Power loss 9 Power loss, typ. 1 W Address area 4ddress space per module • Address space per module, max. 2 byte; + 2 bytes for Ql information Hardware configuration 1	Oversampling	No
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) Rated value (DC) 24 V Power loss 1 W Address area Address space per module • Address space per module, max. 2 byte; + 2 bytes for Ql information Hardware configuration 2	• MSO	No
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 24 V Power loss 1 W Address area 1 W Address space per module 2 byte; + 2 bytes for Ql information Hardware configuration 2 byte; + 2 bytes for Ql information	Supply voltage	
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Reverse polarity protection Yes Input current 60 mA; without load Current consumption, max. 60 mA; without load output voltage / header 60 mA; without load Rated value (DC) 24 V Power loss 7 Power loss, typ. 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
Input current Current consumption, max. 60 mA; without load output voltage / header Rated value (DC) 24 V Power loss 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	permissible range, upper limit (DC)	28.8 V
Current consumption, max. 60 mA; without load output voltage / header 24 V Rated value (DC) 24 V Power loss 1 W Address area 1 W Address space per module 2 byte; + 2 bytes for QI information Hardware configuration 2 byte; + 2 bytes for QI information	Reverse polarity protection	Yes
output voltage / header Rated value (DC) 24 V Power loss 1 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 1	Input current	
Rated value (DC) 24 V Power loss 1 Power loss, typ. 1 W Address area 4 Address space per module 2 • Address space per module, max. 2 byte; + 2 bytes for QI information Hardware configuration 2	Current consumption, max.	60 mA; without load
Power loss 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	output voltage / header	
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 V
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	
		Yes

 Mechanical coding element 	Yes
 Type of mechanical coding element 	Type A
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	
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	
• with resistive load, max.	0.5 A
• on lamp load, max.	5 W
Load resistance range	
lower limit	48 Ω
upper limit	12 kΩ
Output current	
 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	0.5.4
Current per channel, max.	0.5 A
Current per module, max. Total surrant of the surtruits (nor module)	8 A
Total current of the outputs (per module) horizontal installation	
up to 40 °C, max.	8 A
— up to 50 °C, max. — up to 50 °C, max.	8 A 6 A
— up to 60 °C, max. — up to 60 °C, max.	6 A 4 A
vertical installation	Ψ Λ.
— 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	100
Diagnostic alarm	Yes
Diagnoses	
Monitoring the supply voltage	Yes
Wire-break	Yes; Module-wise
■ witc-bicdit	

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
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. 	60 °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
last modified:	9/27/2021

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