SIEMENS

Data sheet

6ES7132-6BD20-0CA0



SIMATIC ET 200SP, digital output module, DQ 4x 24VDC/2A High Feature, suitable for BU type A0, Color code CC02, channel diagnostics

Product type designation HW functional status From FS06 Firmware version Firmare version Firmware version Firmware version Firmware version Fi	General information	
Firmware version FV update possible usable BaseUnits Color code for module-specific color identification plate Product function i (&M data is cohronous mode Engineering with STEP 7 TIA Portal configurable/integrated from version FROFIBUS from GSD version/GSD revision PROFIBUS from GSD version/GSD revision PROFIBUS from GSD version/GSD revision PROFINET from GSD version/GSD revision PROFINET from GSD version/GSD revision PROFISUS from GSD version/GSD revision SSDML V2.3 Operating mode 2	Product type designation	DQ 4x DC 24 V/2 A HF
FW update possible usable BaseUnits Color code for module-specific color identification plate Product function I&M data Sischronous mode Engineering with STEP 7 TIA Portal configurable/integrated from version FROFIBUS from GSD version/GSD revision PROFIBUS from GSD version/GSD revision PROFINET from GSD version/GSD revision DQ DQ Ves DQ with energy-saving function MSO PWM No Oversampling MSO Ves Supply voltage Rated value (DC) Permissible range, lower limit (DC) Permissible range, lower limit (DC) Permissible range, lower limit (DC) Prower loss Power loss, typ. Address space per module Address space per module Automatic encoding Yes BU type A0 CC02 CC02 BU type A0 CC02 CC02 CC02 CC02 RatM3 BU type A0 CC02 V13 SP1 / - Ves; I&M0 to I&M3 Yes V13 SP1 / - Ves; I&M0 to I&M3 Yes SDFL 7- Vesion 5 GSD Revision 5 G	HW functional status	From FS06
usable BaseUnits Color code for module-specific color identification plate Product function IkM data Isochronous mode Engineering with STEP 7 TIA Portal configurable/integrated from version PROFIBUS from GSD version/GSD revision PWM No Oversampling MSO Supply voltage Rated value (DC) permissible range, lower limit (DC) permissible range, lower limit (DC) permissible range, lower limit (DC) Reverse polarity protection Output voltage Rated value (DC) Permissible range, lower limit (DC) Reverse polarity protection Output voltage Rated value (DC) Power loss Power loss Power loss Power loss, typ. Address space per module Address space per module Address space per module, max. 4 byte; 2 channels per submodule + QI information Automatic encoding Yes	Firmware version	
Color code for module-specific color identification plate Product function I I&M data I Scortronous mode I STEP 7 TIA Portal configurable/integrated from version I STEP 7 configurable/integrated from version I STEP 7 configurable/integrated from version I PROFIBUS from GSD version/GSD revision I PROFIBUS from GSD version	 FW update possible 	Yes
Product function • I&M data • Isochronous mode Pengineering with • STEP 7 TIA Portal configurable/integrated from version • STEP 7 configurable/integrated from version • STEP 7 configurable/integrated from version • PROFIBUS from GSD version/GSD revision • PROFIBUS from GSD version/GSD revision • PROFINET from GSD version/GSD revision • DQ version/GSD revision • PWM • DQ with energy-saving function • PWM • Oversampling • MSO • Yes Supply voltage Rated value (DC) • 24 V • permissible range, lower limit (DC) • 19.2 V • permissible range, upper limit (DC) • Reverse polarity protection • Yes Output voltage Rated value (DC) • 24 V • Power loss • Power loss • Power loss, typ. • Address space per module • Address space per module • Address space per module, max. • 4 byte; 2 channels per submodule + QI information Hardware configuration Automatic encoding	usable BaseUnits	BU type A0
Isam data Isam	Color code for module-specific color identification plate	CC02
■ Isochronous mode Engineering with ■ STEP 7 TIA Portal configurable/integrated from version ■ STEP 7 configurable/integrated from version ■ PROFIBUS from GSD version/GSD revision ■ PROFIBUS from GSD version/GSD revision ■ PROFINET from GSD version/GSD revision ■ PROFINET from GSD version/GSD revision ■ PROFINET from GSD version/GSD revision Operating mode ■ DQ ■ Yes ■ DQ with energy-saving function ■ No ■ Oversampling ■ No ■ Oversampling ■ NSO ■ 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 Output voltage Rated value (DC) ■ 24 V ■ Power loss ■ Power loss, typ. Address space per module ■ Address space per module ■ Address space per module, max. ■ 4 byte; 2 channels per submodule + QI information Hardware configuration Automatic encoding	Product function	
Engineering with STEP 7 TIA Portal configurable/integrated from version STEP 7 configuration STEP 7 configuration V5.5 /- GSD Revision 5 GSD Revision 5 GSDML V2.3 Ves Yes Yes Yes SUPLIV 2.3 Yes Yes SUPLIV 2.3 Yes Yes SUPLIV 2.3 Yes SUPLIV 2.3 Yes Yes SUPLIV 2.3 Yes Yes SUPLIV 2.3 Yes Yes Yes Yes Yes Yes Yes Ye	● I&M data	Yes; I&M0 to I&M3
STEP 7 TIA Portal configurable/integrated from version STEP 7 configurable/integrated from version PROFIBUS from GSD version/GSD revision PROFINET from GSD version/GSD revision SSUML V2.3 Operating mode DQ Yes DQ with energy-saving function No PWM NO Oversampling No MSO Yes Supply voltage Rated value (DC) Permissible range, lower limit (DC) Permissible range, upper limit (DC) Reverse polarity protection Yes Output voltage Rated value (DC) Rated value (DC) Power loss Power loss, typ. 1 W Address area Address space per module Address space per module, max. 4 byte; 2 channels per submodule + QI information Hardware configuration Automatic encoding	Isochronous mode	Yes
version • STEP 7 configurable/integrated from version • PROFIBUS from GSD version/GSD revision • PROFINET from GSD version/GSD revision • PROFINET from GSD version/GSD revision Operating mode • DQ • DQ • DQ with energy-saving function • PWM • Oversampling • MSO Supply voltage Rated value (DC) permissible range, lower limit (DC) permissible range, upper limit (DC) permissible range, upper limit (DC) Reverse polarity protection Output voltage Rated value (DC) 24 V Power loss Power loss, typ. Address space per module • Address space per module, max. 4 byte; 2 channels per submodule + QI information Hardware configuration Automatic encoding Yes	Engineering with	
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PROFINET from GSD version/GSD revision Operating mode DQ Yes DQ with energy-saving function No PWM Oversampling No MSO Yes Supply voltage Rated value (DC) Permissible range, lower limit (DC) Permissible range, upper limit (DC) Reverse polarity protection Yes Output voltage Rated value (DC) Address space per module Address space per module, max. 4 byte; 2 channels per submodule + QI information Hardware configuration Automatic encoding Yes	 STEP 7 configurable/integrated from version 	V5.5 / -
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Reverse polarity protection Output voltage Rated value (DC) Power loss Power loss, typ. 1 W Address area Address space per module • Address space per module, max. 4 byte; 2 channels per submodule + QI information Hardware configuration Automatic encoding Yes	permissible range, lower limit (DC)	19.2 V
Output voltage Rated value (DC) Power loss Power loss, typ. Address area Address space per module • Address space per module, max. Hardware configuration Automatic encoding Yes	permissible range, upper limit (DC)	28.8 V
Rated value (DC) Power loss Power loss, typ. 1 W Address area Address space per module • Address space per module, max. 4 byte; 2 channels per submodule + QI information Hardware configuration Automatic encoding Yes	Reverse polarity protection	Yes
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Power loss, typ. Address area Address space per module • Address space per module, max. 4 byte; 2 channels per submodule + QI information Hardware configuration Automatic encoding Yes	Rated value (DC)	24 V
Address area Address space per module • Address space per module, max. 4 byte; 2 channels per submodule + QI information Hardware configuration Automatic encoding Yes	Power loss	
Address space per module • Address space per module, max. 4 byte; 2 channels per submodule + QI information Hardware configuration Automatic encoding Yes	Power loss, typ.	1 W
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Hardware configuration Automatic encoding Yes	Address space per module	
Automatic encoding Yes	Address space per module, max.	4 byte; 2 channels per submodule + QI information
	Hardware configuration	
Mechanical coding element Yes	Automatic encoding	Yes
	Mechanical coding element	Yes

Type A Selection of BaseUnit for connection variants 1-wire connection 1-wire connection 2-wire connection 1-wire controlled distributor model 1-wire controlled distributo	
 1-wire connection 2-wire connection 3-wire connection 4-wire connection BU type A0 with AUX terminals or potential distributor mode. 1-wire connection BU type A0 + Potential distributor module. Digital outputs Type of digital output Number of digital outputs 4 Current-sinking No Current-sourcing Yes Digital outputs, parameterizable Short-circuit protection Response threshold, typ. 2.8 to 5.2 A Limitation of inductive shutdown voltage to L+-(37 to 41V) Controlling a digital input Yes; Minimum current consumption 7 mA Switching capacity of the outputs with resistive load, max. on lamp load, max. 10 W Load resistance range lower limit upper limit Output current for signal "1" rated value for signal "0" residual current, max. Output delay with resistive load 	
 2-wire connection 3-wire connection 4-wire connection BU type A0 with AUX terminals or potential distributor mode BU type A0 + Potential distributor module Digital outputs Type of digital outputs Number of digital outputs 4 Current-sinking No Current-sourcing Digital outputs, parameterizable Short-circuit protection Response threshold, typ. Limitation of inductive shutdown voltage to Chroling a digital input Yes; Minimum current consumption 7 mA Switching capacity of the outputs with resistive load, max. on lamp load, max. lower limit upper limit Output current for signal "1" rated value for signal "0" residual current, max. Output delay with resistive load 	
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• 4-wire connection BU type A0 + Potential distributor module Digital outputs Source output (PNP, current-sourcing) Number of digital outputs 4 Current-sinking No Current-sourcing Yes Digital outputs, parameterizable Yes Short-circuit protection Yes • Response threshold, typ. 2.8 to 5.2 A Limitation of inductive shutdown voltage to L+ -(37 to 41V) Controlling a digital input Yes; Minimum current consumption 7 mA Switching capacity of the outputs 2 A • with resistive load, max. 2 A • on lamp load, max. 10 W Load resistance range lower limit 12 Ω • lower limit 3 400 Ω Output current 6 for signal "1" rated value 2 A • for signal "0" residual current, max. 0.1 mA Output delay with resistive load	ule
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Type of digital output Number of digital outputs Current-sinking Current-sourcing Digital outputs, parameterizable Short-circuit protection Response threshold, typ. Limitation of inductive shutdown voltage to Controlling a digital input Switching capacity of the outputs with resistive load, max. on lamp load, max. low Load resistance range lower limit upper limit for signal "1" rated value for signal "0" residual current, max. Output delay with resistive load Source output (PNP, current-sourcing) 4 4 Lead Ves Source output (PNP, current-sourcing) A 4 4 4 4 A No No Current-sourcing No Yes 2.8 to 5.2 A L+ -(37 to 41V) Yes; Minimum current consumption 7 mA Switching capacity of the outputs a Uper Minimum 2 A 10 W Load resistance range 2 A on lamp load, max. 12 Ω 3 400 Ω Output current of or signal "1" rated value of or signal "0" residual current, max. Output delay with resistive load	
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Short-circuit protection Response threshold, typ. Limitation of inductive shutdown voltage to Controlling a digital input Switching capacity of the outputs with resistive load, max. on lamp load, max. low Load resistance range lower limit upper limit for signal "1" rated value for signal "0" residual current, max. Pess Minimum current consumption 7 mA 2 A 10 W Load resistance range 2 A output current for signal "1" rated value for signal "0" residual current, max. Output delay with resistive load	
 Response threshold, typ. Limitation of inductive shutdown voltage to Controlling a digital input Yes; Minimum current consumption 7 mA Switching capacity of the outputs with resistive load, max. on lamp load, max. Load resistance range lower limit upper limit 3 400 Ω Output current for signal "1" rated value for signal "0" residual current, max. Output delay with resistive load 	
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Controlling a digital input Switching capacity of the outputs with resistive load, max. on lamp load, max. Load resistance range lower limit upper limit for signal "1" rated value for signal "0" residual current, max. Pyes; Minimum current consumption 7 mA 2 A 10 W Load resistance range 2 A 2 A 2 Output current 2 A 0 on signal "1" rated value 2 A 0 on mA Output delay with resistive load	
Switching capacity of the outputs • with resistive load, max. • on lamp load, max. 10 W Load resistance range • lower limit • upper limit 12 Ω • upper limit 3 400 Ω Output current • for signal "1" rated value • for signal "0" residual current, max. Output delay with resistive load	
 with resistive load, max. on lamp load, max. 10 W Load resistance range lower limit upper limit 3 400 Ω Output current for signal "1" rated value for signal "0" residual current, max. Output delay with resistive load 	
on lamp load, max. Load resistance range lower limit upper limit upper limit output current for signal "1" rated value for signal "0" residual current, max. Output delay with resistive load	
Load resistance range • lower limit 12 Ω • upper limit 3 400 Ω Output current • for signal "1" rated value 2 A • for signal "0" residual current, max. 0.1 mA Output delay with resistive load	
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 upper limit Output current for signal "1" rated value for signal "0" residual current, max. Output delay with resistive load 	
Output current • for signal "1" rated value • for signal "0" residual current, max. Output delay with resistive load	
 for signal "1" rated value for signal "0" residual current, max. Output delay with resistive load 	
◆ for signal "0" residual current, max. Output delay with resistive load 0.1 mA	
Output delay with resistive load	
♥ 0 to 1, typ.	
• "1" to "0", typ. 100 µs	
Parallel switching of two outputs	
• for uprating No	
Switching frequency	
with resistive load, max. 100 Hz	
with inductive load, max. Hz	
• on lamp load, max. 10 Hz	
Total current of the outputs	
• Current per channel, max. 2 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	
- up to 60 °C, max. 4 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	
Isochronous mode	
Bus cycle time (TDP), min. 500 µs	
Jitter, max. 8 μs	
Interrupts/diagnostics/status information	
Diagnostics function Yes	
Substitute values connectable Yes	
Alarms	
Diagnostic alarm Yes	
Diagnoses	

 Monitoring the supply voltage 	Yes	
Wire-break	Yes; channel by channel	
Short-circuit	Yes; channel by channel	
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 	Yes; red LED	
 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	
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 FS06	
 horizontal installation, max. 	60 °C	
 vertical installation, min. 	-30 °C; < 0 °C as of FS06	
 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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2/1/2021

last modified: