## **SIEMENS**

## **Data sheet**

6ES7132-6BF00-0CA0



SIMATIC ET 200SP, digital output module, DQ 8x 24VDC/0.5A High Feature, source output PNP, source output, Packing unit: 1 unit, suitable for BU type A0, color code CC02, Channel diagnostics for: Short-circuit and wire break; supply voltage, channel fault LED

Figure similar

Product type designation DQ 8x24 V DC/0.5 A HF HW functional status From FS07  Firmware version  FW update possible Yes usable BaseUnits BU type A0 Color code for module-specific color identification plate Product function  I M data Yes; I&M0 to I&M3 I Spr1 /- version  STEP 7 TIA Portal configurable/integrated from version  STEP 7 TON FOR 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 No PROFINET from GSD version No PROFINET from GSD version Yes  DQ Yes  DQ Yes  DQ Yes  DQ Yes  STEP No PROFINET from GSD version Yes PWM No Poversampling No WSO Pyes  MSO Version Yes  Supply voltage  Rated value (DC) 24 V  permissible range, lower limit (DC) 28 & V  Reverse polarity protection  Output voltage  Rated value (DC) 24 V  Power loss  Power loss typ.  Address area Address space per module Address space per module, max.  8 byte; 2 channels per submodule + QI information	General information	
Firmware version Fiv update possible usable BaseUnits Color code for module-specific color identification plate Product function  IkM data Isochronus mode Engineering with STEP 7 TIA Portal configurable/integrated from version Five STEP 7 configurable/integrated from version Five S	Product type designation	DQ 8x24 V DC/0.5 A HF
• FW update possible  usable BaseUnits Color code for module-specific color identification plate Product function  • I&M data • Isochronous mode Engineering with • STEP 7 TIA Portal configurable/integrated from version • STEP 7 configurable/integrated from version • PCS 7 configurable/integrated from version • PCS 7 configurable/integrated from version • PROFIBUS from GSD version/GSD revision • PROFIBUS from GSD version/GSD revision • DQ with energy-saving function • DQ Yes • DQ with energy-saving function • PWM • Oversampling • MSO  Supply voltage Rated value (DC) permissible range, lower limit (DC) Power loss Power module • Address space per module oversion mode  CC02  BU type A0 CC02  BU type A0 CC02  Poss BU type A0 CC02  Poss, I&M0 to I&M3  Yes IBJ (Na SM)  V13 SP1 / - Ves V5.5 / - V5.5 / - V6.5 / - V6.5 / - V7.5 / - V7.5 / - V8.1 SP1  One GSD file each, Revision 3 and 5 and higher GSDML V2.3  One GSD file each, Revision 3 and 5 and higher V8.1 SP1  No No No V9.5 / - V8.1 SP1  No No V9.5 / - V8.1 SP1  No V8.2 SUPPLIVE (SE) V8.2 SUPPLIVE (SE) V8.3 SUPPLIVE (SE) V8.4 V  Power loss Power loss Power loss Power loss Power module • Address space per module • Address space per module • Address space per module	HW functional status	From FS07
usable BaseUnits Color code for module-specific color identification plate Product function  I &M data I sochronous mode Engineering with STEP 7 TIA Portal configurable/integrated from version STEP 7 ton figurable/integrated from 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 PROFINET from GSD version/GSD revision PWM No Oversampling MSO Yes Supply voltage Rated value (DC) Permissible range, lower limit (DC) Permissible range, upper limit (DC) Permissible range, upper limit (DC) Permissible range, upper limit (DC) Permissible range, sower limit (DC)	Firmware version	
Color code for module-specific color identification plate  Product function  I&M data Sochronous mode Pes  Engineering with  STEP 7 TIA Portal configurable/integrated from version STEP 7 configurable/integrated from version PCS 7 configurable/integrated from version PROFIBUS from GSD version/GSD revision PROFIBUS from GSD version/GSD revision PROFIBUT from GSD version/GSD revision PDQ Yes DQ with energy-saving function PWM No Oversampling MSO Ves  Supply voltage Rated value (DC) Permissible range, lower limit (DC) Permissible range, lower limit (DC) Permissible range, upper limit (DC) Power loss Power loss Power loss, typ. Address space per module Address space per module Address space per module Address space per module, max.  8 byte; 2 channels per submodule + QI information	<ul> <li>FW update possible</li> </ul>	Yes
Product function  • I&M data • Isochronous mode  Engineering with  • STEP 7 TIA Portal configurable/integrated from version • PTEP 7 configurable/integrated from version • PTEP 7 configurable/integrated from version • PCS 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  Operating mode  • DQ • DQ	usable BaseUnits	BU type A0
IskM data Iscorbronous mode  Engineering with  STEP 7 TIA Portal configurable/integrated from version STEP 7 configurable/integrated from version STEP 8 configurable/integrated from version STEP 8 configurable/integrated from version STEP 8 configurable/integrated from version V5.5 /- STEP 1 configurable/integrated from version STEP 1 configurable/integrated from version V5.5 /- STEP 1 configurable/integrated from version STEP 1 configurable/integrated from version V5.5 /- STEP 1 configurable/integrated from version STEP 1 configurable/integrated from version V5.5 /- STE	Color code for module-specific color identification plate	CC02
Scorp 7 TIA Portal configurable/integrated from version STEP 7 TIA Portal configurable/integrated from version STEP 7 configurable/integrated from version STEP 7 configurable/integrated from version PCS 9 configurable/integrated from versi	Product function	
Engineering with  STEP 7 TIA Portal configurable/integrated from version STEP 7 configurable/integrated from version STEP 7 configurable/integrated from version PCS 7 configurable/integrated from version PROFIBUS from GSD version/GSD revision PROFINET from GSD version/GSD revision PROFINET from GSD version/GSD revision POQ Yes DQ Yes DQ Yes DQ Yes PWM No Oversampling NO WSO Yes  Supply voltage Rated value (DC) Permissible range, lower limit (DC) Permissible range, upper limit (DC) Permissible range, upper limit (DC) Reverse polarity protection Power loss Power loss Power loss Power loss typ. Address space per module Address space per module, max.  8 byte; 2 channels per submodule + Ql information	<ul> <li>I&amp;M data</li> </ul>	Yes; I&M0 to I&M3
STEP 7 TIA Portal configurable/integrated from version STEP 7 configurable/integrated from version PCS 7 configurable from SCD version/GSD revision PCS 8 configurable from VFS 8 configurable fro	<ul> <li>Isochronous mode</li> </ul>	Yes
version  STEP 7 configurable/integrated from version PCS 7 configurable/integrated from version PROFIBUS from GSD version/GSD revision PROFINET from GSD version/GSD revision  Operating mode  DQ Yes DQ Yes PWM NO Oversampling NO Ves Supply voltage Rated value (DC) Permissible range, lower limit (DC) Permissible range, upper limit (DC) Permis	Engineering with	
PCS 7 configurable/integrated from version PROFIBUS from GSD version/GSD revision PROFINET from GSD version/GSD revision PROFINET from GSD version/GSD revision PROFINET from GSD version/GSD revision GSDML V2.3  Operating mode  PQ PG DQ Yes PWM NO Oversampling NO MSO Yes  Supply voltage Rated value (DC) Permissible range, lower limit (DC) Permissible range, upper limit (DC) Power loss Power loss Power loss, typ.  Address space per module Address space per module, max.  8 byte; 2 channels per submodule + QI information		V13 SP1 / -
PROFIBUS from GSD version/GSD revision PROFINET from GSD version/GSD revision  PROFINET from GSD version/GSD revision  GSDML V2.3  Operating mode  DQ Yes DQ with energy-saving function No PWM No Oversampling NSO Yes  Supply voltage Rated value (DC) Permissible range, lower limit (DC) Permissible range, upper limit (DC) Permissible range, upper limit (DC) Reverse polarity protection Yes  Output voltage Rated value (DC) Power loss Power loss, typ.  Address space per module Address space per module, max.  8 byte; 2 channels per submodule + Ql information	<ul> <li>STEP 7 configurable/integrated from version</li> </ul>	V5.5 / -
<ul> <li>PROFINET from GSD version/GSD revision</li> <li>Operating mode</li> <li>DQ</li> <li>Yes</li> <li>DQ with energy-saving function</li> <li>No</li> <li>Oversampling</li> <li>MSO</li> <li>MSO</li> <li>Yes</li> </ul> Supply voltage Rated value (DC) <ul> <li>permissible range, lower limit (DC)</li> <li>permissible range, upper limit (DC)</li> <li>permissible range, upper limit (DC)</li> <li>Reverse polarity protection</li> <li>Yes</li> </ul> Output voltage Rated value (DC) <ul> <li>24 V</li> <li>permissible range, upper limit (DC)</li> <li>28.8 V</li> </ul> Reverse polarity protection <ul> <li>Yes</li> </ul> Output voltage Rated value (DC) <ul> <li>24 V</li> </ul> Power loss, typ. <ul> <li>1 W</li> </ul> Address space per module <ul> <li>Address space per module, max.</li> <li>8 byte; 2 channels per submodule + QI information</li> </ul>	<ul> <li>PCS 7 configurable/integrated from version</li> </ul>	V8.1 SP1
Operating mode  • 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) Power loss Power loss, typ.  Address space per module • Address space per module, max.  8 byte; 2 channels per submodule + QI information	<ul> <li>PROFIBUS from GSD version/GSD revision</li> </ul>	One GSD file each, Revision 3 and 5 and higher
DQ     DQ with energy-saving function     PWM     No     Oversampling     No     MSO     Yes  Supply voltage  Rated value (DC)     permissible range, lower limit (DC)     permissible range, upper limit (DC)     permissible range, upper limit (DC)     Permissible range, upper limit (DC)     Reverse polarity protection     Yes  Output voltage  Rated value (DC)  Power loss  Power loss, typ.  Address space per module     • Address space per module, max.  8 byte; 2 channels per submodule + QI information	<ul> <li>PROFINET from GSD version/GSD revision</li> </ul>	GSDML V2.3
<ul> <li>DQ with energy-saving function</li> <li>PWM</li> <li>No</li> <li>Oversampling</li> <li>MSO</li> <li>Yes</li> </ul> Supply voltage Rated value (DC) <ul> <li>permissible range, lower limit (DC)</li> <li>permissible range, upper limit (DC)</li> <li>permissible range, upper limit (DC)</li> <li>Reverse polarity protection</li> <li>Yes</li> </ul> Output voltage Rated value (DC) <ul> <li>24 V</li> </ul> Power loss <ul> <li>Power loss, typ.</li> <li>1 W</li> </ul> Address space per module <ul> <li>Address space per module, max.</li> <li>8 byte; 2 channels per submodule + QI information</li> </ul>	Operating mode	
	• DQ	Yes
Oversampling     MSO     Yes  Supply voltage  Rated value (DC)     permissible range, lower limit (DC)     permissible range, upper limit (DC)     permissible range, upper limit (DC)     Reverse polarity protection     Yes  Output voltage Rated value (DC)     24 V  Power loss Power loss, typ.     1 W  Address area  Address space per module     Address space per module, max.     8 byte; 2 channels per submodule + QI information	<ul> <li>DQ with energy-saving function</li> </ul>	No
MSO  Supply voltage  Rated value (DC)  permissible range, lower limit (DC)  permissible range, upper limit (DC)  Reverse polarity protection  Yes  Output voltage  Rated value (DC)  Power loss  Power loss, typ.  Address area  Address space per module  Address space per module, max.  8 byte; 2 channels per submodule + QI information	• PWM	No
Rated value (DC)  permissible range, lower limit (DC)  permissible range, upper limit (DC)  Reverse polarity protection  Yes  Output voltage  Rated value (DC)  Power loss  Power loss, typ.  Address area  Address space per module  Address space per module, max.  8 byte; 2 channels per submodule + QI information	<ul> <li>Oversampling</li> </ul>	No
Rated value (DC)  permissible range, lower limit (DC)  permissible range, upper limit (DC)  permissible range, upper limit (DC)  Reverse polarity protection  Yes  Output voltage  Rated value (DC)  Power loss  Power loss, typ.  Address area  Address space per module  • Address space per module, max.  8 byte; 2 channels per submodule + QI information	• MSO	Yes
permissible range, lower limit (DC)  permissible range, upper limit (DC)  Reverse polarity protection  Output voltage  Rated value (DC)  Power loss  Power loss, typ.  Address area  Address space per module  • Address space per module, max.  8 byte; 2 channels per submodule + QI information	Supply voltage	
permissible range, upper limit (DC)  Reverse polarity protection  Yes  Output voltage  Rated value (DC)  Power loss  Power loss, typ.  1 W  Address area  Address space per module  • Address space per module, max.  8 byte; 2 channels per submodule + QI information	Rated value (DC)	24 V
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.  8 byte; 2 channels per submodule + QI information	permissible range, lower limit (DC)	19.2 V
Output voltage  Rated value (DC)  24 V  Power loss  Power loss, typ.  1 W  Address area  Address space per module  • Address space per module, max.  8 byte; 2 channels per submodule + QI information	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.  8 byte; 2 channels per submodule + QI information	Reverse polarity protection	Yes
Power loss Power loss, typ. 1 W  Address area  Address space per module  • Address space per module, max. 8 byte; 2 channels per submodule + QI information	Output voltage	
Power loss, typ.  Address area  Address space per module  • Address space per module, max.  8 byte; 2 channels per submodule + QI information	Rated value (DC)	24 V
Address area  Address space per module  • Address space per module, max.  8 byte; 2 channels per submodule + QI information	Power loss	
Address space per module  • Address space per module, max.  8 byte; 2 channels per submodule + QI information	Power loss, typ.	1 W
Address space per module, max.      8 byte; 2 channels per submodule + QI information	Address area	
	Address space per module	
Hardware configuration	Address space per module, max.	8 byte; 2 channels per submodule + QI information
The article configuration	Hardware configuration	

Automatic encoding	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
3-wire connection	BU type A0 with AUX terminals or 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	8
Current-sinking	No
Current-sourcing	Yes
Digital outputs, parameterizable	Yes
Short-circuit protection	Yes
Response threshold, typ.	0.7 to 1.3 A
Limitation of inductive shutdown voltage to	Typ. L+ (-50 V)
Controlling a digital input	Yes
Switching capacity of the outputs	
<ul><li>with resistive load, max.</li></ul>	0.5 A
• on lamp load, max.	5 W
Load resistance range	
lower limit	48 Ω
upper limit	12 kΩ
Output current	
<ul><li>for signal "1" rated value</li></ul>	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	
<ul><li>for uprating</li></ul>	No
for redundant control of a load	Yes
Switching frequency	
<ul> <li>with resistive load, max.</li> </ul>	100 Hz
<ul> <li>with inductive load, max.</li> </ul>	2 Hz
on lamp load, max.	10 Hz
Total current of the outputs	
<ul> <li>Current per channel, max.</li> </ul>	0.5 A
Current per module, max.	4 A
Total current of the outputs (per module)	
horizontal installation	
— up to 60 °C, max.	4 A
vertical installation	
— up to 50 °C, max.	4 A
Cable length	
<ul><li>shielded, max.</li></ul>	1 000 m
• unshielded, max.	600 m
Isochronous mode	
Execution and activation time (TCO), min.	48 µs
Bus cycle time (TDP), min.	500 μs
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Substitute values connectable	Yes
Alarms	
Diagnostic alarm	Yes
Diagnoses	
Monitoring the supply voltage	Yes
2 2	

Wire-break	Yes; channel by channel	
Short-circuit	Yes; channel by channel	
Group error	Yes	
Diagnostics indication LED		
<ul> <li>Monitoring of the supply voltage (PWR-LED)</li> </ul>	Yes; green PWR LED	
<ul> <li>Channel status display</li> </ul>	Yes; green LED	
<ul> <li>for channel diagnostics</li> </ul>	Yes; red LED	
<ul> <li>for module diagnostics</li> </ul>	Yes; green/red DIAG LED	
Potential separation		
Potential separation channels		
<ul> <li>between the channels</li> </ul>	No	
<ul> <li>between the channels and backplane bus</li> </ul>	Yes	
<ul> <li>between the channels and the power supply of the electronics</li> </ul>	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		
<ul> <li>Performance level according to ISO 13849-1</li> </ul>	PL d	
SIL acc. to IEC 61508	SIL 2	
Ambient conditions		
Ambient temperature during operation		
<ul> <li>horizontal installation, min.</li> </ul>	-30 °C; < 0 °C as of FS07	
<ul> <li>horizontal installation, max.</li> </ul>	60 °C	
<ul> <li>vertical installation, min.</li> </ul>	-30 °C; < 0 °C as of FS07	
<ul> <li>vertical installation, max.</li> </ul>	50 °C	
Altitude during operation relating to sea level		
<ul> <li>Installation altitude above sea level, max.</li> </ul>	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	

2/1/2021

last modified: