

MANUFACTURER DOCUMENT PACKAGE

Manufacturer's Manual

Reference package for procurement and maintenance review

SIEMENS

6ES7132-6BH01-0BA0

SIMATIC ET 200SP DQ 16X24VDC/0.5A ST

Used with the applicable SIMATIC ET 200SP digital output system configuration.

REFERENCE PACKAGE

OFFICIAL DOCUMENT

Selected official pages follow this cover with source pagination retained.

[A5E03574420-AE](#)

Properties

The module has the following technical properties:

- Digital output module with 16 outputs
- Source output (PNP, P-switching)
- Supply voltage L+
- Output current 0.5 A (per channel)
- Total current max. 8 A
(see derating: Technical specifications (Page 27))
- Configurable diagnostics (per module)
- Configurable substitute values (per channel)
- Suitable for solenoid valves, DC contactors, and indicator lights
- Extended spare parts compatibility (see product information (<https://support.industry.siemens.com/cs/ww/en/view/73021864>))

The module supports the following functions:

Table 3-1 Version dependencies of the functions

Function	HW version	FW version	STEP 7		GSD file	
			TIA Portal	V5.x	PROFINET IO	PROFIBUS DP
Identification data I&M0 to I&M3	FS01	V0.0.0 and higher	V14 or higher with HSP 0222	V5.5 SP3 or higher with HSP 0230 V7.0	X	X
Reparameterizing in RUN	FS01	V0.0.0 and higher	V14 or higher with HSP 0222	V5.5 SP3 or higher with HSP 0230 V7.0	X	X
PROFenergy	FS01	V0.0.0 and higher	V14 or higher with HSP 0222	V5.5 SP3 or higher with HSP 0230 V7.0	X	-
Value status	FS01	V0.0.0 and higher	V14 or higher with HSP 0222	V5.5 SP3 or higher with HSP 0230 V7.0	X	X

Accessories

The following accessories are available optionally:

- Labeling strips
- Color-coded labels
- Reference identification label
- Shield connection

See also

You can find more information on accessories in the ET 200SP Distributed I/O System (<https://support.automation.siemens.com/WW/view/en/58649293>) System Manual.

Technical specifications

7.1 Technical specifications

Technical specifications of the DQ 16x24VDC/0.5A ST

The following table lists the technical specifications on the issue date. You will find a data sheet including daily updated technical specifications on the Internet

(<https://support.industry.siemens.com/cs/ww/en/pv/6ES7132-6BH01-0BA0/td?dl=en>).

Article number	6ES7132-6BH01-0BA0
General information	
Product type designation	DQ 16x24VDC/0.5 ST
HW functional status	from FS21
Firmware version	V0.0
FW update possible	No
usable BaseUnits	BU type A0
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	STEP 7 TIA V14 with HSP0222 / integrated as of TIA V15
STEP 7 configurable/integrated from version	V5.5 SP3 with HSP0230 V7.0 / integrated as of V5.6 SP1
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

7.1 Technical specifications

Article number	6ES7132-6BH01-0BA0
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.	30 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	
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 with AUX terminals or potential distributor module
• 3-wire connection	BU type A0 with AUX terminals or 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
output characteristic acc. to IEC 61131, type 0.5	Yes
Short-circuit protection	Yes; Electronic
• 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
• with inductive load, max.	0.5 A
• on lamp load, max.	5 W

Article number	6ES7132-6BH01-0BA0
Load resistance range - lower limit - upper limit	48 Ω 12 kΩ
Output current - for signal "1" rated value - for signal "1" permissible range, max. - for signal "0" residual current, max.	0.5 A 0.5 A 0.1 mA
Output delay with resistive load "0" to "1", typ. "1" to "0", typ.	50 μs 100 μs
Parallel switching of two outputs - for uprating - for redundant control of a load	No Yes
Switching frequency - with resistive load, max. - with inductive load, max. - on lamp load, max.	100 Hz 0.1 Hz; higher frequencies are possible, see Equipment Manual "Maximum permitted switching frequency of inductive loads" 10 Hz
Total current of the outputs - Current per channel, max. - Current per module, max.	0.5 A 8 A; see Equipment Manual "Derating curve"
Total current of the outputs (per module)	
horizontal installation – up to 40 °C, max. – up to 50 °C, max. – up to 60 °C, max.	8 A 6 A 4 A
vertical installation – up to 30 °C, max. – up to 40 °C, max. – up to 50 °C, max.	8 A 6 A 4 A
Cable length - shielded, max. - unshielded, max.	1 000 m 600 m
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Substitute values connectable	Yes
Alarms Diagnostic alarm	Yes