SIEMENS

Data sheet

6ES7522-1BP00-0AA0



SIMATIC S7-1500, digital output module, DQ 64xDC 24V/0,3A BA, 64 channels in groups of 16, 2 A per group at 60 °C, sinking output, 35 mm wide, the module supports the safety-oriented shutdown of load groups up to SIL2 according to EN IEC 62061:2021 and Category 3 / PL d according to EN ISO 13849-1:2015. cables and terminal blocks to be ordered separately as accessories

General information	
Product type designation	DQ 64x24VDC/0.3A BA
HW functional status	From FS01
Firmware version	V1.0.0
 FW update possible 	Yes
Product function	
• I&M data	Yes; I&M0 to I&M3
Isochronous mode	No
 Prioritized startup 	No
Engineering with	
 STEP 7 TIA Portal configurable/integrated from version 	V16 with HSP 0319 / V17
 STEP 7 configurable/integrated from version 	V5.5 SP3 / -
 PROFIBUS from GSD version/GSD revision 	V1.0 / V5.1
 PROFINET from GSD version/GSD revision 	V2.35 / -
Operating mode	
• DQ	Yes
 DQ with energy-saving function 	No
• PWM	No
 Cam control (switching at comparison values) 	No
Oversampling	No
• MSO	Yes
 Integrated operating cycle counter 	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; through internal protection with 7 A per group
external protection for power supply lines (recommendation)	24 V DC/6 A miniature circuit breaker with type B tripping characteristic
Input current	
Current consumption, max.	90 mA; without load
output voltage / header	
Rated value (DC)	24 V
Power	
Power available from the backplane bus	0.6 W
Power loss	
Power loss, typ.	3.5 W
Digital outputs	
Type of digital output	Transistor
Number of digital outputs	64

Current einking	No
Current-sinking Current-sourcing	Yes
Digital outputs, parameterizable	No
Short-circuit protection	Yes
Limitation of inductive shutdown voltage to	L+ (-53 V)
Controlling a digital input	Yes
Switching capacity of the outputs	100
• with resistive load, max.	0.3 A
• on lamp load, max.	5 W
Load resistance range	•
lower limit	80 Ω
• upper limit	10 kΩ
Output voltage	
• for signal "1", min.	L+ (-0.8 V)
Output current	
 for signal "1" rated value 	0.3 A
 for signal "1" permissible range, max. 	0.3 A
 for signal "0" residual current, max. 	0.5 mA
Output delay with resistive load	
• "0" to "1", max.	100 µs
• "1" to "0", max.	500 µs
Parallel switching of two outputs	
 for logic links 	Yes
 for uprating 	No
 for redundant control of a load 	Yes
Switching frequency	
 with resistive load, max. 	100 Hz
 with inductive load, max. 	0.5 Hz; According to IEC 60947-5-1, DC-13
 on lamp load, max. 	10 Hz
Total current of the outputs	
 Current per channel, max. 	0.3 A
 Current per group, max. 	2 A
Current per module, max.	8 A
Total current of the outputs (per module)	
horizontal installation	
— up to 60 °C, max.	8 A
vertical installation	
— up to 40 °C, max.	8 A
Cable length	
• shielded, max.	1 000 m
• unshielded, max.	1 000 m 600 m
unshielded, max. Interrupts/diagnostics/status information	
unshielded, max. Interrupts/diagnostics/status information Diagnostics function	600 m No
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unshielded, max. Interrupts/diagnostics/status information Diagnostics function Substitute values connectable Alarms	600 m No No
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unshielded, max. Interrupts/diagnostics/status information Diagnostics function Substitute values connectable Alarms Diagnostic alarm Maintenance interrupt	600 m No No
• unshielded, max. Interrupts/diagnostics/status information Diagnostics function Substitute values connectable Alarms • Diagnostic alarm • Maintenance interrupt Diagnoses	600 m No No No
• unshielded, max. Interrupts/diagnostics/status information Diagnostics function Substitute values connectable Alarms • Diagnostic alarm • Maintenance interrupt Diagnoses • Monitoring the supply voltage	600 m No No No No
unshielded, max. Interrupts/diagnostics/status information Diagnostics function Substitute values connectable Alarms Diagnostic alarm Maintenance interrupt Diagnoses Monitoring the supply voltage Wire-break	600 m No No No No No
unshielded, max. Interrupts/diagnostics/status information Diagnostics function Substitute values connectable Alarms Diagnostic alarm Maintenance interrupt Diagnoses Monitoring the supply voltage Wire-break Short-circuit	600 m No No No No No No
unshielded, max. Interrupts/diagnostics/status information Diagnostics function Substitute values connectable Alarms Diagnostic alarm Maintenance interrupt Diagnoses Monitoring the supply voltage Wire-break Short-circuit Group error	600 m No No No No No
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 unshielded, max. Interrupts/diagnostics/status information Diagnostics function Substitute values connectable Alarms Diagnostic alarm Maintenance interrupt Diagnoses Monitoring the supply voltage Wire-break Short-circuit Group error Diagnostics indication LED RUN LED ERROR LED 	600 m No No No No No No No No No Yes; green LED Yes; red LED
 unshielded, max. Interrupts/diagnostics/status information Diagnostics function Substitute values connectable Alarms Diagnostic alarm Maintenance interrupt Diagnoses Monitoring the supply voltage Wire-break Short-circuit Group error Diagnostics indication LED RUN LED ERROR LED MAINT LED 	600 m No No No No No No No No Yes; green LED Yes; red LED Yes; red LED No
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 between the channels, in groups of between the channels and backplane bus 	16; 32 when using SIMATIC TOP connect connection module 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; From FS01	
Highest safety class achievable for safety-related tripping of standard modules		
 Performance level according to ISO 13849-1 	PL d	
 Category according to ISO 13849-1 	Cat. 3	
• SIL acc. to IEC 62061	SIL 2	
Ambient conditions		
Ambient temperature during operation		
 horizontal installation, min. 	-30 °C	
 horizontal installation, max. 	60 °C	
 vertical installation, min. 	-30 °C	
 vertical installation, max. 	40 °C	
Altitude during operation relating to sea level		
 Installation altitude above sea level, max. 	5 000 m	
Dimensions		
Width	35 mm	
Height	147 mm	
Depth	129 mm	
Weights		
Weight, approx.	270 g	
Other		
Note:	Please order cable and connection modules separately	
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