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Data sheet 6ES7522-1BP50-0AA0



SIMATIC S7-1500, digital output module, DQ 64xDC 24V/0.3A SNK BA, 64 channels in groups of 16, 2 A per group at 60 °C, sourcing output, 35 mm wide cables and terminal blocks to be ordered separately as accessories

General information	
Product type designation	DQ 64x24VDC/0.3A SNK 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 4 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.	4.7 W
Digital outputs	
Type of digital output	Transistor
Number of digital outputs	64
Current-sinking	Yes

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Current-sourcing	No
Digital outputs, parameterizable	No
Short-circuit protection	No; external fusing necessary, max. 4 A per group, tripping characteristic type B or C
Limitation of inductive shutdown voltage to	L+ (-53 V)
Controlling a digital input	Yes
Switching capacity of the outputs	
● 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.	M+ (0.5 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.	600 m
Interrupts/diagnostics/status information	
Diagnostics function	No
Substitute values connectable	No
Alarms	
● Diagnostic alarm	No
● Maintenance interrupt	No
Diagnoses	
● Monitoring the supply voltage	No
● Wire-break	No
● Short-circuit	No
● Group error	No
Diagnostics indication LED	
● RUN LED	Yes; green LED
● ERROR LED	Yes; red LED
● MAINT LED	No
● Monitoring of the supply voltage (PWR-LED)	Yes; via SIMATIC TOP connect connection module
● Channel status display	Yes; via SIMATIC TOP connect connection module
● for channel diagnostics	No
● for module diagnostics	No
Potential separation	

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Potential separation channels	
● between the channels	No
● between the channels, in groups of	16; 32 when using SIMATIC TOP connect connection module
● 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	No
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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