SIEMENS

Data sheet

6ES7522-1BL10-0AA0



SIMATIC S7-1500, digital output module, DQ32xDC 24V/0.5A BA, 32 channels in groups of 8, 4 A per group; 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. delivery incl. front connector push-in

General information	
Product type designation	DQ 32x24VDC/0.5A 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	Yes
Engineering with	
 STEP 7 TIA Portal configurable/integrated from version 	V13 / V13
 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 	V2.3 / -
Operating mode	
• DQ	Yes
 DQ with energy-saving function 	No
• PWM	No
Oversampling	No
• MSO	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; through internal protection with 7 A per group
Input current	
Current consumption, max.	60 mA
output voltage / header	
Rated value (DC)	24 V
Power	
Power available from the backplane bus	1.15 W
Power loss	
Power loss, typ.	3.8 W
Digital outputs	
Type of digital output	Transistor
Number of digital outputs	32
Current-sourcing	Yes
Digital outputs, parameterizable	No
Short-circuit protection	Yes
Response threshold, typ.	1 A

Limitation of inductive shutdown voltage to	L+ (-53 V)
Controlling a digital input	Yes
Switching capacity of the outputs	
with resistive load, max.	0.5 A
 on lamp load, max. 	5 W
Load resistance range	5 W
lower limit	48 Ω
upper limit	12 kΩ
Output voltage	
• for signal "1", min.	L+ (-0.8 V)
Output current	
for signal "1" rated value	0.5 A
 for signal "1" permissible range, max. 	0.5 A
 for signal "0" residual current, max. 	0.5 A
Output delay with resistive load	0.5 mA
• "0" to "1", max.	100 μα
• 0 to 1, max. • "1" to "0", max.	100 µs
	500 µs
Parallel switching of two outputs	Vec
for logic links for uprating	Yes
for uprating for redundant control of a load	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.	0.5 A; see additional description in the manual
Current per group, max.	4 A; see additional description in the manual
Current per module, max.	16 A; see additional description in the manual
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
Monitoring of the supply voltage (PWR-LED)	Yes; green LED
Channel status display	Yes; green LED
for channel diagnostics	No
for module diagnostics	No
Potential separation	
Potential separation channels	
between the channels	No
 between the channels, in groups of 	8
 between the channels and backplane bus 	Yes
solation	
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 FS02

Highest safety class achievable for safety-related tripping o	f 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
 remark on safety-oriented shutdown 	https://support.industry.siemens.com/cs/de/de/view/39198632
Ambient conditions	
Ambient temperature during operation	
 horizontal installation, min. 	-30 °C; from FS04
 horizontal installation, max. 	60 °C
 vertical installation, min. 	-30 °C; from FS04
 vertical installation, max. 	40 °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	25 mm
Height	147 mm
Depth	129 mm
Weights	
Weight, approx.	280 g
Other	
Note:	Supplied incl. 40-pole push-in front connectors

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