## SIEMENS

## Data sheet

## 6ES7526-2BF00-0AB0



SIMATIC S7-1500, F digital output module, F-DQ 8x 24 V DC 2A PPM PROFIsafe; 35 mm width; up to PL E (ISO 13849-1)/ SIL3 (IEC 61508)

Struct 8		
General information		
Product type designation	F-DQ 8x24VDC/2A PPM	
Firmware version		
• FW update possible	Yes	
Product function		
● I&M data	Yes; I&M0 to I&M3	
Engineering with		
<ul> <li>STEP 7 TIA Portal configurable/integrated from version</li> </ul>	V13 SP1 with HSP 0086	
Operating mode		
• DQ	Yes	
• MSO	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	
power supply according to NEC Class 2 required	No	
Input current		
Current consumption (rated value)	110 mA; without load	
Current consumption, max.	130 mA; without load	
output voltage / header		
Rated value (DC)	24 V	
Power		
Power available from the backplane bus	0.8 W	
Power loss		
Power loss, typ.	11 W	
Address area		
Address space per module		
Inputs	6 byte; S7-300/400F CPU, 5 byte	
Outputs	6 byte; S7-300/400F CPU, 5 byte	
Hardware configuration		
Automatic encoding	Yes	
Electronic coding element type F	Yes	
Digital outputs		
Number of digital outputs	8	
Current-sinking	Yes	
Current-sourcing	Yes	
Short-circuit protection	Yes	
Open-circuit detection	Yes	
Response threshold, typ.	8 mA	

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Overload protection	Yes
Response threshold, typ.	2.9 A
Limitation of inductive shutdown voltage to	PM-switching: -24 V + (-47 V), PP-switching: -24 V
Controlling a digital input	Yes; digital output, according to IEC 61131-2, type 2
Switching capacity of the outputs	
• with resistive load, max.	2 A
• on lamp load, max.	10 W
Load resistance range	
lower limit	12 Ω
upper limit	2 000 Ω
Output voltage	
<ul> <li>for signal "1", min.</li> </ul>	24 V; L+ (-0.5 V)
Output current	
<ul> <li>for signal "1" rated value</li> </ul>	2 A
<ul> <li>for signal "0" residual current, max.</li> </ul>	0.5 mA; Current-sourcing, or current sourcing and sinking switches individually, current sinking: max. 1 mA
Switching frequency	current sinking. max. T mA
with resistive load, max.	30 Hz
	0.1 Hz
with inductive load, max.	
• on lamp load, max.	10 Hz
Total current of the outputs	
Current per channel, max.	2 A
Total current of the outputs (per module)	
horizontal installation	
— up to 40 °C, max.	16 A
— up to 60 °C, max.	8 A
vertical installation	
— up to 40 °C, max.	8 A
Cable length	
<ul> <li>shielded, max.</li> </ul>	1 000 m
• unshielded, max.	500 m
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Substitute values connectable	No
Alarms	
Diagnostic alarm	Yes
Diagnoses	
<ul> <li>Monitoring the supply voltage</li> </ul>	Yes
Wire-break	Yes
Short-circuit	Yes
Group error	Yes
Diagnostics indication LED	
RUN LED	Yes; green LED
• ERROR LED	Yes; red LED
<ul> <li>Monitoring of the supply voltage (PWR-LED)</li> </ul>	Yes
Channel status display	Yes; green LED
for channel diagnostics	Yes; red LED
for module diagnostics	Yes; red LED
Potential separation	
Potential separation channels	
· · · · · · · · · · · · · · · · · · ·	No
between the channels     between the channels	No
between the channels and backplane bus	Yes
Isolation	
Isolation tested with	707 V DC (type test)
Standards, approvals, certificates	
Suitable for safety functions	Yes
Highest safety class achievable in safety mode	
<ul> <li>Performance level according to ISO 13849-1</li> </ul>	PLe
SIL acc. to IEC 61508	SIL 3
Probability of failure (for service life of 20 years and repair tim	ne of 100 hours)
- Low demand mode: PFDavg in accordance with	< 6.00E-05

## SIL3

< 2.00E-09 1/h	
0 °C	
60 °C	
0°C	
40 °C	
Dimensions	
35 mm	
147 mm	
129 mm	
300 g	

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