## **SIEMENS**

## Data sheet

## 6ES7142-4BF00-0AA0

SIMATIC DP, Electronic modules for ET 200 PRO 8 DO 24 V DC, 0.5 A Module diagnostics; incl. bus module, Connection module IO 6ES7194-4..00-0AA0 order separately



Supply voltage	
Load voltage 2L+	
<ul> <li>Rated value (DC)</li> </ul>	24 V
<ul> <li>Short-circuit protection</li> </ul>	Yes; per channel, electronic
<ul> <li>Reverse polarity protection</li> </ul>	Yes; against destruction; load increasing
Input current	
from load voltage 2L+ (without load), max.	30 mA
from backplane bus 3.3 V DC, max.	30 mA
Power loss	
Power loss, typ.	2 W
Address area	
Address space per module	
<ul> <li>Address space per module, max.</li> </ul>	1 byte
Digital outputs	
Number of digital outputs	8
Short-circuit protection	Yes
<ul> <li>Response threshold, typ.</li> </ul>	0.7 A

Limitation of inductive shutdown voltage to	2L+ (-47 V)
Controlling a digital input	Yes; Isolation between 1L+ and 2L+ is no longer provided, as 1M and 2M are jumpered
Switching capacity of the outputs	
• on lamp load, max.	5 W
Load resistance range	
lower limit	48 Ω
• upper limit	4 kΩ
Output voltage	
● for signal "1", min.	2L+ (-0,8 V)
Output current	
<ul> <li>for signal "1" rated value</li> </ul>	0.5 A
<ul> <li>for signal "0" residual current, max.</li> </ul>	0.5 mA
Parallel switching of two outputs	
• for uprating	No
<ul> <li>for redundant control of a load</li> </ul>	Yes
Switching frequency	
• with resistive load, max.	100 Hz
<ul> <li>with inductive load, max.</li> </ul>	0.5 Hz
● on lamp load, max.	1 Hz
Total current of the outputs (per group)	
all mounting positions	
— up to 55 °C, max.	4 A
Cable length	
● shielded, max.	30 m
• unshielded, max.	30 m
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Alarms	
Diagnostic alarm	Yes
Diagnostic messages	
<ul> <li>Diagnostic information readable</li> </ul>	Yes
Short-circuit	Yes; Short-circuit of outputs to ground; module by module
Diagnostics indication LED	
<ul> <li>Group error SF (red)</li> </ul>	Yes
<ul> <li>Status indicator digital output (green)</li> </ul>	Yes
Potential separation	
between backplane bus and all other circuit	Yes
components	
Potential separation digital outputs	
<ul> <li>between the channels</li> </ul>	No
<ul> <li>between the channels and backplane bus</li> </ul>	Yes

Isolation		
Isolation tested with	707 V DC (type test)	
Standards, approvals, certificates		
Suitable for safety-related tripping of standard modules	Yes	
Highest safety class achievable for safety-related tripping of standard modules		
<ul> <li>Performance level according to ISO 13849-1</li> </ul>	PL d	
<ul> <li>Category according to ISO 13849-1</li> </ul>	Cat. 3	
<ul> <li>SILCL according to IEC 62061</li> </ul>	SILCL 2	
Dimensions		
Width	45 mm	
Height	130 mm	
Depth	35 mm	
Weights		
Weight, approx.	140 g	
last modified:	11/16/2019	