## **SIEMENS**

## Data sheet

## 6ES7142-4BD00-0AA0

SIMATIC DP, ELECTRONIC MODULE FOR ET200PRO, 4 DO DC 24V, 2.0A; MODULE DIAGNOSTICS; INCLUSIVE BUS MODULE, CONNECTING MODULE IO 6ES7194-4..00-0AA0 MUST BE ORDERED SEPERATELY



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.	20 mA
from backplane bus 3.3 V DC, max.	20 mA
Power loss	
Power loss, typ.	2 W
Address area	
Address space per module	
<ul> <li>with packing</li> </ul>	4 bit
• without packing	1 byte
Digital outputs	
Number of digital outputs	4
Short-circuit protection	Yes

<ul> <li>Response threshold, typ.</li> </ul>	2.8 A
Limitation of inductive shutdown voltage to	2L+ (-47 V)
Controlling a digital input	Yes
Switching capacity of the outputs	
● on lamp load, max.	10 W
Load resistance range	
lower limit	12 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>	2 A
<ul> <li>for signal "0" residual current, max.</li> </ul>	0.5 mA
Parallel switching of two outputs	
<ul> <li>for uprating</li> </ul>	No
<ul> <li>for redundant control of a load</li> </ul>	Yes
Switching frequency	
<ul> <li>with resistive load, max.</li> </ul>	100 Hz
• with inductive load, max.	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	
<ul> <li>shielded, max.</li> </ul>	30 m
• unshielded, max.	30 m
Interrupts/diagnostics/status information	
Diagnostic functions	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	
Group error SF (red)	Yes
Status indicator digital output (green)	Yes
Potential separation	
between backplane bus and all other circuit	Yes
components	
Potential separation digital outputs	
• between the channels	No

<ul> <li>between the channels and backplane bus</li> </ul>	Yes
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Isolation		
Isolation tested with	707 V DC (type test)	
Standards, approvals, certificates		
Suitable for safety-oriented group deactivation	Yes	
Highest safety class achievable in safety mode		
<ul> <li>Performance level according to ISO 13849-1</li> </ul>	d	
• SIL acc. to IEC 61508	2	
Dimensions		
Width	45 mm	
Height	130 mm	
Depth	35 mm	
Weights		
Weight, approx.	140 g	

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last modified: