## SIEMENS

## Data sheet

## 6ES7142-4BD00-0AB0



SIMATIC DP, Electronic modules for ET 200 PRO 4 DO 24 V DC, 2.0A High Feature, Channel diagnostics; short-circuit and wire break; incl. bus module, Connection module IO 6ES7194-4..00-0AA0 order separately

Supply voltage	
Load voltage 2L+	
Rated value (DC)	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.	40 mA
from backplane bus 3.3 V DC, max.	30 mA
Power loss	
Power loss, typ.	2.5 W
Address area	
Address space per module	
Address space per module, max.	1 byte
Digital outputs	
Number of digital outputs	4
Short-circuit protection	Yes
Response threshold, typ.	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	
• for uprating	No
<ul> <li>for redundant control of a load</li> </ul>	Yes
Switching frequency	
<ul> <li>with resistive load, max.</li> </ul>	100 Hz
<ul> <li>with inductive load, max.</li> </ul>	0.5 Hz
<ul> <li>on lamp load, max.</li> </ul>	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	
Substitute values connectable	Yes	
Alarms		
Diagnostic alarm	Yes	
Diagnoses		
<ul> <li>Diagnostic information readable</li> </ul>	Yes	
Wire-break	Yes; channel by channel	
Short-circuit	Yes; channel by channel	
Diagnostics indication LED		
Group error SF (red)	Yes	
<ul> <li>Status indicator digital output (green)</li> </ul>	Yes	
Channel fault indicator F (red)	Yes	
Potential separation		
between backplane bus and all other circuit components	Yes	
Potential separation digital outputs		
between the channels	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	
SIL acc. to IEC 62061	SIL 2	
Dimensions		
Width	45 mm	
Height	130 mm	
Depth	35 mm; without terminal module	
Weights		
Weight, approx.	140 g	

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