## **SIEMENS**

## Data sheet

6ES7142-4BD00-0AB0



SIMATIC DP, ELECTRONIC MODULES FOR ET200PRO 4 DO DC 24V, 2.0A HIGH FEATURE, CHANNEL DIAGNOSTICS; SHORT CIRCUIT AND WIRE BREAK; INCLUSIVE BUS MODULE CONNECTING MODULE IO 6ES7194-4..00-0AA0 MUST BE ORDERED SEPERATELY

Supply voltage	
Load voltage 2L+	
Rated value (DC)	24 V
Short-circuit protection	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	
● with packing	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	
● for signal "1" rated value	2 A
• for signal "0" residual current, max.	0.5 mA
Parallel switching of two outputs	
• for uprating	No
• for redundant control of a load	Yes
Switching frequency	
• with resistive load, max.	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	
• shielded, max.	30 m
• unshielded, max.	30 m
Interrupts/diagnostics/status information	V
Diagnostic functions	Yes
Substitute values connectable	Yes
Alarms	Voc
Diagnostic alarm	Yes
Diagnostic messages	V
Diagnostic information readable	Yes
Wire-break	Yes
Short-circuit	Yes
Diagnostics indication LED	
Group error SF (red)	Yes
<ul> <li>Status indicator digital output (green)</li> </ul>	Yes
<ul><li>Channel fault indicator F (red)</li></ul>	Yes
Parameter	
Diagnostics wire break	channel by channel

Diagnostics short-circuit	channel by channel
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
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; without terminal module
Weights	
Weight, approx.	140 g
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