

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



### Supply voltage

#### Load voltage 2L+

• Rated value (DC)	24 V
• Short-circuit protection	Yes
• Reverse polarity protection	Yes

### Input current

from load voltage 2L+ (without load), max.	20 mA
from backplane bus 3.3 V DC, max.	20 mA

### Encoder supply

Number of outputs	4
Short-circuit protection	Yes; per module, electronic

### Output current

• up to 55 °C, max.	1 A
---------------------	-----

### Power loss

Power loss, typ.	2 W
------------------	-----

### Digital inputs

Number of digital inputs	4
--------------------------	---

Input characteristic curve in accordance with IEC 61131, type 3	Yes
<b>Input voltage</b>	
• Rated value (DC)	24 V
• for signal "0"	-3 to +5V
• for signal "1"	+11 to +30V
<b>Input current</b>	
• for signal "1", typ.	7 mA
<b>Input delay (for rated value of input voltage)</b>	
for standard inputs	
— at "0" to "1", max.	3 ms
— at "1" to "0", max.	3 ms
<b>Cable length</b>	
• unshielded, max.	30 m
<b>Digital outputs</b>	
Number of digital outputs	4
Short-circuit protection	Yes; per channel, electronic
• Response threshold, typ.	0.7 A
Limitation of inductive shutdown voltage to	Typ. (2L+) -47 V
Controlling a digital input	Yes
<b>Switching capacity of the outputs</b>	
• on lamp load, max.	5 W
<b>Load resistance range</b>	
• lower limit	48 Ω
• upper limit	4 kΩ
<b>Output current</b>	
• for signal "1" rated value	0.5 A
• for signal "0" residual current, max.	0.5 mA
<b>Parallel switching of two outputs</b>	
• for uprating	No
• for redundant control of a load	Yes
<b>Switching frequency</b>	
• with resistive load, max.	100 Hz
• with inductive load, max.	0.5 Hz
• on lamp load, max.	1 Hz
<b>Total current of the outputs (per group)</b>	
all mounting positions	
— up to 55 °C, max.	2 A
<b>Cable length</b>	
• unshielded, max.	30 m

## Encoder

Connectable encoders	
<ul style="list-style-type: none"> <li>• 2-wire sensor</li> </ul>	Yes
<ul style="list-style-type: none"> <li>— permissible quiescent current (2-wire sensor), max.</li> </ul>	1.5 mA

### Interrupts/diagnostics/status information

Diagnostics function	Yes
----------------------	-----

### Alarms

<ul style="list-style-type: none"> <li>• Diagnostic alarm</li> </ul>	Yes
--	-----

### Diagnostic messages

<ul style="list-style-type: none"> <li>• Diagnostic information readable</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Short-circuit</li> </ul>	Yes; Short-circuit of outputs to ground; module by module

### Diagnostics indication LED

<ul style="list-style-type: none"> <li>• Status indicator digital input (green)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Status indicator digital output (green)</li> </ul>	Yes

### Potential separation

between backplane bus and all other circuit components	Yes
--	-----

### Potential separation digital inputs

<ul style="list-style-type: none"> <li>• between the channels</li> </ul>	No
<ul style="list-style-type: none"> <li>• between the channels and backplane bus</li> </ul>	Yes

### Potential separation digital outputs

<ul style="list-style-type: none"> <li>• between the channels</li> </ul>	No
<ul style="list-style-type: none"> <li>• between the channels and backplane bus</li> </ul>	Yes

### Isolation

Isolation tested with	707 V DC (type test)
-----------------------	----------------------

### Dimensions

Width	45 mm
Height	130 mm
Depth	35 mm

### Weights

Weight, approx.	140 g
-----------------	-------

<b>last modified:</b>	05/13/2020
-----------------------	------------