

SIMATIC DP, Electronics module for ET 200S, 4 F-DO PROFIsafe, 24 V DC/2 A, 30 mm overall width, up to PL E (ISO 13849), up to SIL 3 (IEC 61508), can also be used in PROFINET configuration with IM 151-3 HF



### Supply voltage

#### Load voltage L+

- |                               |      |
|-------------------------------|------|
| • Rated value (DC)            | 24 V |
| • Reverse polarity protection | No   |

### Input current

- |                                      |        |
|--------------------------------------|--------|
| From load voltage L+ (no load), typ. | 100 mA |
| from backplane bus 3.3 V DC, max.    | 28 mA  |

### Power loss

- |                  |       |
|------------------|-------|
| Power loss, typ. | 3.5 W |
|------------------|-------|

### Digital outputs

- |   |                  |
|---|------------------|
| Type of digital output                      | Transistor       |
| Number of digital outputs                   | 4                |
| Short-circuit protection                    | Yes              |
| Limitation of inductive shutdown voltage to | Typ. (2L+) -47 V |
| Controlling a digital input                 | No               |

#### Switching capacity of the outputs

- |                      |      |
|----------------------|------|
| • on lamp load, max. | 10 W |
|----------------------|------|

#### Load resistance range

• lower limit	12 Ω
• upper limit	1 kΩ
<b>Output voltage</b>	
• for signal "1", min.	L+ (-2,0 V), current sourcing switch: L+ (-1,5 V), voltage drop on current sinking switch: max. 0.5 V
<b>Output current</b>	
• for signal "1" rated value	2 A
• for signal "1" permissible range, min.	20 mA
• for signal "1" permissible range, max.	2.4 A
• for signal "0" residual current, max.	0.5 mA; Current-sourcing and current-sinking switches
<b>Parallel switching of two outputs</b>	
• for uprating	No
• for redundant control of a load	No
<b>Switching frequency</b>	
• with resistive load, max.	30 Hz; Symmetrical
• with inductive load, max.	0.1 Hz; Symmetrical
• on lamp load, max.	10 Hz; Symmetrical
<b>Total current of the outputs</b>	
• Current per module, max.	6 A
<b>Total current of the outputs (per group)</b>	
horizontal installation	
— up to 40 °C, max.	6 A
— up to 55 °C, max.	5 A
— up to 60 °C, max.	4 A
vertical installation	
— up to 40 °C, max.	4 A
<b>Cable length</b>	
• shielded, max.	500 m
• unshielded, max.	500 m
<b>Interrupts/diagnostics/status information</b>	
Diagnostics function	Yes
<b>Diagnostic messages</b>	
• Wire-break	Yes
• Short-circuit	Yes
<b>Diagnostics indication LED</b>	
• Group error SF (red)	Yes
• Status indicator digital output (green)	Yes
<b>Potential separation</b>	
<b>Potential separation digital outputs</b>	
• between the channels	No
• between the channels and backplane bus	Yes

- Between the channels and load voltage L+

No

### Standards, approvals, certificates

Highest safety class achievable in safety mode

- Performance level according to ISO 13849-1
- SIL acc. to IEC 61508

PLe

SIL 3

### Dimensions

Width 30 mm

Height 81 mm

Depth 52 mm

### Weights

Weight, approx. 85 g

**last modified:** 05/13/2020