

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
Output voltage	
• 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
Output current	
• 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
Parallel switching of two outputs	
• for uprating	No
• for redundant control of a load	No
Switching frequency	
• with resistive load, max.	30 Hz; Symmetrical
• with inductive load, max.	0.1 Hz; Symmetrical
• on lamp load, max.	10 Hz; Symmetrical
Total current of the outputs	
• Current per module, max.	6 A
Total current of the outputs (per group)	
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
Cable length	
• shielded, max.	500 m
• unshielded, max.	500 m
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Diagnostic messages	
• Wire-break	Yes
• Short-circuit	Yes
Diagnostics indication LED	
• Group error SF (red)	Yes
• Status indicator digital output (green)	Yes
Potential separation	
Potential separation digital outputs	
• 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:

06/12/2020