

Spare part SIMATIC DP, Electronics module f. ET200S, 4 F-DO PROFIsafe, 24 V DC/2 A, 30 mm overall width, up to Category 4 (EN 954-1)/ SIL3 (IEC61508)/PLE (ISO13849), can also be used in PROFINET configuration with IM 151-3 HF



Figure similar

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	
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 k Ω
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: max. 0.5 mA; Current sinking: max. 4 mA
Parallel switching of two outputs	
• for uprating	No
• for redundant control of a load	No
Switching frequency	
• with resistive load, max.	30 Hz
• with inductive load, max.	0.1 Hz
• on lamp load, max.	10 Hz
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.	200 m
• unshielded, max.	200 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
- between the channels and backplane bus
- Between the channels and load voltage L+

No
Yes
No

Isolation

Isolation tested with 500 V DC

tested with

- Channels against backplane bus and load voltage L+ 1500 V AC

Standards, approvals, certificates

Highest safety class achievable in safety mode

- acc. to EN 954 4
- Performance level according to ISO 13849-1 e
- SIL acc. to IEC 61508 SIL 3

Dimensions

Width 30 mm

Height 81 mm

Depth 52 mm

Weights

Weight, approx. 85 g

last modified: 08/16/2019