

SIMATIC DP, ELECTRONIC SUBMODULE FOR ET 200ISP, 4 DO, DC 23,1V/20MA, "H"-SHUT DOWN



Input current	
from load voltage L+ (without load), max.	340 mA; with actuator supply
from backplane bus 3.3 V DC, max.	10 mA
Power loss	
Power loss, typ.	2.5 W
Address area	
Address space per module	
• without packing	2 byte
Digital outputs	
Number of digital outputs	4; additionally 1 intrinsically-safe input for H shutdown
Short-circuit protection	Yes
No-load voltage U <sub>ao</sub> (DC)	23.1 V
Internal resistor R <sub>i</sub>	275 Ω
Trend key points E	
• Voltage U <sub>e</sub> (DC)	17.6 V
• Current I <sub>e</sub>	20 mA
Output current	
• for signal "1" rated value	0.02 A

<b>Output delay with resistive load</b>	
• "0" to "1", max.	2 ms
• "1" to "0", max.	1.5 ms
<b>Parallel switching of two outputs</b>	
• for uprating	No; for Ex reasons not possible; nor for predecessor
<b>Switching frequency</b>	
• with resistive load, max.	100 Hz
• with inductive load, max.	2 Hz
<b>Cable length</b>	
• shielded, max.	500 m
• unshielded, max.	500 m
<b>Interrupts/diagnostics/status information</b>	
Status indicator	Yes
Diagnostic functions	Yes
<b>Alarms</b>	
• Diagnostic alarm	Yes; Parameterizable
<b>Diagnostic messages</b>	
• Diagnostic information readable	Yes
• Wire-break	Yes; $R > 10 \text{ kohms}$ , $I < 100 \mu\text{A}$
• Short-circuit	Yes; $R < 800 \text{ ohms}$ (one output), $R < 40 \text{ ohms}$ (outputs connected in parallel)
<b>Diagnostics indication LED</b>	
• Group error SF (red)	Yes
• Status indicator digital output (green)	Yes
<b>Parameter</b>	
Diagnostics wire break	Yes
Diagnostics short-circuit	Yes
Response to CPU/master STOP	Substitute a value/keep last value
<b>Ex(i) characteristics</b>	
Maximum values of output circuits (per channel)	
• $T_a$ (permissible ambient temperature), max.	70 °C
<b>Potential separation</b>	
Potential separation digital outputs	
• between the channels	No
• between the channels and backplane bus	Yes
• Between the channels and load voltage L+	Yes
<b>Standards, approvals, certificates</b>	
Highest safety class achievable in safety mode	
• SIL acc. to IEC 61508	No
Use in hazardous areas	

- Type of protection acc. to EN 50020 (CENELEC)
- Type of protection acc. to KEMA

II2 G (1) GD Ex ib[jia] IIC T4 and I M2 Ex ib[jia] I

04 ATEX 1249

#### Dimensions

Width	30 mm
Height	129 mm
Depth	136.5 mm

#### Weights

Weight, approx.	255 g
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**last modified:** 03/07/2017