



SIMATIC DP, electronic module for ET200iSP, 4 DQ, 23.1 V DC/20 mA "H"-shutdown, Ex ib (ia Ga) IIC T4 Gb, Ex ib [ia IIIC Da] IIC T4 Gb, Ex ib [ia] I Mb

General information	
Product type designation	4DQ 23.1 V DC/20 mA
Input current	
Current consumption, typ.	290 mA
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	
• Address space per module, max.	2 byte
Digital outputs	
Type of digital output	Transistor
Number of digital outputs	4; additionally 1 intrinsically-safe input for H shutdown
Short-circuit protection	Yes
No-load voltage U_{ao} (DC)	23.1 V
Internal resistor R_i	275 Ω
Trend key points E	
• Voltage U_e (DC)	17.6 V
• Current I_e	20 mA
Output current	
• for signal "1" rated value	0.02 A
Output delay with resistive load	
• "0" to "1", max.	2 ms
• "1" to "0", max.	1.5 ms
Parallel switching of two outputs	
• for uprating	No; for Ex reasons not possible; nor for predecessor
Switching frequency	
• with resistive load, max.	100 Hz
• with inductive load, max.	2 Hz
Cable length	
• shielded, max.	500 m
• unshielded, max.	500 m
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Alarms	
• Diagnostic alarm	Yes; Parameterizable
Diagnoses	
• Diagnostic information readable	Yes
• Wire-break	Yes; $R > 10 \text{ kohms}$, $I < 100 \mu\text{A}$

• Short-circuit	Yes; R< 800 ohms (one output), R< 40 ohms (outputs connected in parallel)
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+	Yes
Standards, approvals, certificates	
Highest safety class achievable in safety mode	
• SIL acc. to IEC 61508	No
Dimensions	
Width	30 mm
Height	129 mm
Depth	136.5 mm
Weights	
Weight, approx.	255 g

last modified: 1/16/2021 