

SIMATIC DP, fail-safe electronics module for ET200iSP, 4 F-DQ 17.4 V/40 mA Ex I, up to Category 4 (EN954-1)/ SIL3 (IEC61508)/PLE (ISO13849),



Input current	
Current consumption, typ.	340 mA
from load voltage L+ (without load), max.	510 mA; int. Powerbus
Power loss	
Power loss, typ.	5.3 W; max.
Digital outputs	
Number of digital outputs	4
Short-circuit protection	Yes
• Response threshold, typ.	Depending on the "short-circuit level" parameter
Controlling a digital input	No
No-load voltage U_{ao} (DC)	17.4 V
Internal resistor R_i	167 Ω
Load resistance range	
• lower limit	270 Ω
• upper limit	18 k Ω
Trend key points E	
• Voltage U_e (DC)	10.7 V
• Current I_e	40 mA

Output voltage	
• for signal "1", min.	max. 17.4 V
Output current	
• for signal "0" residual current, max.	10 µA
Parallel switching of two outputs	
• for uprating	Yes
• for redundant control of a load	No
Switching frequency	
• with resistive load, max.	30 Hz
• with inductive load, max.	2 Hz
Cable length	
• shielded, max.	500 m
• unshielded, max.	500 m
Interrupts/diagnostics/status information	
Status indicator	Yes
Substitute values connectable	Yes
Alarms	
• Diagnostic alarm	Yes; Parameterizable
Diagnostic messages	
• Diagnostic information readable	Yes
• 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+	Yes
Permissible potential difference	
between different circuits	60 V DC/30 V AC
Standards, approvals, certificates	
CE mark	Yes
Highest safety class achievable in safety mode	
• Performance level according to ISO 13849-1	PLe
• SIL acc. to IEC 61508	SIL 3
Use in hazardous areas	
• Type of protection acc. to EN 50020 (CENELEC)	II 2 G (1) GD Ex ib[ia Ga][ia IIIC Da] IIC T4 GB and I M2 Ex ib[ia Ma] I Mb
• Type of protection acc. to KEMA	10 ATEX 0057

Dimensions

Width	30 mm
Height	129 mm
Depth	136.5 mm

Weights

Weight, approx.	285 g
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last modified: 05/15/2019