

SIEMENS

Product data sheet

6ES7138-7FD00-0AB0


SIMATIC DP,
FAILSAFE ELECT. SUBMODULE FOR ET200ISP,
4F-DO 17.4V/40MA EX I, UP TO SIL3

Input current	
from load voltage L+ (without load), max.	510 mA ; (int. power bus)
Power losses	
Power loss, typ.	5.3 W ; max.
Digital outputs	
Number/binary outputs	4
Functionality/short-circuit strength	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 kΩ
Trend key points E	

Voltage U _e (DC)	10 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 2 outputs	
for increased power	Yes
for redundant control of a load	No
Switching frequency	
with resistive load, max.	30 Hz
with inductive load, max.	2 Hz
Cable length	
Cable length, shielded, max.	500 m
Cable length 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
Parameter	
Diagnosis: wire break	Yes
Diagnosis: short circuit	Yes
Galvanic isolation	
Galvanic isolation digital outputs	
between the channels	No

between the channels and the backplane bus	Yes
between the channels and the load voltage L+	Yes
Permissible potential difference	
between different circuits	60V DC/30V AC
Isolation	
Isolation checked with	370 V for 1 min
Standards, approvals, certificates	
CE mark	Yes
Highest safety class achievable in safety mode	
acc. to IEC 61508	SIL 3
Performance Level in accordance with EN ISO 13849-1	PL _e
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
Weight	
Weight, approx.	285 g
Status	Jul 17, 2012