



SIMATIC, fail-safe electronic module for ET200iSP, 8 F-DI NAMUR Ex I, up to category 4 (EN954-1)/ SIL3 (IEC61508)/PLE (ISO13849), Ex ib (ia Ga) IIC T4 Gb, Ex ib [ia IIIC Da] IIC T4 Gb, Ex ib [ia] I Mb

General information	
Product brand name	SIMATIC
Product family	ET 200iSP
Product category	Digital module input
Product type designation	8F-DI ExNAMUR
Installation type/mounting	
Rack mounting	No
Front mounting	Yes
Rail mounting	Yes
Wall mounting/direct mounting	Yes
Supply voltage	
Type of supply voltage	DC
Input current	
Current consumption, typ.	145 mA
from supply voltage L+, max.	150 mA; int. Powerbus
Encoder supply	
Number of outputs	8
Output voltage (DC)	8 V
Power loss	
Power loss, typ.	1.4 W
Address area	
Address space per module	
• Inputs	6 byte
• Outputs	4 byte
Hardware configuration	
Fieldbus connection via separate transceiver	Yes
Digital inputs	
Number of digital inputs	8
Input voltage	
• Type of input voltage	DC
Input current	
• for signal "0", max. (permissible quiescent current)	1.2 mA
• for signal "1", min.	2.1 mA
• for signal "1", typ.	9.5 mA
Input delay (for rated value of input voltage)	
• Delay time for signal change, min.	0.7 ms
• Delay time for signal change, max.	16 ms
for standard inputs	
— at "0" to "1", min.	0.7 ms

— at "0" to "1", max.	16 ms; Parameterizable
— at "1" to "0", min.	0.7 ms
— at "1" to "0", max.	16 ms; Parameterizable
Cable length	
• shielded, max.	500 m
• unshielded, max.	200 m
Encoder	
Number of connectable encoders, max.	8
Connectable encoders	
• NAMUR encoder	Yes
Interfaces	
Number of PROFINET interfaces	0
Number of RS 485 interfaces	0
Protocols	
Supports protocol for PROFINET IO	No
PROFIBUS	No
Interrupts/diagnostics/status information	
Diagnostics function	Yes
Alarms	
• Diagnostic alarm	Yes; Parameterizable
• Hardware interrupt	No
Diagnoses	
• Diagnostic information readable	Yes
• Wire-break	Yes; NAMUR encoders or single contact with 10 kOhm parallel resistor
• Short-circuit	Yes; R load < 150 ohms with NAMUR sensor/sensor and NAMUR changeover contact/sensor to DIN 19234
Diagnostics indication LED	
• Group error SF (red)	Yes
Potential separation	
Potential separation digital inputs	
• between the channels	No
• between the channels and backplane bus	Yes
Permissible potential difference	
between different circuits	60 V DC/30 V AC
Isolation	
Isolation tested with	350 V AC/1 min between the shield and backplane bus connection 350 V AC/1 min between the shield and I/O 2830 V AC/1 min between backplane bus connection and I/O
Degree and class of protection	
IP degree of protection	IP30
Standards, approvals, certificates	
CE mark	Yes
Suitable for safety functions	Yes
reference designation according to IEC 81346-2 (2009)	K
Highest safety class achievable in safety mode	
• acc. to EN 954	Cat. 3 (single-channel), Cat. 4 (two-channel)
• Performance level according to ISO 13849-1	PLe
• SIL acc. to IEC 61508	SIL 3
Use in hazardous areas	
• ATEX marking	II 2 G (1) GD Ex ib[ia Ga][ia IIIC Da] IIC T4 GB and I M2 Ex ib[ia Ma] I Mb
• ATEX certificate	10 ATEX 0056
• Explosion protection category for gas	ATEX gas explosion protection, Cat. 2
• associated equipment (Ex ia)	Yes
• associated equipment (Ex ib)	Yes
Connection method	
Design of electrical connection	Screw/spring-type terminal
Dimensions	
Width	30 mm
Height	129 mm

Depth	136.5 mm
Weights	
Weight, approx.	288 g
Classifications	

		Version	Classification
	eClass	14	27-24-26-04
	eClass	12	27-24-26-04
	eClass	9.1	27-24-26-04
	eClass	9	27-24-26-04
	eClass	8	27-24-26-04
	eClass	7.1	27-24-26-04
	eClass	6	27-24-26-04
	ETIM	10	EC001599
	ETIM	9	EC001599
	ETIM	8	EC001599
	ETIM	7	EC001599
	IDEA	4	3566
	UNSPSC	15	32-15-17-05

Approvals / Certificates
General Product Approval



[Confirmation](#)



EMV	Radio Equipment Type Approval Certificate	Test Certificates
	Miscellaneous	
		Miscellaneous
		FCC
		Special Test Certificate

Test Certificates	Maritime application
Miscellaneous	

other	Dangerous goods	Environment
Manufacturer Declaration	Confirmation	
	Dangerous goods information	Transport Information

Environment

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