



FAIL-SAFE DIGITAL MODULE DM-F PROFISAFE;
 FOR FAIL-SAFE SWITCH-OFF VIA BUS / PROFISAFE;
 UV: 110..240 V AC/DC, 2 RELAY ENABLING
 CIRCUITS; 2 RELAY OUTPUTS; 3 INPUTS; MAX.
 ERR. SIL (IEC 61508): 3; MAX. ERR. PL (ISO 13849-1):
 E;

product brand name	SIRIUS
Product designation	DM-FP
Design of the product	for fail-safe shutdown

General technical data:

Insulation voltage		
• Rated value	V	300
Vibration resistance		1-6 Hz / 15 mm; 6-500 Hz / 2 g
Surge voltage resistance Rated value	V	4 000
Operating frequency maximum	1/h	360
Mechanical service life (switching cycles)		
• typical		10 000 000
Electrical endurance (switching cycles)		
• typical		100 000
Recovery time		
• after power failure typical	s	1
Protection class IP		IP20
Equipment marking		
• acc. to DIN EN 61346-2		F
• acc. to DIN EN 81346-2		F
Type of input characteristic		Type 2 in accordance with EN 61131-2

Electromagnetic compatibility:

EMC emitted interference		
• acc. to IEC 60947-1		class A
EMI immunity acc. to IEC 60947-1		corresponds to degree of severity 3

Conducted interference due to burst acc. to IEC 61000-4-4		2 kV network connection / 1 kV control connection
Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5		2 kV
Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5		1 kV
Field-bound parasitic coupling acc. to IEC 61000-4-3		10 V/m

Inputs/ Outputs:

Number of inputs		4
Design of input		
• feedback input		Yes
Number of digital inputs		3
Number of analog inputs		0
Number of outputs		2
Number of outputs as contact-affected switching element		2
• as NO contact		
— safety-related instantaneous contact		2
Number of analog outputs		0

Product Function:

Suitability for use		
• safety switch		No
• magnetically operated switch monitoring		No
• safety-related circuits		No

Communication/ Protocol:

Protocol is supported		
• PROFI-safe protocol		Yes

Installation/ mounting/ dimensions:

mounting position		any
Mounting type		screw and snap-on mounting
Height	mm	106
Width	mm	45
Depth	mm	124

Connections/ Terminals:

Type of electrical connection		
• for auxiliary and control current circuit		screw-type terminals

Ambient conditions:

Installation altitude at height above sea level maximum	m	2 000
Ambient temperature		
• during operation	°C	-25 ... +60

• during storage	°C	-40 ... +80
• during transport	°C	-40 ... +80
Relative humidity during operation	%	5 ... 95

Short-circuit:

Design of the fuse link		gL/gG: 4 A
<ul style="list-style-type: none"> • for short-circuit protection of relay enabling circuits required 		

Safety related data:

Safety Integrity Level (SIL) acc. to IEC 61508		SIL3
Performance level (PL) acc. to EN ISO 13849-1		e
Stop category acc. to DIN EN 60204-1		0
PFHD with high demand rate acc. to EN 62061	1/h	0.0000000044
Average probability of failure on demand (PFDavg) with low demand rate acc. to IEC 61508	1/y	0.0000052
T1 value for proof test interval or service life acc. to IEC 61508	y	20
Category acc. to EN 954-1		4

Control circuit/ Control:

Type of voltage of the control supply voltage		AC/DC
Control supply voltage with AC		
<ul style="list-style-type: none"> • at 50 Hz Rated value 	V	110 ... 240
<ul style="list-style-type: none"> • at 60 Hz Rated value 	V	110 ... 240
Control supply voltage for DC		
<ul style="list-style-type: none"> • Rated value 	V	110 ... 240
Control supply voltage frequency 1	Hz	50 ... 60
<ul style="list-style-type: none"> • Rated value 	Hz	50
Control supply voltage frequency 2 Rated value	Hz	60

Certificates/ approvals:

General Product Approval	EMC	For use in hazardous locations
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[Explosion Protection Certificate](#)

Functional Safety/Safety of Machinery	Test Certificates	Shipping Approval
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[Type Examination](#)

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



GL

other

[Declaration of Conformity](#)

[PROFINET-Certification](#)



Profibus

[PROFISafe-Certification](#)

Further information

Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)

<http://www.siemens.com/industrymall>

Cax online generator

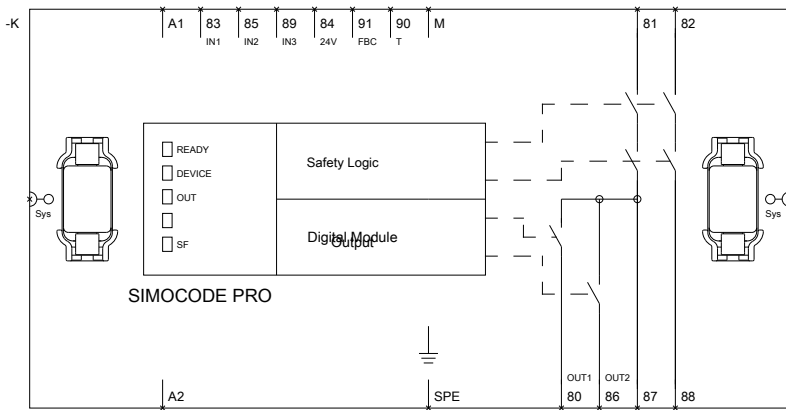
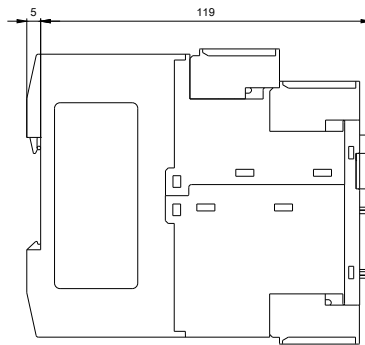
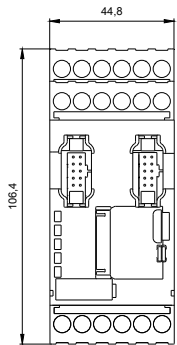
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mfb=3UF73301AU000>

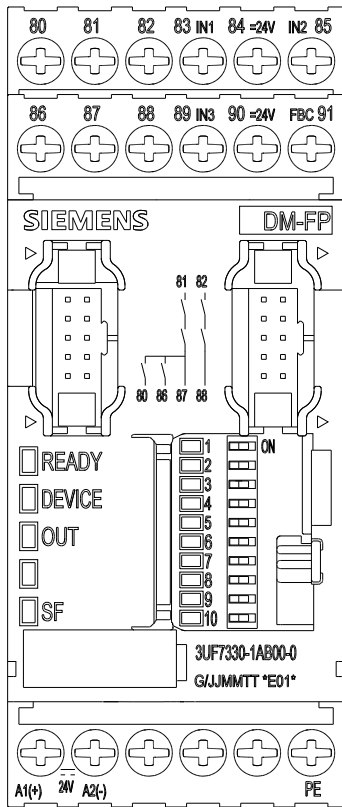
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3UF73301AU000/all>

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

http://www.automation.siemens.com/bilddb/cax_de.aspx?mfb=3UF73301AU000&lang=en





last modified:

09.03.2015