

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 brandname	SIRIUS
Product designation	DM-FP
Design of the product	for fail-safe shutdown
General technical data	
Product component	
• input for analog temperature sensors	No
• input for ground fault detection	No
Insulation voltage	
• rated value	300 V
Surge voltage resistance rated value	4 000 V
Protection class IP	IP20
Vibration resistance	1-6 Hz / 15 mm; 6-500 Hz / 2 g
Operating frequency maximum	360 1/h
Switching behavior	monostable
Switching capacity current of the NO contacts of the relay outputs at AC-15	
• at 24 V	3 A
• at 120 V	3 A

Switching capacity current of the NO contacts of the relay outputs at DC-13	
• at 24 V	4 A
• at 60 V	0.55 A
• at 125 V	0.22 A
Mechanical service life (switching cycles)	
• typical	10 000 000
Electrical endurance (switching cycles)	
• typical	100 000
Recovery time	
• after power failure typical	1 s
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
• due to conductor-earth surge acc. to IEC 61000-4-5	2 kV
• 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
Wire length for digital signals maximum	300 m

Product Function

Suitability for use	
• safety switch	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	106 mm
Width	45 mm
Depth	124 mm
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	2 000 m
Ambient temperature	
• during operation	-25 ... +60 °C
• during storage	-40 ... +80 °C
• during transport	-40 ... +80 °C
Environmental category during operation acc. to IEC 60721	3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6
Relative humidity during operation	5 ... 95 %
Short-circuit protection	
Design of the fuse link	
• for short-circuit protection of relay enabling circuits required	gL/gG: 4 A
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	0.0000000078 1/h
Average probability of failure on demand (PFDavg) with low demand rate acc. to IEC 61508	0.00001 1/y
T1 value for proof test interval or service life acc. to IEC 61508	20 y
Category acc. to EN 954-1	4
Control circuit/ Control	
Type of voltage of the control supply voltage	AC/DC
Control supply voltage at AC	
• at 50 Hz rated value	110 ... 240 V

- at 60 Hz rated value

110 ... 240 V

Control supply voltage frequency 1 rated value	50 Hz
Control supply voltage frequency 2 rated value	60 Hz

Certificates/approvals

General Product Approval	EMC	For use in hazardous locations
 CCC	 EAC	 ATEX
 CSA	 UL	 C-Tick

For use in hazardous locations	Functional Safety/Safety of Machinery	Declaration of Conformity	Test Certificates	Shipping Approval
Explosionsschutzzer tifikat	Baumusterbescheini gung	 EG-Konf.	spezielle Prüfbescheinigunge n	Typprüfbescheinigu ng/Werkszeugnis
				 ABS

Shipping Approval	other
 DNV	Bestätigungen
 GL	PROFINET- Zertifizierung
 RMRS	 Profibus

other
PROFISafe- Zertifizierung

Further information

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

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

Industry Mall (Online ordering system)

<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3UF7330-1AU00-0>

Cax online generator

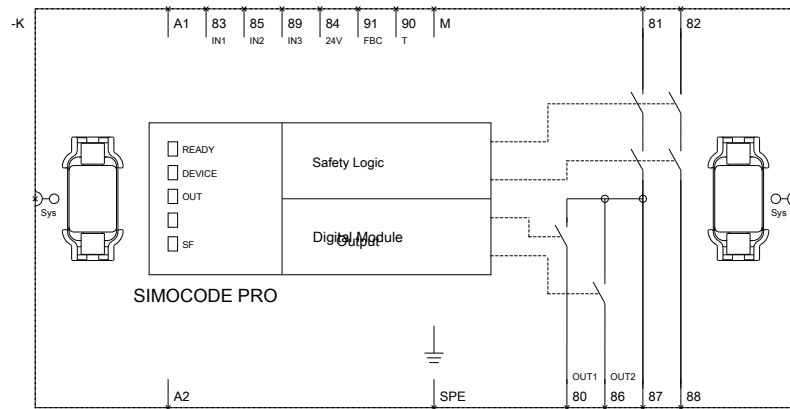
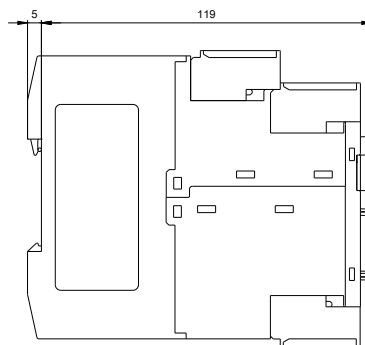
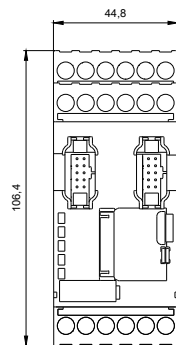
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UF7330-1AU00-0>

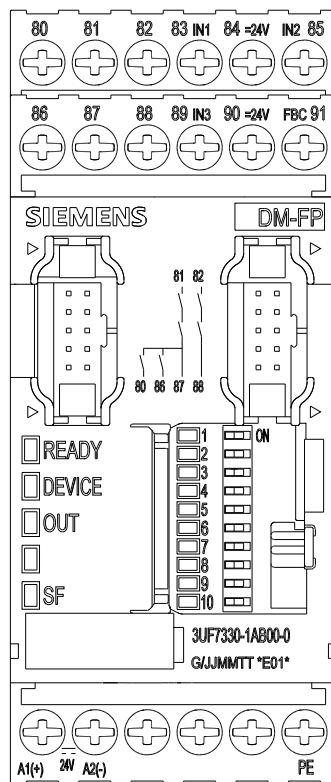
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3UF7330-1AU00-0>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UF7330-1AU00-0&lang=en





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