## **SIEMENS**

Data sheet 3UF7100-1AA00-0

Current measuring module, Set current 0.3...3 A Overall width 45 mm, straight-through transformer



Product brand name	SIRIUS			
Product designation	Current measuring module			
General technical data				
Product function				
<ul> <li>Current measurement</li> </ul>	Yes			
<ul> <li>voltage measurement</li> </ul>	No			
<ul> <li>active power measurement</li> </ul>	No			
<ul> <li>Power measurement</li> </ul>	No			

<ul> <li>voltage measurement</li> </ul>	No
<ul> <li>active power measurement</li> </ul>	No
<ul> <li>Power measurement</li> </ul>	No
<ul> <li>frequency measurement</li> </ul>	No
Product component	
<ul> <li>input for thermistor connection</li> </ul>	No
Insulation voltage	
<ul> <li>with degree of pollution 3 at AC rated value</li> </ul>	690 V
• for wires of main circuit acc. to IEC 60947-1	6 kV
rated value	
Surge voltage resistance rated value	6 000 V
Protection class IP	IP20
Shock resistance	
• acc. to IEC 60068-2-27	15g / 11 ms

Vibration registers	4 C.L. / 45 C 500 L. / 2
Vibration resistance  Reference code acc. to DIN EN 81346-2	1-6 Hz / 15 mm; 6-500 Hz / 2 g
	F
Certificate of suitability	DVO OC ATEV FOOA
according to ATEX directive 2014/34/EU	BVS 06 ATEX F001
Explosion device group and category according to ATEX directive 2014/34/EU	II (2) G, II (2 ) D, I (M2)
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
<ul> <li>due to conductor-earth surge acc. to IEC</li> <li>61000-4-5</li> </ul>	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
nputs/ Outputs	
Number of outputs as contact-affected switching element	0
Protective and monitoring functions	
Product function	
<ul><li>power factor monitoring</li></ul>	No
<ul> <li>ground-fault monitoring</li> </ul>	No
voltage detection	No
Product function	
Current detection	Yes
Overload protection	Yes
nstallation/ mounting/ dimensions	
Mounting position	any
Mounting type	screw and snap-on mounting
Height	84 mm
Width	45 mm
Depth	45 mm
Required spacing	
• top	30 mm
• bottom	30 mm
• left	0 mm
• right	0 mm
Diameter of feed through opening	7.5 mm
Diameter of feed through opening  Diameter of feed through opening for current	7.5 mm
Diameter of feed through opening for current	7.5 IIIII

Connections/ Terminals	
Type of electrical connection	
• for main current circuit	straight-through transformers
Ambient conditions	
Installation altitude at height above sea level	
• 1 maximum	2 000 m
• 2 maximum	3 000 m; max. +50 °C (no protective separation)
• 3 maximum	4 000 m; max. +40 °C (no protective separation)
Ambient temperature	
<ul> <li>during operation</li> </ul>	-25 +60 °C
Environmental category	
<ul> <li>during operation acc. to IEC 60721</li> </ul>	3K6 (no formation of ice, no condensation, relative humidity 10 95%), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6
<ul> <li>during storage acc. to IEC 60721</li> </ul>	1K6 (no condensation, relative humidity 10 95%), 1C2 (no salt mist), 1S2 (sand must not get into the devices), 1M4
• during transport acc. to IEC 60721	2K2, 2C1, 2S1, 2M2
Relative humidity	
<ul><li>during operation</li></ul>	5 95 %
Short-circuit protection	
Product function Short circuit protection	No
Safety related data	
Safety Integrity Level (SIL) acc. to IEC 61508	1
Galvanic isolation	
(electrically) protective separation acc. to IEC 60947-1	All circuits with protective separation (double creepage paths and clearances), the information in the "Protective Separation" test report, No. A0258, must be observed (link see further information)
Main circuit	
Number of poles for main current circuit	3
Adjustable pick-up value current of the current- dependent overload release	0.3 3 A
Operating voltage	
• at AC	
— at 50 Hz rated value	110 690 V
— at 60 Hz rated value	110 690 V
Operating frequency rated value	50 60 Hz
Control circuit/ Control	
Type of voltage	AC
Certificates/ approvals	

## **General Product Approval**

**EMC** 

For use in hazardous locations













For use in haz- ardous loca- tions	Declaration of Conformity	Test Certificates	Marine / Ship- ping
Explosion Protection Certificate	Miscellaneous  EG-Konf.	Special Test Certificate  Type Test Certificates/Test Report	ABS

Marine / Shipping

other







Confirmation



PROFINET-Certification

Profibus

## Further information

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

www.siemens.com/ic10

Industry Mall (Online ordering system)

https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3UF7100-1AA00-0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UF7100-1AA00-0

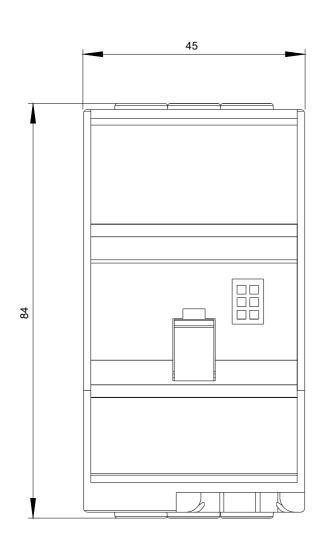
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

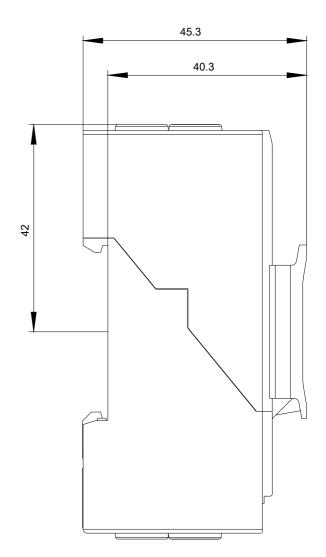
https://support.industry.siemens.com/cs/ww/en/ps/3UF7100-1AA00-0

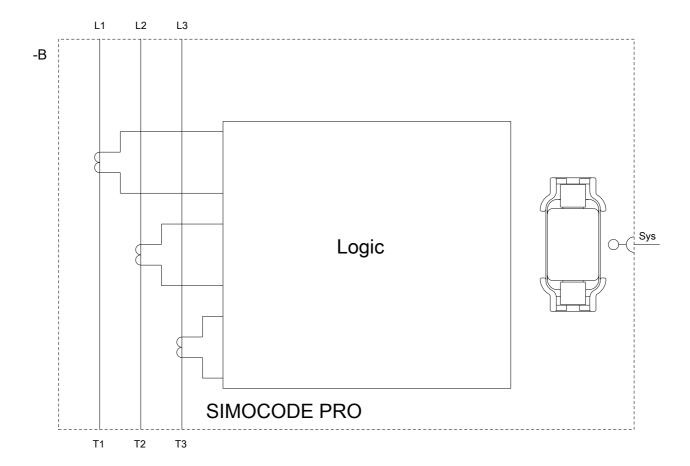
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3UF7100-1AA00-0&lang=en

Test report No. A0258, protective separation

https://support.industry.siemens.com/cs/ww/en/view/109748152







last modified: 04/04/2020 🖸