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	SIMOCODE
product designation	Current measuring module
product type designation	IM
General technical data	
size of the circuit-breaker	S00, S0
product function	
● current measurement	Yes
● voltage measurement	No
● active power measurement	No
● energy measurement	No
● frequency measurement	No
product component	
● input for thermistor connection	No
consumed active power	0.2 W
insulation voltage	
● with degree of pollution 3 at AC rated value	690 V
● for wires of main circuit according to IEC 60947-1 rated value	6 kV
surge voltage resistance rated value	6 000 V
shock resistance according to IEC 60068-2-27	15 g / 11 ms
vibration resistance	1 … 6 Hz / 15 mm; 6 … 500 Hz / 2 g
reference code according to IEC 81346-2	F
Substance Prohibitance (day/month/year)	05/28/2009
SVHC substance name	Lead CAS-No. 7439-92-1 Lead monoxide (lead oxide) CAS-No. 1317-36-8
Net Weight	0.148 kg
Electromagnetic compatibility	
EMC emitted interference according to IEC 60947-1	class A
EMC immunity according to IEC 60947-1	corresponds to degree of severity 3
conducted interference	
● due to burst according to IEC 61000-4-4	2 kV
● due to conductor-earth surge according to IEC 61000-4-5	2 kV
● due to conductor-conductor surge according to IEC 61000-4-5	1 kV
field-based interference according to IEC 61000-4-3	10 V/m
Inputs/ Outputs	
number of outputs as contact-affected switching element	0
Protective and monitoring functions	
product function	
● power factor monitoring	No

Subject to change without notice
© Copyright Siemens

● ground-fault monitoring	No
● voltage detection	No
trip class	CLASS 5E, 10E, 15E, 20E, 25E, 30E, 35E and 40E adjustable
product function	
● current detection	Yes
● overload protection	Yes
Installation/ mounting/ dimensions	
mounting position	any
fastening method	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 inlet opening	7.5 mm
diameter of inlet opening for current measurement	7.5 mm
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	
● during operation	-25 ... +60 °C
● during storage	-40 ... +80 °C
● during transport	-40 ... +80 °C
environmental category	
● during operation according to IEC 60721	3K6 (no formation of ice, no condensation, relative humidity 10 ... 95%), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6
● during storage according to IEC 60721	1K6 (no condensation, relative humidity 10 ... 95%), 1C2 (no salt mist), 1S2 (sand must not get into the devices), 1M4
● during transport according to IEC 60721	2K2, 2C1, 2S1, 2M2
relative humidity during operation	5 ... 95 %
Short-circuit protection	
product function short circuit protection	No
IEC 61508	
Safety Integrity Level (SIL) according to IEC 61508	1
ATEX	
certificate of suitability	
● according to ATEX directive 2014/34/EU	BVS 06 ATEX F001
● according to UKCA	ITS21UKEX0464
explosion device group and category according to ATEX directive 2014/34/EU	II (2) G, II (2) D, I (M2)
Galvanic isolation	
(electrically) protective separation according 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 current response 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

Subject to change without notice
© Copyright Siemens

operating frequency rated value	50 ... 60 Hz
Control circuit/ Control	
type of voltage	AC

Approvals Certificates

Environment	General Product Approval				
Environmental Confirmations					

General Product Approval		EMV		For use in hazardous locations	

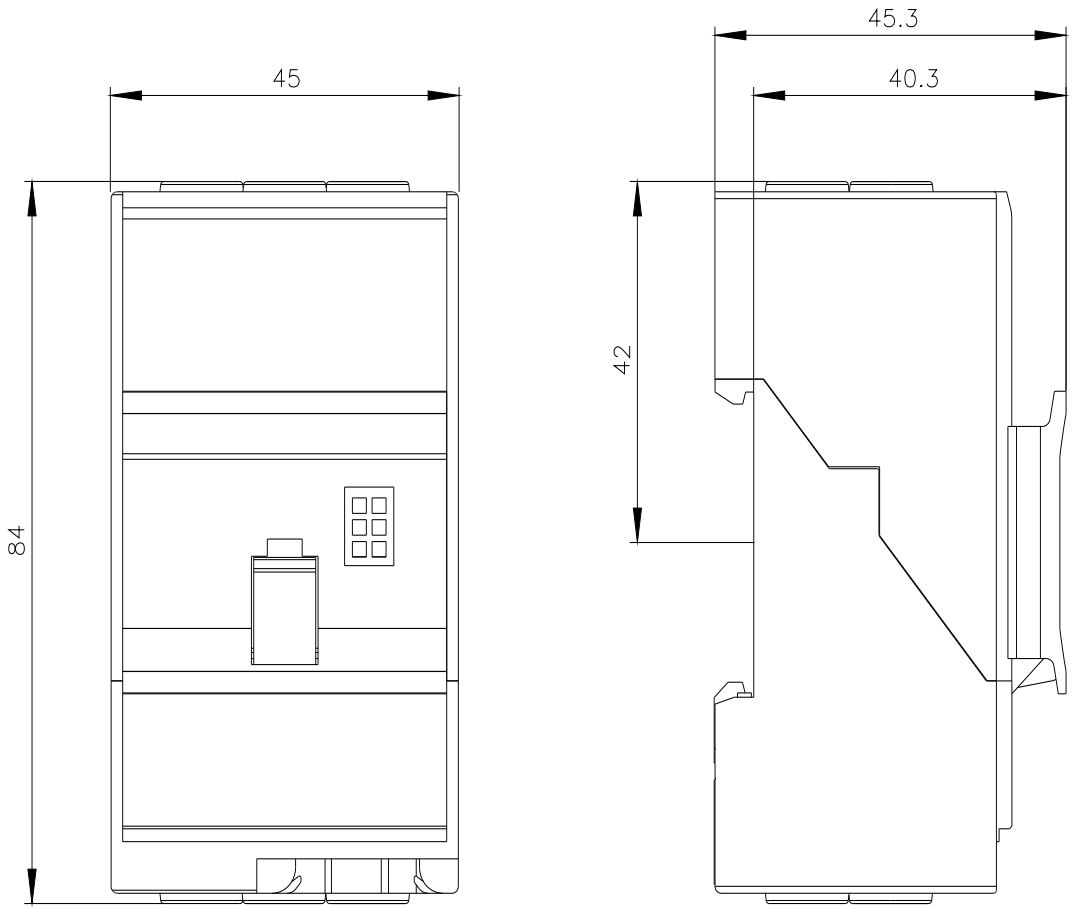
For use in hazardous locations		Test Certificates		Maritime application	
	Miscellaneous	Special Test Certificate	Type Test Certificates/Test Report		

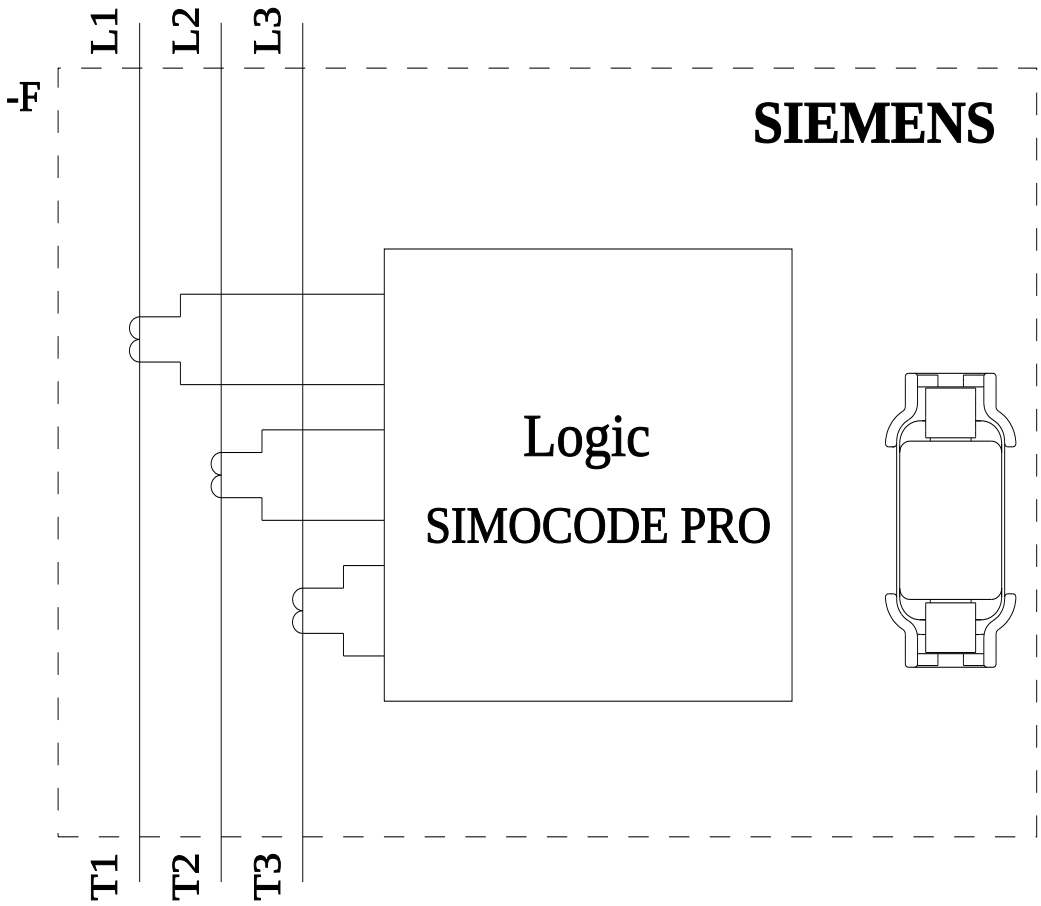
Maritime application	other		Industrial Communication
	Confirmation		

Further information

Information on the packaging
https://support.industry.siemens.com/cs/ww/en/view/109813875
Information for data generation and storage
https://support.industry.siemens.com/cs/ww/en/view/109995012
Information- and Downloadcenter (Catalogs, Brochures,…)
https://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
https://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, ...)
https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UF7100-1AA00-0&lang=en

Subject to change without notice
© Copyright Siemens





last modified: 7/24/2026

Subject to change without notice
© Copyright Siemens

Subject to change without notice
© Copyright Siemens