



Current measuring module, Set current 10...100 A Overall width 55 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	S2, S3
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	300 g
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

• ground-fault monitoring • voltage detection	No
trip class	CLASS 5E
product function • current detection • overload protection	Yes Yes
Installation/ mounting/ dimensions	
mounting position	any
fastening method	screw and snap-on mounting
height	94 mm
width	55 mm
depth	72 mm
required spacing • top • bottom • left • right	30 mm 30 mm 0 mm 0 mm
diameter of inlet opening	14 mm
diameter of inlet opening for current measurement	14 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 maximum • 3 maximum	2 000 m 3 000 m; max. +50 °C (no protective separation) 4 000 m; max. +40 °C (no protective separation)
ambient temperature • during operation • during storage • during transport	-25 ... +60 °C -40 ... +80 °C -40 ... +80 °C
environmental category • during operation according to IEC 60721 • during storage according to IEC 60721 • during transport 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 1K6 (no condensation, relative humidity 10 ... 95%), 1C2 (no salt mist), 1S2 (sand must not get into the devices), 1M4 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 • according to UKCA	BVS 06 ATEX F001 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	10 ... 100 A
operating voltage • at AC — at 50 Hz rated value — at 60 Hz rated value	110 ... 690 V 110 ... 690 V

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	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=3UF7102-1AA00-0>

Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UF7102-1AA00-0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3UF7102-1AA00-0>

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

https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UF7102-1AA00-0&lang=en



