













Current/voltage measuring module V2; Set current 20...200 A, Voltage measurement up to 690 V, Overall width 120 mm, Straight-through transformer, basic unit required pro V PB, pro V MR, pro V PN or pro V EIP

product brand name	SIRIUS
product designation	Current/voltage measuring module
<b>General technical data</b>	
measuring procedure	RMS value measurement
size of the circuit-breaker	S6
product function	<ul style="list-style-type: none"> <li>• current measurement</li> <li>• voltage measurement</li> <li>• active power measurement</li> <li>• energy measurement</li> <li>• frequency measurement</li> </ul>
measuring procedure for current measurement	TRMS
current measuring range extension with external current transformers	No
measuring procedure for voltage measurement	TRMS
measurable supply voltage between the line conductors at AC maximum rated value	690 V
product component	
• input for thermistor connection	No
consumed active power	0.5 W
insulation voltage	<ul style="list-style-type: none"> <li>• with degree of pollution 3 at AC rated value</li> <li>• for wires of main circuit according to IEC 60947-1 rated value</li> </ul>
surge voltage resistance rated value	6 000 V
shock resistance according to IEC 60068-2-27	15g / 11 ms; with basic unit snapped on
vibration resistance	1-6 Hz / 15 mm; 6-500 Hz / 2 g; with basic unit snapped on: 1g
reference code according to IEC 81346-2	F
Substance Prohibitance (Date)	05/28/2009
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8
Weight	0.693 kg
<b>Electromagnetic compatibility</b>	
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	<ul style="list-style-type: none"> <li>• due to burst according to IEC 61000-4-4</li> <li>• due to conductor-earth surge according to IEC 61000-4-5</li> <li>• due to conductor-conductor surge according to IEC 61000-4-5</li> </ul>
field-based interference according to IEC 61000-4-3	10 V/m
<b>Inputs/ Outputs</b>	

number of outputs as contact-affected switching element	0
<b>Protective and monitoring functions</b>	
<b>product function</b>	
• power factor monitoring	Yes
• ground-fault monitoring	Yes
• voltage detection	Yes
<b>trip class</b>	CLASS 5E
<b>product function</b>	
• current detection	Yes
• overload protection	Yes
<b>Precision</b>	
<b>measuring precision</b>	
• of frequency measurement	+/- 1,5 %, 15 A ... 1600 A, 0,85 x 110 V ... 1,1 x 690 V (line-to-line voltages), cos phi (0.5...1), 50/60 Hz, 25 °C
• for current measurement 1	+/- 1.5 %, in range 15 A ... 400 A, in range 0.85 x 110 V ... 1.1 x 690 V (line-to-line voltages), 50/60 Hz, 25 °C
• for current measurement 2	+/- 5%, in range 400 A ... 1600 A, in range 0.85 x 110 V ... 1.1 x 690 V (line-to-line voltages), 50/60 Hz, 25 °C
• for voltage measurement 1	+/- 1.5 %, in range 0.85 x 110 V ... 1.1 x 690 V (line-to-line voltages), 50/60 Hz, 25 °C
• at cos phi-measurement 1	+/- 1.5 %, 15 A ... 400 A, 0.85 x 110 V ... 1.1 x 690 V (line-to-line voltages), cos phi (0.5...1), 50/60 Hz, 25 °C
• at cos phi-measurement 2	+/- 5%, 400 A ... 1600 A, 0.85 x 110 V ... 1.1 x 690 V (line-to-line voltages), cos-phi (0.5...1), 50/60 Hz, 25 °C
• at active power measurement 1	+/- 5%, 15 A ... 400 A, 0.85 x 110 V ... 1.1 x 690 V (line-to-line voltages), cos-phi (0.5...1), 50/60 Hz, 25 °C
• at active power measurement 2	+/- 10%, 400 A ... 1600 A, 0.85 x 110 V ... 1.1 x 690 V (line-to-line voltages), cos-phi (0.5...1), 50/60 Hz, 25 °C
• at energy measurement 1	+/- 5%, 47 A ... 1260 A, 0.85 x 110 V ... 1.1 x 690 V (line-to-line voltages), cos-phi (0.5...1), 50/60 Hz, 25 °C
• at energy measurement 2	+/- 10%, 400 A ... 1600 A, 0.85 x 110 V ... 1.1 x 690 V (line-to-line voltages), cos-phi (0.5...1), 50/60 Hz, 25 °C
• at apparent power measurement 1	+/- 3%, 15 A ... 400 A, 0.85 x 110 V ... 1.1 x 690 V (line-to-line voltages), cos-phi (0.5...1), 50/60 Hz, 25 °C
• at apparent power measurement 2	+/- 5 %, 400 A ... 1600 A, 0.85 x 110 V ... 1.1 x 690 V (line-to-line voltages), cos phi (0.5...1), 50/60 Hz, 25 °C
<b>accuracy of ground-fault monitoring</b>	In the range 30 % .. 120 %/Is: +/- 10 % (Class CI-A), in range 15 % .. 30 % Ie: +/- 25 % (Class CI-B), both values acc. to IEC 60947-1 Annex T
<b>temperature drift per °C</b>	0.01 %/°C; Reference temperature: 25°C
<b>measured variable frequency</b>	45 ... 65 Hz
<b>Installation/ mounting/ dimensions</b>	
<b>mounting position</b>	any
<b>fastening method</b>	screw and snap-on mounting
<b>height</b>	95 mm
<b>width</b>	120 mm
<b>depth</b>	145 mm
<b>required spacing</b>	
• top	30 mm
• bottom	30 mm
• left	0 mm
• right	0 mm
<b>diameter of inlet opening</b>	25 mm
<b>diameter of inlet opening for current measurement</b>	25 mm
<b>Connections/ Terminals</b>	
<b>type of electrical connection</b>	
• for main current circuit	straight-through transformers
• for auxiliary and control circuit	screw-type terminals
<b>type of electrical connection at the measurement inputs for voltage</b>	screw-type terminals
<b>type of connectable conductor cross-sections at the measurement inputs for voltage</b>	
• finely stranded with core end processing	1x (0.5 ... 2.5 mm²), 2x (0.5 ... 1.5 mm²)
• solid	1x (0.5 ... 4 mm²), 2x (0.5 ... 2.5 mm²)
• for AWG cables solid	1x (20 ... 12), 2x (20 ... 14)
• for AWG cables stranded	1x (20 ... 14), 2x (20 ... 16)

tightening torque at the measurement inputs for voltage	0.8 ... 1.2 N·m
tightening torque [lbf·in] at the measurement inputs for voltage	7 ... 10.3 lbf·in
<b>Ambient conditions</b>	
<b>installation altitude at height above sea level</b> <ul style="list-style-type: none"> <li>• 1 maximum</li> <li>• 2 maximum</li> <li>• 3 maximum</li> </ul>	2 000 m 3 000 m; max. +50 °C (no protective separation) 4 000 m; max. +40 °C (no protective separation)
<b>ambient temperature</b> <ul style="list-style-type: none"> <li>• during operation</li> <li>• during storage</li> <li>• during transport</li> </ul>	-25 ... +60 °C -40 ... +80 °C -40 ... +80 °C
<b>environmental category</b> <ul style="list-style-type: none"> <li>• during operation according to IEC 60721</li> <li>• during storage according to IEC 60721</li> <li>• during transport according 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 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	10 ... 95 %
<b>Short-circuit protection</b>	
product function short circuit protection	No
<b>ATEX</b>	
<b>certificate of suitability</b> <ul style="list-style-type: none"> <li>• according to ATEX directive 2014/34/EU</li> <li>• according to UKCA</li> </ul>	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)
<b>Galvanic isolation</b>	
(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)
<b>Main circuit</b>	
number of poles for main current circuit	3
adjustable current response value current of the current-dependent overload release	20 ... 200 A
<b>operating voltage</b> <ul style="list-style-type: none"> <li>• at AC               <ul style="list-style-type: none"> <li>— at 50 Hz rated value</li> <li>— at 60 Hz rated value</li> </ul> </li> </ul>	110 ... 690 V 110 ... 690 V
operating frequency rated value	50 ... 60 Hz
<b>Control circuit/ Control</b>	
type of voltage	AC
inrush current maximum	2 000 A; 10 x I <sub>o</sub>
<b>Approvals Certificates</b>	
General Product Approval	EMV
<div>       </div>	
EMV	For use in hazardous locations
<div> <a href="#">KC</a>     <a href="#">Miscellaneous</a> </div>	
Test Certificates	Maritime application

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)

[Special Test Certificate](#)



Maritime application	other	Environment	Industrial Communication
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[Confirmation](#)



[Environmental Confirmations](#)



#### Further information

##### Information on the packaging

<https://support.industry.siemens.com/cs/ww/en/view/109813875>

##### 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=3UF7113-1AA01-0>

##### Cax online generator

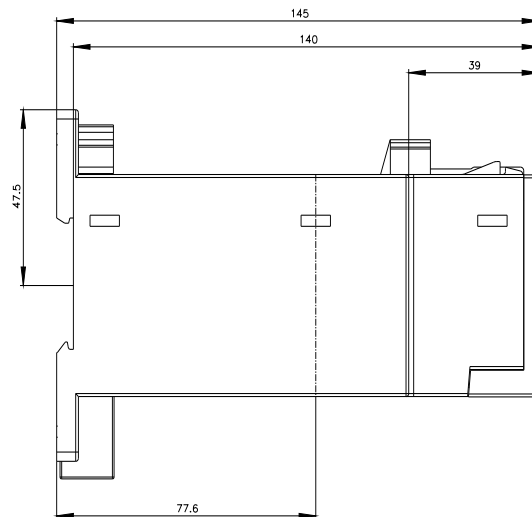
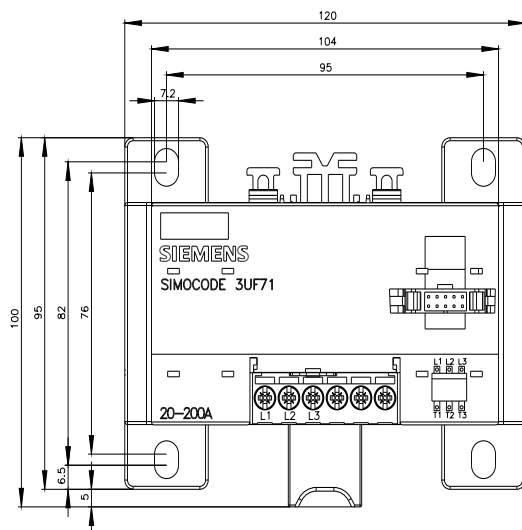
<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UF7113-1AA01-0>

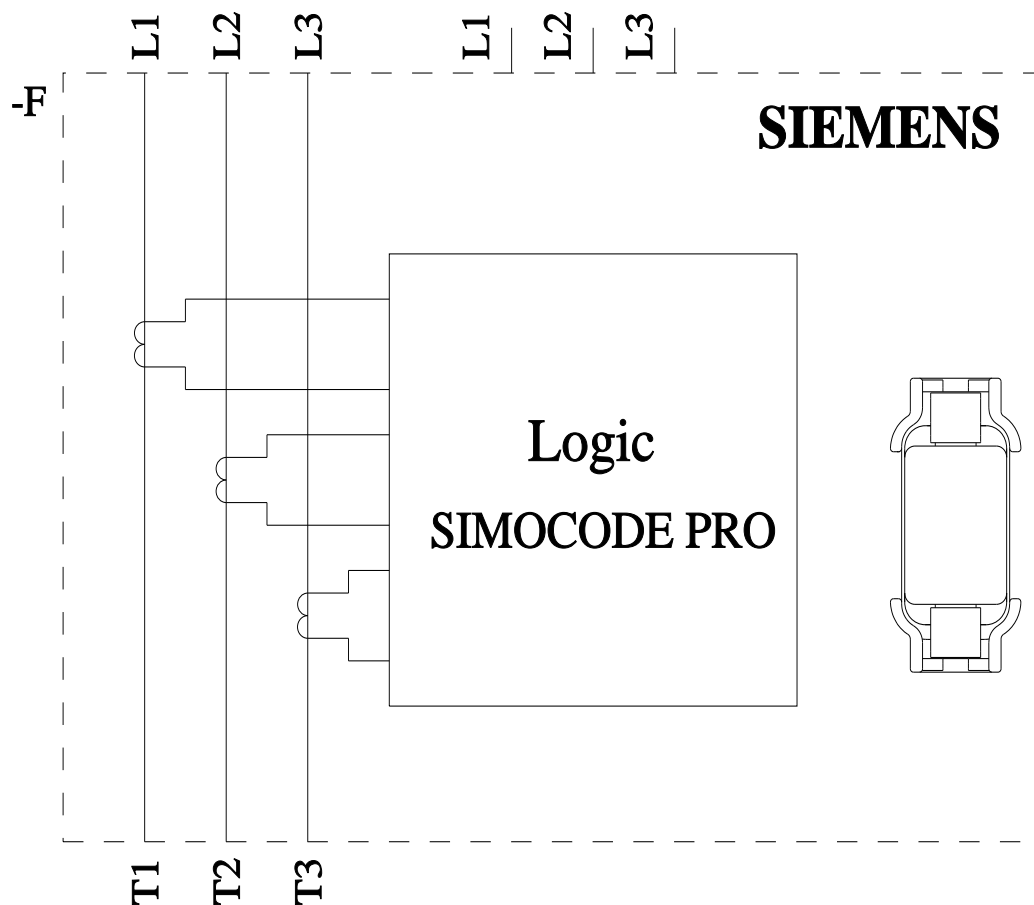
##### Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<https://support.industry.siemens.com/cs/ww/en/ps/3UF7113-1AA01-0>

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

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3UF7113-1AA01-0&lang=en](http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UF7113-1AA01-0&lang=en)





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