

Current/voltage measuring module Set current 0.3...3 A, voltage measurement up to 690 V, Overall width 45 mm, straight-through transformer



Product brand name	SIRIUS
Product designation	Current/voltage measuring module
General technical data	
Product function	
• Current measurement	Yes
• voltage measurement	Yes
• active power measurement	Yes
• Power measurement	Yes
• frequency measurement	No
Current measuring range extension with external current transformers	Yes
Measurable supply voltage between the outer conductors at AC maximum rated value	690 V
Outer conductors and neutral conductors internal resistance for voltage measurement	1 MΩ; R-based voltage divider
Product component	
• input for thermistor connection	No
Insulation voltage	
• with degree of pollution 3 rated value	690 V

<ul style="list-style-type: none"> <li>for wires of main circuit acc. to IEC 60947-1 rated value</li> </ul>	6 kV
<b>Surge voltage resistance rated value</b>	6 000 V
<b>Protection class IP</b>	IP20
<b>Shock resistance</b>	
<ul style="list-style-type: none"> <li>acc. to IEC 60068-2-27</li> </ul>	15g / 11 ms
<b>Vibration resistance</b>	1-6 Hz / 15 mm; 6-500 Hz / 2 g
<b>Reference code acc. to DIN EN 81346-2</b>	F

#### Electromagnetic compatibility

<b>EMC emitted interference</b>	
<ul style="list-style-type: none"> <li>acc. to IEC 60947-1</li> </ul>	class A
<b>EMI immunity acc. to IEC 60947-1</b>	corresponds to degree of severity 3
<b>Conducted interference</b>	
<ul style="list-style-type: none"> <li>due to burst acc. to IEC 61000-4-4</li> </ul>	2 kV
<ul style="list-style-type: none"> <li>due to conductor-earth surge acc. to IEC 61000-4-5</li> </ul>	2 kV
<ul style="list-style-type: none"> <li>due to conductor-conductor surge acc. to IEC 61000-4-5</li> </ul>	1 kV
<b>Field-bound parasitic coupling acc. to IEC 61000-4-3</b>	10 V/m

#### Inputs/ Outputs

<b>Number of outputs as contact-affected switching element</b>	0
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#### Protective and monitoring functions

<b>Product function</b>	
<ul style="list-style-type: none"> <li>power factor monitoring</li> </ul>	Yes
<ul style="list-style-type: none"> <li>ground-fault monitoring</li> </ul>	No
<ul style="list-style-type: none"> <li>voltage detection</li> </ul>	Yes
<b>Product function</b>	
<ul style="list-style-type: none"> <li>Current detection</li> </ul>	Yes
<ul style="list-style-type: none"> <li>Overload protection</li> </ul>	Yes

#### Installation/ mounting/ dimensions

<b>Mounting position</b>	any
<b>Mounting type</b>	screw and snap-on mounting
<b>Height</b>	85 mm
<b>Width</b>	45 mm
<b>Depth</b>	66 mm
<b>Required spacing</b>	
<ul style="list-style-type: none"> <li>top</li> </ul>	30 mm
<ul style="list-style-type: none"> <li>bottom</li> </ul>	30 mm
<ul style="list-style-type: none"> <li>left</li> </ul>	0 mm
<ul style="list-style-type: none"> <li>right</li> </ul>	0 mm

Diameter of feed through opening	7.5 mm
Diameter of feed through opening for current measurement	7.5 mm

#### Connections/Terminals

<b>Type of electrical connection</b> <ul style="list-style-type: none"> <li>• for main current circuit</li> <li>• for auxiliary and control current circuit</li> </ul>	straight-through transformers 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> <ul style="list-style-type: none"> <li>• finely stranded with core end processing</li> <li>• solid</li> <li>• at AWG conductors solid</li> <li>• at AWG conductors stranded</li> </ul>	1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1.5 mm <sup>2</sup> ) 1x (0.5 ... 4 mm <sup>2</sup> ), 2x (0.5 ... 2.5 mm <sup>2</sup> ) 1x (20 ... 14), 2x (20 ... 14) 1x (20 ... 14), 2x (20 ... 16)
<b>Tightening torque at the measurement inputs for voltage</b>	0.8 ... 1.2 N·m
<b>Tightening torque [lbf·in] at the measurement inputs for voltage</b>	7 ... 10.3 lbf·in

#### Ambient conditions

<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; No protective separation at 50 °C 4 000 m; No protective separation at 40 °C
<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 acc. to IEC 60721</li> <li>• during storage acc. to IEC 60721</li> <li>• during transport 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 1K6 (no condensation, relative humidity 10 ... 95%), 1C2 (no salt mist), 1S2 (sand must not get into the devices), 1M4 2K2, 2C1, 2S1, 2M2
<b>Relative humidity</b> <ul style="list-style-type: none"> <li>• during operation</li> </ul>	5 ... 95 %

#### Short-circuit protection

<b>Product function Short circuit protection</b>	No
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#### Safety related data

<b>Safety Integrity Level (SIL) acc. to IEC 61508</b>	1
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#### 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 <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

Control circuit/ Control	
Type of voltage	AC
Type of voltage of the control supply voltage	AC

Certificates/approvals		
General Product Approval	EMC	For use in hazardous locations



Declaration of Conformity	Test Certificates	Marine / Shipping
<p>EG-Konf.</p>	<a href="#">Type Test Certificates/Test Report</a> <a href="#">Special Test Certificate</a>	<p>ABS</p> <p>LRS</p> <p>RMRS</p>

Marine / Shipping	other
<p>DNV-GL DNVGL.COM/AF</p>	<a href="#">Confirmation</a> <a href="#">PROFIsafe-Certification</a> <p>Profibus</p> <a href="#">PROFINET-Certification</a>

## Further information

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

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

Industry Mall (Online ordering system)

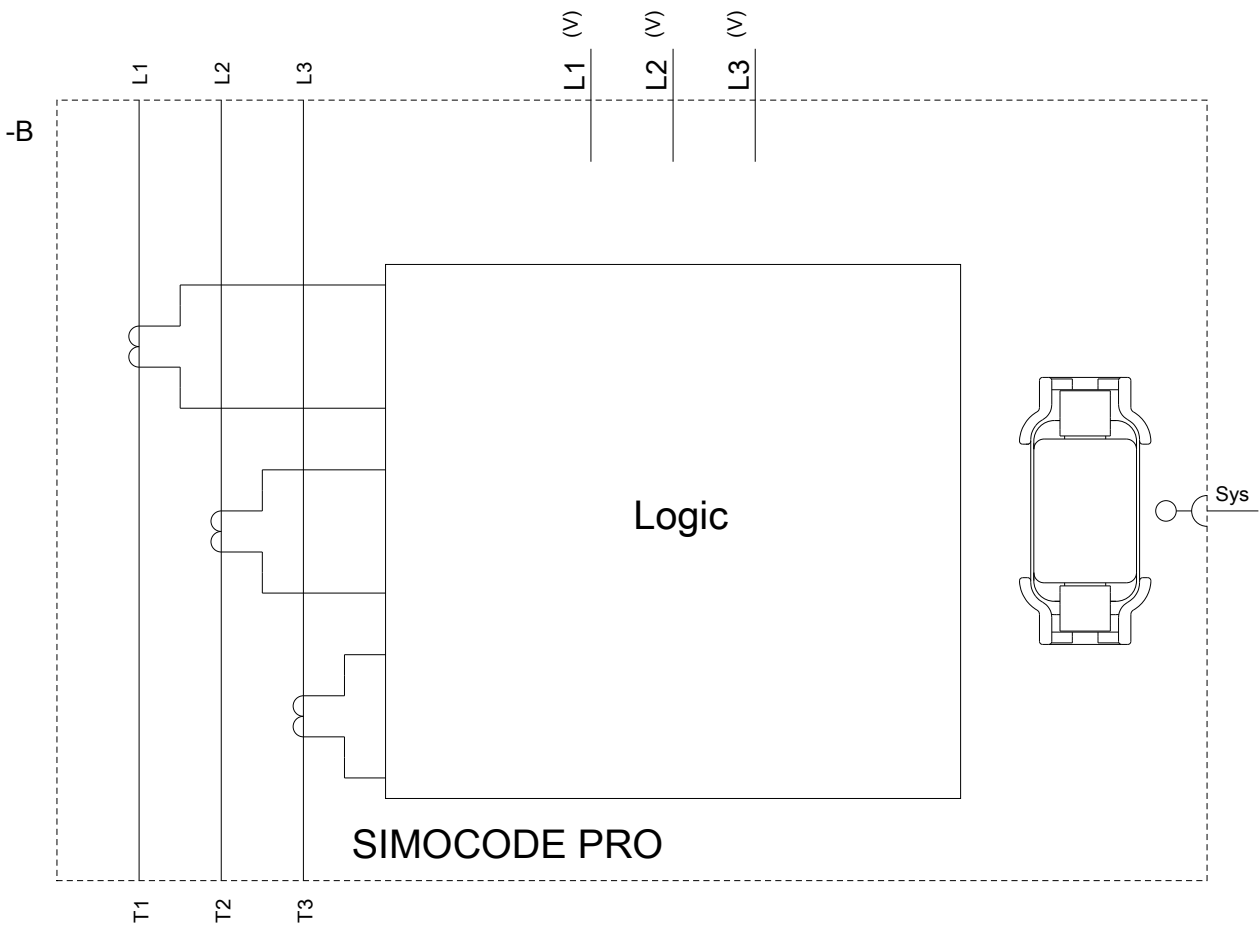
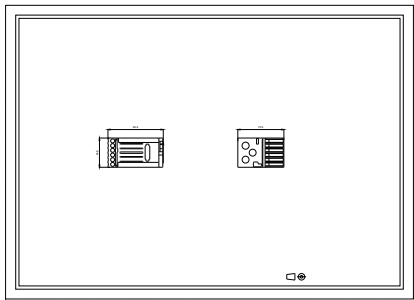
<https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=3UF7110-1AA00-0>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UF7110-1AA00-0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3UF7110-1AA00-0>



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