

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



|   |                          |
|---|--------------------------|
| <b>Product brand name</b>                                   | SIRIUS                   |
| <b>Product designation</b>                                  | Current measuring module |
| <b>General technical data</b>                               |                          |
| <b>Product function</b>                                     |                          |
| • Current measurement                                       | Yes                      |
| • voltage measurement                                       | No                       |
| • active power measurement                                  | No                       |
| • Power measurement   | No                       |
| • frequency measurement                                     | No                       |
| <b>Product component</b>                                    |                          |
| • input for thermistor connection                           | No                       |
| <b>Insulation voltage</b>                                   |                          |
| • with degree of pollution 3 at AC rated value              | 690 V                    |
| • for wires of main circuit acc. to IEC 60947-1 rated value | 6 kV                     |
| <b>Surge voltage resistance rated value</b>                 | 6 000 V                  |
| <b>Protection class IP</b>                                  | IP20                     |
| <b>Shock resistance</b>                                     |                          |
| • acc. to IEC 60068-2-27                                    | 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                              |
| <b>Certificate of suitability</b>  |                                |
| <ul style="list-style-type: none"> <li>• according to ATEX directive 2014/34/EU</li> </ul> | 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

|  |                                     |
|--|-------------------------------------|
| <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 |
|--|---|

### Protective and monitoring functions

|   |     |
|---|-----|
| <b>Product function</b>   |     |
| <ul style="list-style-type: none"> <li>• power factor monitoring</li> </ul> | No  |
| <ul style="list-style-type: none"> <li>• ground-fault monitoring</li> </ul> | No  |
| <ul style="list-style-type: none"> <li>• voltage detection</li> </ul>       | No  |
| <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>   | 84 mm                      |
| <b>Width</b>  | 45 mm                      |
| <b>Depth</b>  | 45 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                       |
| <b>Diameter of feed through opening</b>                         | 7.5 mm                     |
| <b>Diameter of feed through opening for current measurement</b> | 7.5 mm                     |

| Connections/ Terminals  |   |
|---|---|
| <b>Type of electrical connection</b>  |   |
| <ul style="list-style-type: none"> <li>• for main current circuit</li> </ul>  | straight-through transformers   |
| 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<br>3 000 m; max. +50 °C (no protective separation)<br>4 000 m; max. +40 °C (no protective separation)   |
| <b>Ambient temperature</b>  |   |
| <ul style="list-style-type: none"> <li>• during operation</li> </ul>  | -25 ... +60 °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<br><br>1K6 (no condensation, relative humidity 10 ... 95%), 1C2 (no salt mist), 1S2 (sand must not get into the devices), 1M4<br><br>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  |
| Safety related data   |   |
| Safety Integrity Level (SIL) acc. to IEC 61508  | 1   |
| Galvanic isolation  |   |
| <b>(electrically) protective separation acc. to IEC 60947-1</b>   | 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  |   |
| <b>Number of poles for main current circuit</b>   | 3   |
| <b>adjustable pick-up value current of the current-dependent overload release</b>   | 0.3 ... 3 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<br>110 ... 690 V  |
| <b>Operating frequency rated value</b>  | 50 ... 60 Hz  |
| Control circuit/ Control  |   |
| <b>Type of voltage</b>  | AC  |
| Certificates/ approvals   |   |

|                          |     |                                |
|--------------------------|-----|--------------------------------|
| General Product Approval | EMC | For use in hazardous locations |
|--------------------------|-----|--------------------------------|



|                                |                           |                   |                   |
|--------------------------------|---------------------------|-------------------|-------------------|
| For use in hazardous locations | Declaration of Conformity | Test Certificates | Marine / Shipping |
|--------------------------------|---------------------------|-------------------|-------------------|

[Explosion Protection Certificate](#)



[Miscellaneous](#)

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)



|                   |       |
|-------------------|-------|
| Marine / Shipping | other |
|-------------------|-------|



[Confirmation](#)



[PROFINET-Certification](#)

#### Further information

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

[www.siemens.com/ic10](http://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,...)**

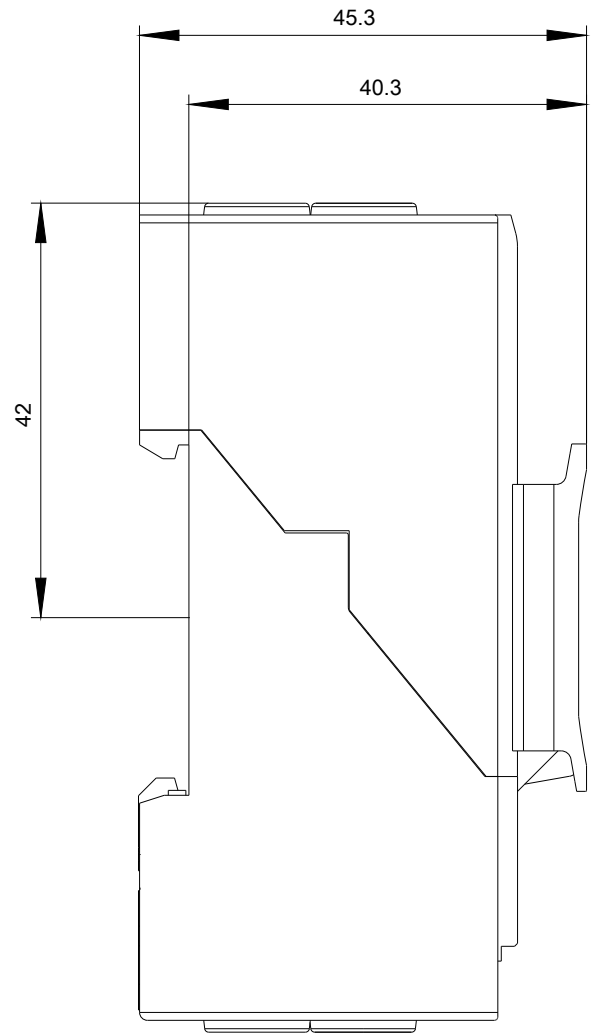
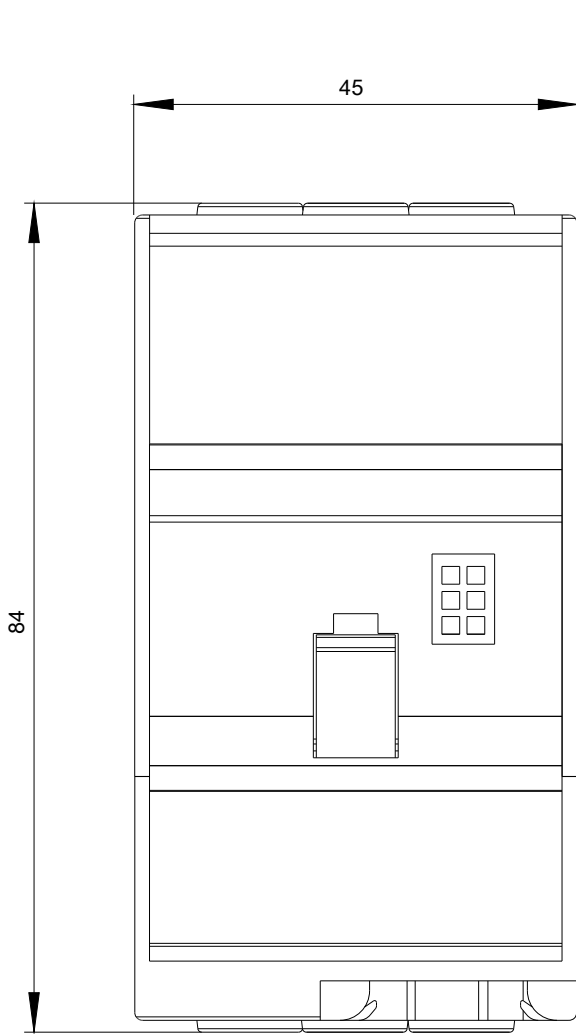
<https://support.industry.siemens.com/cs/ww/en/ps/3UF7100-1AA00-0>

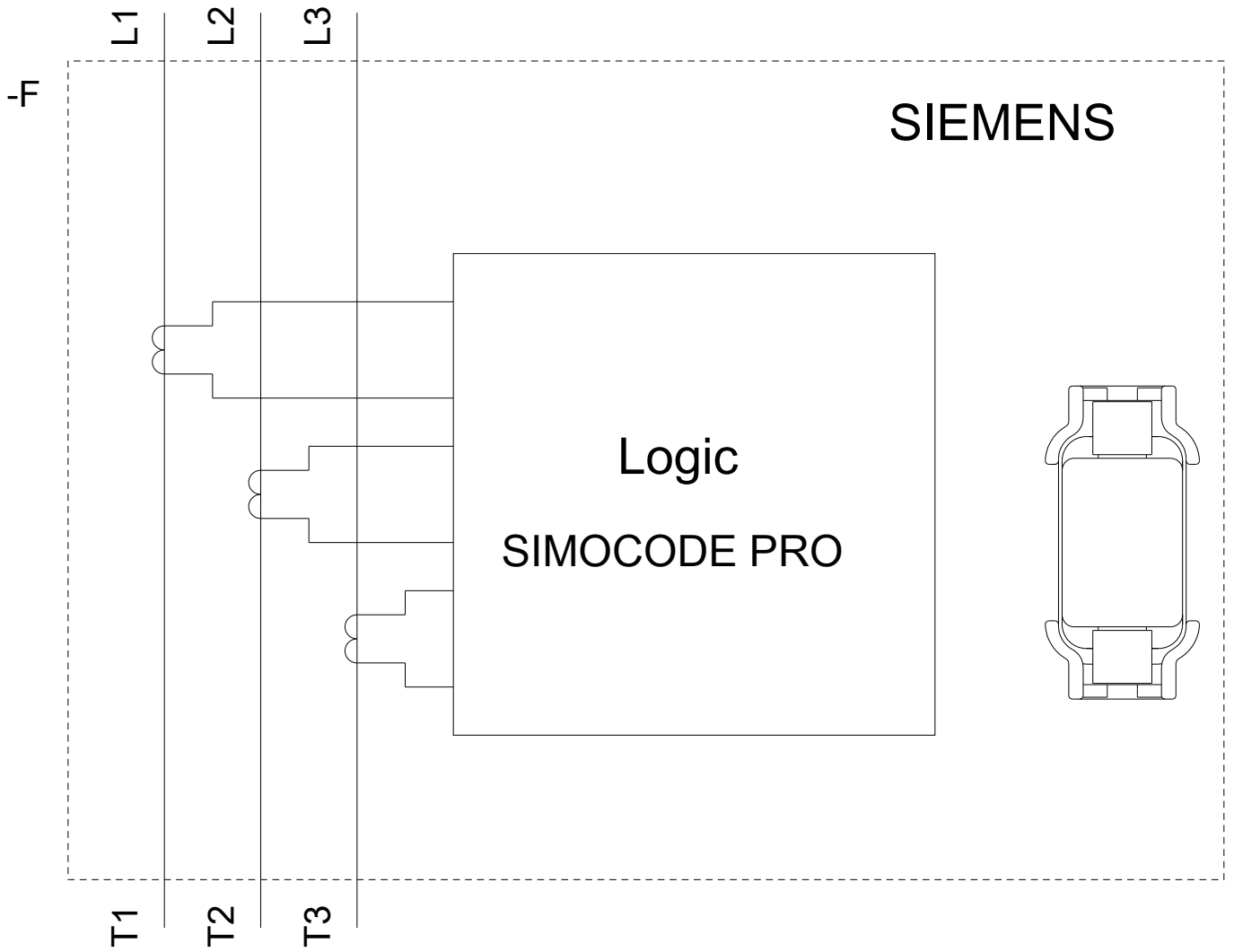
**Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)**

[http://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3UF7100-1AA00-0&lang=en](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>





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