



Temperature module, 3 inputs for connection of up to 3 temperature sensors, for SIMOCODE pro V basic unit

|                                                             |                                                            |
|-------------------------------------------------------------|------------------------------------------------------------|
| product brand name                                          | SIRIUS                                                     |
| product designation                                         | temperature module                                         |
| General technical data                                      |                                                            |
| product component                                           |                                                            |
| • input for thermistor connection                           | No                                                         |
| • input for analog temperature sensors                      | Yes                                                        |
| • input for ground fault detection                          | No                                                         |
| consumed active power                                       | 0.2 W                                                      |
| surge voltage resistance rated value                        | 4 000 V                                                    |
| shock resistance according to IEC 60068-2-27                | 15g / 11 ms                                                |
| vibration resistance according to IEC 60068-2-6             | 1 ... 6 Hz: 15 mm, 6 ... 500 Hz: 2g                        |
| reference code according to IEC 81346-2                     | B                                                          |
| measurable temperature                                      |                                                            |
| • initial value                                             | -50 °C                                                     |
| • full-scale value                                          | 500 °C                                                     |
| Substance Prohibitance (Date)                               | 05/01/2012                                                 |
| SVHC substance name                                         | Lead - 7439-92-1<br>Lead monoxide (lead oxide) - 1317-36-8 |
| Weight                                                      | 131 g                                                      |
| measurable temperature                                      |                                                            |
| • with NTC minimum                                          | 80 °C                                                      |
| • with NTC maximum                                          | 160 °C                                                     |
| • with KTY 84 minimum                                       | -40 °C                                                     |
| • with KTY 84 maximum                                       | 300 °C                                                     |
| • with KTY 83-110 minimum                                   | -50 °C                                                     |
| • with KTY 83-110 maximum                                   | 175 °C                                                     |
| • with Pt 1000 minimum                                      | -50 °C                                                     |
| • with Pt 1000 maximum                                      | 500 °C                                                     |
| • with Pt 100 minimum                                       | -50 °C                                                     |
| • with Pt 100 maximum                                       | 500 °C                                                     |
| relative temperature-related measurement deviation at 20 °C | 2 %                                                        |
| sensor current for Pt 100 typical                           | 1 mA                                                       |
| sensor current for Pt 1000/KTY 83-110/KTY 84/NTC typical    | 0.2 mA                                                     |
| diagnostics function at sensor input with Pt 100            |                                                            |
| • short-circuit detection                                   | Yes                                                        |
| • open-circuit detection                                    | Yes                                                        |
| diagnostics function at sensor input with Pt 1000           |                                                            |
| • short-circuit detection                                   | Yes                                                        |
| • open-circuit detection                                    | Yes                                                        |

|                                                                 |                                                 |
|-----------------------------------------------------------------|-------------------------------------------------|
| <b>diagnostics function at sensor input with KTY 83-110</b>     |                                                 |
| • short-circuit detection                                       | Yes                                             |
| • open-circuit detection                                        | Yes                                             |
| <b>diagnostics function at sensor input with KTY 84</b>         |                                                 |
| • short-circuit detection                                       | Yes                                             |
| • open-circuit detection                                        | Yes                                             |
| <b>diagnostics function at sensor input with NTC</b>            |                                                 |
| • short-circuit detection                                       | Yes                                             |
| • open-circuit detection                                        | No                                              |
| <b>type of connection technology of sensor circuit</b>          | 2-wire or 3-wire connection                     |
| <b>A/D conversion time at sensor circuit</b>                    | 500 ms                                          |
| <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             |
| <b>conducted interference</b>                                   |                                                 |
| • due to burst according to IEC 61000-4-4                       | 1 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                                            |
| <b>field-based interference according to IEC 61000-4-3</b>      | 10 V/m                                          |
| <b>Inputs/ Outputs</b>                                          |                                                 |
| <b>number of inputs</b>                                         | 3                                               |
| <b>number of digital inputs</b>                                 | 0                                               |
| <b>number of analog inputs</b>                                  | 3                                               |
| <b>number of outputs as contact-affected switching element</b>  | 0                                               |
| <b>number of analog outputs</b>                                 | 0                                               |
| <b>Protective and monitoring functions</b>                      |                                                 |
| design of the sensor for temperature measurement connectable    | PT100 / PT1000 / KTY83-110 / KTY84 / NTC        |
| <b>Precision</b>                                                |                                                 |
| <b>temperature drift per °C</b>                                 | 0.05 %/°C                                       |
| <b>Installation/ mounting/ dimensions</b>                       |                                                 |
| <b>mounting position</b>                                        | any                                             |
| <b>fastening method</b>                                         | screw and snap-on mounting                      |
| <b>height</b>                                                   | 92 mm                                           |
| <b>width</b>                                                    | 22.5 mm                                         |
| <b>depth</b>                                                    | 124 mm                                          |
| <b>required spacing</b>                                         |                                                 |
| • top                                                           | 40 mm                                           |
| • bottom                                                        | 40 mm                                           |
| • left                                                          | 0 mm                                            |
| • right                                                         | 0 mm                                            |
| <b>Connections/ Terminals</b>                                   |                                                 |
| type of electrical connection for auxiliary and control circuit | screw-type terminals                            |
| <b>type of connectable conductor cross-sections</b>             |                                                 |
| • solid                                                         | 1x (0.5 ... 4.0mm²), 2x (0.5 ... 2.5 mm²)       |
| • finely stranded with core end processing                      | 1x (0.5 ... 2.5 mm²), 2x (0.5 ... 1.5 mm²)      |
| • for AWG cables solid                                          | 1x (20 ... 14), 2x (20 ... 16)                  |
| • for AWG cables stranded                                       | 1x (20 ... 12), 2x (20 ... 14)                  |
| tightening torque with screw-type terminals                     | 0.8 ... 1.2 N·m                                 |
| tightening torque [lbf·in] with screw-type terminals            | 7 ... 10.3 lbf·in                               |
| <b>Ambient conditions</b>                                       |                                                 |
| <b>installation altitude at height above sea level</b>          |                                                 |
| • 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) |
| <b>ambient temperature</b>                                      |                                                 |
| • during operation                                              | -25 ... +60 °C                                  |
| • during storage                                                | -40 ... +80 °C                                  |
| • during transport                                              | -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), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6<br>3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6<br>3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6 |
| relative humidity during operation                                                                                                                                                        | 5 ... 95 %                                                                                                                                                                                                                                                                                                                                      |
| <b>Electrical Safety</b>                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                 |
| <b>touch protection against electrical shock</b>                                                                                                                                          | finger-safe                                                                                                                                                                                                                                                                                                                                     |
| <b>Galvanic isolation</b>                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                 |
| galvanic isolation between inputs and electronics                                                                                                                                         | No                                                                                                                                                                                                                                                                                                                                              |
| <b>Approvals Certificates</b>                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                 |
| <b>General Product Approval</b>                                                                                                                                                           | EMV                                                                                                                                                                                                                                                                                                                                             |



| EMV                | Test Certificates                                  | Maritime application | other |
|--------------------|----------------------------------------------------|----------------------|-------|
| <a href="#">KC</a> | <a href="#">Type Test Certificates/Test Report</a> |                      |       |

| other                        | Environment | Industrial Communication                        |
|------------------------------|-------------|-------------------------------------------------|
| <a href="#">Confirmation</a> |             | <a href="#">Environmental Confirmations</a><br> |

## 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=3UF7700-1AA00-0>

### Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UF7700-1AA00-0>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3UF7700-1AA00-0>

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

[https://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3UF7700-1AA00-0&lang=en](https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UF7700-1AA00-0&lang=en)



