# **SIEMENS**

3UF7700-1AA00-0 **Data sheet** 



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

product brand name product designation

SIRIUS

temperature module

#### General technical data

### product component

- input for thermistor connection
- input for analog temperature sensors
- input for ground fault detection

consumed active power

surge voltage resistance rated value

protection class IP

shock resistance according to IEC 60068-2-27 vibration resistance according to IEC 60068-2-6 reference code according to IEC 81346-2

measurable temperature

- initial value
- full-scale value

**Substance Prohibitance (Date)** 

#### measurable temperature

- with NTC minimum
- with NTC maximum
- with KTY 84 minimum
- with KTY 84 maximum
- with KTY 83-110 minimum • with KTY 83-110 maximum
- with Pt 1000 minimum
- with Pt 1000 maximum
- with Pt 100 minimum
- with Pt 100 maximum

relative temperature-related measurement deviation at

sensor current for Pt 100 typical

sensor current for Pt 1000/KTY 83-110/KTY 84/NTC typical

diagnostics function at sensor input with Pt 100

- short-circuit detection
- open-circuit detection

diagnostics function at sensor input with Pt 1000

- short-circuit detection
- open-circuit detection

diagnostics function at sensor input with KTY 83-110

- short-circuit detection
- open-circuit detection

Nο

Yes

No

0.2 W 4 000 V

IP20

15g / 11 ms

1 ... 6 Hz: 15 mm, 6 ... 500 Hz: 2g

-50 °C

500 °C

05/01/2012

80 °C

160 °C

-40 °C

300 °C

-50 °C

175 °C

-50 °C

500 °C -50 °C

500 °C

2 %

1 mA 0.2 mA

Yes

Yes

Yes

Yes

Yes

Yes

diagnostics function at sensor input with KTY 84	
<ul> <li>short-circuit detection</li> </ul>	Yes
<ul> <li>open-circuit detection</li> </ul>	Yes
diagnostics function at sensor input with NTC	
<ul> <li>short-circuit detection</li> </ul>	Yes
<ul> <li>open-circuit detection</li> </ul>	No
type of connection technology of sensor circuit	2-wire or 3-wire connection
A/D conversion time at sensor circuit	500 ms
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	
<ul> <li>due to burst according to IEC 61000-4-4</li> </ul>	1 kV
due to conductor-earth surge according to IEC	2 kV
61000-4-5	
<ul> <li>due to conductor-conductor surge according to IEC</li> </ul>	1 kV
61000-4-5	
field-based interference according to IEC 61000-4-3	10 V/m
Inputs/ Outputs	
number of inputs	3
number of digital inputs	0
number of analog inputs	3
number of outputs as contact-affected switching	0
element	
number of analog outputs	0
Protective and monitoring functions	
design of the sensor for temperature measurement	PT100 / PT1000 / KTY83-110 / KTY84 / NTC
connectable	
Precision	
temperature drift per °C	0.05 %/°C
Installation/ mounting/ dimensions	
mounting position	any
fastening method	screw and snap-on mounting
height	92 mm
width	22.5 mm
depth	124 mm
a op a	
required spacing	
required spacing  • top	40 mm
• top	40 mm 40 mm
• top • bottom	40 mm
<ul><li>top</li><li>bottom</li><li>left</li></ul>	40 mm 0 mm
<ul><li> top</li><li> bottom</li><li> left</li><li> right</li></ul>	40 mm
<ul> <li>top</li> <li>bottom</li> <li>left</li> <li>right</li> </ul> Connections/ Terminals	40 mm 0 mm
<ul> <li>top</li> <li>bottom</li> <li>left</li> <li>right</li> </ul> Connections/ Terminals type of connectable conductor cross-sections	40 mm 0 mm 0 mm
<ul> <li>top</li> <li>bottom</li> <li>left</li> <li>right</li> </ul> Connections/ Terminals type of connectable conductor cross-sections <ul> <li>solid</li> </ul>	40 mm 0 mm 0 mm 1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)
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top     bottom     left     right  Connections/ Terminals  type of connectable conductor cross-sections     solid     finely stranded with core end processing     at AWG cables solid     at AWG cables stranded tightening torque with screw-type terminals tightening torque [lbf-in] with screw-type terminals Ambient conditions	40 mm 0 mm 0 mm 1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 1x (20 14), 2x (20 16) 1x (20 12), 2x (20 14) 0.8 1.2 N·m
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top     bottom     left     right  Connections/ Terminals  type of connectable conductor cross-sections     solid     finely stranded with core end processing     at AWG cables solid     at AWG cables stranded tightening torque with screw-type terminals tightening torque [lbf-in] with screw-type terminals  Ambient conditions  installation altitude at height above sea level     1 maximum     2 maximum     3 maximum ambient temperature     during operation	40 mm 0 mm 0 mm  1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²) 1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²) 1x (20 14), 2x (20 16) 1x (20 12), 2x (20 14) 0.8 1.2 N·m 7 10.3 lbf·in  2 000 m 3 000 m; max. +50 °C (no protective separation) 4 000 m; max. +40 °C (no protective separation) -25 +60 °C
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• during transport according to IEC 60721

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 %

Safety related data

touch protection against electrical shock finger-safe

**Galvanic** isolation

galvanic isolation between inputs and electronics No

Certificates/ approvals

**General Product Approval** 

**EMC** 

Declaration of Conformity



Confirmation









Declaration of Conformity

**Test Certificates** 

Marine / Shipping

other



Type Test Certificates/Test Report







Confirmation

other



Profibus

## Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

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=3UF7700-1AA00-0

Cax online generator

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

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

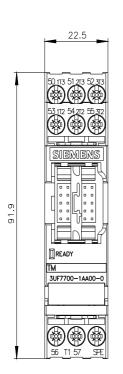
https://support.industry.siemens.com/cs/ww/en/ps/3UF7700-1AA00-0

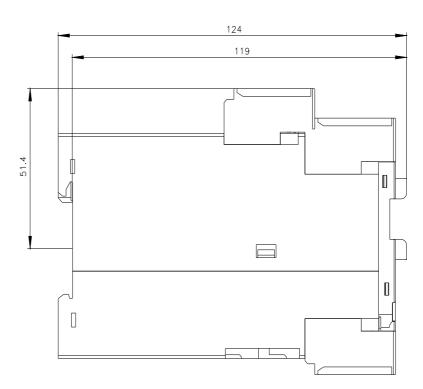
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

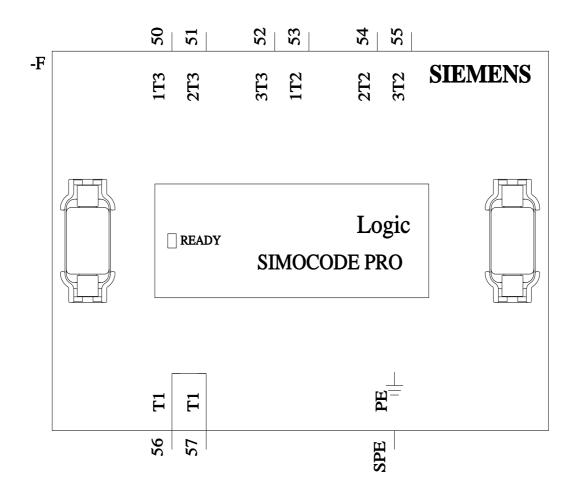
http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3UF7700-1AA00-0&lang=en

Test report No. A0258, protective separation

https://support.industry.siemens.com/cs/ww/en/view/109748152







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