SIEMENS

Data sheet 3UF7700-1AA00-0



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		
surge voltage resistance rated value	4 000 V		
protection class IP	IP20		
shock resistance acc. to IEC 60068-2-27	15g / 11 ms		
vibration resistance acc. to IEC 60068-2-6	1 6 Hz: 15 mm, 6 500 Hz: 2g		
reference code acc. to IEC 81346-2	В		
measurable temperature			
• initial value	-50 °C		
• full-scale value	500 °C		
Substance Prohibitance (Date)	01.05.2012 00:00:00		
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 $^{\circ}\text{C}$	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		

diagnostics function at sensor input with KTY 83-110			
 short-circuit detection 	Yes		
open-circuit detection	Yes		
diagnostics function at sensor input with KTY 84			
 short-circuit detection 	Yes		
 open-circuit detection 	Yes		
diagnostics function at sensor input with NTC			
short-circuit detection	Yes		
open-circuit detection	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 acc. to IEC 60947-1	class A		
EMC immunity acc. to IEC 60947-1	corresponds to degree of severity 3		
conducted interference	osinosponas to augres or soroni, o		
• due to burst acc. to IEC 61000-4-4	1 kV		
due to burst acc. to IEC 61000-4-5 due to conductor-earth surge acc. to IEC 61000-4-5	2 kV		
due to conductor-cartif surge acc. to IEC 0 1000-4-3 due to conductor-conductor surge acc. to IEC	1 kV		
61000-4-5	LIVA		
field-based interference acc. 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		
mounting position fastening method	any screw and snap-on mounting		
fastening method	•		
	screw and snap-on mounting		
fastening method height width	screw and snap-on mounting 92 mm		
fastening method height width depth	screw and snap-on mounting 92 mm 22.5 mm		
fastening method height width depth required spacing	screw and snap-on mounting 92 mm 22.5 mm		
fastening method height width depth required spacing • top	screw and snap-on mounting 92 mm 22.5 mm 124 mm		
fastening method height width depth required spacing	screw and snap-on mounting 92 mm 22.5 mm 124 mm		
fastening method height width depth required spacing • top • bottom • left	screw and snap-on mounting 92 mm 22.5 mm 124 mm 40 mm 40 mm 0 mm		
fastening method height width depth required spacing • top • bottom • left • right	screw and snap-on mounting 92 mm 22.5 mm 124 mm 40 mm		
fastening method height width depth required spacing • top • bottom • left • right Connections/ Terminals	screw and snap-on mounting 92 mm 22.5 mm 124 mm 40 mm 40 mm 0 mm		
fastening method height width depth required spacing • top • bottom • left • right Connections/ Terminals type of connectable conductor cross-sections	screw and snap-on mounting 92 mm 22.5 mm 124 mm 40 mm 40 mm 0 mm 0 mm		
fastening method height width depth required spacing • top • bottom • left • right Connections/ Terminals type of connectable conductor cross-sections • solid	screw and snap-on mounting 92 mm 22.5 mm 124 mm 40 mm 40 mm 0 mm 0 mm 1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)		
fastening method height width depth required spacing • top • bottom • left • right Connections/ Terminals type of connectable conductor cross-sections • solid • finely stranded with core end processing	screw and snap-on mounting 92 mm 22.5 mm 124 mm 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)		
fastening method height width depth required spacing • top • bottom • left • right Connections/ Terminals type of connectable conductor cross-sections • solid • finely stranded with core end processing • at AWG cables solid	screw and snap-on mounting 92 mm 22.5 mm 124 mm 40 mm 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)		
fastening method height width depth required spacing • 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	screw and snap-on mounting 92 mm 22.5 mm 124 mm 40 mm 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)		
fastening method height width depth required spacing • 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	screw and snap-on mounting 92 mm 22.5 mm 124 mm 40 mm 0 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		
fastening method height width depth required spacing • 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	screw and snap-on mounting 92 mm 22.5 mm 124 mm 40 mm 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)		
fastening method height width depth required spacing • 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	screw and snap-on mounting 92 mm 22.5 mm 124 mm 40 mm 0 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		
fastening method height width depth required spacing • 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	screw and snap-on mounting 92 mm 22.5 mm 124 mm 40 mm 0 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		
fastening method height width depth required spacing • 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	screw and snap-on mounting 92 mm 22.5 mm 124 mm 40 mm 0 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		
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during storage	-40 +80 °C				
during transport	-40 +80 °C				
environmental category					
• during operation acc. to IEC 60721	3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6				
• during storage acc. to IEC 60721	3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6				
• during transport acc. 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		

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Test Certificates

Marine / Shipping

other

Type Test Certificates/Test Report







Confirmation

PROFINET-Certification

other



Profibus

Further information

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,...)

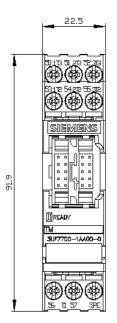
https://support.industry.siemens.com/cs/ww/en/ps/3UF7700-1AA00-0

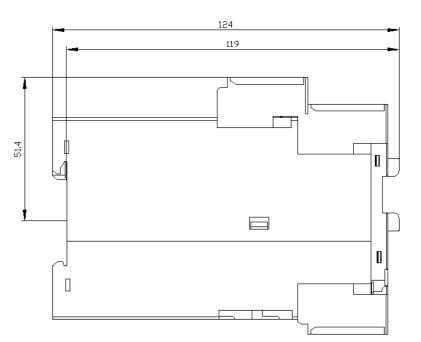
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

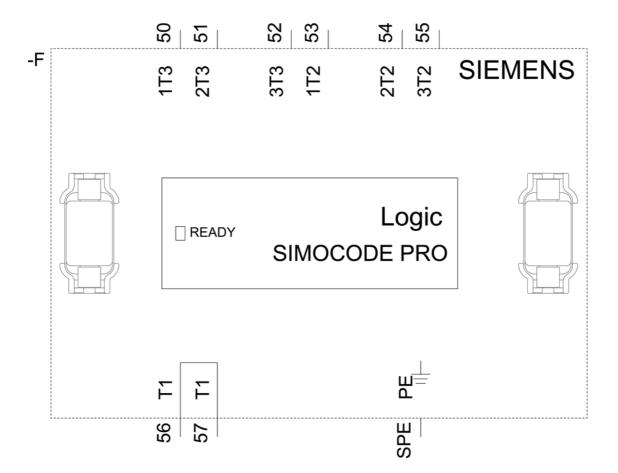
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UF7700-1AA00-0&lang=en

Test report No. A0258, protective separation

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







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