

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 DIN EN 81346-2	B
Measurable temperature	
• initial value	-50 °C
• Full-scale value	500 °C
Measurable temperature	
• with NTC minimum	80 °C

<ul style="list-style-type: none"> • with NTC maximum 	160 °C
<ul style="list-style-type: none"> • with KTY 84 minimum 	-40 °C
<ul style="list-style-type: none"> • with KTY 84 maximum 	300 °C
<ul style="list-style-type: none"> • with KTY 83-110 minimum 	-50 °C
<ul style="list-style-type: none"> • with KTY 83-110 maximum 	175 °C
<ul style="list-style-type: none"> • with Pt 1000 minimum 	-50 °C
<ul style="list-style-type: none"> • with Pt 1000 maximum 	500 °C
<ul style="list-style-type: none"> • with Pt 100 minimum 	-50 °C
<ul style="list-style-type: none"> • 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	
<ul style="list-style-type: none"> • Short-circuit detection 	Yes
<ul style="list-style-type: none"> • Cable break detection 	Yes
Diagnostics function at sensor input with Pt 1000	
<ul style="list-style-type: none"> • Short-circuit detection 	Yes
<ul style="list-style-type: none"> • Cable break detection 	Yes
Diagnostics function at sensor input with KTY 83-110	
<ul style="list-style-type: none"> • Short-circuit detection 	Yes
<ul style="list-style-type: none"> • Cable break detection 	Yes
Diagnostics function at sensor input with KTY 84	
<ul style="list-style-type: none"> • Short-circuit detection 	Yes
<ul style="list-style-type: none"> • Cable break detection 	Yes
Diagnostics function at sensor input with NTC	
<ul style="list-style-type: none"> • Short-circuit detection 	Yes
<ul style="list-style-type: none"> • Cable break detection 	No
Type of connection of sensor circuit	2-wire or 3-wire connection
A/D conversion time at sensor circuit	500 ms
Electromagnetic compatibility	
EMC emitted interference	
<ul style="list-style-type: none"> • acc. to IEC 60947-1 	class A
EMI immunity acc. to IEC 60947-1	corresponds to degree of severity 3
Conducted interference	
<ul style="list-style-type: none"> • due to burst acc. to IEC 61000-4-4 	1 kV
<ul style="list-style-type: none"> • due to conductor-earth surge acc. to IEC 61000-4-5 	2 kV
<ul style="list-style-type: none"> • due to conductor-conductor surge acc. to IEC 61000-4-5 	1 kV
Field-bound parasitic coupling 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 element	0
number of analog outputs	0

Protective and monitoring functions	
Design of the sensor	
• for temperature measurement connectable	PT100 / PT1000 / KTY83-110 / KTY84 / NTC

Precision	
Temperature drift per °C	0.05 %/°C

Installation/ mounting/ dimensions	
• mounting position	any
Mounting type	screw and snap-on mounting
Height	92 mm
Width	22.5 mm
Depth	124 mm
Required spacing	
• top	40 mm
• bottom	40 mm
• left	0 mm
• right	0 mm

Connections/ Terminals	
• type of connectable conductor cross-sections solid	1x (0.5 ... 4.0 mm ²), 2x (0.5 ... 2.5 mm ²)
• Type of connectable conductor cross-sections finely stranded with core end processing	1x (0.5 ... 2.5 mm ²), 2x (0.5 ... 1.5 mm ²)
• Type of connectable conductor cross-sections at AWG conductors solid	1x (20 ... 14), 2x (20 ... 16)
• Type of connectable conductor cross-sections at AWG conductors 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

Ambient conditions	
Installation altitude at height above sea level	
• 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)

Environmental category	
<ul style="list-style-type: none"> 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
<ul style="list-style-type: none"> 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
<ul style="list-style-type: none"> 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
<ul style="list-style-type: none"> Relative humidity during operation 	5 ... 95 %

Safety related data

Protection against electrical shock	finger-safe
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Galvanic isolation

<ul style="list-style-type: none"> Galvanic isolation between inputs and electronic 	No
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Certificates/ approvals

General Product Approval	EMC	Declaration of Conformity
 CCC	 EAC	 EG-Konf.
 CSA	 RCM	
 UL		

Test Certificates	Marine / Shipping	other
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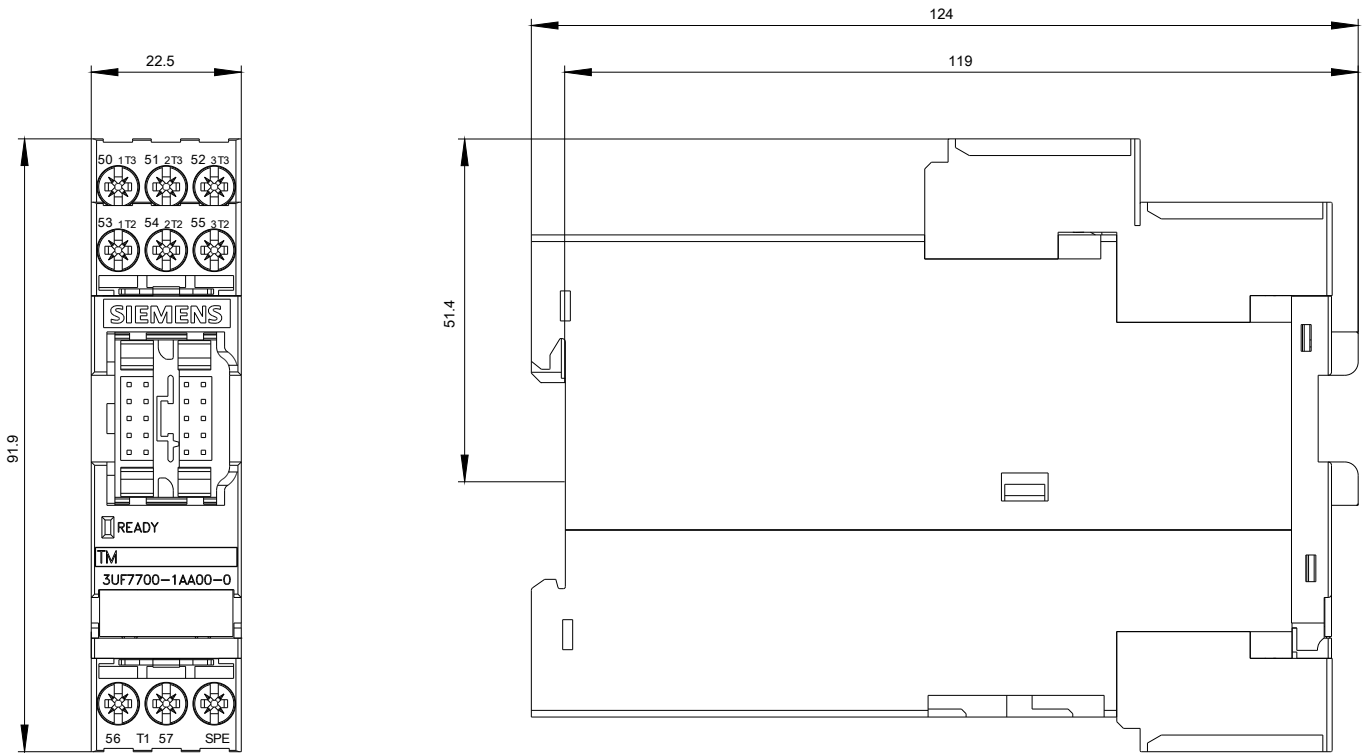
Type Test Certificates/Test Report	 ABS	 RMRS
	 DNV-GL DNVGL.COM/AF	Confirmation
		 Profibus

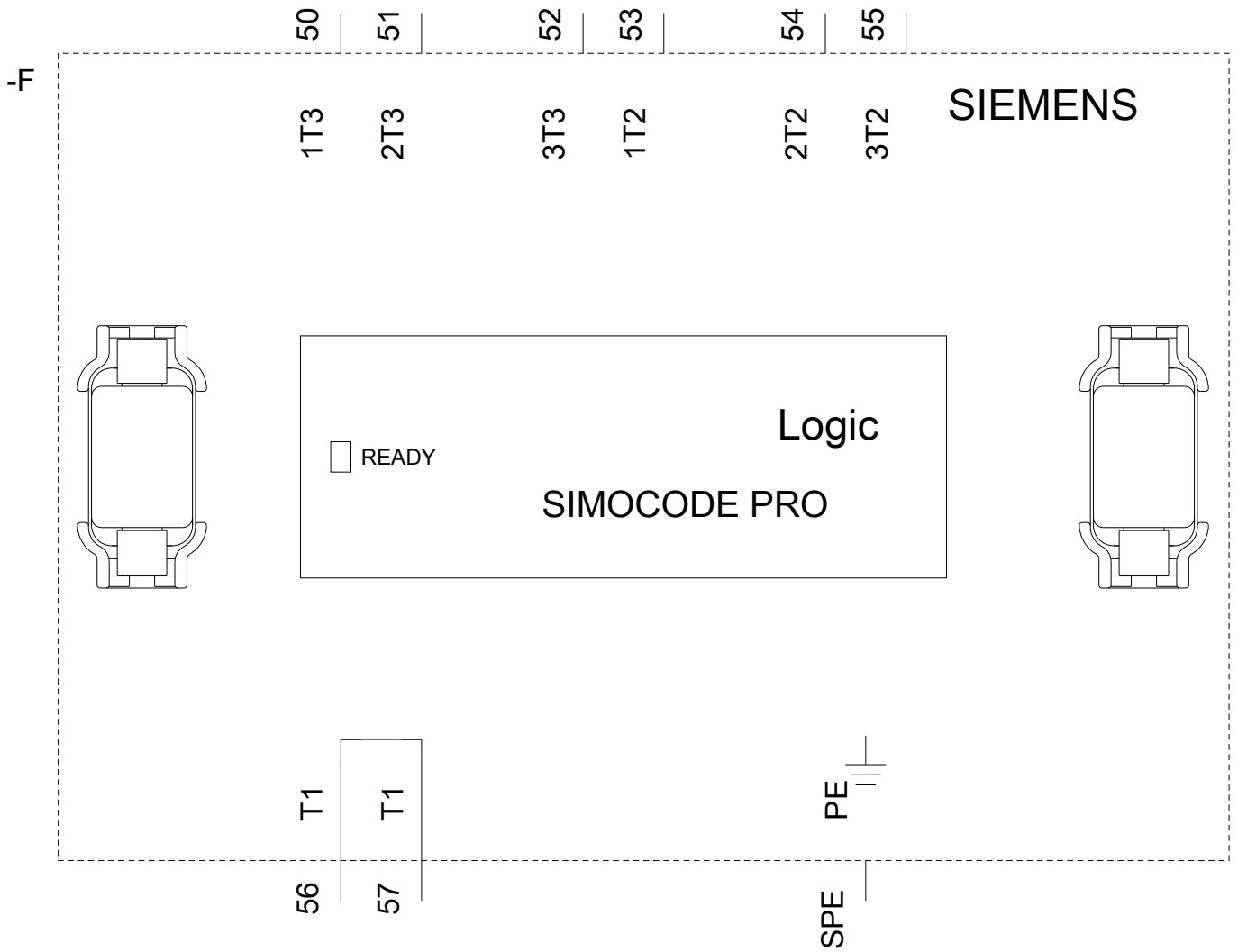
other

PROFINET-Certification
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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>





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