## SIEMENS

## Data sheet

## 3UF7310-1AU00-0



Digital module, 4 inputs and 2 relay outputs, input voltage 110-240 V AC/DC relay outputs bistable, max. 2 digital modules, for SIMOCODE pro V basic unit

product brand name	SIRIUS			
product designation	digital modules			
General technical data				
product component				
<ul> <li>input for thermistor connection</li> </ul>	No			
<ul> <li>digital input</li> </ul>	Yes			
<ul> <li>input for analog temperature sensors</li> </ul>	No			
<ul> <li>input for ground fault detection</li> </ul>	No			
relay output	Yes			
insulation voltage with degree of pollution 3 at AC rated value	300 V			
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			
switching capacity current of the NO contacts of the relay outputs at AC-15				
• at 24 V	6 A			
• at 120 V	6 A			
• at 230 V	3 A			
switching capacity current of the NO contacts of the relay outputs at DC-13				
• at 24 V	2 A			
• at 60 V	0.55 A			
• at 125 V	0.25 A			
mechanical service life (switching cycles) typical	10 000 000			
electrical endurance (switching cycles) typical	100 000			
reference code acc. to IEC 81346-2	К			
continuous current of the NO contacts of the relay outputs				
● at 50 °C	6 A			
● at 60 °C	5 A			
Substance Prohibitance (Date)	01.05.2012 00:00:00			
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				
<ul> <li>due to burst acc. to IEC 61000-4-4</li> </ul>	1 kV			
<ul> <li>due to conductor-earth surge acc. to IEC 61000-4-5</li> </ul>	2 kV			
• due to conductor-conductor surge acc. to IEC 61000-4-5	1 kV			

<ul> <li>due to high-frequency radiation acc. to IEC 61000- 4-6</li> </ul>	10 V			
field-based interference acc. to IEC 61000-4-3	10 V/m			
electrostatic discharge acc. to IEC 61000-4-2	6 kV contact discharge / 8 kV air discharge			
conducted HF interference emissions acc. to CISPR11	corresponds to degree of severity A			
field-bound HF interference emission acc. to CISPR11	corresponds to degree of severity A			
Inputs/ Outputs				
product function				
<ul> <li>parameterizable inputs</li> </ul>	Yes			
parameterizable outputs	Yes			
number of inputs	4			
number of digital inputs	4			
with a common reference potential	4			
digital input version				
• type 1 acc. to IEC 61131	No			
• type 2 acc. to IEC 61131	No			
number of analog inputs	0			
input voltage at digital input at DC rated value	110 V			
number of outputs	2			
number of semiconductor outputs	0			
number of outputs as contact-affected switching element	2			
number of analog outputs	0			
switching behavior	bistable			
property of contacts of the relay outputs	Floating NO contacts (NC reaction parameterizable via internal signal conditioning), connected to common ground, can be freely assigned to the control functions (e.g. line, star (wye), delta contactor or signaling of the operating state)			
wire length for digital signals maximum	200 m			
Installation/ mounting/ dimensions				
mounting position	any			
fastening method	screw and snap-on mounting			
fastening method height	screw and snap-on mounting 92 mm			
height	92 mm			
height width	92 mm 22.5 mm			
height width depth	92 mm 22.5 mm			
height width depth required spacing	92 mm 22.5 mm 124 mm			
height width depth required spacing • top	92 mm 22.5 mm 124 mm 40 mm			
height width depth required spacing • top • bottom	92 mm 22.5 mm 124 mm 40 mm 40 mm			
height width depth required spacing • top • bottom • left	92 mm 22.5 mm 124 mm 40 mm 40 mm 0 mm			
height width depth required spacing • top • bottom • left • right	92 mm 22.5 mm 124 mm 40 mm 40 mm 0 mm			
height width depth required spacing • top • bottom • left • right Connections/ Terminals product component removable terminal for auxiliary	92 mm 22.5 mm 124 mm 40 mm 0 mm 0 mm			
height         width         depth         required spacing         • top         • bottom         • left         • right         Connections/ Terminals         product component removable terminal for auxiliary and control circuit	92 mm 22.5 mm 124 mm 40 mm 0 mm 0 mm			
height         width         depth         required spacing         • top         • bottom         • left         • right         Connections/ Terminals         product component removable terminal for auxiliary and control circuit         type of connectable conductor cross-sections	92 mm 22.5 mm 124 mm 40 mm 0 mm 0 mm 7 Yes			
height         width         depth         required spacing         • top         • bottom         • left         • right         Connections/ Terminals         product component removable terminal for auxiliary and control circuit         type of connectable conductor cross-sections         • solid	92 mm 22.5 mm 124 mm 40 mm 0 mm 0 mm 0 mm Yes 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> )			
height         width         depth         required spacing         • top         • bottom         • left         • right         Connections/ Terminals         product component removable terminal for auxiliary and control circuit         type of connectable conductor cross-sections         • solid         • finely stranded with core end processing	92 mm 22.5 mm 124 mm 40 mm 0 mm 0 mm 0 mm Yes 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> ) 1x (0.5 2.5 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> )			
height         width         depth         required spacing         • top         • bottom         • left         • right         Connections/ Terminals         product component removable terminal for auxiliary and control circuit         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	92 mm 22.5 mm 124 mm 40 mm 0 mm 0 mm 0 mm Yes $1x (0.5 4.0 mm^2), 2x (0.5 2.5 mm^2)$ $1x (0.5 2.5 mm^2), 2x (0.5 1.5 mm^2)$ 1x (20 14), 2x (20 16) 1x (20 12), 2x (20 14) $0.8 1.2 N \cdot m$			
height         width         depth         required spacing         • top         • bottom         • left         • right         Connections/ Terminals         product component removable terminal for auxiliary and control circuit         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	92 mm 22.5 mm 124 mm 40 mm 0 mm 0 mm 0 mm Yes 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> ) 1x (0.5 2.5 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> ) 1x (20 14), 2x (20 16) 1x (20 12), 2x (20 14)			
height         width         depth         required spacing         • top         • bottom         • left         • right         Connections/ Terminals         product component removable terminal for auxiliary and control circuit         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	92 mm 22.5 mm 124 mm 40 mm 0 mm 0 mm 0 mm Yes $1x (0.5 4.0 mm^2), 2x (0.5 2.5 mm^2)$ $1x (0.5 2.5 mm^2), 2x (0.5 1.5 mm^2)$ 1x (20 14), 2x (20 16) 1x (20 12), 2x (20 14) $0.8 1.2 N \cdot m$			
height         width         depth         required spacing         • top         • bottom         • left         • right         Connections/ Terminals         product component removable terminal for auxiliary and control circuit         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         tightening torque at height above sea level	92 mm 22.5 mm 124 mm 40 mm 0 mm 0 mm 0 mm Yes $1x (0.5 4.0 mm^2), 2x (0.5 2.5 mm^2)$ $1x (0.5 2.5 mm^2), 2x (0.5 1.5 mm^2)$ 1x (20 14), 2x (20 16) 1x (20 12), 2x (20 14) $0.8 1.2 N \cdot m$ 7 10.3 lbf·in			
height         width         depth         required spacing         • top         • bottom         • left         • right         Connections/ Terminals         product component removable terminal for auxiliary and control circuit         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	92 mm 22.5 mm 124 mm 40 mm 40 mm 0 mm 0 mm 0 mm Yes 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> ) 1x (0.5 2.5 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> ) 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			
height         width         depth         required spacing         • top         • bottom         • left         • right         Connections/ Terminals         product component removable terminal for auxiliary and control circuit         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	92 mm 22.5 mm 124 mm 40 mm 0 mm 0 mm 0 mm Yes 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> ) 1x (0.5 2.5 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> ) 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)			
height         width         depth         required spacing         • top         • bottom         • left         • right         Connections/ Terminals         product component removable terminal for auxiliary and control circuit         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         installation altitude at height above sea level         • 1 maximum         • 2 maximum         • 3 maximum	92 mm 22.5 mm 124 mm 40 mm 40 mm 0 mm 0 mm 0 mm Yes 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> ) 1x (0.5 2.5 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> ) 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			
height         width         depth         required spacing         • top         • bottom         • left         • right         Connections/ Terminals         product component removable terminal for auxiliary and control circuit         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         tightening torque [lbf-in] with screw-type terminals         4mbient conditions         installation altitude at height above sea level         • 1 maximum         • 2 maximum         • 3 maximum         • 3 maximum	92 mm 22.5 mm 124 mm 40 mm 0 mm 0 mm 0 mm Yes 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> ) 1x (0.5 2.5 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> ) 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)			
height         width         depth         required spacing         • top         • bottom         • left         • right         Connections/ Terminals         product component removable terminal for auxiliary and control circuit         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         installation altitude at height above sea level         • 1 maximum         • 2 maximum         • 3 maximum         • during operation	92 mm 22.5 mm 124 mm 40 mm 0 mm 0 mm 0 mm 7 Yes 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> ) 1x (0.5 2.5 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> ) 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			
height         width         depth         required spacing         • top         • bottom         • left         • right         Connections/ Terminals         product component removable terminal for auxiliary and control circuit         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         tightening torque [lbf·in] with screw-type terminals         anbient conditions         installation altitude at height above sea level         • 1 maximum         • 2 maximum         • 3 maximum         • during operation         • during storage	92 mm 22.5 mm 124 mm 40 mm 40 mm 0 mm 0 mm 0 mm Yes Yes 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> ) 1x (0.5 2.5 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> ) 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 -40 +80 °C			
height         width         depth         required spacing         • top         • bottom         • left         • right         Connections/ Terminals         product component removable terminal for auxiliary and control circuit         type of connectable conductor cross-sections         • solid         • finely stranded with core end processing         • at AWG cables solid         • at AWG cables solid         • at AWG cables stranded         tightening torque with screw-type terminals         tightening torque [lbf·in] with screw-type terminals         tightening torque [lbf·in] with screw-type terminals         installation altitude at height above sea level         • 1 maximum         • 2 maximum         • 3 maximum         • 3 maximum         • during operation         • during storage         • during transport	92 mm 22.5 mm 124 mm 40 mm 0 mm 0 mm 0 mm 7 Yes 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> ) 1x (0.5 2.5 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> ) 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			
height         width         depth         required spacing         • top         • bottom         • left         • right         Connections/ Terminals         product component removable terminal for auxiliary and control circuit         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         tightening torque [lbf·in] with screw-type terminals         anbient conditions         installation altitude at height above sea level         • 1 maximum         • 2 maximum         • 3 maximum         • during operation         • during storage	92 mm 22.5 mm 124 mm 40 mm 40 mm 0 mm 0 mm 0 mm Yes Yes 1x (0.5 4.0 mm <sup>2</sup> ), 2x (0.5 2.5 mm <sup>2</sup> ) 1x (0.5 2.5 mm <sup>2</sup> ), 2x (0.5 1.5 mm <sup>2</sup> ) 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 -40 +80 °C			

			(sand mu	ust not get into th	e devices), 3M6		
• during storage acc. to IEC 60721			(sand must not get into the devices), 3M6 3K6 (no formation of ice, no condensation), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6				
<ul> <li>during transpor</li> </ul>	t 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 durin	relative humidity during operation			/o	,,		
contact rating of auxiliary contacts according to UL			B300 / R	300			
Short-circuit protection	-	Ū.					
design of short-circuit protection per output			Fuse links: gG 6 A, quick-response 10 A (IEC 60947-5-1), miniature circuit-breaker C char.: 1.6 A (IEC 60947-5-1) or 6 A (I_K < 500 A)				
Safety related data							
touch protection against electrical shock			finger-safe				
Galvanic isolation							
	tive separation acc. to	IEC 60947-1	All circuit	ts with protective	separation (double cree	nage naths and	
	ive separation acc. to	120 00947-1	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)				
<b>Control circuit/ Contr</b>	ol						
type of voltage of th	e control supply volta	ge	AC/DC				
control supply volta	ige at AC						
• at 50 Hz rated	at 50 Hz rated value			40 V			
• at 60 Hz rated	value		110 24	40 V			
	control supply voltage frequency 1			Hz			
control supply volta							
rated value	-		110 24	40 V			
operating range factors value at DC	tor control supply volt	age rated					
initial value		0.85					
<ul> <li>full-scale value</li> </ul>			1.1				
operating range fact value at AC at 50 Hz	tor control supply volt	age rated					
initial value		0.85					
<ul> <li>full-scale value</li> </ul>		1.1					
operating range factor control supply voltage rated value at AC at 60 Hz							
<ul> <li>initial value</li> </ul>		0.85					
<ul> <li>full-scale value</li> </ul>			1.1				
Certificates/ approval	s						
					5140	For use in hazard-	
General Product Ap	oproval				EMC	ous locations	
					A	IFOF	
(SĐ	( <b>m</b> )	(ŲL)		FHI		IECEx	
	<u> </u>	÷		LIIL		1545.	
CSA	ccc	UL			n G M	IECEx	
Declaration of	Test Certificates	Marine / Ship	ning			other	
Conformity	rest vertincates	marine / onip	Ping			other	
~ ~	<u>Type Test Certific-</u> ates/Test Report	State of the state			AL PROPERTY OF ANY AL	<b>Confirmation</b>	
	ales/rest Report	a the			DNV-GL		
EG-Konf.		ABS		RMRS	Devol. CONCAP		
4							
other							
PROFINET-Certific- ation	PROFO						
auon							
	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=3UF7310-1AU00-0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UF7310-1AU00-0

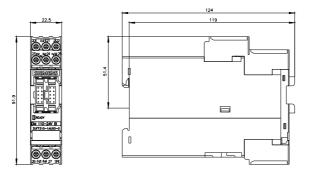
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

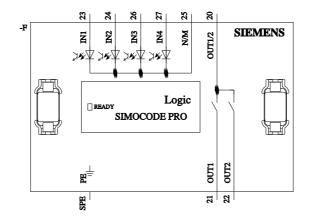
https://support.industry.siemens.com/cs/ww/en/ps/3UF7310-1AU00-0

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...) <a href="http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3UF7310-1AU00-0&lang=en">http://www.automation.siemens.com/bilddb/cax\_de.aspx?mlfb=3UF7310-1AU00-0&lang=en</a>

Test report No. A0258, protective separation

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





last modified:

1/18/2021 🖸