SIEMENS

Data sheet 6AG1010-1AU00-4AA0

SIPLUS SIMOCODE pro V Basic unit 2 -25...+60°C with conformal coating based on 3UF7010-1AU00-0 . E- type with "Safety ""12 Mbit/s, RS485;""" "4I/3O freely parameterizable;" "US: 110-240V AC/DC; input for" "thermistor connection;" "monostable relay outputs;" expandable by extension modules

Figure similar

product brand name	SIPLUS
product designation	Motor management system
design of the product	basic unit 2
product type designation	SIMOCODE pro V

General technical data	
• product function bus communication	Yes
• product function data acquisition function	Yes
• product function diagnostics function	Yes
• product function password protection	Yes
• Product function Test function	Yes
• product function maintenance function	Yes
• Product component input for thermistor connection	Yes
• product component digital input	Yes
• product component input for analog temperature sensors	No

• Product component input for ground fault detection	No
• product component relay output	Yes
Product extension	
• Temperature monitoring module	Yes
• Current measuring module	Yes
• Current/voltage measuring module	Yes
• failsafe digital I/O module	Yes
• Ground fault monitoring module	Yes
• Control unit with display	Yes
• Control unit	Yes
• analog I/O module	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**	1-6 Hz / 15 mm; 6-500 Hz / 2 g
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
buffering time in the event of power failure	0.2 s
reference code acc. to DIN EN 81346-2	F
Continuous current of the NO contacts of the relay outputs	
• at 50 °C	6 A
• at 60 °C	5 A
Type of input characteristic	Type 1 in accordance with EN 61131-2

Electromagnetic compatibility

EMC emitted interference	
• acc. to IEC 60947-1	class A
EMI immunity acc. to IEC 60947-1	corresponds to degree of severity 3

• conducted interference due to burst acc. to IEC 61000-4-4	2 kV (power ports) / 1 kV (signal ports)
• Conducted interference due to conductor-earth surge acc. to IEC 61000-4-5	2 kV
• Conducted interference due to conductor-conductor surge acc. to IEC 61000-4-5	1 kV
• conducted interference due to high-frequency radiation acc. to IEC 61000-4-6	10 V
field-bound parasitic coupling 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	
• Parameterizable inputs	Yes
• Parameterizable outputs	Yes
• **number of inputs**	4
• Number of inputs for thermistor connection	1
• Number of digital inputs with a common reference potential	4
digital input version	
• type 1 acc. to IEC 61131	Yes
input voltage at digital input at DC rated value	24 V
number of outputs	3
• **number of semiconductor outputs**	0
Number of outputs as contact-affected switching element	3
switching behavior	monostable
Wire length for digital signals maximum	300 m
Wire length for thermistor connection	
• with conductor cross-section = 0.5 mm² maximum	50 m
• with conductor cross-section = 1.5 mm² maximum	150 m
• with conductor cross-section = 2.5 mm² maximum	250 m

Protective and monitoring functions

• Product function Phase unbalance	Yes
• Product function blocking current evaluation	Yes
• Product function power factor monitoring	Yes
• product function ground fault detection	Yes

• product function phase failure detection	Yes
• Product function phase sequence recognition	Yes
• product function voltage detection	Yes
• Product function Monitoring of number of start operations	Yes
• Product function Overvoltage detection	Yes
• Product function Overcurrent detection 1 phase	Yes
• Product function undervoltage detection	Yes
• Product function undercurrent detection 1 phase	Yes
• Product function active power monitoring	Yes
• product function current detection	Yes
• product function overload protection	Yes
• Product function Evaluation of thermistor motor protection	Yes
Response value of thermoresistor	3 400 ... 3 800 Ω
Release value of thermoresistor	1 500 ... 1 650 Ω

Motor control functions	
• Product function parameterizable overload relay	Yes
• Product function circuit breaker control	Yes
• Product function direct start	Yes
• Product function reverse starting	Yes
• product function star-delta circuit	Yes
• Product function star-delta reversing circuit	Yes
• Product function Dahlander circuit	Yes
• Product function Dahlander reversing circuit	Yes
• Product function pole-changing switch circuit	Yes
• Product function pole-changing switch reversing circuit	Yes
• Product function Slide control	Yes
• Product function valve control	Yes

Communication/ Protocol	
• protocol is supported PROFIBUS DP protocol	Yes
• protocol is supported PROFINET IO protocol	No
• protocol is supported PROFIsafe protocol	Yes
• protocol is supported Modbus RTU	No
• protocol is supported EtherNet/IP	No
• protocol is supported OPC UA Server	No
• protocol is supported LLDP	No
• protocol is supported Address Resolution Protocol (ARP)	No

• protocol is supported SNMP	No
• protocol is supported HTTPS	No
• protocol is supported NTP	No
• protocol is supported Media Redundancy Protocol (MRP)	No
• Product function is supported Device Level Ring (DLR)	No
• number of interfaces acc. to PROFIBUS	1
• Product function web server	No
• Product function shared device	No
• product function at the Ethernet interface Autocrossover	No
• product function at the Ethernet interface Autonegotiation	No
• Product function at the Ethernet interface Autosensing	No
• Product function is supported PROFINET system redundancy	No
• Product function supports PROFIenergy measured values	No
• Product function supports PROFIenergy shutdown	No
transfer rate maximum	12 Mbit/s
• identification & maintenance function I&M0 - device-specific information	Yes
• identification & maintenance function I&M1 – higher-level designation/location designation	Yes
• identification & maintenance function I&M2 - installation date	Yes
• identification & maintenance function I&M3 - comment	Yes
• type of electrical connection of the communication interface	9-pin SUB-D socket (12 Mbit) / screw terminal (1.5 Mbit)

Installation/ mounting/ dimensions	
• **mounting position**	any
• **mounting type**	screw and snap-on mounting
height	111 mm
width	45 mm
depth	124 mm

Connections/ Terminals	
• product function removable terminal for auxiliary and control circuit	Yes

• type of connectable conductor cross-sections solid	1x (0.5 ... 4.0 mm²), 2x (0.5 ... 2.5 mm²)
• Type of connectable conductor cross-sections finely stranded with core end processing	1x (0.5 ... 2.5 mm²), 2x (0.5 ... 1.5 mm²)
• Type of connectable conductor cross-sections at AWG conductors solid	1x (20 ... 12), 2x (20 ... 14)
• type of connectable conductor cross-sections at AWG conductors stranded	1x (20 ... 14), 2x (20 ... 16)
• 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
Type of connectable conductor cross-sections for PROFIBUS wire	2x 0.34 mm², AWG 22
Ambient conditions	
Installation altitude at height above sea level	
• 1 maximum	2 000 m
• 2 maximum	3 000 m
• 3 maximum	4 000 m; max. +40 °C (no protective separation)
relative humidity	
• with condensation maximum	100 %; RH incl. condensation/frost (no commissioning in bedewed state)
ambient condition relating to ambient temperature - air pressure - installation altitude	-25 ... +60°C at 1080 hPa ... 795 hPa (-1000 m ... +2000 m) // -25 ... +50°C at 795 hPa ... 658 hPa (+2000 m ... +3500 m) // -25 ... +40°C at 658 hPa ... 540 hPa (+3500 m ... +5000 m)
resistance to mechanically active substances conformity acc. to EN 60721-3-3	Yes; Compliant with EN 60721-3-3, Class 3S4 incl. sand, dust; the supplied plug covers must remain in place on the unused interfaces during operation.
resistance to chemically active substances conformity acc. to EN 60721-3-3	Yes; Compliant with EN 60721-3-3, Class 3B2 mold and fungal spores (except fauna); the supplied plug covers must remain in place on the unused interfaces during operation.
resistance to biologically active substances conformity acc. to EN 60721-3-3	Yes; Compliant with EN 60721-3-3, Class 3C4 incl. salt spray in accordance with EN 60068-2-52 (severity 3); the supplied plug covers must remain in place on the unused interfaces during operation.
resistance to salt-laden atmosphere conformity acc. to EN 60068-2-52	Yes; Severity 3
contact rating of auxiliary contacts according to UL	B300 / R300
Short-circuit protection	
• 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	
protection against electrical shock	finger-safe
Main circuit	

•	
— operating voltage at AC at 50 Hz rated value	110 ... 240 V
— operating voltage at AC at 60 Hz rated value	110 ... 240 V
• operating voltage at DC	
— rated value	110 ... 240 V

Control circuit/ Control

Product function soft starter control	Yes
Type of voltage of the control supply voltage	AC/DC
• control supply voltage at AC at 50 Hz rated value	110 ... 240 V
• control supply voltage at AC at 60 Hz rated value	110 ... 240 V
control supply voltage frequency	
• **1 rated value**	50 Hz
• **2 rated value**	60 Hz
control supply voltage at DC	
• rated value	110 ... 240 V
Control supply voltage 1	
• at DC rated value	240 V
operating range factor control supply voltage rated value at DC	
• initial value	0.85
• full-scale value	1.1
operating range factor control supply voltage rated value at AC at 50 Hz	
• initial value	0.85
• full-scale value	1.1
operating range factor control supply voltage rated value at AC at 60 Hz	
• initial value	0.85
• full-scale value	1.1

Certificates/ approvals

Further information

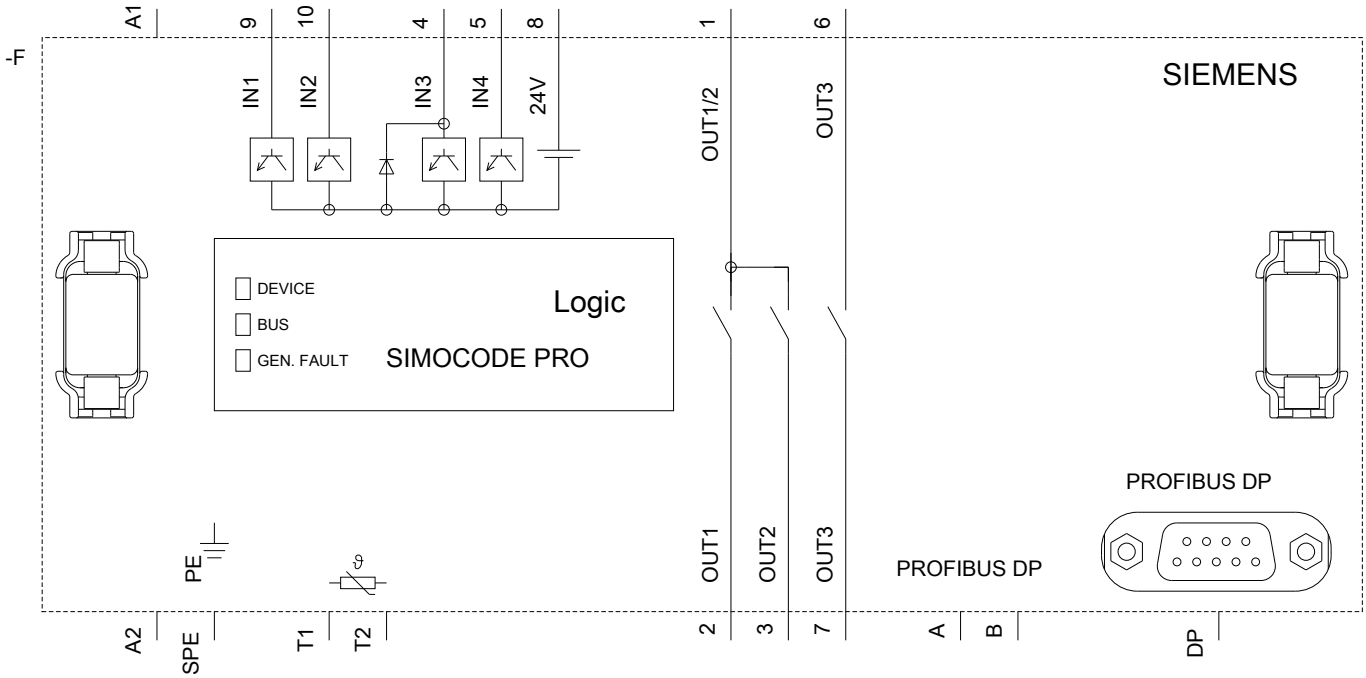
Information- and Downloadcenter (Catalogs, Brochures,…)
https://www.siemens.com/ic10

Industry Mall (Online ordering system)
https://mall.industry.siemens.com/mall/en/en/Catalog/product?mlfb=6AG1010-1AU00-4AA0

Cax online generator
http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=6AG1010-1AU00-4AA0

Service&Support (Manuals, Certificates, Characteristics, FAQs,...)
https://support.industry.siemens.com/cs/ww/en/ps/6AG1010-1AU00-4AA0

Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=6AG1010-1AU00-4AA0&lang=en



last modified: 08/29/2020