



BASIC UNIT 1 SIMOCODE PRO C;
 PROFIBUS DP-INTERFACE 12 MBIT/S, RS485;
 4I/3O FREELY PARAMETERIZABLE;
 US: DC 24V;
 THERMISTOR MOTOR PROTECTION;
 OUTPUTS MONOSTABLE

General technical data:

product brand name		SIRIUS
product designation		SIMOCODE pro C Motor Management System
Design of the product		basic unit 1
Number of outputs		3
Number of inputs		4
Operating voltage		
• for DC / rated value	V	24 ... 24
Operating range factor control supply voltage rated value		
• for DC / initial value		0.8
• for DC / final value		1.2
Active power loss / total / typical	W	5
Stored energy time / at mains power cut	s	0.05
Protection class IP		IP20
Protection against electrical shock		finger-safe
Item designation / according to DIN 40719 extendable after IEC 204-2 / according to IEC 750		F
Item designation / according to DIN EN 61346-2		F

Electromagnetic compatibility:

EMC immunity to interference / according to IEC 60947-1		corresponds to degree of severity 3
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Conductor-bound parasitic coupling BURST		2 kV (power ports) / 1 kV (signal ports)
Conductor-bound parasitic coupling conductor-earth SURGE / according to IEC 61000-4-5		2 kV
Conductor-bound parasitic coupling conductor-conductor SURGE / according to IEC 61000-4-5		1 kV
Electrostatic discharge / according to IEC 61000-4-2		6 kV contact discharge / 8 kV air discharge
Field-bound parasitic coupling / according to IEC 61000-4-3		10 V/m
Conducted interference as high-frequency radiation / according to IEC 61000-4-6		10 V
EMC emitted interference / according to IEC 60947-1		class A
Field-bound HF-interference emission / according to CISPR11		corresponds to degree of severity A
Conductor-bound HF-interference emission / according to CISPR11		corresponds to degree of severity A
Design of the electrical isolation		Protective separation in accordance with IEC 60947-1 for all circuits, up to installation altitude of 2000 m
Impulse voltage resistance / rated value	V	4,000
Insulation voltage / with degree of pollution 3 / rated value	V	300

Outputs:

Number of outputs		
• as contact-affected switching element		3
Switching behaviour		monostable
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)
Continuous current / of NO contacts of relay outputs		
• at 50°C	A	6
• at 60°C	A	5
Switching capacity current / of the NO contacts of the relay outputs		
• at AC-15		
• at 24 V	A	6
• at 120 V	A	6
• at 230 V	A	3
• at DC-13		
• at 24 V	A	2
• at 60 V	A	0.55
• at 125 V	A	0.25
Contact rating designation / for auxiliary contacts / according to UL		B300 / R300
Electrical operating cycles as operating time / typical		100,000
Mechanical operating cycles as operating time / typical		10,000,000

Inputs:

Number of digital inputs / with a common reference potential		4
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Input voltage / at the digital input / for DC / rated value	V	24
Cable length / for digital signals / maximum	m	300
Design of the digital inputs / Type 1 according to IEC 61131		Yes
Number of inputs / for thermistor connection		1
Response value of thermoresistor	Ω	3,400 ... 3,800
Release value of thermoresistor	Ω	1,500 ... 1,650
Cable length / for thermistor connection / with conductor cross-section = 2.5 mm ² / maximum	m	250
Cable length / for thermistor connection / with conductor cross-section = 1.5 mm ² / maximum	m	150
Cable length / for thermistor connection / with conductor cross-section = 0.5 mm ² / maximum	m	50
Product component		
• Digital input		Yes
• input for thermistor connection		Yes
• input for analog temperature sensors		No
• input for ground-fault detection		No

Motorschutzfunktionen:

Product function		
• overload protection		Yes
• evaluation of thermal resistor motor protection		Yes

Protection functions:

Product function		
• asymmetry recognition		Yes
• phase disturbance recognition		Yes
• phase sequence recognition		No
• short-circuit to earth recognition		Yes
• undercurrent recognition of 1 phase		Yes
• overcurrent recognition of 1 phase		Yes
• undervoltage recognition		No
• overvoltage recognition		No
• blocking current evaluation		Yes
• active power monitoring		No
• power factor monitoring		No
• monitoring of number of start operations		Yes

Motorsteuerfunktionen:

Product function		
• parameterizable overload relay		Yes
• circuit breaker control		Yes

- direct start
- reverse starting
- star-delta circuit
- star/delta reversing circuit
- Dahlander circuit
- Dahlander reversing circuit
- pole-changing switch circuit
- pole-changing switch reversing circuit
- slide control
- valve control

Yes
Yes
No
No
No
No
No
No
No
No

Product Function:

Product function

- soft starter control
- outputs parameterisable
- current detection
- voltage detection
- active power measurement
- inputs parameterisable
- diagnostic function
- data collection function
- maintenance function
- Password protection
- test function

No
Yes
Yes
No
No
Yes
Yes
Yes
Yes
Yes
Yes

Product expansion

- current measuring module
- current/voltage measuring module
- decoupling module
- digital I/O module
- failsafe digital I/O module
- ground fault monitoring module
- temperature monitoring module
- analog I/O module
- control unit
- control unit with display

Yes
No
No
No
No
No
No
No
Yes
No

Communication:

Product function / bus-communication

Yes

Design of the electrical connection / of the communication interface

D-sub / terminal

Transfer rate / maximum

Mbit/s 12

Number of interfaces

<ul style="list-style-type: none"> • acc. to PROFIBUS 		1
Protocol / will be supported <ul style="list-style-type: none"> • PROFIBUS DP protocol • PROFINET IO protocol • PROFI-safe protocol • LLDP • Address Resolution Protocol (ARP) • HTTPS • OPC UA Server • NTP 		Yes No No No No No No
Product function <ul style="list-style-type: none"> • web server • shared device • at the Ethernet interface <ul style="list-style-type: none"> • autonegotiation • autosensing • MRP redundancy protocol • MRRT redundancy procedure • is supported / PROFINET system redundancy • supports PROFIenergy measured values • supports PROFIenergy shutdown 		No No No No No No No No
Identification & maintenance <ul style="list-style-type: none"> • I&M0 - device-specific information • I&M1 - plant identification/location name • I&M2 - installation date • I&M3 - description 		Yes Yes Yes Yes

Installation/mounting/dimensions:

Type of mounting		screw and snap-on mounting
mounting position		any
Width	mm	45
Height	mm	111
Depth	mm	95
Type of the connectable conductor cross-section <ul style="list-style-type: none"> • solid • finely stranded <ul style="list-style-type: none"> • with wire end processing • for AWG conductors <ul style="list-style-type: none"> • solid • stranded 		1x (0.5 ... 4 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 ... 12), 2x (20 ... 14) 1x (20 ... 14), 2x (20 ... 16)

Tightening torque		
• with screw-type terminals	N·m	0.8 ... 1.2
Tightening torque (lbf·in)		
• with screw connection	lbf·in	7 ... 10.3

Connections:

Product function / removable terminal for auxiliary and control circuit	Yes
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Ambient conditions:

Ambient temperature		
• during storage	°C	-40 ... +80
• during transport	°C	-40 ... +80
• during operating	°C	-25 ... +60
• at installation altitude ≤ 3000m / during operation / maximum	°C	50
• at installation altitude ≤ 4000 m / during operation / maximum	°C	40
Relative humidity		
• during operating phase	%	5 ... 95
Altitude of installation site / at a height over sea level		
• maximum	m	2,000
	m	4,000
Resistance against shock / according to IEC 60068-2-27		15g / 11 ms
Resistance against vibration		1-6 Hz / 15 mm; 6-500 Hz / 2 g

Certificates/approvals:

Ex-device group and Ex-protection category / according to ATEX-directive 94/9/EG	Ex II (2) GD / Ex I (M2)
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varification of suitability / concerning ATEX	Yes
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General Product Approval

EMC



CCC



CSA



GOST



UL



C-TICK

For use in hazardous locations

Test Certificates



ATEX

[Explosion Protection Certificate](#)

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

Shipping Approval



ABS



DNV



GL



LRS

other

[Confirmation](#)

[Declaration of Conformity](#)



Profibus

[PROFINET-Certification](#)

[PROFISafe-Certification](#)

[other](#)

Further information:

Information- and Downloadcenter (Catalogs, Brochures,...)

<http://www.siemens.com/industrial-controls/catalogs>

Industry Mall (Online ordering system)

<http://www.siemens.com/industrial-controls/mall>

Cax online generator:

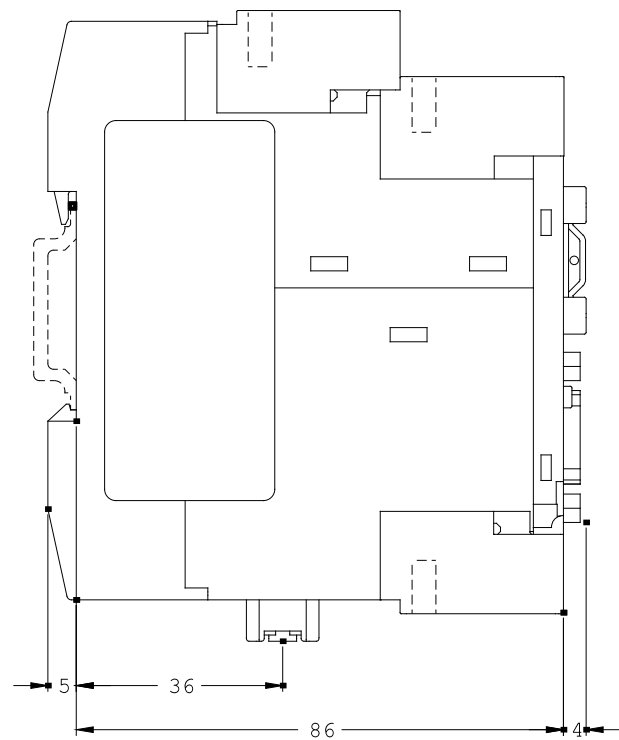
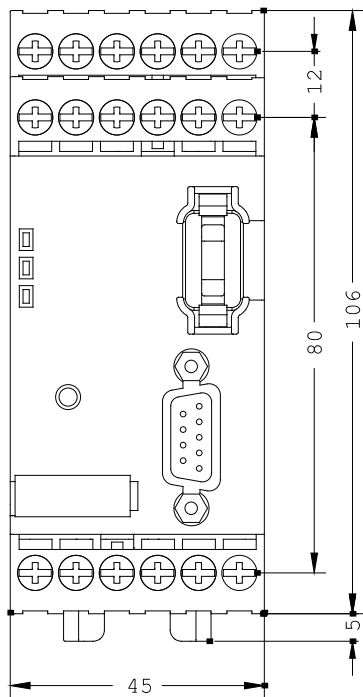
<http://www.siemens.com/cax>

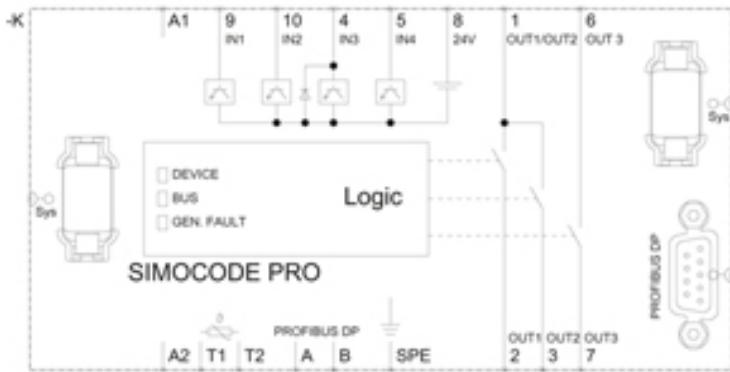
Service&Support (Manuals, Certificates, Characteristics, FAQs,...)

<http://support.automation.siemens.com/WW/view/en/3UF7000-1AB00-0/all>

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

http://www.automation.siemens.com/bilddb/cax_en.aspx?mlfb=3UF7000-1AB00-0





last change:

Jan 8, 2013