SIEMENS

Data sheet 3UF7010-1AU00-0

	Basic unit SIMOCODE pro V PB PROFIBUS DP interface 12 Mbit/s, RS 485, 4I/3O freely parameterizable, Us: 110240 V AC/DC, input for thermistor connection Monostable relay outputs, expandable by extension modules
product brand name	SIRIUS
product designation	Motor management system
design of the product	basic unit 2
product type designation	SIMOCODE pro V PB
General technical data	
product function	
• bus communication	Yes
data acquisition function	Yes
diagnostics function	Yes
password protection	Yes
• test function	Yes
maintenance function	Yes
product component	
input for thermistor connection	Yes
digital input	Yes
input for analog temperature sensors	No
input for ground fault detection	No
• relay output	Yes
product extension	
temperature monitoring module	Yes
current measuring module	Yes
current/voltage measuring module	Yes
fail-safe digital I/O module	Yes
ground-fault monitoring module	Yes
control unit with display	Yes
• control unit	Yes
analog I/O module	Yes
apparent power consumption	8.3 VA
consumed active power	3.6 W
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	
• according to IEC 60068-2-27	15g / 11 ms
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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 (operating cycles) typical	10 000 000
electrical endurance (operating cycles) typical	100 000
buffering time in the event of power failure	0 s
reference code according to IEC 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
Substance Prohibitance (Date)	05/01/2012
certificate of suitability	03/01/2012
IECEX	Yes; IECEx PTB 18.0004X
according to ATEX directive 2014/34/EU	BVS 06 ATEX F001, PTB 18 ATEX 5003 X
acc. to Equipment and Protective System Intended for	ITS21UKEX0464, ITS21UKEX0455X
Use in Potentially Explosive Atmospheres Regulations 2016 (S.I. 2016 No.1107)	113210REA0404; 113210REA0433A
according to UKCA	ITS21UKEX0464, ITS21UKEX0455X
explosion device group and category according to ATEX directive 2014/34/EU	II (2) G, II (2) D, I (M2) / I (1G/M2), II (1/2) G, II (1G/2D)
Electromagnetic compatibility	
EMC emitted interference according to IEC 60947-1	class A
EMC immunity according to IEC 60947-1	corresponds to degree of severity 3
conducted interference	
 due to burst according to IEC 61000-4-4 	2 kV (power ports) / 1 kV (signal ports)
 due to conductor-earth surge according to IEC 61000-4-5 	2 kV
 due to conductor-conductor surge according to IEC 61000-4-5 	1 kV
 due to high-frequency radiation according to IEC 61000- 4-6 	10 V
field-based interference according to IEC 61000-4-3	10 V/m
electrostatic discharge according to IEC 61000-4-2	6 kV contact discharge / 8 kV air discharge
conducted HF interference emissions according to CISPR11	corresponds to degree of severity A
field-bound HF interference emission according to CISPR11	corresponds to degree of severity A
Inputs/ Outputs	
product function	
 parameterizable inputs 	Yes
 parameterizable outputs 	Yes
number of inputs	4
• 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
type of relay outputs	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	
asymmetry detection	Yes
blocking current evaluation	Yes
power factor monitoring	Yes
ground fault detection	Yes
phase failure detection	Yes
 phase sequence recognition 	Yes
voltage detection	Yes
monitoring of number of start operations	Yes
overvoltage detection	Yes
overvollage detection overcurrent detection 1 phase	Yes
undervoltage detection	Yes
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	ocket (12 Mbit) / screw terminal (1.5 Mbit)
Installation/ mounting/ dimensions	
mounting position any	

fastening method	screw and snap-on mounting
height	111 mm
width	45 mm
depth	124 mm
required spacing	
• top	40 mm
• bottom	40 mm
• left	0 mm
• right	0 mm
Connections/ Terminals	
product component removable terminal for auxiliary and	Yes
control circuit	
type of connectable conductor cross-sections	4 (0 - 40 - 0) 0 (0 - 0 - 0)
• solid	1x (0.5 4.0 mm²), 2x (0.5 2.5 mm²)
finely stranded with core end processing	1x (0.5 2.5 mm²), 2x (0.5 1.5 mm²)
 for AWG cables solid 	1x (20 12), 2x (20 14)
for AWG cables 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; max. +50 °C (no protective separation)
• 3 maximum	4 000 m; max. +40 °C (no protective separation)
ambient temperature	
during operation	-25 +60 °C
during storage	-40 +80 °C
during transport	-40 +80 °C
environmental category	
during operation according to IEC 60721	3K6 (no formation of ice, no condensation, relative humidity 10 95%), 3C3
	(no salt mist), 3S2 (sand must not get into the devices), 3M6
 during storage according to IEC 60721 	1K6 (no condensation, relative humidity 10 95%), 1C2 (no salt mist), 1S2 (sand must not get into the devices), 1M4
 during transport according to IEC 60721 	2K2, 2C1, 2S1, 2M2
relative humidity	
during operation	5 95 %
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	
touch protection against electrical shock	finger-safe
Galvanic isolation	
(electrically) protective separation according to IEC 60947-1	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)
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
at 60 Hz rated value	110 240 V
control supply voltage frequency	
• 1 rated value	50 Hz
• 2 rated value	60 Hz
relative symmetrical tolerance of the control supply voltage frequency	5 %
control supply voltage at DC	
• rated value	110 240 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
inrush current peak	
• at 240 V	15 A
duration of inrush current peak	
● at 240 V	1 ms
0-46-4-1	

Certificates/ approvals

General Product Approval

For use in hazardous locations



Confirmation









For use in hazardous locations

Declaration of Conformity









Explosion Protection Certificate





Test Certificates

Marine / Shipping

other

Special Test Certific-<u>ate</u>

Type Test Certificates/Test Report

Special Test Certific-<u>ate</u>



Confirmation



Profibus

Further information

Siemens has decided to exit the Russian market (see here).

https://press.siemens.com/global/en/pressrelease/siemens-wind-down-russian-business

Siemens is working on the renewal of the current EAC certificates.

Please contact your local Siemens office on the status of validity of the EAC certification if you intend to import or offer to supply these products to an EAC relevant market (other than the sanctioned EAEU member states Russia or Belarus).

Information on the packaging

https://support.industry.siemens.com/cs/ww/en/view/109813875

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=3UF7010-1AU00-0

Cax online generator

http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UF7010-1AU00-0

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

https://support.industry.siemens.com/cs/ww/en/ps/3UF7010-1AU00-0

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UF7010-1AU00-0&lang=en

Test report No. A0258, protective separation

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

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4/6/2023



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