



Basic unit SIMOCODE pro V PN GP , Ethernet/PROFINET IO, PN system redundancy, OPC UA server, Web server, transmission rate 100 Mbps, 1 x bus connection via RJ45, 4 I/3 Q freely parameterizable, Us: 24 V DC, input for thermistor connection Monostable relay outputs, expandable by 1 extension module(DM, TM, EM)

product brand name	SIRIUS
product designation	Motor management system
design of the product	basic unit 3
product type designation	SIMOCODE pro V PN GP
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	No
• fail-safe digital I/O module	No
• ground-fault monitoring module	Yes
• control unit with display	No
• control unit	Yes
• analog I/O module	No
consumed active power	3.9 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
• 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 • at 60 V • at 125 V mechanical service life (switching cycles) typical electrical endurance (switching cycles) typical buffering time in the event of power failure reference code according to IEC 81346-2 continuous current of the NO contacts of the relay outputs • at 50 °C • at 60 °C type of input characteristic Substance Prohibitance (Date) certificate of suitability • according to ATEX directive 2014/34/EU explosion device group and category according to ATEX directive 2014/34/EU	2 A 0.55 A 0.25 A 10 000 000 100 000 0.02 s F 6 A 5 A Type 1 in accordance with EN 61131-2 08/31/2018 BVS 06 ATEX F001 II (2) G, II (2) D, I (M2)
Electromagnetic compatibility	
EMC emitted interference according to IEC 60947-1 EMC immunity according to IEC 60947-1 conducted interference • due to burst according to IEC 61000-4-4 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-6 field-based interference according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 conducted HF interference emissions according to CISPR11 field-bound HF interference emission according to CISPR11	class A corresponds to degree of severity 3 2 kV (power ports) / 1 kV (signal ports) 2 kV 1 kV 10 V 10 V/m 6 kV contact discharge / 8 kV air discharge corresponds to degree of severity A corresponds to degree of severity A
Inputs/ Outputs	
product function • parameterizable inputs • parameterizable outputs number of inputs • for thermistor connection number of digital inputs with a common reference potential digital input version type 1 acc. to IEC 61131 input voltage at digital input at DC rated value number of outputs number of semiconductor outputs number of outputs as contact-affected switching element switching behavior type of relay outputs wire length for digital signals maximum wire length for thermistor connection • with conductor cross-section = 0.5 mm² maximum • with conductor cross-section = 1.5 mm² maximum • with conductor cross-section = 2.5 mm² maximum	Yes Yes 4 1 4 Yes 24 V 3 0 3 monostable Monostable 300 m 50 m 150 m 250 m
Protective and monitoring functions	
product function • asymmetry detection • blocking current evaluation • power factor monitoring • ground fault detection • phase failure detection • phase sequence recognition • voltage detection • monitoring of number of start operations • overvoltage detection	Yes Yes No Yes Yes No No Yes No

• overcurrent detection 1 phase • undervoltage detection • undercurrent detection 1 phase • active power monitoring	Yes No Yes No
product function	
• current detection • overload protection • evaluation of thermistor motor protection	Yes Yes Yes
total cold resistance number of sensors in series maximum	1.5 kΩ
response value of thermoresistor	3 400 ... 3 800 Ω
• of the short-circuit control	9 Ω
release value of thermoresistor	1 500 ... 1 650 Ω
Motor control functions	
product function	
• parameterizable overload relay • circuit breaker control • 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 Yes Yes Yes No No No No No No No No
Communication/ Protocol	
• protocol is supported PROFIBUS DP protocol • protocol is supported PROFINET IO protocol • protocol is supported PROFI-safe protocol • protocol is supported Modbus RTU • protocol is supported EtherNet/IP • protocol is supported OPC UA Server • protocol is supported LLDP • protocol is supported Address Resolution Protocol (ARP) • protocol is supported SNMP • protocol is supported HTTPS • protocol is supported NTP • protocol is supported Media Redundancy Protocol (MRP) • product function is supported Device Level Ring (DLR)	No Yes No No No Yes Yes Yes Yes Yes Yes Yes No No
number of interfaces	
• according to PROFINET • according to PROFIBUS • according to Ethernet/IP	1 0 0
product function	
• web server • shared device • at the Ethernet interface Autocrossover • at the Ethernet interface Autonegotiation • at the Ethernet interface Autosensing • Media Redundancy Protocol for Planned Duplication (MRPD) • is supported PROFINET system redundancy (S2) • supports PROFIenergy measured values • supports PROFIenergy shutdown	Yes No Yes Yes Yes No Yes; S2 in conjunction with SIMATIC PCS 7 CPU 410-5H Yes Yes Yes
transfer rate maximum	100 Mbit/s
PROFINET conformity class	B
identification & maintenance function	
• I&M0 - device-specific information • I&M1 – higher level designation/location designation	Yes Yes

• I&M2 - installation date • I&M3 - comment	Yes Yes 1 x RJ45
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 • bottom • left • right	40 mm 40 mm 0 mm 0 mm
Connections/ Terminals	
product component removable terminal for auxiliary and control circuit	Yes
type of connectable conductor cross-sections	
• solid • finely stranded with core end processing • at AWG cables solid • at AWG cables stranded	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 ... 12), 2x (20 ... 14) 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
Ambient conditions	
installation altitude at height above sea level	
• 1 maximum • 2 maximum • 3 maximum	2 000 m 3 000 m; max. +50 °C (no protective separation) 4 000 m; max. +40 °C (no protective separation)
ambient temperature	
• during operation • during storage • during transport	-25 ... +60 °C -40 ... +80 °C -40 ... +80 °C
environmental category	
• during operation according to IEC 60721 • during storage according to IEC 60721 • during transport 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 1K6 (no condensation, relative humidity 10 ... 95%), 1C2 (no salt mist), 1S2 (sand must not get into the devices), 1M4 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	DC
control supply voltage at DC	
• rated value	24 V
control supply voltage 1 at DC rated value	24 V
operating range factor control supply voltage rated value at DC	
• initial value • full-scale value	0.85 1.2
inrush current peak	
• at 24 V	17 A

duration of inrush current peak

- at 24 V

1.1 ms

Certificates/ approvals

General Product Approval

EMC

For use in hazardous locations



[Confirmation](#)



For use in hazardous locations

Declaration of Conformity

Test Certificates



[Type Test Certificates/Test Report](#)

Test Certificates

Marine / Shipping

[Special Test Certificate](#)

[Special Test Certificate](#)



other

[Confirmation](#)



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=3UF7011-1AB00-2>

Cax online generator

<http://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UF7011-1AB00-2>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3UF7011-1AB00-2>

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

http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UF7011-1AB00-2&lang=en

Test report No. A0258, protective separation

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



