














basic device SIMOCODE pro V PN GP , Ethernet/PROFINET IO, PN system redundancy, OPC UA server, web server, transfer rate 100 Mbps, 2 x bus connection via RJ45, 4 I/O freely configurable, Us: 110...240 V AC/DC, input for thermistor connection monostable relay outputs, expandable by 1 expansion module(DM, TM, EM)

<b>product brand name</b>	SIMOCODE
<b>product designation</b>	Motor management system
<b>design of the product</b>	basic unit 3
<b>product type designation</b>	pro V PN GP
<b>General technical data</b>	
<b>product function</b>	
• current measurement	No
• voltage measurement	No
• active power measurement	No
• energy measurement	No
• frequency measurement	No
• bus communication	Yes
• data acquisition function	Yes
• diagnostics function	Yes
• password protection	Yes
• test function	Yes
• maintenance function	Yes
<b>product component</b>	
• input for thermistor connection	Yes
• digital input	Yes
• input for analog temperature sensors	No
• input for ground fault detection	No
• relay output	Yes
<b>product extension</b>	
• 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
• decoupling module	No
• analog I/O module	No
• digital I/O module with monostable outputs	Yes
• digital I/O module with bistable outputs	No
• control unit with display	No
• control unit	Yes
<b>apparent power consumption</b>	8.3 VA
<b>consumed active power</b>	4.5 W
insulation voltage with degree of pollution 3 at AC rated value	300 V
<b>surge voltage resistance rated value</b>	4 000 V

<b>shock resistance</b>	
<ul style="list-style-type: none"> <li>● according to IEC 60068-2-27</li> </ul>	15 g / 11 ms
<ul style="list-style-type: none"> <li>● vibration resistance</li> </ul>	1 ... 6 Hz / 15 mm; 6 ... 500 Hz / 2 g
<b>switching capacity current of the NO contacts of the relay outputs at AC-15</b>	
<ul style="list-style-type: none"> <li>● at 24 V</li> </ul>	6 A
<ul style="list-style-type: none"> <li>● at 120 V</li> </ul>	6 A
<ul style="list-style-type: none"> <li>● at 230 V</li> </ul>	3 A
<b>switching capacity current of the NO contacts of the relay outputs at DC-13</b>	
<ul style="list-style-type: none"> <li>● at 24 V</li> </ul>	2 A
<ul style="list-style-type: none"> <li>● at 60 V</li> </ul>	0.55 A
<ul style="list-style-type: none"> <li>● at 125 V</li> </ul>	0.25 A
<b>mechanical service life (operating cycles) typical</b>	10 000 000
electrical endurance (operating cycles) typical	100 000
<b>buffering time in the event of power failure</b>	0.02 s
<b>reference code according to IEC 81346-2</b>	F
continuous current of the NO contacts of the relay outputs	
<ul style="list-style-type: none"> <li>● at 50 °C</li> </ul>	6 A
<ul style="list-style-type: none"> <li>● at 60 °C</li> </ul>	5 A
<b>type of input characteristic</b>	Type 1 in accordance with EN 61131-2
<b>Substance Prohibitance (day/month/year)</b>	08/31/2018
<b>SVHC substance name</b>	Lead CAS-No. 7439-92-1 Lead monoxide (lead oxide) CAS-No. 1317-36-8 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one CAS-No. 71868-10-5 4,4'-isopropylidenediphenol (Bisphenol A, BPA) CAS-No. 80-05-7 2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone CAS-No. 119313-12-1
<b>Net Weight</b>	0.335 kg
<b>Electromagnetic compatibility</b>	
EMC emitted interference according to IEC 60947-1	class A
EMC immunity according to IEC 60947-1	corresponds to degree of severity 3
<b>conducted interference</b>	
<ul style="list-style-type: none"> <li>● due to burst according to IEC 61000-4-4</li> </ul>	2 kV (power ports) / 1 kV (signal ports)
<ul style="list-style-type: none"> <li>● due to conductor-earth surge according to IEC 61000-4-5</li> </ul>	2 kV
<ul style="list-style-type: none"> <li>● due to conductor-conductor surge according to IEC 61000-4-5</li> </ul>	1 kV
<ul style="list-style-type: none"> <li>● due to high-frequency radiation according to IEC 61000-4-6</li> </ul>	10 V
<b>field-based interference according to IEC 61000-4-3</b>	10 V/m
<b>electrostatic discharge according to IEC 61000-4-2</b>	6 kV contact discharge / 8 kV air discharge
<b>conducted HF interference emissions according to CISPR11</b>	corresponds to degree of severity A
<b>field-bound HF interference emission according to CISPR11</b>	corresponds to degree of severity A
<b>Inputs/ Outputs</b>	
<b>product function</b>	
<ul style="list-style-type: none"> <li>● parameterizable inputs</li> </ul>	Yes
<ul style="list-style-type: none"> <li>● parameterizable outputs</li> </ul>	Yes
<b>number of inputs</b>	4
<ul style="list-style-type: none"> <li>● for thermistor connection</li> </ul>	1
number of digital inputs with a common reference potential	4
<b>digital input version</b>	
<ul style="list-style-type: none"> <li>● type 1 acc. to IEC 61131</li> </ul>	Yes
<b>input voltage at digital input at DC</b>	
<ul style="list-style-type: none"> <li>● rated value</li> </ul>	24 V
<b>number of outputs</b>	3
<b>number of semiconductor outputs</b>	0
<b>number of outputs as contact-affected switching element</b>	3
<b>switching behavior</b>	monostable
<b>number of relay outputs</b>	3
<b>type of relay outputs</b>	Monostable

<b>wire length for digital signals maximum</b>	300 m
<b>wire length for thermistor connection</b>	
• with conductor cross-section = 0.5 mm <sup>2</sup> maximum	50 m
• with conductor cross-section = 1.5 mm <sup>2</sup> maximum	150 m
• with conductor cross-section = 2.5 mm <sup>2</sup> maximum	250 m
<b>Protective and monitoring functions</b>	
<b>product function</b>	
• asymmetry detection	Yes
• blocking current evaluation	Yes
• power factor monitoring	No
• ground fault detection	Yes
• ground-fault monitoring	No
• phase failure detection	Yes
• phase sequence recognition	No
• voltage detection	No
• monitoring of number of start operations	Yes
• overvoltage detection	No
• overcurrent detection 1 phase	Yes
• undervoltage detection	No
• undercurrent detection 1 phase	Yes
• active power monitoring	No
<b>product function</b>	
• current detection	Yes
• overload protection	Yes
• evaluation of thermistor motor protection	Yes
<b>total cold resistance number of sensors in series maximum</b>	1.5 kΩ
<b>response value of thermoresistor</b>	3 400 ... 3 800 Ω
• of the short-circuit control	9 Ω
<b>release value of thermoresistor</b>	1 500 ... 1 650 Ω
<b>Motor control functions</b>	
<b>product function</b>	
• parameterizable overload relay	Yes
• circuit breaker control	Yes
• direct start	Yes
• reverse starting	Yes
• star-delta circuit	Yes
• star-delta reversing circuit	No
• Dahlander circuit	No
• Dahlander reversing circuit	No
• pole-changing switch circuit	No
• pole-changing switch reversing circuit	No
• slide control	No
• valve control	No
<b>Communication/ Protocol</b>	
<b>protocol is supported</b>	
• PROFIBUS DP protocol	No
• PROFINET IO protocol	Yes
• PROFIsafe protocol	No
• Modbus RTU	No
• EtherNet/IP	No
• OPC UA Server	Yes
• LLDP	Yes
• Address Resolution Protocol (ARP)	Yes
• SNMP	Yes
• HTTPS	Yes
• NTP	Yes
• Media Redundancy Protocol (MRP)	Yes
<b>product function</b>	
• web server	Yes

<ul style="list-style-type: none"> <li>• shared device</li> </ul>	No
<ul style="list-style-type: none"> <li>• at the Ethernet interface Autocrossover</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• at the Ethernet interface Autonegotiation</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• at the Ethernet interface Autosensing</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• Media Redundancy Protocol for Planned Duplication (MRPD)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• is supported Device Level Ring (DLR)</li> </ul>	No
<ul style="list-style-type: none"> <li>• is supported PROFINET system redundancy (S2)</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• supports PROFinenergy measured values</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• supports PROFinenergy shutdown</li> </ul>	Yes
<b>transfer rate</b>	100 Mbit/s
<b>transfer rate maximum</b>	100 Mbit/s
<b>PROFINET conformity class</b>	C
<b>identification &amp; maintenance function</b>	
<ul style="list-style-type: none"> <li>• I&amp;M0 - device-specific information</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• I&amp;M1 - higher level designation/location designation</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• I&amp;M2 - installation date</li> </ul>	Yes
<ul style="list-style-type: none"> <li>• I&amp;M3 - comment</li> </ul>	Yes
type of electrical connection of the communication interface	2x RJ45
<b>Installation/ mounting/ dimensions</b>	
<b>mounting position</b>	any
<b>fastening method</b>	screw and snap-on mounting
<b>height</b>	111 mm
<b>width</b>	45 mm
<b>depth</b>	124 mm
<b>required spacing</b>	
<ul style="list-style-type: none"> <li>• top</li> </ul>	40 mm
<ul style="list-style-type: none"> <li>• bottom</li> </ul>	40 mm
<ul style="list-style-type: none"> <li>• left</li> </ul>	0 mm
<ul style="list-style-type: none"> <li>• right</li> </ul>	0 mm
<b>Connections/ Terminals</b>	
<b>product component removable terminal for auxiliary and control circuit</b>	Yes
<b>type of electrical connection</b>	
<ul style="list-style-type: none"> <li>• for auxiliary and control circuit</li> </ul>	screw-type terminals
<b>type of connectable conductor cross-sections</b>	
<ul style="list-style-type: none"> <li>• solid</li> </ul>	1x (0.5 ... 4.0mm <sup>2</sup> ), 2x (0.5 ... 2.5 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>• finely stranded with core end processing</li> </ul>	1x (0.5 ... 2.5 mm <sup>2</sup> ), 2x (0.5 ... 1.5 mm <sup>2</sup> )
<ul style="list-style-type: none"> <li>• for AWG cables solid</li> </ul>	1x (20 ... 12), 2x (20 ... 14)
<ul style="list-style-type: none"> <li>• for AWG cables stranded</li> </ul>	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
<b>Ambient conditions</b>	
installation altitude at height above sea level maximum	2 000 m
<ul style="list-style-type: none"> <li>• note</li> </ul>	Restrictions apply to higher installation altitudes, see: <a href="https://support.industry.siemens.com/cs/document/109995153">https://support.industry.siemens.com/cs/document/109995153</a>
<b>ambient temperature</b>	
<ul style="list-style-type: none"> <li>• during operation</li> </ul>	-25 ... +60 °C
<ul style="list-style-type: none"> <li>• during storage</li> </ul>	-40 ... +80 °C
<ul style="list-style-type: none"> <li>• during transport</li> </ul>	-40 ... +80 °C
<b>environmental category</b>	
<ul style="list-style-type: none"> <li>• during operation according to IEC 60721</li> </ul>	3K6 (no formation of ice, no condensation, relative humidity 10 ... 95%), 3C3 (no salt mist), 3S2 (sand must not get into the devices), 3M6
<ul style="list-style-type: none"> <li>• during storage according to IEC 60721</li> </ul>	1K6 (no condensation, relative humidity 10 ... 95%), 1C2 (no salt mist), 1S2 (sand must not get into the devices), 1M4
<ul style="list-style-type: none"> <li>• during transport according to IEC 60721</li> </ul>	2K2, 2C1, 2S1, 2M2
<b>relative humidity</b>	
<ul style="list-style-type: none"> <li>• during operation</li> </ul>	5 ... 95 %
<b>contact rating of auxiliary contacts according to UL</b>	B300 / R300
<b>Short-circuit protection</b>	

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 <sub>K</sub> < 500 A)	
<b>Electrical Safety</b>		
touch protection against electrical shock	finger-safe	
<b>ATEX</b>		
<b>certificate of suitability</b> <ul style="list-style-type: none"> <li>• IECEx</li> <li>• according to ATEX directive 2014/34/EU</li> <li>• according to UKCA</li> </ul>	Yes; IECEx BVS 20.0020 BVS 06 ATEX F001 ITS21UKEX0464	
<b>Galvanic isolation</b>		
(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)	
<b>design of the electrical isolation</b> <ul style="list-style-type: none"> <li>• note</li> </ul>	Protective separation in accordance with IEC 60947-1 for all circuits Test report No. A0258 must be observed (https://support.industry.siemens.com/cs/document/109748152)	
<b>Control circuit/ Control</b>		
product function soft starter control	Yes	
type of voltage of the control supply voltage	AC/DC	
<b>control supply voltage at AC</b> <ul style="list-style-type: none"> <li>• at 50 Hz rated value</li> <li>• at 60 Hz rated value</li> </ul>	110 ... 240 V 110 ... 240 V	
<b>control supply voltage frequency</b> <ul style="list-style-type: none"> <li>• 1 rated value</li> <li>• 2 rated value</li> </ul>	50 Hz 60 Hz	
relative symmetrical tolerance of the control supply voltage frequency	5 %	
control supply voltage at DC rated value	110 ... 240 V	
<b>operating range factor control supply voltage rated value at DC</b> <ul style="list-style-type: none"> <li>• initial value</li> <li>• full-scale value</li> </ul>	0.85 1.1	
<b>operating range factor control supply voltage rated value at AC at 50 Hz</b> <ul style="list-style-type: none"> <li>• initial value</li> <li>• full-scale value</li> </ul>	0.85 1.1	
<b>operating range factor control supply voltage rated value at AC at 60 Hz</b> <ul style="list-style-type: none"> <li>• initial value</li> <li>• full-scale value</li> </ul>	0.85 1.1	
<b>inrush current peak</b> <ul style="list-style-type: none"> <li>• at 240 V</li> </ul>	15 A	
<b>duration of inrush current peak</b> <ul style="list-style-type: none"> <li>• at 240 V</li> </ul>	1 ms	
<b>Approvals Certificates</b>		
<b>Environment</b>	<b>General Product Approval</b>	
<a href="#">Environmental Confirmations</a> 	   	
<b>General Product Approval</b>	<b>EMV</b>	<b>For use in hazardous locations</b>
     		
<b>For use in hazardous locations</b>	<b>Test Certificates</b>	



IECEEx



ATEX

[Miscellaneous](#)

[Special Test Certificate](#)

[Type Test Certificates/Test Report](#)

[Special Test Certificate](#)

Maritime application

other



ABS



DNV



LRS



RMRS



[Confirmation](#)

other

Industrial Communication

[Confirmation](#)

[PROFINET](#)



Profibus

Further information

Information on the packaging

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

Information for data generation and storage

<https://support.industry.siemens.com/cs/ww/en/view/109995012>

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=3UF7011-1AU00-1>

Cax online generator

<https://support.automation.siemens.com/WW/CAXorder/default.aspx?lang=en&mlfb=3UF7011-1AU00-1>

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

<https://support.industry.siemens.com/cs/ww/en/ps/3UF7011-1AU00-1>

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

[https://www.automation.siemens.com/bilddb/cax\\_de.aspx?mlfb=3UF7011-1AU00-1&lang=en](https://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UF7011-1AU00-1&lang=en)

