



Basic unit SIMOCODE pro V EIP, EtherNet/IP, medium redundancy DLR, Web server, transmission rate 100 Mbps, 2 x bus connection via RJ45, 4I/3O freely parameterizable, Us: 24 V 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 3
product type designation	SIMOCODE pro V EIP
General technical data	
product function	<ul style="list-style-type: none"> • current measurement • voltage measurement • active power measurement • energy measurement • frequency measurement • bus communication • data acquisition function • diagnostics function • password protection • test function • maintenance function
	No No Yes No No Yes Yes Yes Yes Yes Yes Yes Yes
product component	<ul style="list-style-type: none"> • input for thermistor connection • digital input • input for analog temperature sensors • input for ground fault detection • relay output
	Yes Yes No No Yes
product extension	<ul style="list-style-type: none"> • temperature monitoring module • current measuring module • current/voltage measuring module • fail-safe digital I/O module • ground-fault monitoring module • decoupling module • control unit with display • control unit • analog I/O module
	Yes Yes Yes Yes Yes Yes Yes Yes Yes
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
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	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	0.02 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)	03/01/2017
SVHC substance name	Lead - 7439-92-1 Lead monoxide (lead oxide) - 1317-36-8
Weight	0.339 kg
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 mm ² maximum	50 m
• with conductor cross-section = 1.5 mm ² maximum	150 m
• with conductor cross-section = 2.5 mm ² maximum	250 m
Protective and monitoring functions	
product function	
• asymmetry detection	Yes
• blocking current evaluation	Yes
• power factor monitoring	Yes

• ground fault detection	Yes
• ground-fault monitoring	No
• phase failure detection	Yes
• phase sequence recognition	Yes
• voltage detection	Yes
• monitoring of number of start operations	Yes
• overvoltage detection	Yes
• overcurrent detection 1 phase	Yes
• undervoltage detection	Yes
• undercurrent detection 1 phase	Yes
• active power monitoring	Yes
product function	
• current detection	Yes
• overload protection	Yes
• evaluation of thermistor motor protection	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	Yes
• circuit breaker control	Yes
• direct start	Yes
• reverse starting	Yes
• star-delta circuit	Yes
• star-delta reversing circuit	Yes
• Dahlander circuit	Yes
• Dahlander reversing circuit	Yes
• pole-changing switch circuit	Yes
• pole-changing switch reversing circuit	Yes
• slide control	Yes
• valve control	Yes
Communication/ Protocol	
protocol is supported	
• PROFIBUS DP protocol	No
• PROFINET IO protocol	No
• PROFIsafe protocol	No
• Modbus RTU	No
• EtherNet/IP	Yes
• OPC UA Server	No
• LLDP	Yes
• Address Resolution Protocol (ARP)	Yes
• SNMP	Yes
• HTTPS	No
• NTP	Yes
• Media Redundancy Protocol (MRP)	No
number of interfaces	
• according to PROFINET	0
• according to PROFIBUS	0
• according to Ethernet/IP	2
product function	
• web server	Yes
• shared device	No
• at the Ethernet interface Autocrossover	Yes
• at the Ethernet interface Autonegotiation	Yes
• at the Ethernet interface Autosensing	Yes
• is supported Device Level Ring (DLR)	Yes
• is supported PROFINET system redundancy (S2)	No
• supports PROFIenergy measured values	No
• supports PROFIenergy shutdown	No