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: 110...240 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
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	

e at 18 V 0.25 A	• at 24 V	2 A
ear 128 V 0.25 A		
electrical endurance (peending podes) pyleal 100 000 buffering time in the worth of power failure 0.2 s certenence code according to IEC 81346-2 F - at 80 °C 5A - at 80 °C 5A - buffering time in North characteristic Type 1 in accordance with EN 61131-2 Substance Prohibitance (Date) 506/12012 SWHG substance name Bill-1748-92-21 ellerinoxidi (Bilcoki) - 1317-38-8 Hell-concord (Bilcoki) - 1317-38-8 Bill-1748-92-21 ellerinoxidi (Bilcoki) - 1317-38-8 - accrotificate of suitability **ECEX Yes; IECEX PTB 18 0004X - accroding to NEX directive 2014-03-EEU Wes; IECEX PTB 18 0004X - accroding to NEX directive 2014-03-EEU Wes IECEX PTB 18 0004X - accroding to NEX directive System Intended for Use in Potentially Explose Ahmasphares Regulations 2016 (S. 2016 No. 1107) ITS210KEX-044, TS211VEX-0455X - accroding to NEX directive 2014-03-EEU ItS210KEX-044, TS211VEX-0455X EMC contractive directive conduction to Table to 1007-1 class A EMC contractive directive conduction to IEC 0004-1 class A - due to high-frequency relation according to IEC 61000-4 2 kV (power ponts) / 1 kV (signal ports) - due to high-fre		
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5.4 Type of input characteristic Type of injut Type of injut characteristic Type of		
Sybe of input characteristic Substance Prohibitance (Date) Substance Prohibitance (Date) SVHG substance Prohibitance (Date) SVHG substance name Bills - 7439-92-1 Bilminomoust (Bilacoud) - 1317-36-8 Bilacoud) - 1317-36-8 Bilacoud) - 1317-36-8 Bill		
Substance Prohibitance (Date) SWHC substance name		
SUHC substance name Blein - 7499-92-1 Blein - 1899-92-1 Blein - 1899-92-1 Blein - 1899-92-1 Blein - 1899-92-1 Blein - 1899-93-1 Blein - 1899-93-93-1 Blein - 1899-93-1	_ · · · ·	
Bileimonoud (Bileimon (Jayrhan A., 86-96-7) certificate of suitability	, ,	
• IECEX • according to ATEX directive 2014/34/EU • acc. to Equipment and Protective System Intended for Use in Potentially Explosive Atmospheres Regulations 2016 (S. 1.20 fo N. 1017) • according to UKCA • TISS2*** ITS2**** ITS2**** ITS2*** ITS2** IT	SVHC substance name	Bleimonoxid (Bleioxid) - 1317-36-8
according to ATEX directive 2014/34/EU acc. to Equipment and Protective System Intended for Use in Potentially Exploses Atmospheres Regulations 2016 (S.I. 2018 No. 1107) according to UKCA riss21UKEX0464, ITS21UKEX0455X lick contact of Explose and category according to ATEX directive 2014/34/EU lick compatibility EMC emitted interference according to IEC 60947-1 conducted interference according to IEC 60947-1 due to to transpared according to IEC 60947-1 due to to transpared according to IEC 61000-4-4 due to conductor-cardin surge according to IEC 61000-4-5 due to to transpared according to IEC 61000-4-5 due to bust according to IEC 61000-4-3 due to high-frequency radiation according to IEC 61000-4-2 due to high-frequency radiation according to IEC 61000-4-3 due to broad-freence according to IEC 61000-4-3 delectrostatic discharge according to IEC 61000-4-3 doubt to high-frequency radiation according to IEC 61000-4-3 doubt to high-freence emissions according to CISPR11 folid-bound HF Interference emissions according to CISPR11 product function parameterizable inputs product function parameterizable cuputs for themistor connection number of displain you at a DC rated value bype 1 acc. to IEC 61131 put voltage at digital input at DC rated value bype 1 acc. to IEC 61131 put voltage at digital input at DC rated value bype of relay outputs mumber of outputs mumber of outputs mumber of outputs as contact-affected switching element switching behavior monostable wire length for themistor connection wire leng	certificate of suitability	
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conducted interference • due to burst according to IEC 61000-4-5 • due to conductor-earth surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to conductor-conductor surge according to IEC 61000-4-5 • due to brigh-frequency radiation according to IEC 61000-4-6 • due to brigh-frequency radiation according to IEC 61000-4-6 • due to brigh-frequency radiation according to IEC 61000-4-7 • de to bright-frequency radiation according to IEC 61000-4-2 • 6 kW contact discharge /8 kW air discharge conducted HF interference emissions according to CISPR11 field-bosund HF interference emissions according to CISPR11 field-bound HF Interference emission according to CISPR11 field-bound HF interference emission according to CISPR11 field-bound HF interference emission according to CISPR11 reported trunction • parameterizable inputs • parameterizable inputs • parameterizable outputs • for themistor connection • parameterizable outputs • for themistor connection • (yee 1 acc. to IEC 61131 • (yee 3 acc. to IEC 61131 • (yee 4 acc. to IEC 61131 • (yee 6 acc. to IEC 6113		
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61000-4-5 • due to high-frequency radiation according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-3 electrostatic discharge according to IEC 61000-4-2 ocnoducted HF interference emissions according to CISPR11 field-bound HF interference emission according to CISPR11 orresponds to degree of severity A CISPR11 field-bound HF interference emission according to CISPR11 orresponds to degree of severity A corresponds to degree of severity A product function • parameterizable inputs • parameterizable inputs • parameterizable outputs • for thermistor connection • type 1 acc. to IEC 61131 ves input voltage at digital input at DC rated value • type 1 acc. to IEC 61131 vumber of outputs number of outputs as contact-affected switching element switching behavior type of relay outputs wire length for digital signals maximum wire length for digital signals maximum • with conductor cross-section = 0.5 mm² maximum • with conductor cross-section = 2.5 mm² maximum • with conductor or cross-section = 2.5 mm² maximum • with conductor or cross-section = 2.5 mm² maximum • with conductor or cross-section = 2.5 mm² maximum • with conductor or cross-section = 2.5 mm² maximum • with conductor or cross-section = 2.5 mm² maximum • with conductor or cross-section = 2.5 mm² maximum • with conductor or cross-section = 2.5 mm² maximum • with conductor or cross-section = 2.5 mm² maximum • with conductor or cross-section = 2.5 mm² maximum • with conductor or cross-section = 2.5 mm² maximum • with conductor or cross-section = 2.5 mm² maximum • with conductor or cross-section = 2.5 mm² maximum • with conductor or cross-section = 2.5 mm² maximum • with conductor or cross-section = 2.5 mm² maximum • with conductor or cross-section = 2.5 mm² maximum • asymmetry detection	 due to conductor-earth surge according to IEC 61000-4-5 	2 kV
field-based interference according to IEC 61000-4-3	61000-4-5	
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product function	CISPR11	
product function		corresponds to degree of severity A
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with conductor cross-section = 1.5 mm² maximum with conductor cross-section = 2.5 mm² maximum 250 m Protective and monitoring functions product function asymmetry detection Yes	_	
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Protective and monitoring functions product function • asymmetry detection Yes	• with conductor cross-section = 1.5 mm² maximum	150 m
product function • asymmetry detection Yes	• with conductor cross-section = 2.5 mm² maximum	250 m
• asymmetry detection Yes	Protective and monitoring functions	
	product function	
• blocking current evaluation Yes	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
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 kQ
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	1 000 1 000 12
product function	Voo
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
slide control valve control	Yes Yes
valve control	
valve control Communication/ Protocol	
valve control Communication/ Protocol protocol is supported	Yes
valve control Communication/ Protocol protocol is supported PROFIBUS DP protocol	Yes
valve control Communication/ Protocol protocol is supported PROFIBUS DP protocol PROFINET IO protocol	Yes Yes No
valve control Communication/ Protocol protocol is supported PROFIBUS DP protocol PROFINET IO protocol PROFIsafe protocol	Yes Yes No Yes
valve control Communication/ Protocol protocol is supported PROFIBUS DP protocol PROFINET IO protocol PROFIsafe protocol Modbus RTU	Yes Yes No Yes No
valve control Communication/ Protocol protocol is supported PROFIBUS DP protocol PROFINET IO protocol PROFIsafe protocol Modbus RTU EtherNet/IP	Yes Yes No Yes No No
valve control Communication/ Protocol protocol is supported PROFIBUS DP protocol PROFINET IO protocol PROFIsafe protocol Modbus RTU EtherNet/IP OPC UA Server	Yes Yes No Yes No No No
valve control Communication/ Protocol protocol is supported PROFIBUS DP protocol PROFINET IO protocol PROFIsafe protocol Modbus RTU EtherNet/IP OPC UA Server LLDP	Yes Yes No Yes No No No No
valve control Communication/ Protocol protocol is supported PROFIBUS DP protocol PROFINET IO protocol PROFIsafe protocol Modbus RTU EtherNet/IP OPC UA Server LLDP Address Resolution Protocol (ARP)	Yes Yes No Yes No No No No No No
valve control Communication/ Protocol protocol is supported PROFIBUS DP protocol PROFINET IO protocol PROFIsafe protocol Modbus RTU EtherNet/IP OPC UA Server LLDP Address Resolution Protocol (ARP) SNMP	Yes Yes No Yes No No No No No No No
valve control Communication/ Protocol protocol is supported PROFIBUS DP protocol PROFINET IO protocol PROFIsafe protocol Modbus RTU EtherNet/IP OPC UA Server LLDP Address Resolution Protocol (ARP) SNMP HTTPS	Yes Yes No Yes No
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valve control Communication/ Protocol protocol is supported PROFIBUS DP protocol PROFINET IO protocol PROFIsafe protocol Modbus RTU EtherNet/IP OPC UA Server LLDP Address Resolution Protocol (ARP) SNMP HTTPS NTP Media Redundancy Protocol (MRP)	Yes No Yes No
valve control Communication/ Protocol protocol is supported PROFIBUS DP protocol PROFINET IO protocol PROFIsafe protocol Modbus RTU EtherNet/IP OPC UA Server LLDP Address Resolution Protocol (ARP) SNMP HTTPS NTP Media Redundancy Protocol (MRP) number of interfaces according to PROFINET	Yes No Yes No
valve control Communication/ Protocol protocol is supported PROFIBUS DP protocol PROFINET IO protocol PROFIsafe protocol Modbus RTU EtherNet/IP OPC UA Server LLDP Address Resolution Protocol (ARP) SNMP HTTPS NTP Media Redundancy Protocol (MRP) number of interfaces according to PROFIBUS	Yes No Yes No
valve control Communication/ Protocol protocol is supported PROFIBUS DP protocol PROFINET IO protocol PROFISATE protocol Modbus RTU EtherNet/IP OPC UA Server LLDP Address Resolution Protocol (ARP) SNMP HTTPS NTP Media Redundancy Protocol (MRP) number of interfaces according to PROFIBUS according to Ethernet/IP	Yes No Yes No
valve control Communication/ Protocol protocol is supported PROFIBUS DP protocol PROFINET IO protocol PROFIsafe protocol Modbus RTU EtherNet/IP OPC UA Server LLDP Address Resolution Protocol (ARP) SNMP HTTPS NTP Media Redundancy Protocol (MRP) number of interfaces according to PROFINET according to Ethernet/IP product function	Yes No Yes No
valve control Communication/ Protocol protocol is supported PROFIBUS DP protocol PROFINET IO protocol PROFIsafe protocol Modbus RTU EtherNet/IP OPC UA Server LLDP Address Resolution Protocol (ARP) SNMP HTTPS NTP Media Redundancy Protocol (MRP) number of interfaces according to PROFINET according to Ethernet/IP product function web server	Yes No Yes No
valve control Communication/ Protocol protocol is supported PROFIBUS DP protocol PROFINET IO protocol PROFIsafe protocol Modbus RTU EtherNet/IP OPC UA Server LLDP Address Resolution Protocol (ARP) SNMP HTTPS NTP Media Redundancy Protocol (MRP) number of interfaces according to PROFINET according to Ethernet/IP product function web server shared device	Yes No Yes No
valve control Communication/ Protocol protocol is supported PROFIBUS DP protocol PROFINET IO protocol PROFIsafe protocol Modbus RTU EtherNet/IP OPC UA Server LLDP Address Resolution Protocol (ARP) SNMP HTTPS NTP Media Redundancy Protocol (MRP) number of interfaces according to PROFINET according to Ethernet/IP product function web server shared device at the Ethernet interface Autocrossover	Yes No Yes No
valve control Communication/ Protocol protocol is supported PROFIBUS DP protocol PROFINET IO protocol PROFISafe protocol Modbus RTU EtherNet/IP OPC UA Server LLDP Address Resolution Protocol (ARP) SNMP HTTPS NTP Media Redundancy Protocol (MRP) number of interfaces according to PROFIBUS according to Ethernet/IP product function web server shared device at the Ethernet interface Autocrossover at the Ethernet interface Autonegotiation	Yes No Yes No
valve control Communication/ Protocol protocol is supported PROFIBUS DP protocol PROFINET IO protocol PROFIsafe protocol Modbus RTU EtherNet/IP OPC UA Server LLDP Address Resolution Protocol (ARP) SNMP HTTPS NTP Media Redundancy Protocol (MRP) number of interfaces according to PROFINET according to PROFIBUS according to Ethernet/IP product function web server shared device at the Ethernet interface Autocrossover at the Ethernet interface Autosensing	Yes No Yes No
valve control Communication/ Protocol protocol is supported PROFIBUS DP protocol PROFINET IO protocol PROFISafe protocol Modbus RTU EtherNet/IP OPC UA Server LLDP Address Resolution Protocol (ARP) SNMP HTTPS NTP Media Redundancy Protocol (MRP) number of interfaces according to PROFINET according to PROFIBUS according to Ethernet/IP product function web server shared device at the Ethernet interface Autocrossover at the Ethernet interface Autosensing is supported Device Level Ring (DLR)	Yes No Yes No
valve control Communication/ Protocol protocol is supported PROFIBUS DP protocol PROFINET IO protocol PROFISafe protocol Modbus RTU EtherNet/IP OPC UA Server LLDP Address Resolution Protocol (ARP) SNMP HTTPS NTP Media Redundancy Protocol (MRP) number of interfaces according to PROFINET according to PROFIBUS according to Ethernet/IP product function web server shared device at the Ethernet interface Autocrossover at the Ethernet interface Autosensing is supported PROFINET system redundancy (S2)	Yes No Yes No
valve control Communication/ Protocol protocol is supported PROFIBUS DP protocol PROFINET IO protocol PROFISafe protocol Modbus RTU EtherNet/IP OPC UA Server LLDP Address Resolution Protocol (ARP) SNMP HTTPS NTP Media Redundancy Protocol (MRP) number of interfaces according to PROFINET according to PROFIBUS according to Ethernet/IP product function web server shared device at the Ethernet interface Autocrossover at the Ethernet interface Autosensing is supported Device Level Ring (DLR)	Yes No Yes No

transfer rate maximum	12 Mbit/s
identification & maintenance function	V
1&M0 - device-specific information	Yes
• I&M1 - higher level designation/location designation	Yes
I&M2 - installation date	Yes
• I&M3 - comment	Yes
type of electrical connection of the communication interface	9-pin SUB-D socket (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 control circuit	Yes
type of connectable conductor cross-sections	
• 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	2x 0.34 mm², AWG 22
PROFIBUS wire	
Ambient conditions	
installation altitude at height above sea level	0.000
• 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	25 LC0 °C
during operation	-25 +60 °C
during storage	-40 +80 °C
during transport	-40 +80 °C
environmental category	21/0 (no formation of its no condensation relative to 11/1 40 000)
 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-
Electrical Safety	breaker C char.: 1.6 A (IEC 60947-5-1) or 6 A (I_K < 500 A)
touch protection against electrical shock	finger-safe
Galvanic isolation	inger saic
(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
Approvals Certificates	

General Product Approval

For use in hazardous locations

Confirmation











For use in hazardous locations

Declaration of Conformity

Test Certificates





Explosion Protection Certificate





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

Test Certificates

Marine / Shipping

other

Type Test Certificates/Test Report

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





Confirmation



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,...)

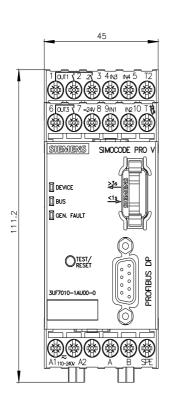
https://support.industry.siemens.com/cs/ww/en/ps/3UF7010-1AU00-0

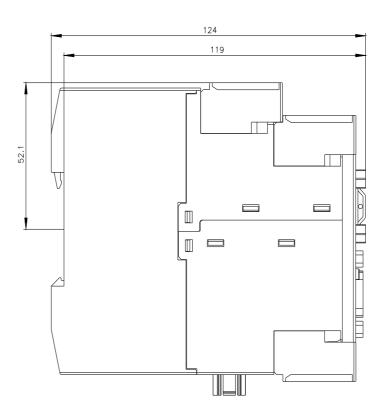
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

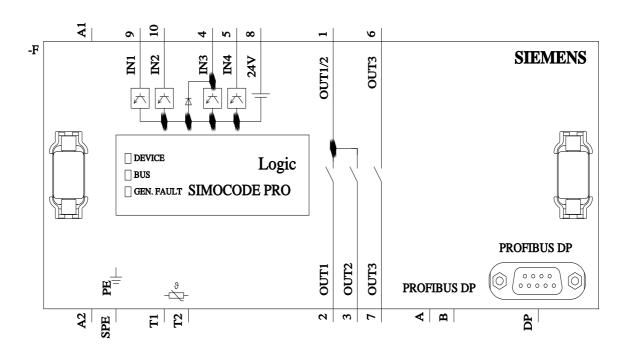
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UF7010-1AU00-0&lang=en

Test report No. A0258, protective separation

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







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