SIEMENS

Data sheet 3UF7020-1AB01-0



Basic unit SIMOCODE pro S, PROFIBUS DP interface 1.5 Mbit/s, 4I/2O freely parameterizable, Us: 24 V DC, input for thermistor connection Monostable relay outputs, expandable by a multifunctional module

product designation design of the product product type designation SiMOCODE pro S Central technical data product function	product brand name	SIRIUS
product type designation Ceneral technical data product function	product designation	Motor management system
Control tochnical data product function Yes o bus communication Yes data acquisition function Yes data acquisition function Yes password protection Yes test function Yes end function Yes product component Input for intermistor connection digital input Yes input for analog temperature sensors No input for ground fault detection No relay output Yes product extension Yes ecurrent measuring module Yes current/voltage measuring module Yes current/voltage measuring module No fail-safe digital I/O module No control unit with display No control unit with display No consumed active power 2.1 W insulation voltage with degree of pollution 3 at AC rated value No very voltage resistance rated value 10 g / 11 ms shock resistance when mounted on current measuring module according to IC 60068-2-27	design of the product	Basic device 0
product function • bus communication • bus communication • data acquisition function • data acquisition function • data acquisition function • data acquisition function • password protection • test function • maintenance function • maintenance function • maintenance function • realy output • input for analog temperature sensors • input for ground fault detection • relay output • relay output • current weasuring module • current weasuring module • current voltage measuring module • current voltage measuring module • ground-fault monitoring module • ground-fault monitoring module • control unit with display • control unit with display • control unit with display • control unit • analog I/O module consumed active power insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value • when mounted on current measuring module according to IEC 60068-2-27 • according to IEC 60068-2-27 • according to IEC 60068-2-27 • at 120 V • at 230 V	product type designation	SIMOCODE pro S
bus communication data acquisition function diagnostics function elaignostics function password protection test function test function test function maintenance function res product component input for thermistor connection digital input input for analog temperature sensors input for ground fault detection relay output product extension temperature monitoring module current measuring module current work and input module fields are digital I/O module ground-fault monitoring module control unit with display control unit with display control unit with degree of pollution 3 at AC rated value protection class IP shock resistance when mounted on current measuring module according to IEC 60068-2-27 according to IEC 60068-2-27 set 24 V at 120 V at 230 V actions Yes 'es 'es 'es 'es 'es 'es 'e	General technical data	
data acquisition function diagnostics function password protection test function maintenance function maintenance function maintenance function maintenance function maintenance function product component input for thermistor connection digital input resistance input for analog temperature sensors no input for ground fault detection relay output product extension temperature monitoring module temperature monitoring module current measuring module fail-safe digital I/O module ground-fault monitoring module recontrol unit with display control unit with display control unit analog I/O module consumed active power surge voltage resistance rated value when mounted on current measuring module according to IEC 60068-2-27 according to IEC 60068-2-27 switching capacity current of the NO contacts of the relay outputs at AC-15 at 230 V at 230 V at 230 V surge voltage visit degree of pollution 3 of AC rated value and the power switching capacity current of the NO contacts of the relay outputs at AC-15 at 230 V at 230 V at 230 V at 230 V	product function	
diagnostics function password protection test function mintenance function mintenance function product component input for thermistor connection digital input input for ground fault detection nerelay output really output product extension temperature monitoring module current measuring module current/voltage measuring module fiel-safe digital I/O module control unit with display control unit analog I/O module consumed active power insulation voltage will begree of pollution 3 at AC rated value protection class IP shock resistance when mounted on current measuring module according to IEC 60068-2-27 according to IEC 60068-2-7 switching capacity current of the NO contacts of the relay outputs at AC-15 at 230 V at 230 V at 230 V at 230 V action Tyes Yes Yes No	 bus communication 	Yes
password protection test function maintenance function reserved. product component input for thermistor connection digital input input for analog temperature sensors digital input region of a fault detection relay output region of a fault detection relay output reserved. input for ground fault detection relay output reserved. relay output relay output reserved. relay output relay out	 data acquisition function 	Yes
e lest function maintenance function yes maintenance function yes product component e input for thermistor connection digital input input for analog temperature sensors input for ground fault detection input for ground fault monitoring module input for ground fault monitoring module input fault monitoring module input fault monitoring module input fault monitoring module input fault fa	 diagnostics function 	Yes
maintenance function roduct component input for thermistor connection input for ground fault detection input for ground fault for ground fault fault detection input for ground fault for ground fault fau	 password protection 	Yes
product component input for thermistor connection digital input input for analog temperature sensors input for ground fault detection relay output relay output respective measuring module current measuring module fail-safe digital I/O module ground-fault monitoring module control unit with display control unit with display control unit analog I/O module consumed active power insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance when mounted on current measuring module according to IEC 60068-2-27 switching capacity current of the NO contacts of the relay outputs at AC-15 at 24 V at 120 V at 230 V AV res Ves Ves No Ves No Ves Ave Ave Ave Ave Ave Ave Ave A	• test function	Yes
input for thermistor connection digital input input for analog temperature sensors input for ground fault detection input for ground fault f	maintenance function	Yes
digital input input for analog temperature sensors input for ground fault detection relay output Yes product extension temperature monitoring module current measuring module fail-safe digital I/O module ground-fault monitoring module Yes control unit with display control unit with display control unit analog I/O module No consumed active power insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value protection class IP shock resistance when mounted on current measuring module according to IEC 60068-2-27 eaccording to IEC 60068-2-27 switching capacity current of the NO contacts of the relay outputs at AC-15 eat 24 V eat 230 V res No	product component	
input for analog temperature sensors input for ground fault detection relay output product extension temperature monitoring module current measuring module fail-safe digital I/O module ground-fault monitoring module fail-safe digital I/O module ground-fault monitoring module control unit with display control unit analog I/O module consumed active power insulation voltage with degree of pollution 3 at AC rated value protection class IP shock resistance when mounted on current measuring module according to IEC 60068-2-27 eaccording to IEC 60068-2-27 sutput to the NO contacts of the relay outputs at AC-15 eat 24 V eat 230 V insulation voltage with degree of pollution 3 at AC active relay at 24 V eat 230 V sutput to the NO contacts of the relay eat 24 V eat 230 V ANO Yes NO Yes NO Yes NO Yes ANO NO ONO ANO Yes ANO Yes ANO Yes ANO Yes ANO Yes ANO NO ONO ANO Yes ANO Yes ANO Yes ANO Yes ANO Yes ANO Yes ANO NO ONO ANO Yes ANO Yes ANO NO ONO ONO ANO	 input for thermistor connection 	Yes
input for ground fault detection relay output product extension temperature monitoring module current measuring module current/voltage measuring module fail-safe digital I/O module ground-fault monitoring module control unit with display control unit analog I/O module consumed active power insulation voltage with degree of pollution 3 at AC rated value protection class IP shock resistance when mounted on current measuring module according to IEC 60068-2-27 eaccording to IEC 60068-2-27 switching capacity current of the NO contacts of the relay outputs at AC-15 eat 24 V eat 230 V yes Yes No Yes No 2.1 W insulation voltage with degree of pollution 3 at AC rated value 4 000 V protection class IP IP20 shock resistance • when mounted on current measuring module according to IEC 60068-2-27 • according to IEC 60068-2-27 • at 24 V eat 120 V eat 230 V 3 A	digital input	Yes
relay output Yes product extension temperature monitoring module current measuring module current/voltage measuring module fail-safe digital I/O module ground-fault monitoring module control unit with display control unit yes analog I/O module vonsumed active power insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value protection class IP shock resistance when mounted on current measuring module according to IEC 60068-2-27 according to IEC 60068-2-27 act 24 V at 24 V at 220 V at 230 V relay outputs	 input for analog temperature sensors 	No
product extension • temperature monitoring module • current measuring module • current/voltage measuring module • current/voltage measuring module • fail-safe digital I/O module • control unit with display • control unit with display • control unit • analog I/O module consumed active power insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value protection class IP shock resistance • when mounted on current measuring module according to IEC 60068-2-27 • according to IEC 60068-2-27 • at 24 V • at 120 V • at 230 V 30 V	 input for ground fault detection 	No
temperature monitoring module current measuring module current/voltage measuring module current/voltage measuring module fail-safe digital I/O module ground-fault monitoring module control unit with display control unit analog I/O module ves analog I/O module ves consumed active power insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value protection class IP shock resistance when mounted on current measuring module according to IEC 60068-2-27 according to IEC 60068-2-27 according to IEC 60068-2-27 switching capacity current of the NO contacts of the relay outputs at AC-15 at 24 V at 120 V at 230 V 3 A	relay output	Yes
current measuring module current/voltage measuring module fail-safe digital I/O module ground-fault monitoring module control unit with display control unit analog I/O module No consumed active power insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value protection class IP shock resistance when mounted on current measuring module according to IEC 60068-2-27 according to IEC 60068-2-27 switching capacity current of the NO contacts of the relay outputs at AC-15 at 24 V at 230 V e current/voltage measuring module according to IEC 60068-2-27 at 24 V at 24 V at 230 V Solve in the NO contacts of the relay outputs at AC-15 AC A	product extension	
current/voltage measuring module fail-safe digital I/O module ground-fault monitoring module control unit with display control unit control unit analog I/O module ve analog I/O module No consumed active power insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value protection class IP shock resistance when mounted on current measuring module according to IEC 60068-2-27	 temperature monitoring module 	Yes
 fail-safe digital I/O module ground-fault monitoring module control unit with display control unit yes analog I/O module no consumed active power insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value protection class IP shock resistance when mounted on current measuring module according to IEC 60068-2-27 according to IEC 60068-2-27 switching capacity current of the NO contacts of the relay outputs at AC-15 at 24 V at 24 V at 230 V at 230 V 	current measuring module	Yes
ground-fault monitoring module control unit with display control unit control unit analog I/O module no consumed active power insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value protection class IP inexplay the mounted on current measuring module according to IEC 60068-2-27 according to IEC 60068-2-27 according to IEC 60068-2-27 according to IEC 60068-2-27 act 24 V at 24 V at 120 V at 230 V inexplay the first many statements and some statements and some statements are surrounded in the No contacts of the relay outputs at AC-15 at 24 V at 230 V at 230 V and some statements are surrounded in the No contacts of the relay outputs at AC-15 at 24 V at 230 V at 230 V and some statements are surrounded in the No contacts of the relay outputs at AC-15 act 24 V at 230 V and some statements are surrounded in the No contacts of the relay outputs at AC-15 act 24 V at 230 V and some statements are surrounded in the No contacts of the relay outputs at AC-15 according to IEC 60068-2-27 accordi	 current/voltage measuring module 	No
control unit with display control unit control unit analog I/O module No consumed active power insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value protection class IP insulation mounted on current measuring module according to IEC 60068-2-27 according to IEC 60068-2-27 according to IEC 60068-2-27 switching capacity current of the NO contacts of the relay outputs at AC-15 at 24 V at 120 V at 230 V No No 2.1 W 100 V 100 V 110 g / 11 ms 15g / 11 ms	fail-safe digital I/O module	No
control unit analog I/O module No consumed active power insulation voltage with degree of pollution 3 at AC rated value insulation voltage resistance rated value surge voltage resistance rated value 4 000 V protection class IP IP20 shock resistance when mounted on current measuring module according to IEC 60068-2-27 according to IEC 60068-2-27 according to IEC 60068-2-27 switching capacity current of the NO contacts of the relay outputs at AC-15 at 24 V at 120 V at 230 V 3 A	 ground-fault monitoring module 	Yes
 analog I/O module consumed active power insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value 4 000 V protection class IP shock resistance when mounted on current measuring module according to IEC 60068-2-27 according to IEC 60068-2-27 switching capacity current of the NO contacts of the relay outputs at AC-15 at 24 V at 120 V at 230 V 3 A 	 control unit with display 	No
consumed active power insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value protection class IP IP20 shock resistance when mounted on current measuring module according to IEC 60068-2-27 according to IEC 60068-2-27 according to IEC 60068-2-27 switching capacity current of the NO contacts of the relay outputs at AC-15 at 24 V at 120 V at 230 V 3 A	• control unit	Yes
insulation voltage with degree of pollution 3 at AC rated value surge voltage resistance rated value protection class IP IP20 shock resistance • when mounted on current measuring module according to IEC 60068-2-27 • according to IEC 60068-2-27 switching capacity current of the NO contacts of the relay outputs at AC-15 • at 24 V • at 120 V • at 230 V 300 V 4000 V IP20 10 g / 11 ms 6 A 6 A 6 A	analog I/O module	No
surge voltage resistance rated value protection class IP shock resistance • when mounted on current measuring module according to IEC 60068-2-27 • according to IEC 60068-2-27 switching capacity current of the NO contacts of the relay outputs at AC-15 • at 24 V • at 120 V • at 230 V 3 A	consumed active power	2.1 W
protection class IP shock resistance • when mounted on current measuring module according to IEC 60068-2-27 • according to IEC 60068-2-27 switching capacity current of the NO contacts of the relay outputs at AC-15 • at 24 V • at 120 V • at 230 V IP20 10 g / 11 ms 10 g / 11 ms 6 A 6 A 6 A	insulation voltage with degree of pollution 3 at AC rated value	300 V
shock resistance • when mounted on current measuring module according to IEC 60068-2-27 • according to IEC 60068-2-27 switching capacity current of the NO contacts of the relay outputs at AC-15 • at 24 V • at 120 V • at 230 V 3 A	surge voltage resistance rated value	4 000 V
 when mounted on current measuring module according to IEC 60068-2-27 according to IEC 60068-2-27 switching capacity current of the NO contacts of the relay outputs at AC-15 at 24 V at 120 V at 230 V 3 A 	protection class IP	IP20
IEC 60068-2-27	shock resistance	
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		10 g / 11 ms
outputs at AC-15	• according to IEC 60068-2-27	15g / 11 ms
• at 120 V 6 A		
• at 230 V 3 A	• at 24 V	6 A
	• at 120 V	6 A
switching capacity current of the NO contacts of the relay	• at 230 V	3 A
	switching capacity current of the NO contacts of the relay	

EMC emitted interference according to IEC 60947-1 corresponds to degree of severity 3 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 conductor-conductor surge according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-6 • due to high-frequency radiation according to IEC 61000-4-6 • due to high-frequency radiation according to IEC 61000-4-3 • fleld-based interference according to IEC 61000-4-2 • 6 kV contact discharge / 8 kV air discharge conducted HF interference emissions according to CISPR11 field-bound HF interference emissions according to CISPR11 field-bound HF interference emission according to CISPR11 product function • parameterizable inputs • product function • parameterizable outputs • for thermistor connection • for thermistor connection • type 1 acc. to IEC 61131 Yes input voltage at digital input at DC rated value • type of relay outputs unmber of outputs as contact-affected switching element • with conductor cross-section = 0.5 mm² maximum • with conductor cross-section = 1.5 mm² maximum • with conductor cross-section = 0.5 mm² maximum • with conductor cross-section = 0.5 mm² maximum • with conductor cross-section = 1.5 mm² maximum • with conductor cross-section = 1.5 mm² maximum • with conductor cross-section = 0.5 mm² maximum • with conductor cross-section = 1.5 mm² maximum • with conductor cross-section = 1.5 mm² maximum • with conductor cross-section = 0.5 mm² maximum • with conductor cross-section = 1.5 mm² maximum • with conductor cross-section = 1.5 mm² maximum		
* at 80 V	•	
earl 125 V 0.25 A 0.000 0.000		
buffering time in the event of power failure reference code according to IEC 61346-2	• at 125 V	0.25 A
buffering time in the event of power failure reference code according to IEC 51446-2 continuous current of the NO contacts of the relay outputs a 150 °C 5 A 5 A 5 A 5 A 5 A 5 A 5 A 5 A 5 A 5	mechanical service life (operating cycles) typical	10 000 000
reference code according to IEC 91346-2 F continuous current of the NO contacts of the relay outputs	electrical endurance (operating cycles) typical	100 000
entitious current of the NO contacts of the relay outputs at 80 °C s A ytpo of Input characteristic Type 1 in accordance with EN 8131-2 Sobtance Prohibitance (Date) Sobtance Prohib	buffering time in the event of power failure	0.05 s
# at 80 °C	reference code according to IEC 81346-2	F
type of input characteristic type of input characteristic SyHG substance Prohibitance (Date) SyHG substance name Biller - 7439-92-1 Biller -	continuous current of the NO contacts of the relay outputs	
Sybe of Input characteristic Substance Prohibitance (Date) S061/2012 Sibstance name Selli-7439-82-1 Blaimcnout (Blewold) - 1317-36-8 Blaimcnout (Blewold) - 1317-36-9 Blaimcnout (Blaimchield) - 1317-36-9 Blaimchield - 1317-36-9 Blaimchiel	• at 50 °C	6 A
Subtance Prohibitance (Date) SYHC substance name Bishmonoutd (Bishoud) - 1317-36-8 2.2.6.6-Tetrabron-4.4*sisporopylidendi - 79-94-7 certificate of autibality according to ATEX directive 2014/34/EU according to ATEX directive 2014/34/EU according to MEX directive 2014/34/EU accordinated interference according to MEX direct	• at 60 °C	5 A
SVHC substance name Bilei - 7439-92-1	type of input characteristic	Type 1 in accordance with EN 61131-2
Elimonovid (Bleoxid) - 1317-36-8 2,2,6-6-Tetathorn-4-H-sporpylidendi - 79-94-7 cortificate of suitability	Substance Prohibitance (Date)	05/01/2012
Seconding to ATEX directive 2014(34EU) Seconding to LEQ directive System intended for building the property Exposers Megulations 2016 (S. 1.2016) No. 107) **a according to UKCA **apposition device group and category according to ATEX directive 2014(34EU) **BEMC emitted interference according to IEC 60947-1 class A corresponds to degree of severity 3 corresponds to degree of severity 4 corresponds to degree of severity 5 corresponds	SVHC substance name	Bleimonoxid (Bleioxid) - 1317-36-8
	certificate of suitability	
Use in Potentially Explosive Atmospheres Regulations 2016 (St. 2016 No.1107) a according to UKCA explosion device group and category according to ATEX directive 201434/EU Electromagnotic compatibility Electromagnotic compatibility Electromagnotic compatibility Electromagnotic compatibility Electromagnotic compatibility EMC emitted inference according to IEC 60947-1 conducted interference a due to burst according to IEC 61000-4-5 a due to conductor-conductor surge according to IEC 61000-4-5 a due to conductor-conductor surge according to IEC 61000-4-5 a due to conductor-conductor surge according to IEC 61000-4-5 a due to burst according to IEC 61000-4-5 a due to injin-frequency radiation according to IEC 61000-4-5 a due to high-frequency radiation according to IEC 61000-4-2 b due to high-frequency radiation according to IEC 61000-4-2 b due to high-frequency radiation according to IEC 61000-4-2 conducted HF interference emissions according to CISPR11 corresponds to degree of severity A corresponds to degree of s	 according to ATEX directive 2014/34/EU 	BVS 06 ATEX F001
explosion device group and category according to ATEX directive 2014/34/EU Enctromagnetic compatibility EMC emitted interference according to IEC 60947-1 corresponds to degree of severity 3 conducted interference • due to burst according to IEC 60947-1 • due to conductor-centh surge according to IEC 61000-4-5 • due to conductor-centh surge according to IEC 61000-4-5 • due to burst according to IEC 61000-4-5 • due to high-frequency radiation according to IEC 61000-4-6 • due to high-frequency radiation according to IEC 61000-4-6 • due to high-frequency radiation according to IEC 61000-4-6 • due to high-frequency radiation according to IEC 61000-4-6 • due to high-frequency radiation according to IEC 61000-4-2 • due to high-frequency radiation according to IEC 61000-4-3 • due to high-frequency radiation according to IEC 61000-4-3 • due to high-frequency radiation according to IEC 61000-4-3 • due to high-frequency radiation according to IEC 61000-4-3 • due to high-frequency radiation according to IEC 61000-4-3 • due to high-frequency radiation according to IEC 61000-4-3 • due to high-frequency radiation according to IEC 61000-4-3 • fold-based interference emissions according to IEC 61000-4-3 • due to high-frequency radiation according to IEC 61000-4-3 • fold-based interference emissions according to IEC 61000-4-3 • fold-based interference emissions according to IEC 61000-4-3 • fold-based interference emissions according to IEC 61000-4-3 • parameterizable outputs • product function • parameterizable outputs • for thermistor connection • parameterizable outputs • for thermistor connection • purpor of semiconductor outputs • product function • purpor of lights input at DC rated value • yell conductor cross-section = 1.5 mm² maximum • with conductor cross-section = 2.5 mm² maximum • with conductor cross-section = 2.5 mm² maximum • with conductor cross-section = 2.5 mm² ma	Use in Potentially Explosive Atmospheres Regulations 2016 (S.I. 2016 No.1107)	,
directive 2014/34/EU EMC emitted interference according to IEC 60947-1 corresponds to degree of severity 3 Conducted interference - due to burst according to IEC 61000-4-4 2kV (power ports) / 1 kV (signal ports) - due to conductor-certh surge according to IEC 61000-4-5 2kV - due to conductor-certh surge according to IEC 61000-4-5 1kV - due to conductor-conductor surge according to IEC 61000-4-5 1kV - due to high-frequency radiation according to IEC 61000-4-5 1kV - due to high-frequency radiation according to IEC 61000-4-5 1kV - due to high-frequency radiation according to IEC 61000-4-5 1kV - due to high-frequency radiation according to IEC 61000-4-3 1kV //m - electrostatic discharge according to IEC 61000-4-2 6kV contact discharge / 8 kV air discharge - conducted HF Interference emissions according to CISPR11 corresponds to degree of severity A - sorting the first of the first	· · · · · · · · · · · · · · · · · · ·	
EMC emitted interference according to IEC 60947-1 corresponds to degree of severity 3 conducted interference	directive 2014/34/EU	II (2) G, II (2) D, I (M2)
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 conductor-conductor surge according to IEC 61000-4-5 due to high-frequency radiation according to IEC 61000-4-5 defield-based interference according to IEC 61000-4-3 defield-based interference according to IEC 61000-4-2 defield-based interference emissions according to IEC 61000-4-2 downward field-based of severity A downward field-based of severity A	Electromagnetic compatibility	
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 conductor-conductor surge according to IEC 61000-4-6 • due to bigh-frequency radiation according to IEC 61000-4-6 • due to thigh-frequency radiation according to IEC 61000-4-6 • due to be high-frequency radiation according to IEC 61000-4-6 • deb-based interference 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 CISPR11 field-bound HF Interference emission according to CISPR11 corresponds to degree of severity A CISPR11 reports/ Outputs product function • parameterizable inputs • parameterizable outputs • parameterizable outputs • for thermistor connection • unmber of digital inputs with a common reference potential digital input version • type 1 acc. to IEC 61131 Yes Input voltage at digital input at DC rated value 2 vumber of outputs as contact-affected switching element 2 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 = 1.5 mm² maximum • with conductor cross-section = 2.5 mm² maximum • with conductor cross-section = 0.5 mm² maximum • with conductor cross-section = 0.5 mm² maximum • with conductor cross-section = 0.5 mm² maximum • with conductor cross-section		
• due to burst according to IEC 61000-4-4 • due to conductor-canth 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 • due to high-frequency radiation according to IEC 61000-4-7 • due to high-frequency radiation according to IEC 61000-4-7 • due to high-frequency radiation according to IEC 61000-4-3 • due to high-frequency radiation according to IEC 61000-4-2 • div contact discharge / 8 kV air discharge conducted HF interference emissions according to CISPR11 conducted HF interference emission according to CISPR11 corresponds to degree of severity A corresponds to degree of severity A parameterizable inputs • parameterizable inputs • parameterizable outputs • parameterizable outputs • for thermistor connection • type 1 acc. to IEC 61131	EMC immunity according to IEC 60947-1	corresponds to degree of severity 3
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 61000-4-2 feld-based interference 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 CISPR11 field-bound HF interference emission according to CISPR11 corresponds to degree of severity A corre	conducted interference	
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 corresponds to degree of severity A corresponds to degree	 due to burst according to IEC 61000-4-4 	2 kV (power ports) / 1 kV (signal ports)
• due to high-frequency radiation according to IEC 61000- 4-6 • due to high-frequency radiation according to IEC 61000-4-3 • lelectrostatic discharge according to IEC 61000-4-2 • kV contact discharge / 8 kV air discharge conducted HF Interference emissions according to CISPR11 field-bound HF interference emission according to CISPR11 product function • parameterizable inputs • parameterizable inputs • parameterizable outputs **Yes** • parameterizable outputs • for thermistor connection • type 1 acc. to IEC 61131 input vortage at digital input at DC rated value • type 1 acc. to IEC 61131 **Immber of outputs a contact-affected switching element • switching behavior type of relay outputs wire length for digital signals maximum • with conductor cross-section = 0.5 mm² maximum • with conductor cross-section = 2.5 mm² maximum • with conductor gross-section = 2.5 mm² maximum • with conductor of inputs product function • asymmetry detection 10 V/m 6 kV contact discharge / 8 kV air discharge 6 kV contact discharge / 8 kV air discharge corresponds to degree of severity A 6 kV contact discharge / 8 kV air discharge corresponds to degree of severity A 10 V/m 4 4 4 4 4 4 4 4 4 4 4 9 4 9 4	 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	
electrostatic discharge according to IEC 61000-4-2 conducted HF interference emissions according to CISPR11 corresponds to degree of severity A corresponds to degree of sever	4-6	
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 product function pumber of inputs product function pumber of inputs product function pumber of digital inputs with a common reference potential digital input version put voltage at digital input at DC rated value pumber of outputs pumber of outputs pumber of outputs as contact-affected switching element pumber of every outputs purple for relay outputs purple for relay outputs purple for relay outputs purple for foligital signals maximum purple for digital signals maximum purple for thermistor connection put with conductor cross-section = 0.5 mm² maximum purple with conductor cross-section = 2.5 mm² maximum product function product function saymmetry detection Product function asymmetry detection CISPR1 corresponds to degree of severity A product function product function Parameterizable outputs product function parameterizable outputs product function parameterizable outputs product function parameterizable outputs product function parameterizable outputs product function parameterizable outputs product function parameterizable outputs product function parameterizable outputs product function parameterizable outputs product function parameterizable outputs product function parameterizable outputs product function parameterizable outputs product function parameterizable outputs product function parameterizable outputs product function parameterizable outputs product function parameterizable outputs product function parameterizable outputs parameterizable outputs product function parameterizable outputs parameterizable ou	<u> </u>	
CISPR11 field-bound HF interference emission according to CISPR11 product function		· ·
product function	CISPR11	
product function		corresponds to degree of severity A
parameterizable inputs		
parameterizable outputs prompts finputs for thermistor connection number of digital inputs with a common reference potential digital input version type 1 acc. to IEC 61131 rumber of outputs input voltage at digital input at DC rated value prompts of semiconductor outputs number of semiconductor outputs number of outputs as contact-affected switching element 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 = 2.5 mm² maximum wire length for digital signals maximum with conductor cross-section = 2.5 mm² maximum with conductor cross-section = 2.5 mm² maximum wire length for digital signals maximum with conductor cross-section = 2.5 mm² maximum	!	
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	blocking current evaluation	Yes

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PROFIsafe protocol No	
Modbus RTU No	
• EtherNet/IP No	
OPC UA Server No	
• LLDP No	
Address Resolution Protocol (ARP) No	
• SNMP No	
• HTTPS No	
◆ NTP No	
Media Redundancy Protocol (MRP) No	
number of interfaces	
• according to PROFINET 0	
• according to PROFIBUS 1	
• according to Ethernet/IP 0	
product function	
• web server No	
• shared device No	
• at the Ethernet interface Autocrossover No	
• at the Ethernet interface Autonegotiation No	
• at the Ethernet interface Autosensing No	
• is supported Device Level Ring (DLR) No	
• is supported PROFINET system redundancy (S2) No	
• supports PROFlenergy measured values No	
• supports PROFleneray shutdown No	

transfer rate maximum	1.5 Mbit/s
identification & maintenance function	
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	Screw-type terminal (1.5 Mbit)
Installation/ mounting/ dimensions	
mounting position	any
fastening method	screw and snap-on mounting
height	100 mm
width	22.5 mm
depth	124.5 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 2.5 mm²), 2x (0.5 1.5 mm²)
 finely stranded with core end processing 	1x (0.5 2.5 mm²), 2x (0.5 1 mm²)
for AWG cables solid	1x (20 14), 2x (20 16)
tightening torque with screw-type terminals	0.6 0.8 N·m
tightening torque [lbf-in] with screw-type terminals	5.2 7 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 \dots 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	10 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)
Electrical Safety	
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	
type of voltage of the control supply voltage	DC
control supply voltage at DC	DC

operating range factor control supply voltage rated value at DC	
• initial value	0.85
• full-scale value	1.2
inrush current peak	
• at 24 V	7.5 A
duration of inrush current peak	
• at 24 V	2.2 ms

Approvals Certificates

General Product Approval EMC For use in hazardous locations



Confirmation









IECEx

For use in hazardous locations

Declaration of Conformity

Test Certificates





Explosion Protection Certificate





Special Test Certificate

Test Certificates

Marine / Shipping

Type Test Certificates/Test Report

Special Test Certificate









other

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=3UF7020-1AB01-0

Cax online generator

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

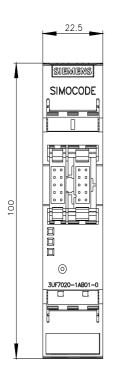
https://support.industry.siemens.com/cs/ww/en/ps/3UF7020-1AB01-0

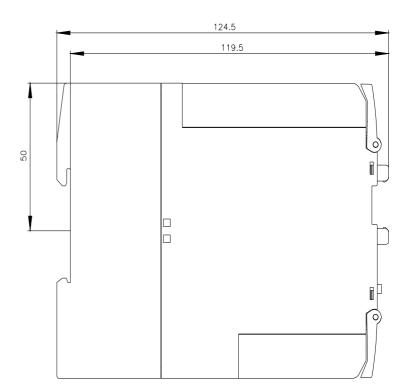
Image database (product images, 2D dimension drawings, 3D models, device circuit diagrams, EPLAN macros, ...)

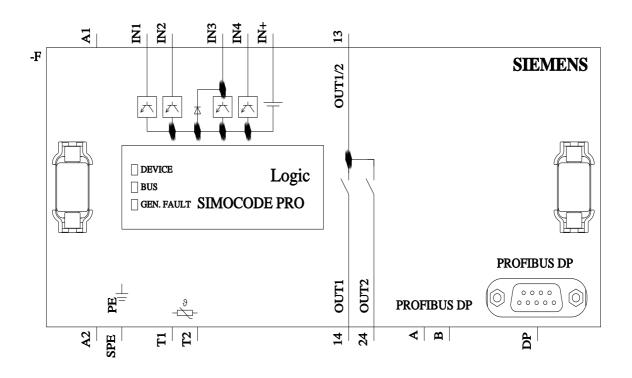
http://www.automation.siemens.com/bilddb/cax_de.aspx?mlfb=3UF7020-1AB01-0&lang=en

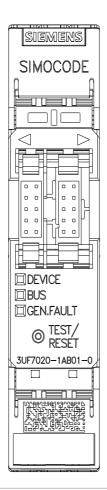
Test report No. A0258, protective separation

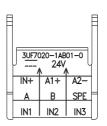
https://support.industry.siemens.com/cs/ww/en/view/109748152

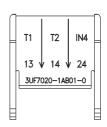












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