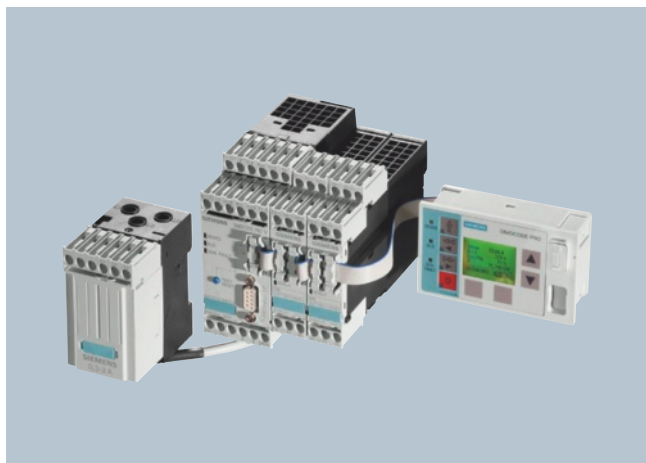


SIMOCODE 3UF Motor Management and Control Devices

SIMOCODE pro 3UF7 motor management and control devices

Overview



SIMOCODE pro V with current/voltage measuring module, expansion modules and operator panel with display

SIMOCODE pro is a flexible, modular motor management system for motors with constant speeds in the low-voltage performance range. It optimizes the connection between I&C and motor feeder, increases plant availability and allows significant savings to be made for startup, operation and maintenance of a system.

When SIMOCODE pro is installed in the low-voltage switchboard, it is the intelligent interface between the higher-level automation system and the motor feeder and includes the following:

- Multifunctional, solid-state full motor protection which is independent of the automation system
- Integrated control functions instead of hardware for the motor control
- Detailed operating, service and diagnostics data
- Open communication through PROFIBUS DP, the standard for fieldbus systems

SIMOCODE ES is the software package for SIMOCODE pro parameterization, start-up and diagnostics.

Benefits

General customer benefits

- Integrating the whole motor feeder into the process control by means of a bus significantly reduces the wiring outlay between the motor feeder and PLC
- Decentralization of the automated processes by means of configurable control and monitoring functions in the feeder saves resources in the automation system and ensures full functionality and protection of the feeder even if the I&C or bus system fails
- The acquisition and monitoring of operational, service and diagnostics data in the feeder and process control system increases plant availability as well as maintenance and service-friendliness
- The high degree of modularity allows users to perfectly implement their plant-specific requirements for each motor feeder

- The SIMOCODE pro system offers functionally graded and space-saving solutions for each customer application
- The replacement of the control circuit hardware with integrated control functions decreases the number of hardware components and wiring required and in this way limits stock keeping costs and potential wiring errors
- The use of solid-state full motor protection permits better utilization of the motors and ensures long-term stability of the tripping characteristic and reliable tripping even after years of service

Multifunctional, solid-state full motor protection for rated motor currents up to 820 A

SIMOCODE pro offers comprehensive protection of the motor feeder by means of a combination of different, multi-step and delayable protection and monitoring functions:

- Inverse-time delayed solid-state overload protection (Class 5 ... 40)
- Thermistor motor protection
- Phase failure / unbalance protection
- Stall protection
- Monitoring of adjustable limit values for the motor current
- Voltage and power monitoring
- Monitoring of the power factor (motor idling/load shedding)
- Ground-fault monitoring
- Temperature monitoring, e. g. over PT100/PT1000
- Monitoring of operating hours, downtime and number of starts etc.

Recording of measuring curves

SIMOCODE pro can record measuring curves and therefore is able, for example, to present the progression of motor current during motor start-up.

Flexible motor control implemented with integrated control functions (instead of comprehensive hardware interlocks)

Many predefined motor control functions have already been integrated into SIMOCODE pro, including all necessary logic operations and interlocks:

- Overload relays
- Direct-on-line and reversing starters
- Star/delta starters (also with direction reversal)
- Two speeds, motors with separate windings (pole-changing switch); also with direction reversal
- Two speeds, motors with separate Dahlander windings (also with direction reversal)
- Positioner actuation
- Solenoid valve actuation
- Actuation of a circuit breaker
- Soft starter actuation (also with direction reversal)

These control functions are predefined in SIMOCODE pro and can be freely assigned to the inputs and outputs of the device (including PROFIBUS DP).

These predefined control functions can also be flexibly adapted to each customized configuration of a motor feeder by means of freely configurable logic modules (truth tables, counters, timers, edge evaluation ...) and with the help of standard functions (power failure monitoring, emergency start, external faults ...), without additional auxiliary relays being necessary in the control circuit.

SIMOCODE pro makes a lot of additional hardware and wiring in the control circuit unnecessary which results in a high level of standardization of the motor feeder in terms of its design and circuit diagrams.

SIMOCODE 3UF Motor Management and Control Devices

SIMOCODE pro 3UF7 motor management and control devices

Detailed operational, service and diagnostics data

SIMOCODE pro makes different operational, service and diagnostics data available and helps to detect potential faults in time and to prevent them by means of preventative measures. In the event of a malfunction, a fault can be diagnosed, localized and rectified very quickly – there are no or very short downtimes.

Operating data

- Motor switching state derived from the current flow in the main circuit
- All phase currents
- All phase voltages
- Active power, apparent power and power factor
- Phase unbalance and phase sequence
- Time to trip
- Motor temperature
- Remaining cooling time etc.

Service data

- Motor operating hours
- Motor stop times
- Number of motor starts
- Number of overload trips
- Consumed power
- Internal comments stored in the device etc.

Diagnostics data

- Numerous detailed early warning and fault messages
- Internal device fault logging with time stamp
- Time stamping of freely selectable status, alarm or fault messages etc.

Communication

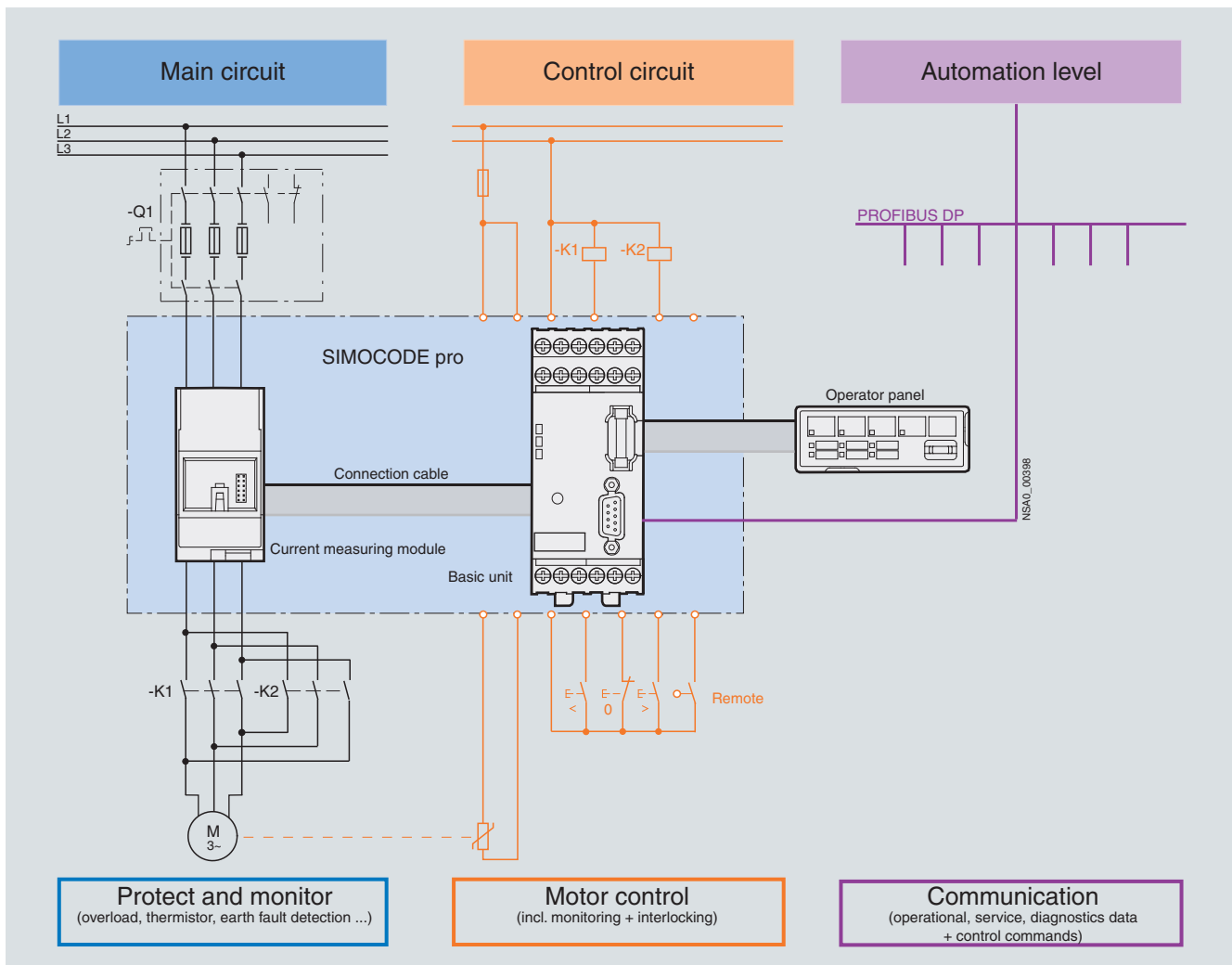
SIMOCODE pro is equipped with an integral PROFIBUS DP interface (SUB-D or terminal connection) and can therefore replace all individual wiring (including marshalling racks), which would usually be required for exchanging data with the higher-level automation system, with a single 2-wire cable.

SIMOCODE pro supports among other things:

- Baud rates up to 12 Mbit/s
- Automatic baud rate detection
- Communication with up to 3 masters
- Time synchronization over PROFIBUS (SIMATIC S7)
- Time stamp with high timing precision (SIMATIC S7)
- Cyclic services (DPV0) and acyclic services (DPV1)
- DPV1 communication after the Y-Link etc.

Communication:

- For SIMOCODE pro motor management and control devices with communication function see page 7/8 onwards.
- For accessories, see page 7/11.
- For more information see Chapter 12 "Planning and Configuration with SIRIUS".



SIMOCODE pro combines all the necessary functions for the motor feeder in a compact system.

SIMOCODE 3UF Motor Management and Control Devices

SIMOCODE pro 3UF7 motor management and control devices

Application

SIMOCODE pro is often used for automated processes where plant downtimes are very expensive (e. g. steel or cement industry) and where it is important to prevent plant downtimes through detailed operational, service and diagnostics data or to localize the fault very quickly in the event of a fault.

SIMOCODE pro is modular and space-saving and suited especially for operation in motor control centers in the process industry and for power plant technology.

Applications

Protection and control of motors

- In hazardous areas for types of protection EEx e/d according to ATEX directive 94/9/EC see "Appendix" --> "Standards and approvals" --> "Type overview of approved devices for explosion-protected areas (ATEX Explosion Protection)".
- With heavy starting (paper, cement, metal and water industries)


- In high-availability plants (chemical, oil, raw material processing industry, power plants)

Industries

Today, SIMOCODE pro is mainly used in the chemical (incl. oil and gas), steel, water, paper, pharmaceutical, cement, and glass industry. It is also used for applications in power plants and large diamond, gold and platinum mines. Based on the experience made with the predecessor system SIMOCODE-DP, SIMOCODE pro has been tailored even more specifically to the requirements of these industries.

An essential requirement in these industries is the availability of the motors and thus the availability of the whole process. Plant downtimes caused by faults frequently result in high costs. For this reason, it is very important to detect potential faults early on and to initiate targeted countermeasures. SIMOCODE pro offers users an up-to-date motor management system based on years of experience.

Selection and ordering data

Version	Current setting	Width	DT	Screw terminals 	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
	A	mm		Order No.	Price per PU			kg

SIMOCODE pro



3UF7 000-1A.00-0

SIMOCODE pro C, basic units 1

PROFIBUS DP interface, 12 Mbit/s, RS 485
4 I/3 O freely assignable, input for thermistor connection, monostable relay outputs, rated control supply voltage U_g :

- 24 V DC
- 110 ... 240 V AC/DC

A	3UF7 000-1AB00-0	1	1 unit	131	0.350
A	3UF7 000-1AU00-0	1	1 unit	131	0.350



3UF7 010-1A.00-0

SIMOCODE pro V, basic units 2

PROFIBUS DP interface, 12 Mbit/s, RS 485
4 I/3 O freely assignable, input for thermistor connection, monostable relay outputs, can be expanded with expansion modules, rated control supply voltage U_g :

- 24 V DC
- 110 ... 240 V AC/DC

A	3UF7 010-1AB00-0	1	1 unit	131	0.350
A	3UF7 010-1AU00-0	1	1 unit	131	0.350




3UF7 100-1AA00-0

Current measuring modules

Straight-through transformers	0.3 ... 3	45	A	3UF7 100-1AA00-0	1	1 unit	131	0.100
	2.4 ... 25	45	A	3UF7 101-1AA00-0	1	1 unit	131	0.150
	10 ... 100	55	A	3UF7 102-1AA00-0	1	1 unit	131	0.350
	20 ... 200	120	A	3UF7 103-1AA00-0	1	1 unit	131	0.600
Busbar connections	20 ... 200	120	A	3UF7 103-1BA00-0	1	1 unit	131	1.000
	63 ... 630	145	A	3UF7 104-1BA00-0	1	1 unit	131	1.750

SIMOCODE 3UF Motor Management and Control Devices

SIMOCODE pro 3UF7 motor management and control devices

Version	Current setting	Width	DT	Screw terminals 	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
	A	mm		Order No.	Price per PU			kg

SIMOCODE pro



3UF7 110-1AA00-0

Current/voltage measuring modules

Voltage measuring up to 690 V if required in connection with a decoupling module

Straight-through transformers	0.3 ... 3	45	A	3UF7 110-1AA00-0		1	1 unit	131	0.150
	2.4 ... 25	45	A	3UF7 111-1AA00-0		1	1 unit	131	0.200
	10 ... 100	55	A	3UF7 112-1AA00-0		1	1 unit	131	0.400
	20 ... 200	120	A	3UF7 113-1AA00-0		1	1 unit	131	0.700
Busbar connections	20 ... 200	120	A	3UF7 113-1BA00-0		1	1 unit	131	1.000
	63 ... 630	145	A	3UF7 114-1BA00-0		1	1 unit	131	1.750



3UF7 150-1AA00-0

Decoupling modules

For connecting upstream from a current/voltage measuring module on the system interface when using voltage detection in non-earthed networks

			A	3UF7 150-1AA00-0		1	1 unit	131	0.150
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3UF7 200-1AA00-0

Operator panels

Installation in control cabinet door or front plate, for plugging into basic unit, 10 LEDs for status indication and user-assignable buttons for controlling the motor

			A	3UF7 200-1AA00-0		1	1 unit	131	0.100
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3UF7 210-1AA00-0

Operator panels with display for SIMOCODE pro V¹⁾


Installation in control cabinet door or front plate, for plugging into basic unit 2, 7 LEDs for status indication and user-assignable buttons for controlling the motor, multilingual display, e. g. for indication of measured values, status information or fault messages

				3UF7 210-1AA00-0		1	1 unit	131	0.150
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¹⁾ Only possible with basic unit 2, product version E03 and higher (from 12/2006).

SIMOCODE 3UF Motor Management and Control Devices

SIMOCODE pro 3UF7 motor management and control devices

Version	DT	Screw terminals 	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx.
Order No.	Price per PU					kg

Expansion modules

Note:

Expansion modules can only be used in combination with basic unit 2! A total of up to 5 expansion modules can be connected in any order to one basic unit. When an operator panel with display and/or a decoupling module is used, more restrictions on the number of expansion modules connectable per basic unit must be observed!



3UF7 300-1AU00-0

Digital modules

4 binary inputs and 2 relay outputs,
Up to 2 digital modules can be connected per
basic unit 2

Relay outputs	Input voltage						
Monostable	24 V DC	A	3UF7 300-1AB00-0	1	1 unit	131	0.150
	110 ... 240 V AC/DC	A	3UF7 300-1AU00-0	1	1 unit	131	0.150
Bistable	24 V DC	A	3UF7 310-1AB00-0	1	1 unit	131	0.150
	110 ... 240 V AC/DC	A	3UF7 310-1AU00-0	1	1 unit	131	0.150

Analog modules

2 inputs (passive) for input
and 1 output for output of 0/4 ... 20 mA signals,
max. 1 analog module can be connected per basic
unit 2

A	3UF7 400-1AA00-0	1	1 unit	131	0.150
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3UF7 400-1AA00-0



3UF7 500-1AA00-0

Ground-fault modules

1 input for connecting a summation current
transformer 3UL22, up to 1 ground-fault module
can be connected per basic unit 2

A	3UF7 500-1AA00-0	1	1 unit	131	0.150
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Note:

For the corresponding summation current trans-
formers for rated fault currents of 0.3 A, 0.5 A or
1 A see page 7/50.









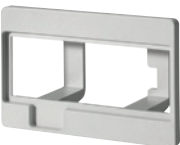
3UF7 700-1AA00-0

Temperature modules

3 inputs for connecting up to 3 analog temperature
sensors, up to 1 temperature module can be con-
nected per basic unit 2







A	3UF7 700-1AA00-0	1	1 unit	131	0.150
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Accessories

Version	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
Connection cables (essential accessory)							
		Connection cables In different lengths for connecting basic unit, current measuring module, current/voltage measuring module, operator panel or expansion modules or decoupling module: • Length 0.025 m (flat) Note: Only suitable for connecting basic unit 2 to its expansion modules or for connecting expansion modules to each other; only when the front plates finish at the same height! • Length 0.1 m (flat) • Length 0.3 m (flat) • Length 0.5 m (flat) • Length 0.5 m (round) • Length 1.0 m (round) • Length 2.5 m (round)					
3UF7 932-0AA00-0	A	3UF7 930-0AA00-0		1	1 unit	131	0.010
	A	3UF7 931-0AA00-0		1	1 unit	131	0.010
	A	3UF7 935-0AA00-0		1	1 unit	131	0.020
	A	3UF7 932-0AA00-0		1	1 unit	131	0.020
	A	3UF7 932-0BA00-0		1	1 unit	131	0.050
	A	3UF7 937-0BA00-0		1	1 unit	131	0.100
	A	3UF7 933-0BA00-0		1	1 unit	131	0.150
PC cables and adapters							
		For PC/PG communication with SIMOCODE pro through the system interface, for connecting to the serial interface of the PC/PG					
3UF7 940-0AA00-0	A	3UF7 940-0AA00-0		1	1 unit	131	0.150
	B	3UF7 946-0AA00-0		1	1 unit	131	0.150
		USB/serial adapters To connect an RS 232 PC cable to the USB port of a PC, we recommend using modular safety system 3RK3, soft starter 3RW44, ET 200S/ECOFAS/ET 200pro motor starter, AS-i safety monitor, AS-i analyzer in conjunction with SIMOCODE pro 3UF7					
Memory modules							
		The memory module enables the complete parameter assignment of a system to be saved and transferred to a new system, e. g. when a device is replaced, without the need for additional aids or detailed knowledge of the the system interface					
3UF7 900-0AA00-0	A	3UF7 900-0AA00-0		1	1 unit	131	0.010
Interface covers							
		For system interface					
3UF7 950-0AA00-0	A	3UF7 950-0AA00-0		1	5 units	131	0.100
Addressing plugs							
		For assigning the PROFIBUS addresses without using a PC/PG On SIMOCODE pro through the system interface					
3UF7 910-0AA00-0	A	3UF7 910-0AA00-0		1	1 unit	131	0.030
Door adapters							
		For external connection of the system interface Outside, for example, a control cabinet					
3UF7 920-0AA00-0	A	3UF7 920-0AA00-0		1	1 unit	131	0.030
Adapters for operator panel							
		The adapter enables the smaller 3UF7 20 operator panel from SIMOCODE pro to be used in a front panel cutout in which previously, e. g. after a change of system, a larger 3UF5 2 operator panel from SIMOCODE-DP had been used; degree of protection IP54					
3UF7 922-0AA00-0	A	3UF7 922-0AA00-0		1	1 unit	131	0.150

SIMOCODE 3UF Motor Management and Control Devices

SIMOCODE pro 3UF7 motor management and control devices

Version	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
Labeling strips							
 3UF7 925-0AA02-0	• For pushbuttons of the 3UF7 20 operator panel	A	3UF7 925-0AA00-0	100	400 units	131	15.000
	• For pushbuttons of the 3UF7 21 operator panel with display	A	3UF7 925-0AA01-0	100	600 units	131	15.000
	• For LEDs of the 3UF7 20 operator panel	A	3UF7 925-0AA02-0	100	1200 units	131	15.000
<i>Note: Pre-punched labeling strips for user-specific printing using the free inscription software "SIRIUS Label Designer" on a laser printer. Note the software version! Download from http://www.siemens.com/simocode.</i>							
Push-in lugs							
 3RB19 00-0B	For screw fixing e. g. on mounting plate, 2 units required per device	A	3RB19 00-0B	100	10 units	101	0.100
	• Can be used with 3UF7 1.0, 3UF7 1.1 and 3UF7 1.2	A	3RB19 03	1	10 units	101	0.002
• Can be used with 3UF7 0, 3UF7 3, 3UF7 4, 3UF7 5 and 3UF7 7							
Terminal covers							
 3RT19 56-4EA1	Covers for cable lugs and busbar connections	▶	3RT19 56-4EA1	1	1 unit	101	0.070
	• Length 100 mm, can be used for 3UF7 1.3-1BA00-0	▶	3RT19 66-4EA1	1	1 unit	101	0.130
 3RT19 56-4EA2	Covers for box terminals	▶	3RT19 56-4EA2	1	1 unit	101	0.030
	• Length 25 mm, can be used for 3UF7 1.3-1BA00-0	▶	3RT19 66-4EA2	1	1 unit	101	0.040
	• Length 30 mm, can be used for 3UF7 1.4-1BA00-0	▶					
Covers for screw terminals between contactor and current measuring module or current/voltage measuring module for direct mounting							
• Can be used for 3UF7 1.3-1BA00-0 ▶ 3RT19 56-4EA3 1 1 unit 101 0.020							
• Can be used for 3UF7 1.4-1BA00-0 ▶ 3RT19 66-4EA3 1 1 unit 101 0.060							
Box terminal blocks							
 3RT19 5.-4G	For round and ribbon cables						
	• Up to 70 mm ² , can be used for 3UF7 1.3-1BA00-0	▶	3RT19 55-4G	1	1 unit	101	0.230
	• Up to 120 mm ² , can be used for 3UF7 1.3-1BA00-0	▶	3RT19 56-4G	1	1 unit	101	0.260
• Up to 240 mm ² , can be used for 3UF7 1.4-1BA00-0	▶	3RT19 66-4G	1	1 unit	101	0.676	
For conductor cross-sections, see Technical Information LV 1 T.							
Bus terminations							
Bus termination module with separate supply voltage for terminating the bus following the last unit on the bus line. Supply voltage:							
• 115/230 V AC C 3UF1 900-1KA00 1 1 unit 131 0.286							
• 24 V DC C 3UF1 900-1KB00 1 1 unit 131 0.192							
System manuals							
 3UF7 970-0AA01-0	SIMOCODE pro With token fee, languages:						
	• German	A	3UF7 970-0AA01-0	1	1 unit	131	0.850
	• English	A	3UF7 970-0AA00-0	1	1 unit	131	0.850
• French	A	3UF7 970-0AA02-0	1	1 unit	131	0.850	

SIMOCODE 3UF Motor Management and Control Devices

SIMOCODE pro 3UF7 motor management and control devices

Version	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
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PCS 7 function block library for SIMOCODE pro



3UF7 982-0AA00-0

For integrating SIMOCODE pro into the PCS 7 process control system

- **PCS 7 function block library for SIMOCODE pro, V6.0**

Scope of supply:
AS modules and faceplates for integrating SIMOCODE pro into the PCS 7 process control system, for PCS 7 Version V6.0
engineering software for one engineering station (single license) including runtime software for execution of the AS module in an automation system (single license), English/French/German,
Type of delivery: CD incl. electronic documentation

- **PCS 7 function block library for SIMOCODE pro, V6.1**

Scope of supply:
AS modules and faceplates for integrating SIMOCODE pro into the PCS 7 process control system, for PCS 7 Version V6.1
engineering software for one engineering station (single license) including runtime software for execution of the AS module in an automation system (single license), English/French/German,
Type of delivery: CD incl. electronic documentation

- **PCS 7 SIMOCODE pro function block library, V7.0**

Scope of supply:
AS modules and faceplates for integrating SIMOCODE pro into the PCS 7 process control system, for PCS 7 Version V7.0
engineering software for one engineering station (single license) including runtime software for execution of the AS module in an automation system (single license), English/French/German,
Type of delivery: CD incl. electronic documentation

- **AS modules for integrating SIMOCODE pro in the PCS 7 process control system for PCS 7-Version V6.x**

Runtime software for execution of the AS module in an automation system (single license),
Type of delivery: license without software and documentation

- **AS modules for integrating SIMOCODE pro in the PCS 7 process control system for PCS 7-Version V7.x**


Runtime software for execution of the AS module in an automation system (single license),
Type of delivery: license without software and documentation

- **Upgrade for the PCS 7 function block library SIMOCODE pro, V6.0 or V6.1 on Version SIMOCODE pro V7.0**

For integrating SIMOCODE pro into the PCS 7 process control system, for PCS 7 Version V7.0 (single license), English/French/German,
Type of delivery: CD incl. electronic documentation

SIMOCODE 3UF Motor Management and Control Devices

SIMOCODE pro 3UF7 motor management and control devices

Version	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
SIMOCODE ES 2007 Basic							
 <p>3ZS1 312-4CC10-0YA5</p>		Floating license for one user E-SW, software and documentation on CD, 3 languages (English/French/German), communication through the system interface					
	▶	3ZS1 312-4CC10-0YA5		1	1 unit	131	0.230
	▶	3ZS1 312-4CE10-0YB5		1	1 unit	131	0.001
SIMOCODE ES 2007 Standard							
		Floating license for one user E-SW, software and documentation on CD, 3 languages (English/French/German), communication through the system interface					
	▶	3ZS1 312-5CC10-0YA5		1	1 unit	131	0.230
	▶	3ZS1 312-5CE10-0YB5		1	1 unit	131	0.001
	▶	Upgrade for SIMOCODE ES 2004 and later Floating license for one user, E-SW, software and documentation on CD, license key on USB stick, Class A, 3 languages (English/French/German), communication through the system interface		1	1 unit	131	0.230
	▶	Powerpack for SIMOCODE ES 2007 Basic Floating license for one user, E-SW, software and documentation on CD, license key on USB stick, Class A, 3 languages (English/French/German), communication through the system interface		1	1 unit	131	0.230
	▶	Software Update Service For 1 year with automatic extension, assuming the current software version is in use, E-SW, software and documentation on CD, communication through the system interface		1	1 unit	131	0.230
SIMOCODE ES 2007 Premium							
		Floating license for one user E-SW, software and documentation on CD, 3 languages (English/French/German), communication through PROFIBUS or the system interface					
	▶	3ZS1 312-6CC10-0YA5		1	1 unit	131	0.230
	▶	3ZS1 312-6CE10-0YB5		1	1 unit	131	0.001
	▶	Upgrade for SIMOCODE ES 2004 and later Floating license for one user, E-SW, software and documentation on CD, license key on USB stick, Class A, 3 languages (English/French/German), communication through PROFIBUS of the system interface		1	1 unit	131	0.230
	▶	Powerpack for SIMOCODE ES 2007 Standard Floating license for one user, E-SW, software and documentation on CD, license key on USB stick, Class A, 3 languages (English/French/German), communication through PROFIBUS or the system interface		1	1 unit	131	0.230
	▶	Software Update Service For 1 year with automatic extension, assuming the current software version is in use, E-SW, software and documentation on CD, communication through PROFIBUS or the system interface		1	1 unit	131	0.230

More information*Important ordering notes*

SIMOCODE pro is a modularly designed motor management system which is subdivided into two device series with different functional scopes:

- SIMOCODE pro C, as a compact system for direct-on-line starters and reversing starters
- SIMOCODE pro V, as a variable system with all control functions and with the possibility of expanding the inputs, outputs and functions of the system at will using expansion modules.

Expansion possibilities	SIMOCODE pro C, Basic Unit 1	SIMOCODE pro V, Basic Unit 2
Operator panels	✓	✓
Operator panels with display	--	✓
Current measuring modules	✓	✓
Current/voltage measuring modules	--	✓
Decoupling modules	--	✓
Expansion modules:		
• Digital modules (max. 2)	--	✓
• Analog module (max. 1)	--	✓
• Ground-fault module (max. 1)	--	✓
• Temperature module (max. 1)	--	✓

✓ Possible

-- Not available

Note:

When an operator panel with display and/or a decoupling module is used, restrictions on the number of expansion modules connectable per basic unit must be observed see Technical Information LV 1 T!

System manual

For selection of equipment and for configuring, it is recommended that the 3UF7 970-0AA0.-0 system manual is consulted.

Internet

You can find further information on the Internet at:
<http://www.siemens.com/simocode>

SIMOCODE 3UF Motor Management and Control Devices



3UF18 current transformers for overload protection

Overview

The 3UF18 current transformers are protection transformers and are used for actuating overload relays. Current transformers are designed to ensure proportional current transfer up to a part of


the primary rated current. The 3UF18 current transformers convert the maximum current of the corresponding primary perating range into the standard signal of 1 A secondary.

Selection and ordering data

Mounting type	Primary operating range A	DT	Screw terminals	⊕	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
			Order No.					
For stand-alone installation								
 3UF18 43	Screw fixing and snap-on mounting onto 35 mm standard mounting rail	0.25 ... 2.5 ¹⁾	C	3UF18 43-1BA00	1	1 unit	131	0.488
		1.25 ... 12.5 ¹⁾	C	3UF18 43-2AA00	1	1 unit	131	0.485
		2.5 ... 25 ¹⁾	C	3UF18 43-2BA00	1	1 unit	131	0.490
		12.5 ... 50	C	3UF18 45-2CA00	1	1 unit	131	0.694
		16 ... 65	C	3UF18 47-2DA00	1	1 unit	131	1.182
		25 ... 100	C	3UF18 48-2EA00	1	1 unit	131	1.232
For mounting onto contactors and stand-alone installation								
 3UF18 68	Screw fixing	32 ... 130	C	3UF18 50-3AA00	1	1 unit	131	1.745
		50 ... 200	C	3UF18 52-3BA00	1	1 unit	131	1.890
		63 ... 250	C	3UF18 54-3CA00	1	1 unit	131	3.618
		100 ... 400	C	3UF18 56-3DA00	1	1 unit	131	3.851
		125 ... 500	C	3UF18 57-3EA00	1	1 unit	131	4.138
		160 ... 630	C	3UF18 68-3FA00	1	1 unit	131	7.782
		205 ... 820	C	3UF18 68-3GA00	1	1 unit	131	8.920

¹⁾ For the protection of EEx e motors the following setting ranges are applicable:
 3UF18 43-1BA00, 0.25 A ... 1.25 A
 3UF18 43-2AA00, 1.25 A ... 6.3 A
 3UF18 43-2BA00, 2.5 A ... 12.5 A

Accessories

For contactor type	D T	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
Terminal covers							
 3TX7 466-0A	For transformer/contactors combinations and stand-alone installation for transformer (cover required per connection side)						
	3UF18 45	D	3TX7 446-0A		1 unit	101	0.006
	3UF18 48	D	3TX7 466-0A	1	1 unit	101	0.035
	3UF18 50, 3UF18 52	D	3TX7 506-0A	1	1 unit	101	0.041
	3UF18 54 to 3UF18 57	D	3TX7 536-0A	1	2 units	101	0.112
	3UF18 68-3FA00	B	3TX7 686-0A	1	1 unit	101	0.410
	3UF18 68-3GA00	B	3TX7 696-0A	1	1 unit	101	0.410
For covering the screw terminal for direct mounting on contactor (cover required per contactor/transformer combination)							
3UF18 48	D	3TX7 466-0B	1	1 unit	101	0.013	
3UF18 50, 3UF18 52	D	3TX7 506-0B	1	1 unit	101	0.019	
3UF18 54 to 3UF18 57	D	3TX7 536-0B	1	1 unit	101	0.057	
3UF18 68-3FA00	C	3TX7 686-0B	1	1 unit	101	0.085	
3UF18 68-3GA00	C	3TX7 696-0B	1	1 unit	101	0.102	