

# SIMOCODE 3UF Motor Management and Control Devices

## SIMOCODE-DP 3UF5 motor protection and control devices

### Overview



SIMOCODE-DP basic unit, expansion module and operator panels

SIMOCODE-DP is the predecessor of the SIMOCODE pro motor management system and offers the solution for a wide range of different tasks in a single unit:

- Multifunctional, electronic motor protection and plant monitoring
- Comprehensive motor and plant diagnostics
- Integrated control programs (instead of extensive hardware wiring)
- Open communication through PROFIBUS DP, the standard for fieldbus systems

# SIMOCODE 3UF Motor Management and Control Devices

## SIMOCODE-DP 3UF5 motor protection and control devices

### Selection and ordering data

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



**4 inputs, 4 outputs**  
For snap-on mounting onto  
35 mm standard mounting rail

Contactors that can be mounted exter- nally	Width mm	Setting range A	
Type			
--	70	1.25 <sup>1)</sup> ... 6.3	C
--	70	6.3 ... 25	C
--	70	25 ... 100	C
3RT10 5	120	50 ... 205	C
3RT10 6, 3RT10 7	145	125 ... 500	C
3RT12 6, 3RT12 7			
3TF68, 3TF69	230	200 ... 820	C

3UF5 001 to 021



3UF5 031 to 051

**Inputs**  
Input for thermistor motor protection

Ground-fault detection input (external)  
(detection of ground fault currents of  
sizes 0.3 A, 0.5 A and 1 A with 3UL2 20.-A.  
summation current transformers)

**Rated control voltage**

- 24 V DC
- 115 V AC
- 230 V AC

**Behavior of the outputs in case of control  
supply voltage failure**

- Monostable
- Bistable

Order No. supplements	A	--	1	1 unit	131	0.800
		--				
		x				
		--				
		--				
Order No. supplements	B	--	1	1 unit	131	0.800
		--				
Order No. supplements	J	x	1	1 unit	131	1.640
		--				
Order No. supplements	N	--	1	1 unit	131	2.420
		--				
Order No. supplements	0	--	1	1 unit	131	4.330
		x				

Order No. supplements	Additional price
A	--
B	--
J	x
N	--
0	--
1	x

x = with additional price  
-- = without additional price

<sup>1)</sup> The current setting range of 0.25 ... 1.25 A is obtained by multiple looping  
of the main circuits through the current transformers of the basic unit.

<sup>2)</sup> Totals are rounded up and down. This may lead to slight differences in the  
overall price.

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



3UF5 100-0A.00

**8 inputs, 4 outputs**  
For snap-on mounting onto 35 mm standard  
mounting rail  
External supply voltage for the inputs  
24 V DC  
115 V AC  
230 V AC

Order No.	A	3UF5 100-0AB00	1	1 unit	131	0.422
		3UF5 100-0AJ00				
		3UF5 100-0AN00				

#### Operator panels



3UF5 202-1AA00-1



**For installation in the control cabinet door,**  
for plugging into basic unit or expansion  
module

Order No.	A	3UF5 202-1AA00-1	1	1 unit	131	0.137
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## SIMOCODE 3UF Motor Management and Control Devices

SIMOCODE-DP 3UF5  
motor protection and control devices





## Accessories

Version	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
<b>Configuration software</b>							
 3UF5 710-0AA00-0		<b>Win-SIMOCODE-DP/Professional</b>	A	<b>3UF5 710-0AA00-0</b>	1	1 unit	131 0.230
<ul style="list-style-type: none"> <li>Parameterization, control, monitoring and testing of SIMOCODE-DP: Through PROFIBUS or the system interface on the device</li> <li>PC/PG requirement: Windows 95/98/2000/NT/ME or Windows XP</li> <li>PC/PG interface requirement: PROFIBUS system interface from Siemens or RS 232 with compatible 3RW2 920-1DA00 interface cable</li> <li>SIMOCODE-DP requirement: Delivery stage E10 (as of June 1998)</li> <li>Type of delivery: CD-ROM, English/German incl. online Help and example parameter files, single license</li> </ul>							
 3UF5 711-0AA00-0		<b>Win-SIMOCODE-DP/Smart</b>	A	<b>3UF5 711-0AA00-0</b>	1	1 unit	131 0.231
<ul style="list-style-type: none"> <li>Parameterization, control, monitoring and testing: Through the interface on the device</li> <li>PC/PG requirement: Windows 95/98/2000/NT/ME or Windows XP</li> <li>PC/PG interface requirement: RS 232 with compatible 3RW2 920-1DA00 interface cable</li> <li>Type of delivery: CD-ROM, English/German incl. online Help and example parameter files, single license</li> </ul>							
		<b>OM-SIMOCODE-DP</b>	A	<b>3UF5 712-0AA00-0</b>	1	1 unit	131 0.231
<p>STEP 7 Object Manager for integrating SIMOCODE-DP as S7 slave and for call of Win-SIMOCODE-DP/Professional from STEP 7</p> <ul style="list-style-type: none"> <li>Requirements: STEP 7, Version 4.0 or higher</li> <li>SIMOCODE-DP requirement: Delivery stage E10 (as of June 1998)</li> <li>Type of delivery: CD-ROM, English/German incl. online Help, single license</li> </ul>							
		<b>PCS 7 SIMOCODE-DP function blocks</b>	A	<b>3UF5 720-0AA10-0</b>	1	1 unit	131 0.230
<p>Function block for integrating SIMOCODE-DP into the process control system, PCS 7, Version V6.0</p> <ul style="list-style-type: none"> <li>SIMOCODE-DP requirement: Delivery stage E10 and higher (as of June 1998)</li> <li>Type of delivery: CD-ROM, English/German, single license</li> </ul>							
<b>Documentation</b>							
<b>System manuals</b>							
With description of the communication through PROFIBUS DP and a configuration example							
		• German	A	<b>3UF5 700-0AA00-0</b>	1	1 unit	131 0.841
		• English	A	<b>3UF5 700-0AA00-1</b>	1	1 unit	131 0.749

\* You can order this quantity or a multiple thereof.

## SIMOCODE 3UF Motor Management and Control Devices

SIMOCODE-DP 3UF5  
motor protection and control devices

Version	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
<b>Connection cables, installation materials</b>							
<b>Connection cables</b> For PC communication through the system interface on the device Length 5 m		A	<b>3RW29 20-1DA00</b>		1	1 unit	131 0.176
<b>Plug-in connectors/connecting cables with 3UF5 9/3UF1 9 connectors (essential accessory)</b>							
 3UF1 900-1MA00 3UF1 900-1NA00 3UF1 900-1PA00   3UF1 900-1DA00 3UF1 900-1EA00	• For connecting the basic unit to the expansion module, 9-pole, 0.03 m, flat connector shielded	A	<b>3UF5 900-1AA00</b>		1	1 unit	131 0.020
	• For connecting the basic unit to the expansion module or to the operator panel, 9-pole						
	- 0.5 m long, shielded connector, 45° angled	B	<b>3UF1 900-1MA00</b>		1	1 unit	131 0.077
	- 2.0 m long, shielded connector, 45° angled	B	<b>3UF1 900-1NA00</b>		1	1 unit	131 0.168
	- 2.5 m long, shielded connector, 45° angled	B	<b>3UF1 900-1PA00</b>		1	1 unit	131 0.197
	- 0.5 m long, with flat connector, shielded	A	<b>3UF1 900-1DA00</b>		1	1 unit	131 0.062
	- 1.0 m long, with flat connector, shielded	A	<b>3UF1 900-1EA00</b>		1	1 unit	131 0.088
	• For connecting basic unit/expansion module to the control cabinet door It is possible to set parameters, operate and monitor using the PC from the control cabinet door, 9-pole						
	- 0.5 m long, with flat connector and socket, shielded	A	<b>3UF5 900-0AA00</b>		1	1 unit	131 0.061
	- 1.0 m long, with flat connector and socket, shielded	A	<b>3UF5 900-0BA00</b>		1	1 unit	131 0.095
<b>T-shaped terminals</b> Terminal for bus connection to PROFIBUS DP - RS 485		A	<b>3UF5 900-1GA00</b>		1	1 unit	131 0.048
<b>3UF1 900 bus terminations</b> 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 24 V DC		A	<b>3UF1 900-1KA00</b>		1	1 unit	131 0.286
		A	<b>3UF1 900-1KB00</b>		1	1 unit	131 0.192
<b>Push-in lugs</b>							
 For screw mounting on mounting plate 2 units are required for each 3UF5 0		C	<b>3RB19 00-0B</b>		100	10 units	101 0.100
<b>Terminal covers</b>							
 3TX7 506-0A							
• For stand-alone installation or on the output side for direct mounting							
	- 3UF5 031	D	<b>3TX7 506-0A</b>		1	1 unit	101 0.041
	- 3UF5 041	D	<b>3TX7 536-0A</b>		1	2 units	101 0.112
	- 3UF5 051 with 3TF6 8	B	<b>3TX7 686-0A</b>		1	1 unit	101 0.410
	- 3UF5 051 with 3TF6 9	B	<b>3TX7 696-0A</b>		1	1 unit	101 0.410
• Between contactor and overload relay for direct mounting							
	- 3UF5 031	D	<b>3TX7 506-0B</b>		1	1 unit	101 0.019
	- 3UF5 041	D	<b>3TX7 536-0B</b>		1	1 unit	101 0.057
	- 3UF5 051 with 3TF6 8	C	<b>3TX7 686-0B</b>		1	1 unit	101 0.085
	- 3UF5 051 with 3TF6 9	C	<b>3TX7 696-0B</b>		1	1 unit	101 0.102

**More information****System manuals**

For selection of equipment and for configuration, it is recommended that the 3UF5 7 system manual is consulted.

**Internet**

More information can be found on the Internet under <http://www.siemens.com/simocode-dp>

# 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. Protection transformers are designed to ensure proportional current transfer up to a multiple

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

### Selection and ordering data


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

3UF18 43

3UF18 68

<sup>1)</sup> The following setting ranges for the protection of EEx e motors 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	DT	Order No.	Price per PU	PU (UNIT, SET, M)	PS*	PG	Weight per PU approx. kg
<b>Terminal covers</b>							
	For transformer/contactor combinations and stand-alone installation for transformer (cover required per connection side)						
	3UF18 45	D	<b>3TX7 446-0A</b>		1	101	0.006
	3UF18 48	D	<b>3TX7 466-0A</b>		1	101	0.035
	3UF18 50, 3UF18 52	D	<b>3TX7 506-0A</b>		1	101	0.041
	3UF18 54 to 3UF18 57	D	<b>3TX7 536-0A</b>		1	101	0.112
	3UF18 68-3FA00	B	<b>3TX7 686-0A</b>		1	101	0.410
	3UF18 68-3GA00	B	<b>3TX7 696-0A</b>		1	101	0.410
3TX7 466-0A	For covering the screw terminal for direct mounting on contactor (cover required per contactor/transformer combination)						
	3UF18 48	D	<b>3TX7 466-0B</b>		1	101	0.013
	3UF18 50, 3UF18 52	D	<b>3TX7 506-0B</b>		1	101	0.019
	3UF18 54 to 3UF18 57	D	<b>3TX7 536-0B</b>		1	101	0.057
	3UF18 68-3FA00	C	<b>3TX7 686-0B</b>		1	101	0.085
	3UF18 68-3GA00	C	<b>3TX7 696-0B</b>		1	101	0.102

\* You can order this quantity or a multiple thereof.