

SIMOCODE 3UF Motor Management and Control Devices

SIMOCODE pro 3UF7 motor management and control devices

Technical specifications

General data applicable to the basic units, current measuring modules, current/voltage measuring modules, expansion modules, decoupling module and operator panel		
Permissible ambient temperature		
• During operation	°C	-25 ... +60 ¹⁾
• Storage and transport	°C	-40 ... +80 ²⁾
Installation height above sea level		
• Permissible ambient temperature max. +50 °C (no safe isolation)	m	≤2000
• Permissible ambient temperature max. +40 °C (no safe isolation)	m	≤3000
• Permissible ambient temperature max. +40 °C (no safe isolation)	m	≤4000
Degree of protection (acc. to IEC 60529)		
• All components, (except for current measuring modules or current/voltage measuring modules for busbar connection, operator panel and door adapter)		IP20
• Current measuring modules or current/voltage measuring module with busbar connection		IP00
• Operator panel (front) and door adapter (front) with cover		IP54
Shock resistance (sine pulse)	g/ms	15/11
Mounting position		Any
Frequency	Hz	50/60 ±5 %
Immunity to electromagnetic interferences (acc. to IEC 60947-1)		
• Line-induced interference, burst acc. to IEC 61000-4-4	kV	Corresponds to degree of severity 3
	kV	2 (power ports)
	V	1 (signal ports)
• Line-induced interference, high frequency acc. to IEC 61000-4-6	V	10
• Line-induced interference, surge acc. to IEC 61000-4-5	kV	2 (line to earth)
	kV	1 (line to line)
• Electrostatic discharge, ESD acc. to IEC 61000-4-2	kV	8 (air discharge)
	kV	6 ³⁾ (contact discharge)
• Field-related interference acc. to IEC 61000-4-3	V/m	10
Immunity to electromagnetic interference (acc. to IEC 60947-1)		
• Line-conducted and radiated interference emission		DIN EN 55011/DIN EN 55022 (CISPR 11/CISPR 22) (corresponds to degree of severity A)
Safe isolation (acc. to IEC 60947-1)		
		All circuits in SIMOCODE pro are safely isolated from each other acc. to IEC 60947-1, they are designed with doubled creepage paths and clearances
		In this context, compliance with the instructions in the test report "Safe Isolation" No. 2668 is required.
Basic units		
Mounting		
		Snap-on mounting onto 35 mm standard mounting rail or screw mounting with additional push-in lugs
Displays		
• Red/green/yellow LED "DEVICE"		• Green: "Ready"
		• Red: "Function test not OK; device is disabled"
		• Yellow: "Memory module or addressing plug detected"
		• Off: "No control supply voltage"
• Green "BUS" LED		• Continuous light: "Communication with PLC/PCS"
• Red "GEN. FAULT" LED		• Flashing: "Baud rate recognized/communicating with PC/PG"
		• Continuous light/flash: "Feeder fault", e.g. overload trip
Test/Reset buttons		
		• Resets the device after tripping
		• Function test
		• Operation of a memory module or addressing plug
System interface		
• Front		Connection of an operator panel or expansion modules; the memory module, addressing plug or a PC cable can also be connected to the system interface for parameterizing
• Bottom		Connection of a current measuring module or current/voltage measuring module
PROFIBUS DP interface		
		Connection of the PROFIBUS DP cable through terminal connection or through a 9-pin sub D socket

¹⁾ For 3UF7 21: 0 ... +60 °C.

²⁾ For 3UF7 21: -20 ... +70°C.

³⁾ For 3UF7 21: 4 kV.

Basic units

Control circuits

Rated control supply voltage U_s (acc. to EN 61131-2)		110 ... 240 V AC/DC; 50/60 Hz	24 V DC
Operating range		0.85 ... 1.1 x U_s	0.80 ... 1.2 x U_s
Power consumption • Basic unit 1 (3UF7 000) • Basic unit 2 (3UF7 010) incl. two expansion modules connected to basic unit 2		7 VA 10 VA	5 W 7 CO
Rated insulation voltage U_i	V	300 (at degree of pollution 3)	
Rated impulse withstand voltage U_{imp}	kV	4	
Relay outputs • Number • Auxiliary contacts of the 3 relay outputs • Specified short-circuit protection for auxiliary contacts (relay outputs) • Rated uninterrupted current • Rated short-circuit capacity		3 monostable relay outputs Floating NO contacts (NC contact response can be parameterized with internal signal conditioning), 2 relay outputs are jointly and 1 relay output is separately connected to a common potential; they can be freely assigned to the control functions (e.g. for line, star and delta contactors and for signaling the operating state) • Fuse links, gL/gA operational class 6 A, quick-acting 10 A (IEC 60947-5-1) • Miniature circuit breaker 1.6 A, C characteristic (IEC 60947-5-1) • Miniature circuit breaker 6 A, C characteristic ($I_k < 500$ A) AC-15 6 A 24 V/AC 6 A 120 V/AC 3 A 230 V/AC DC-13 2 A 24 V/DC 0.55 A 60 V/DC 0.25 A 125 V/DC	
Inputs (binary)		4 inputs supplied internally by the device electronics (24 V DC) and connected to a common potential for acquiring process signals (e.g. local control station, key-operated switch, limit switch, ...), freely assignable to the control functions	
Thermistor motor protection (binary PTC) • Summation cold resistance • Response value • Return value	k Ω k Ω k Ω	≤ 1.5 3.4 ... 3.8 1.5 ... 1.65	
Conductor cross-sections • Tightening torque • Solid • Finely stranded with end sleeve • AWG cable (solid) • AWG cable (finely stranded)	Nm mm ² mm ² AWG AWG	0.8 ... 1.2 1 x (0.5 ... 4.0); 2 x (0.5 ... 2.5) 1 x (0.5 ... 2.5); 2 x (0.5 ... 1.5) 1 x AWG 20 to 12/2 x AWG 20 to 14 1 x AWG 20 to 14/2 x AWG 20 to 16	

Current measuring modules or
current/voltage measuring modules

Mounting • Set current $I_e = 0.3 ... 3$ A; 2.4 ... 25 A; 10 ... 100 A (3UF7 1.0, 3UF7 1.1, 3UF7 1.2) • Set current $I_e = 20 ... 200$ A (3UF7 103, 3UF7 113) • Set current $I_e = 63 ... 630$ A (3UF7 104, 3UF7 114)		Snap-on mounting onto 35 mm standard mounting rail or screw mounting with additional push-in lugs Snap-on mounting onto 35 mm standard mounting rail, screw mounting on mounting plate or direct fixing on contactor Screw mounting on mounting plate or direct fixing on contactor	
System interface		For connection to a basic unit or decoupling module	

Main circuits

		3UF7 1.0	3UF7 1.1	3UF7 1.2	3UF7 1.3	3UF7 1.4
Set current I_e	A	0.3 ... 3	2.4 ... 25	10 ... 100	20 ... 200	63 ... 630
Rated insulation voltage U_i (degree of pollution 3)	V	690 ¹⁾				
Rated operational voltage U_e	V	690				
Rated impulse withstand voltage U_{imp}	kV	6 ²⁾				
Rated frequency	Hz	50/60				
Type of current		Three-phase current				
Short-circuit		Additional short-circuit protection is required in main circuit				
Accuracy of current measurement (in the range 1 x minimum set current I_u to 8 x max. set current I_o)	%	± 3				
Typical voltage measuring ranges • Phase-to-phase voltage/line-to-line voltage (e.g. U_{L1L2})	V	110 ... 690 (only the phase voltages are available in SIMOCODE pro as measured values)				
• Phase voltage (e.g. U_{L1})	V	65 ... 400				
Accuracy • Of voltage measurement (phase voltage U_L in the range 230 ... 400 V)	%	± 3 (typical)				
• Of power factor measurement (in the rated load range power factor = 0.4 ... 0.8)	%	± 5 (typical)				
• Of apparent power measurement (in the rated load range)	%	± 5 (typical)				
Notes on voltage measurement • In non-grounded networks or in networks with integrated insulation measurement or monitoring • Feeder lines for voltage measurement		In these networks the current/voltage measuring module can be used only with an upstream decoupling module on the system interface. In the feeder lines from the main circuit for voltage measurement of SIMOCODE pro it may be necessary to provide additional line protection!				

1) For 3UF7 103 or 3UF7 104 up to 1000 V.

2) For 3UF7 103 or 3UF7 104 up to 8 kV.

SIMOCODE 3UF Motor Management and Control Devices

SIMOCODE pro 3UF7 motor management and control devices

Current measuring modules or current/voltage measuring modules

Connection for main circuit

Feed-through opening (diameter)

- Set current $I_e = 0.3 \dots 3 \text{ A}$; 2.4 ... 25 A
- Set current $I_e = 10 \dots 100 \text{ A}$
- Set current $I_e = 20 \dots 200 \text{ A}$

Busbar connections¹⁾

- Set current I_e
- Terminal screw
- Tightening torque
- Solid with cable lug
- Stranded with cable lug
- AWG cable

Conductor cross-sections for voltage measurement

- Tightening torque
- Solid
- Finely stranded with end sleeve
- AWG cable (solid)
- AWG cable (finely stranded)

mm	7.5		
mm	14.0		
mm	25.0		
A	3UF7 100, 3UF7 101, 3UF7 102	3UF7 103, 3UF7 104	
	20 ... 200	63 ... 630	
Nm	M8 x 25	M10 x 30	
mm ²	10 ... 14	14 ... 24	
mm ²	16 ... 95 ²⁾	50 ... 240 ³⁾	
mm ²	25 ... 120 ²⁾	70 ... 240 ³⁾	
AWG	6 ... 3/0 kcmil	1/0 ... 500 kcmil	
Nm	0.8 ... 1.2		
mm ²	1 x (0.5 ... 4.0); 2 x (0.5 ... 2.5)		
mm ²	1 x (0.5 ... 2.5); 2 x (0.5 ... 1.5)		
AWG	1 x AWG 20 to 12/2 x AWG 20 to 14		
AWG	1 x AWG 20 to 14/2 x AWG 20 to 16		

Decoupling modules

Mounting

Snap-on mounting onto 35 mm standard mounting rail or screw mounting with additional push-in lugs

Display

- Green "READY" LED

- Continuous light: "Ready"

System interfaces

Left interface for connecting to a basic unit or to an expansion module, right interface only for connecting to a current/voltage measuring module.

Conductor cross-sections

- Tightening torque
- Solid
- Finely stranded with end sleeve
- AWG cable (solid)
- AWG cable (finely stranded)

Nm	0.8 ... 1.2
mm ²	1 x (0.5 ... 4.0); 2 x (0.5 ... 2.5)
mm ²	1 x (0.5 ... 2.5); 2 x (0.5 ... 1.5)
AWG	1 x AWG 20 to 12/2 x AWG 20 to 14
AWG	1 x AWG 20 to 14/2 x AWG 20 to 16

Digital modules

Mounting

Snap-on mounting onto 35 mm standard mounting rail or screw mounting with additional push-in lugs

Display

- Green "READY" LED

- Continuous light: "Ready"
- Flashing: "No connection to the basic unit"

System interfaces

For connecting to a basic unit, another expansion module, a current measuring module or current/voltage measuring module or to the operator panel

Control circuit

Rated insulation voltage U_i

V	300 (at degree of pollution 3)
---	--------------------------------

Rated impulse withstand voltage U_{imp}

kV	4
----	---

Relay outputs

- Number
- Auxiliary contacts of the 2 relay outputs

- Specified short-circuit protection for auxiliary contacts (relay outputs)

- Rated uninterrupted current
- Rated short-circuit capacity

A

2 monostable or bistable relay outputs (depending on the version) Floating NO contacts (NC contact response can be parameterized with internal signal conditioning), all relay outputs are jointly connected to a common potential, they can be freely assigned to the control functions (e.g. for line, wye and delta contactors and for signaling the operating state)			
<ul style="list-style-type: none"> • Fuse links, gL/gG operational class 6 A, quick-acting 10 A (IEC 60947-5-1) • Miniature circuit breaker 1.6 A, C characteristic (IEC 60947-5-1) • Miniature circuit breaker 6 A, C characteristic ($I_k < 500 \text{ A}$) 			
6			
AC-15	6 A/24 V AC	6 A/120 V AC	3 A/230 V AC
DC-13	2 A/24 V DC	0.55 A/60 V DC	0.25 A/125 V DC

Inputs (binary)

4 externally supplied floating inputs, 24 V DC or 110 ... 240 V AC/DC depending on the version; inputs jointly connected to common potential for sensing process signals (e.g.: local control station, key-operated switch, limit switch ...), freely assignable to the control functions

Conductor cross-sections

- Tightening torque
- Solid
- Finely stranded with end sleeve
- AWG cable (solid)
- AWG cable (finely stranded)

Nm	0.8 ... 1.2
mm ²	1 x (0.5 ... 4.0); 2 x (0.5 ... 2.5)
mm ²	1 x (0.5 ... 2.5); 2 x (0.5 ... 1.5)
AWG	1 x AWG 20 to 12/2 x AWG 20 to 14
AWG	1 x AWG 20 to 14/2 x AWG 20 to 16

¹⁾ Screw terminal is possible using a suitable 3RT19 ... box terminal.

²⁾ When connecting cable lugs according to DIN 46235, use the 3RT19 56-4EA1 terminal cover for conductor cross-sections from 95 mm² to ensure phase spacing.

³⁾ When connecting cable lugs according to DIN 46234 for conductor cross-sections from 240 mm² as well as DIN 46235 for conductor cross-sections from 185 mm², use the 3RT19 66-4EA1 terminal cover to ensure phase spacing.

Ground-fault modules																		
Mounting		Snap-on mounting onto 35 mm standard mounting rail or screw mounting with additional push-in lugs																
Display		<ul style="list-style-type: none">• Continuous light: "Ready"• Flashing: "No connection to the basic unit"																
System interfaces		For connecting to a basic unit, another expansion module, a current measuring module or current/voltage measuring module or to the operator panel																
Control circuit																		
Connectable 3UL22 summation current transformer with rated fault currents I_N	A	0.3/0.5/1																
<ul style="list-style-type: none">• $I_{\text{Ground fault}} \leq 50 \% I_N$• $I_{\text{Ground fault}} \geq 100 \% I_N$		No tripping Tripping																
Response delay (conversion time)	ms	300 ... 500, additionally delayable																
Conductor cross-sections																		
<ul style="list-style-type: none">• Tightening torque• Solid• Finely stranded with end sleeve• AWG cable (solid)• AWG cable (finely stranded)	Nm mm ² mm ² AWG AWG	0.8 ... 1.2 1 × (0.5 ... 4.0); 2 × (0.5 ... 2.5) 1 × (0.5 ... 2.5); 2 × (0.5 ... 1.5) 1 × AWG 20 to 12/2 x AWG 20 to 14 1 × AWG 20 to 14/2 x AWG 20 to 16																
Temperature modules																		
Mounting		Snap-on mounting onto 35 mm standard mounting rail or screw mounting with additional push-in lugs																
Display		<ul style="list-style-type: none">• Continuous light: "Ready"• Flashing: "No connection to the basic unit"																
System interfaces		For connecting to a basic unit, another expansion module, a current measuring module or current/voltage measuring module or to the operator panel																
Sensor circuits																		
Typical sensor circuits																		
<ul style="list-style-type: none">• PT100• PT1000/KTY83/KTY84/NTC	mA mA	1 (typical) 0.2 (typical)																
Open-circuit/short-circuit detection																		
<ul style="list-style-type: none">• For sensor type• Open circuit• Short-circuit• Measuring range	°C	<table><tr><td>PT100/PT1000</td><td>KTY83-110</td><td>KTY84</td><td>NTC</td></tr><tr><td>✓</td><td>✓</td><td>✓</td><td>--</td></tr><tr><td>✓</td><td>✓</td><td>✓</td><td>✓</td></tr><tr><td>-50 ... +500</td><td>-50 ... +175</td><td>-40 ... +300</td><td>+80 ... +160</td></tr></table>	PT100/PT1000	KTY83-110	KTY84	NTC	✓	✓	✓	--	✓	✓	✓	✓	-50 ... +500	-50 ... +175	-40 ... +300	+80 ... +160
PT100/PT1000	KTY83-110	KTY84	NTC															
✓	✓	✓	--															
✓	✓	✓	✓															
-50 ... +500	-50 ... +175	-40 ... +300	+80 ... +160															
Measuring accuracy at 20 °C ambient temperature (T20)	K	<±2																
Deviation due to ambient temperature (in % of measuring range)	%	0.05 per K deviation from T20																
Conversion time	ms	500																
Connection type		2- or 3-conductor connection																
Conductor cross-sections																		
<ul style="list-style-type: none">• Tightening torque• Solid• Finely stranded with end sleeve• AWG cable (solid)• AWG cable (finely stranded)	Nm mm ² mm ² AWG AWG	0.8 ... 1.2 1 × (0.5 ... 4.0); 2 × (0.5 ... 2.5) 1 × (0.5 ... 2.5); 2 × (0.5 ... 1.5) 1 × AWG 20 to 12/2 x AWG 20 to 14 1 × AWG 20 to 14/2 x AWG 20 to 16																

- ✓ Detection possible
-- Detection not possible

SIMOCODE 3UF Motor Management and Control Devices

SIMOCODE pro 3UF7 motor management and control devices

Analog modules		
Mounting		Snap-on mounting onto 35 mm standard mounting rail or screw mounting with additional push-in lugs
Display <ul style="list-style-type: none"> Green "READY" LED 		<ul style="list-style-type: none"> Continuous light: "Ready" Flashing: "No connection to the basic unit"
System interfaces		For connecting to a basic unit, another expansion module, a current measuring module or current/voltage measuring module or to the operator panel
Control circuit		
Inputs <ul style="list-style-type: none"> Channels Parameterizable measuring ranges Shielding Max. input current (destruction limit) Accuracy Input resistance Conversion time Resolution Open-circuit detection 	mA mA % Ω ms bit	2 (passive) 0/4...20 Up to 30 m shield recommended, from 30 m shield required 40 ± 1 50 150 12 With measuring range 4 ... 20 mA
Output <ul style="list-style-type: none"> Channels Parameterizable output range Shielding Max. voltage at output Accuracy Max. output load Conversion time Resolution Short-circuit resistant 	mA % Ω ms bit	1 0/4...20 Up to 30 m shield recommended, from 30 m shield required 30 V DC ± 1 500 25 12 Yes
Connection type		2-conductor connection
Voltage isolation of inputs/output to the device electronics		No
Conductor cross-sections <ul style="list-style-type: none"> Tightening torque Solid Finely stranded with end sleeve AWG cable (solid) AWG cable (finely stranded) 	Nm mm ² mm ² AWG AWG	0.8...1.2 1 x (0.5...4.0); 2 x (0.5...2.5) 1 x (0.5...2.5); 2 x (0.5...1.5) 1 x AWG 20 to 12/2 x AWG 20 to 14 1 x AWG 20 to 14/2 x AWG 20 to 16
Operator panels		
Mounting		Mounted in a control cabinet door or in a front panel, IP54 with system interface cover
Display <ul style="list-style-type: none"> Red/green/yellow LED "DEVICE" <ul style="list-style-type: none"> Green "BUS" LED <ul style="list-style-type: none"> Red "GEN. FAULT" LED Green or yellow LEDs 		<ul style="list-style-type: none"> Green: "Ready" Green flashing: "No connection to the basic unit" Red: "Function test not OK; device is disabled" Yellow: "Memory module or addressing plug detected" Off: "No control supply voltage" Continuous light: "Communication with PLC/PCS" Flashing: "Baud rate recognized/communicating with PC/PG" Continuous light/flashing: "Feeder fault", e.g. overload trip For assigning to any status signals, as required
Keys <ul style="list-style-type: none"> Test/Reset <ul style="list-style-type: none"> Control keys 		<ul style="list-style-type: none"> Resets the device after tripping Function test Operation of a memory module or addressing plug for controlling the motor feeder, user-assignable
System interface <ul style="list-style-type: none"> Front <ul style="list-style-type: none"> Rear 		For plugging in a memory module, an addressing plug or a PC cable for parameterization Connection to the basic unit or to an expansion module

SIMOCODE 3UF Motor Management and Control Devices

SIMOCODE pro 3UF7 motor management and control devices

Operator panels with display	
Mounting	Mounted in a control cabinet door or in a front panel, IP54 with system interface cover
Display <ul style="list-style-type: none">Red/green/yellow LED "DEVICE" <ul style="list-style-type: none">Green "BUS" LED <ul style="list-style-type: none">Red "GEN. FAULT" LED4 green LEDs	<ul style="list-style-type: none">Green: "Ready"Green flashing: "No connection to the basic unit"Red: "Function test not OK; device is disabled"Yellow: "Memory module or addressing plug detected"Off: "No control supply voltage"Continuous light: "Communication with PLC/PCS"Flashing: "Baud rate recognized/communicating with PC/PG"Continuous light/flashing: "Feeder fault", e.g. overload trip For assigning to any status signals as required (preferably for the feedback of switching states, e.g. On, Off, Left, Right, etc.)
Displays	Graphic display for indicating current measured values, operational and diagnostics data or status information
Keys <ul style="list-style-type: none">Control keysArrow keysSoftkeys	For controlling the motor feeder, user-assignable Navigation in the display menu Various menu-dependent functions, e.g. test, reset, operation of a memory module or addressing plug
System interface <ul style="list-style-type: none">Front <ul style="list-style-type: none">Rear	For plugging in a memory module, an addressing plug or a PC cable for parameterization Connection to the basic unit or to an expansion module

SIMOCODE pro 3UF7 motor management and control devices

Short-circuit protection with fuses for motor feeders for short-circuit currents up to 50 kA and 690 V for 3UF7

Current measuring module or current/voltage measuring module	Contactors	CLASS 5 and Class 10			CLASS 15			CLASS 20			CLASS 25		
	Type	Rated operational current I_g /AC-3 in A at ... V											
		400	500	690	400	500	690	400	500	690	400	500	690
Set current 0.3 ... 3.0 A													
3UF7 1.0-1AA00-0	3RT10 15	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	3RT10 16	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Set current 2.4 ... 25 A													
3UF7 1.1-1AA00-0	3RT10 15	7.0	5.0	4.0	7.0	5.0	4.0	7.0	5.0	4.0	7.0	5.0	4.0
	3RT10 16	9.0	6.5	5.2	9.0	6.5	5.2	9.0	6.5	5.2	9.0	6.5	5.2
	3RT10 17	12.0	9.0	6.3	11.0	9.0	6.3	10.0	9.0	6.3	9.5	9.0	6.3
	3RT10 23	9.0	6.5	5.2	9.0	6.5	5.2	9.0	6.5	5.2	--	--	--
	3RT10 24	12.0	12.0	9.0	12.0	12.0	9.0	12.0	12.0	9.0	12.0	12.0	9.0
	3RT10 25	17.0	17.0	13.0	17.0	17.0	13.0	16.0	16.0	13.0	15.0	15.0	13.0
	3RT10 26	25.0	18.0	13.0	18.0	18.0	13.0	16.0	16.0	13.0	15.0	15.0	13.0
	3RT10 34	25.0	25.0	20.0	25.0	25.0	20.0	22.3	22.3	20.0	20.3	20.3	20.3
	3RT10 35	25.0	25.0	24.0	25.0	25.0	24.0	25.0	25.0	24.0	25.0	25.0	24.0
Set current 10 ... 100 A													
3UF7 1.2-1AA00-0	3RT10 34	32.0	32.0	20.0	25.5	25.5	20.0	22.3	22.3	20.0	20.3	20.3	20.0
	3RT10 35	40.0	40.0	24.0	33.0	33.0	24.0	29.4	29.4	24.0	28.0	28.0	24.0
	3RT10 36	50.0	50.0	24.0	38.5	38.5	24.0	32.7	32.7	24.0	29.4	29.4	24.0
	3RT10 44	65.0	65.0	47.0	56.0	56.0	47.0	49.0	49.0	47.0	45.0	45.0	45.0
	3RT10 45	80.0	80.0	58.0	61.0	61.0	58.0	53.0	53.0	53.0	47.0	47.0	47.0
	3RT10 46	95.0	95.0	58.0	69.0	69.0	58.0	59.0	59.0	58.0	53.0	53.0	53.0
	3RT10 54	100.0	100.0	100.0	93.2	93.2	93.2	81.7	81.7	81.7	74.8	74.8	74.8
	3RT10 55	--	--	--	100.0	100.0	100.0	100.0	100.0	100.0	97.5	97.5	97.5
Set current 20 ... 200 A													
3UF7 1.3-1.A00-0	3RT10 54	115	115	115	93.2	93.2	93.2	81.7	81.7	81.7	74.8	74.8	74.8
	3RT10 55	150	150	150	122	122	122	107	107	107	98	98	98
	3RT10 56	185	185	170	150	150	150	131	131	131	120	120	120
Set current 63 ... 630 A													
3UF7 1.4-1BA00-0	3RT10 64	225	225	225	182	182	182	160	160	160	146	146	146
	3RT10 65	265	265	265	215	215	215	188	188	188	172	172	172
	3RT10 66	300	300	280	243	243	243	213	213	213	195	195	195
	3RT10 75	400	400	400	324	324	324	284	284	284	260	260	260
	3RT10 76	500	500	450	405	405	405	355	355	355	325	325	325
	3RT12 64	225	225	225	225	225	225	225	225	225	194	194	194
	3RT12 65	265	265	265	265	265	265	265	265	265	228	228	228
	3RT12 66	300	300	300	300	300	300	300	300	300	258	258	258
	3RT12 75	400	400	400	400	400	400	400	400	400	344	344	344
	3RT12 76	500	500	500	500	500	500	500	500	500	430	430	430
	3TF68 ¹⁾	630	630	630	502	502	502	440	440	440	408	408	408
	3TF69 ¹⁾	630	630	630	630	630	630	572	572	572	531	531	531

¹⁾ Contactor cannot be mounted.

SIMOCODE 3UF Motor Management and Control Devices

SIMOCODE pro 3UF7 motor management and control devices

Current measuring module or current/voltage measuring module	Contactors	CLASS 30			CLASS 35			CLASS 40			Fuse links ¹⁾			British Standard fuses BS88
											LV HRC	Type 3NA	Type 3ND	
											DIAZED	Type 5SB		
											NEOZED	Type 5SE		
											Operational class			
gG			aM											
Type of coordination ²⁾			Type of coordination ²⁾											
Rated operational current I _e /AC-3 in A at ... V											1	2	2	2
Type		400 V	500 V	690 V	400 V	500 V	690 V	400 V	500 V	690 V	690 V	690 V	690 V	415 V
Set current 0.3 ... 3.0 A														
3UF7 1.0-1AA00-0	3RT10 15	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	35	20	--	20
	3RT10 16	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	35	20	--	20
Set current 2.4 ... 25 A														
3UF7 1.1-1AA00-0	3RT10 15	7.0	5.0	4.0	7.0	5.0	4.0	7.0	5.0	4.0	35	20	--	20
	3RT10 16	9.0	6.5	5.2	9.0	6.5	5.2	8.5	6.5	5.2	35	20	--	20
	3RT10 17	9.0	9.0	6.3	9.0	9.0	6.3	8.5	8.5	6.3	35	20	--	20
	3RT10 23	--	--	--	--	--	--	--	--	--	63	25	--	25
	3RT10 24	12.0	12.0	9.0	12.0	12.0	9.0	12.0	12.0	9.0	63	25	20	25
	3RT10 25	14.0	14.0	13.0	13.0	13.0	13.0	12.0	12.0	12.0	63	25	20	25
	3RT10 26	14.0	14.0	13.0	13.0	13.0	13.0	12.0	12.0	12.0	100	35	20	25
	3RT10 34	19.1	19.1	19.1	17.6	17.6	17.6	16.1	16.1	16.1	125	63	50	63
	3RT10 35	25.0	25.0	24.0	25.0	25.0	24.0	23.5	23.5	23.5	125	63	50	63
Set current 10 ... 100 A														
3UF7 1.2-1AA00-0	3RT10 34	19.1	19.1	19.1	17.6	17.6	17.6	16.1	16.1	16.1	125	63	50	63
	3RT10 35	26.5	26.5	24.0	25.0	25.0	24.0	23.5	23.5	23.5	125	63	50	80
	3RT10 36	26.5	26.5	24.0	25.0	25.0	24.0	23.5	23.5	23.5	160	80	50	80
	3RT10 44	41.7	41.7	41.7	38.2	38.2	38.2	34.5	34.5	34.5	200	125	63	125
	3RT10 45	45.0	45.0	45.0	43.0	43.0	43.0	40.0	40.0	40.0	200	160	80	160
	3RT10 46	50.0	50.0	50.0	47.0	47.0	47.0	44.0	44.0	44.0	200	160	100	160
	3RT10 54	69.0	69.0	69.0	63.0	63.0	63.0	57.0	57.0	57.0	355	315	160	250
	3RT10 55	90.0	90.0	90.0	82.0	82.0	82.0	74.0	74.0	74.0	355	315	200	315
Set current 20 ... 200 A														
3UF7 1.3-1.A00-0	3RT10 54	69.0	69.0	69.0	64.0	64.0	64.0	--	--	--	355	315	160	250
	3RT10 55	90	90	90	82	82	82	74	74	74	355	315	200	315
	3RT10 56	111	111	111	102	102	102	93	93	93	355	315	200	315
Set current 63 ... 630 A														
3UF7 1.4-1BA00-0	3RT10 64	135	135	135	126	126	126	--	--	--	500	400	250	400
	3RT10 65	159	159	159	146	146	146	133	133	133	500	400	315	400
	3RT10 66	180	180	180	165	165	165	150	150	150	500	400	315	400
	3RT10 75	240	240	240	220	220	220	200	200	200	630	500	400	450
	3RT10 76	300	300	300	275	275	275	250	250	250	630	500	500	500
	3RT12 64	173	173	173	152	152	152	131	131	131	500	500	400	450
	3RT12 65	204	204	204	180	180	180	156	156	156	500	500	400	450
	3RT12 66	231	231	231	204	204	204	177	177	177	500	500	400	450
	3RT12 75	316	316	316	--	--	--	--	--	--	800	800	630	800
	3RT12 76	385	385	385	340	340	340	316	316	316	800	800	630	800
	3TF68 ³⁾	376	376	376	344	344	344	317	317	317	800	500 ⁴⁾	630	500
	3TF69 ³⁾	500	500	500	469	469	469	438	438	438	800	630 ⁴⁾	630	630

¹⁾ Respect the operational voltage.

²⁾ Assignment and short-circuit protective devices according to IEC 60947-4-1.

³⁾ Contactor cannot be mounted.

⁴⁾ Ensure that the maximum AC-3 operational current is sufficiently different from the rated fuse current.

• Type of coordination "1"

Contactors or starters must not endanger persons or equipment in the event of a short-circuit. They need not to be able to be used further without repair and new parts.

• Type of coordination "2"

Contactors or starters must not endanger persons or equipment in the event of a short-circuit and must be suitable for continued use. There is a risk of contact welding.