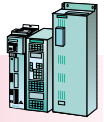


SIMOVERT MASTERDRIVES Vector Control

Compact PLUS, Compact and Chassis Units



Recommended system components
for rectifier units

Compact PLUS units
Compact and chassis units

Selection and ordering data

Nominal power rating	Rectifier unit	Switch disconnectors ²⁾		Switch disconnectors with fuse holders ¹⁾²⁾		Fuse switch disconnectors ¹⁾²⁾			
		Order No.	Rated current	Order No.	Rated current	Max. fuse size	Order No.	Rated current	Max. fuse size
kW	Order No.	Order No.	A	Order No.	A		Order No.	A	

Compact PLUS units

Supply voltage 3-ph. 380 V to 480 V AC

15	6SE7024-1EP85-0AA0	3KA50 30-1EE01	63	3KL50 30-1EB01	63	00; 000	3NP40 10-0CH01	100	000
50	6SE7031-2EP85-0AA0	3KA53 30-1EE01	160	3KL53 30-1EB01	160	00; 000	3NP42 70-0CA01	250	0; 1
100	6SE7032-3EP85-0AA0	3KA55 30-1EE01	250	3KL55 30-1EB01	250	1; 2	3NP42 70-0CA01	250	0; 1

Compact and chassis units

Supply voltage 3-ph. 380 V to 480 V AC

15	6SE7024-1EB85-0AA0	3KA50 30-1EE01	63	3KL50 30-1EB01	63	00	3NP40 10-0CH01	100	000
37	6SE7028-6EC85-0AA0	3KA51 30-1EE01	80	3KL52 30-1EB01	125	00	3NP40 10-0CH01	100	000
75	6SE7031-7EE85-0AA0	3KA53 30-1EE01	160	3KL55 30-1EB01	250	0; 1; 2	3NP42 70-0CA01	250	0; 1
110	6SE7032-7EE85-0AA0	3KA55 30-1EE01	250	3KL55 30-1EB01	250	0; 1; 2	3NP42 70-0CA01	250	0; 1
160	6SE7033-8EE85-0AA0	3KA57 30-1EE01	400	3KL57 30-1EB01	400	1; 2	3NP53 60-0CA00	400	1; 2
200	6SE7034-6EE85-0AA0	3KA57 30-1EE01	400	3KL57 30-1EB01	400	1; 2	3NP53 60-0CA00	400	1; 2
250	6SE7036-1EE85-0AA0	3KA58 30-1EE01	630	3KL61 30-1AB0	630	3	3NP54 60-0CA00	630	2; 3
400	6SE7038-2EH85-0AA0	3KE45 30-0AA	1000	-	-	-	-	-	-
500	6SE7041-0EH85-0AA0	3KE45 30-0AA	1000	-	-	-	-	-	-
630	6SE7041-3EK85-0A□0	②	1250	-	-	-	-	-	-
800	6SE7041-8EK85-0A□0	②	1600	-	-	-	-	-	-

Supply voltage 3-ph. 500 V to 600 V AC

22	6SE7024-1FB85-0AA0	3KA50 30-1EE01	63	3KL50 30-1EB01	63	00	3NP40 10-0CH01	100	000
37	6SE7027-2FC85-0AA0	3KA50 30-1EE01	63	3KL50 30-1EB01	63	00	3NP40 10-0CH01	100	000
55	6SE7028-8FC85-0AA0	3KA51 30-1EE01	80	3KL52 30-1EB01	125	00	3NP40 70-0CA01	160	00
75	6SE7031-4FE85-0AA0	3KA53 30-1EE01	160	3KL52 30-1EB01	125	00	3NP40 70-0CA01	160	00
132	6SE7032-4FE85-0AA0	3KA55 30-1EE01	250	3KL55 30-1EB01	250	0; 1; 2	3NP42 70-0CA01	250	0; 1
200	6SE7033-5FE85-0AA0	3KA57 30-1EE01	400	3KL57 30-1EB01	400	1; 2	3NP53 60-0CA00	400	1; 2
250	6SE7034-2FE85-0AA0	3KA57 30-1EE01	400	3KL57 30-1EB01	400	1; 2	3NP53 60-0CA00	400	1; 2
315	6SE7035-4FE85-0AA0	3KA58 30-1EE01	630	3KL61 30-1AB0	630	3	3NP54 60-0CA00	630	2; 3
450	6SE7037-7FH85-0AA0	3KE45 30-0AA	1000	-	-	-	-	-	-
630	6SE7041-0FH85-0AA0	3KE45 30-0AA	1000	-	-	-	-	-	-
800	6SE7041-3FK85-0A□0	②	1250	-	-	-	-	-	-
900	6SE7041-5FK85-0A□0	②	1600	-	-	-	-	-	-
1100	6SE7041-8FK85-0A□0	②	2000	-	-	-	-	-	-

Supply voltage 3-ph. 660 V to 690 V AC

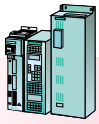
160	6SE7032-2HE85-0AA0	3KA57 30-1EE01	400	3KL55 30-1EB01	250	0; 1; 2	3NP42 70-0CA01	250	0; 1
250	6SE7033-5HE85-0AA0	3KA57 30-1EE01	400	3KL57 30-1EB01	400	1; 2	3NP53 60-0CA00	400	1; 2
315	6SE7034-2HE85-0AA0	3KA57 30-1EE01	400	3KL57 30-1EB01	400	1; 2	3NP53 60-0CA00	400	1; 2
400	6SE7035-4HE85-0AA0	3KA58 30-1EE01	630	3KL61 30-1AB0	630	3	3NP54 60-0CA00	630	2; 3
630	6SE7037-7HH85-0AA0	3KE45 30-0AA	1000	-	-	-	-	-	-
800	6SE7041-0HH85-0AA0	3KE45 30-0AA	1000	-	-	-	-	-	-
1000	6SE7041-3HK85-0A□0	②	1250	-	-	-	-	-	-
1100	6SE7041-5HK85-0A□0	②	1600	-	-	-	-	-	-
1500	6SE7041-8HK85-0A□0	②	2000	-	-	-	-	-	-

Rectifier unit **A**
Rectifier unit with power section³⁾ **D**

1) Switch disconnectors:
Note size of cable-protection and semiconductor-protection fuses!

2) Can be optionally used depending on requirements. For further information see catalog "Low-voltage switchgear".

3) For parallel connection.
② Not available from Siemens.



Compact PLUS units
Compact and chassis units

SIMOVERT MASTERDRIVES Vector Control Compact PLUS, Compact and Chassis Units

Recommended system components
for rectifier units

Cable-protection fuses Duty class gL ¹⁾²⁾			Semiconductor-protection fuses Duty class gR ²⁾ (incl. cable protection)			Fuse bases to IEC/DIN ⁵⁾		Circuit-breaker ⁴⁾		Main contactor/ AC contactor ⁴⁾		
Order No.	Rated current A	Size	Order No.	Rated current A	Size	Order No.	Rated current/size	Order No.	Rated current A	Order No.	Rated current A	
3NA3 817	40	000	3NE1 802-0	40	000	-	-	-	-	3RT10 34	50	
3NA3 032	125	0	3NE1 022-0	125	00	-	-	-	-	3RT10 54	160	
3NA3 142	224	1	3NE1 227-0	250	1	-	-	-	-	3RT10 64	275	
3NA3 820	50	00	3NE1 802-0	40	000	-	-	-	-	3RT10 34	45	
3NA3 830	100	00	3NE1 820-0	80	000	-	-	-	-	3RT10 44	90	
3NA3 140	200	1	3NE1 224-0	160	1	-	-	-	-	3TK50	190	
3NA3 252	315	2	3NE1 227-0	250	1	-	-	-	-	3TK52	315	
3NA3 260	400	2	3NE1 331-0	350	2	-	-	-	-	3TK54	380	
3NA3 365	500	3	3NE1 332-0	400	2	-	-	-	-	3TK56	500	
3NA3 372	630	3	3NE1 435-0	560	3	-	-	-	-	2 x 3TK52	567	
3NA3 480 ³⁾⁶⁾	1000	4	Semiconductor protection fuses aR (without cable protection) already integrated in the standard unit			3NH3 530	1000/4	3WN61	800	3 x 3TK52	788	
3NA3 682 ³⁾⁶⁾	1250	4a				3NH7 520	1250/4a	3WN62	1000	3 x 3TK54	950	
2 x 3NA3 475 ³⁾⁶⁾	800	4				3NH3 530	1000/4	3WN63	1250	3 x 3TK56	1250	
2 x 3NA3 480 ³⁾⁶⁾	1000	4				3NH3 530	1000/4	3WN65	2000	3 x 3TK15	1950	
to 500 V	to 600 V											
3NA3 820	3NA3 820-6	50	00	3NE1 802-0	40	000	-	-	-	3RT10 34	45	
3NA3 824	3NA3 824-6	80	00	3NE1 818-0	63	000	-	-	-	3RT10 44	90	
3NA3 830	3NA3 830-6	100	00	3NE1 021-0	100	00	-	-	-	3RT10 44	90	
3NA3 136	3NA3 136-6	160	1	3NE1 022-0	125	00	-	-	-	3RT14 46	135	
3NA3 144	3NA3 144-6	250	2	3NE1 227-0	250	1	-	-	-	3TK52	315	
3NA3 260	3NA3 260-6	400	2	3NE1 231-0	350	2	-	-	-	3TK52	315	
3NA3 365	3NA3 365-6	500	3	3NE1 332-0	400	2	-	-	-	3TK54	380	
3NA3 372		630	3	3NE1 334-0	500	2	-	-	-	3TK56	500	
3NA3 480 ³⁾⁶⁾		1000	4	Semiconductor protection fuses aR (without cable protection) already integrated in the standard unit			3NH3 530	1000/4	3WN61	800	2 x 3TK54	788
3NA3 682 ³⁾⁶⁾		1250	4a				3NH7 520	1250/4a	3WN62	1000	3 x 3TK54	950
2 x 3NA3 475 ³⁾⁶⁾		800	4				3NH3 530	1000/4	3WN63	1250	3 x 3TK56	1250
2 x 3NA3 475 ³⁾⁶⁾		800	4				3NH3 530	1000/4	3WN64	1600	3 x 3TK14	1410
2 x 3NA3 480 ³⁾⁶⁾		1000	4				3NH3 530	1000/4	3WN65	2000	3 x 3TK15	1950
3NA3 144-6		250	2	3NE1 225-0	200	1	-	-	-	3TK50	190	
3NA3 260-6		400	2	3NE1 230-0	315	1	-	-	-	3TK52	315	
3NA3 365-6		500	3	3NE1 225-0	400	2	-	-	-	3TK54	380	
3NE1 436-0		630	3	3NE1 334-0	500	3	-	-	-	3TK56	500	
				Semiconductor protection fuses aR (without cable protection) already integrated in the standard unit			-	-	3WN61	800	2 x 3TK54	788
							-	-	3WN62	1000	3 x 3TK54	950
							-	-	3WN63	1250	3 x 3TK56	1250
							-	-	3WN64	1600	3 x 3TK14	1410
							-	-	3WN65	2000	3 x 3TK15	1950

1) Does not provide 100 % protection for the input rectifier of the unit.

2) The cable cross-sections must be dimensioned according to DIN VDE 0100, VDE 0298 Part 4 as a function of the rated fuse currents.

3) See catalog "Low-voltage switchgear". Used for drive converters with a line supply inductance of $\geq 3\%$ referred to the drive converter impedance, i.e. so that the ratio of the system fault level to the converter output is 33 : 1 or 100 : 1 if an additional 2 % line reactor is used.

Impedance of unit:

$$Z = \frac{V}{\sqrt{3} \cdot I_{UN}}$$

4) See catalog "Low-voltage switchgear".

5) Size and quantity dependent on the fuses used. For further information see catalog "Low-voltage switchgear".

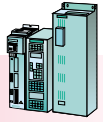
6) Cables can also be protected with circuit-breakers with appropriate cable protection. See catalog "Low-voltage switchgear".

Caution:

Short-circuit capacity and loadability at ambient temperature must be taken into account.

SIMOVERT MASTERDRIVES Vector Control

Compact PLUS, Compact and Chassis Units



Recommended system components
for rectifier units

Compact PLUS units
Compact and chassis units

Selection and ordering data

Nominal power rating	Rectifier unit	Radio-interference suppression filter	Commutating reactor ¹⁾ $v_D = 2\%$	P_V 50/60 Hz	Rated current
kW	Order No.	Order No.	Order No.	W	A

Compact PLUS units

Supply voltage 3-ph. 380 V to 480 V AC

400/480 V, 50/60 Hz					
15	6SE7024-1EP85-0AA0	6SE7023-4ES87-0FB1 ²⁾	4EP37 00-2US00	57/ 60	35.5
50	6SE7031-2EP85-0AA0	6SE7031-8ES87-0FA1 ²⁾	4EU24 52-2UA00-0AA0	154/163	160
100	6SE7032-3EP85-0AA0	6SE7033-2ES87-0FA1 ²⁾	4EU25 52-5UA00-0AA0	187/201	250

Compact and chassis units

Supply voltage 3-ph. 380 V to 480 V AC

400/480 V, 50/60 Hz					
15	6SE7024-1EB85-0AA0	6SE7023-4ES87-0FB1 ²⁾	4EP37 00-2US00	57/ 60	35.5
37	6SE7028-6EC85-0AA0	6SE7027-2ES87-0FB1 ²⁾	4EP39 00-2US00	82/ 87	80
75	6SE7031-7EE85-0AA0	6SE7031-8ES87-0FA1 ²⁾	4EU24 52-2UA00-0AA0	154/163	160
110	6SE7032-7EE85-0AA0	6SE7033-2ES87-0FA1 ²⁾	4EU25 52-5UA00-0AA0	187/201	250
160	6SE7033-8EE85-0AA0	6SE7033-2ES87-0FA1 ²⁾	4EU27 52-7UA00-0AA0	253/275	315
200	6SE7034-6EE85-0AA0	6SE7036-0ES87-0FA1 ²⁾	4EU27 52-8UA00-0AA0	253/275	400
250	6SE7036-1EE85-0AA0	6SE7036-0ES87-0FA1 ²⁾	4EU30 52-5UA00-0AA0	334/367	560
400	6SE7038-2EH85-0AA0	6SE7041-0ES87-0FA1 ²⁾	4EU36 52-8UA00-1BA0	450/495	720
500	6SE7041-0EH85-0AA0	6SE7041-0ES87-0FA1 ²⁾	4EU36 52-0UB00-1BA0	450/495	910
630	6SE7041-3EK85-0A□0	6SE7041-6ES87-0FA1 ²⁾	4EU36 52-7UC00-1BA0	450/495	1120
800	6SE7041-8EK85-0A□0	6SE7041-6ES87-0FA1 ²⁾	4EU39 51-0UC00-0A	570/627	1600

Supply voltage 3-ph. 500 V to 600 V AC

500 V, 50 Hz					
22	6SE7024-1FB85-0AA0	B84143-A50-R21 ²⁾³⁾	4EP37 00-1US00	57	35.5
37	6SE7027-2FC85-0AA0	B84143-A80-R21 ²⁾³⁾	4EP39 00-1US00	82	63
55	6SE7028-8FC85-0AA0	B84143-A80-R21 ²⁾³⁾	4EP40 00-1US00	96	80
75	6SE7031-4FE85-0AA0	B84143-A120-R21 ²⁾³⁾	4EU24 52-1UA00-0AA0	154	140
132	6SE7032-4FE85-0AA0	B84143-B 250-S□□ ³⁾	4EU25 52-6UA00-0AA0	187	200
200	6SE7033-5FE85-0AA0	B84143-B 320-S□□ ³⁾	4EU27 52-3UA00-0AA0	253	315
250	6SE7034-2FE85-0AA0	B84143-B 600-S□□ ³⁾	4EU27 52-4UA00-0AA0	253	400
315	6SE7035-4FE85-0AA0	B84143-B 600-S□□ ³⁾	4EU30 52-2UA00-0AA0	334	450
450	6SE7037-7FH85-0AA0	B84143-B1000-S□□ ³⁾	4EU36 52-3UA00-0AA0	450	710
630	6SE7041-0FH85-0AA0	B84143-B1000-S□□ ³⁾	4EU36 52-4UA00-1BA0	450	910
800	6SE7041-3FK85-0A□0	B84143-B1600-S□□ ³⁾	4EU39 51-5UB00-0A	570	1120
900	6SE7041-5FK85-0A□0	B84143-B1600-S□□ ³⁾	4EU39 51-7UB00-0A	570	1250
1100	6SE7041-8FK85-0A□0	B84143-B1600-S□□ ³⁾	4EU43 51-2UB00-0A	750	1600

Supply voltage 3-ph. 660 V to 690 V AC

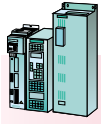
690 V, 50 Hz					
160	6SE7032-2HE85-0AA0	B84143-B 250-S□□ ³⁾	4EU27 52-6UA00-0AA0	253	224
250	6SE7033-5HE85-0AA0	B84143-B 320-S□□ ³⁾	4EU30 52-3UA00-0AA0	334	315
315	6SE7034-2HE85-0AA0	B84143-B 600-S□□ ³⁾	4EU30 52-4UA00-0AA0	334	400
400	6SE7035-4HE85-0AA0	B84143-B 600-S□□ ³⁾	4EU36 52-5UA00-0AA0	450	500
630	6SE7037-7HH85-0AA0	B84143-B1000-S□□ ³⁾	4EU36 52-7UA00-1BA0	450	710
800	6SE7041-0HH85-0AA0	B84143-B1000-S□□ ³⁾	4EU39 51-0UA00-0A	570	910
1000	6SE7041-3HK85-0A□0	B84143-B1600-S□□ ³⁾	4EU39 51-6UB00-0A	570	1120
1100	6SE7041-5HK85-0A□0	B84143-B1600-S□□ ³⁾	4EU43 51-0UB00-0A	750	1250
1500	6SE7041-8HK85-0A□0	B84143-B1600-S□□ ³⁾	4EU45 51-4UA00	840	1600

Rectifier unit	A
Rectifier unit for parallel connection	D
for 500 V TT and TN systems (earthed system)	2 0
for 690 V TT and TN systems (earthed system)	2 1
for 380 V to 690 V IT systems (non-earthed and insulated system)	2 4

1) For commutating reactors for converters and rectifier units, see catalog PD 30.

2) Can only be used with TT and TN systems (earthed system).

3) Further information on the filters can be obtained from EPCOS (www.epcos.com) at www4.ad.siemens.de. Please enter the following number under "Entry ID": 65 67 129.



Compact PLUS units
Compact and chassis units

SIMOVERT MASTERDRIVES Vector Control

Compact PLUS, Compact and Chassis Units

Recommended system components
for rectifier units

Commutating reactor¹⁾
 $v_D = 4\%$

Order No.	P_v 50/60 Hz W	Rated current A
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400/480 V, 50/60 Hz

4EP39 00-5US00	82/ 87	35.5
4EU27 52-1UB00-0AA0	253/275	160
4EU30 52-7UA00-0AA0	334/367	280

400/480 V, 50/60 Hz

4EP39 00-5US00	82/ 87	35.5
4EU24 52-4UA00-0AA0	154/163	80
4EU27 52-1UB00-0AA0	253/275	160
4EU30 52-7UA00-0AA0	334/367	280
4EU30 52-8UA00-0AA0	334/367	355
4EU36 52-3UB00-0AA0	450/495	400
4EU36 52-4UB00-0AA0	450/495	560
4EU39 51-6UA00-0A	570/627	710
4EU39 51-1UB00-0A	570/627	910
4EU43 51-3UB00-0A	750/830	1120
4EU43 51-5UB00-0A	750/830	1600

500 V, 50 Hz

4EP40 01-0US00	96	35.5
4EU24 52-5UA00-0AA0	154	63
4EU25 52-1UB00-0AA0	187	80
4EU27 52-3UB00-0AA0	253	140
4EU30 52-0UB00-0AA0	334	200
4EU36 52-5UB00-0AA0	450	315
4EU36 52-6UB00-0AA0	450	400
4EU36 52-7UB00-1BA0	450	500
4EU39 51-7UA00-0A	570	710
4EU43 51-5UA00-0A	570	910
4EU45 51-5UA00-0A	840	1120
4EU45 51-6UA00-0A	840	1250
4EU47 51-3UA00-0A	965	1600

690 V, 50 Hz

4EU36 52-8UB00-0AA0	450	224
4EU36 52-0UC00-0AA0	450	315
4EU39 51-8UA00-0A	570	400
4EU39 51-0UB00-0A	570	500
4EU43 51-6UA00-0A	750	710
4EU45 51-3UA00	840	910
4EU47 51-2UA00	965	1120
4EU50 51-1UA00	1180	1250
4EU52 51-1UA00	1350	1600

1) Commutating reactors for converters and rectifier units, see catalog PD 30.