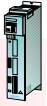


SIMOVERT MASTERDRIVES Vector Control Compact PLUS Units



Air-cooled converters and inverters

Compact PLUS units

Selection and ordering data

Compact PLUS converters

Nominal power rating	Rated output current	Base load current	Short-time current ¹⁾	Supply current ²⁾ Single-motor drive	Line current ³⁾ Multi-motor drive	Order No.	Power loss at 2.5 kHz single-motor drive (multi-motor drive)	Braking power with integrated braking chopper Smallest permissible value of external braking resistor R_{min}	Rated braking power P_{20} with R_{min}	Short-time braking power P_3 with R_{min}
kW	I_N A	I_G A	A	A	A		kW	Ω	kW	kW
Supply voltage 3-ph. 380 V to 480 V AC										
0.55	1.5	1.4	2.4	1.7	2.6	6SE7011-5EP60	0.05 (0.05)	80	5	7.5
1.1	3.0	2.7	4.8	3.3	5.3	6SE7013-0EP60	0.07 (0.08)	80	5	7.5
1.5	5.0	4.6	8.0	5.5	8.8	6SE7015-0EP60	0.10 (0.11)	80	5	7.5
3	8.0	7.3	12.8	8.8	14	6SE7018-0EP60	0.14 (0.16)	40	10	15
4	10.0	9.1	16.0	11.0	18	6SE7021-0EP60	0.15 (0.17)	40	10	15
5.5	14.0	12.7	22.4	15.4	25	6SE7021-4EP60	0.17 (0.20)	20	20	30
7.5	20.5	18.7	32.8	22.6	36	6SE7022-1EP60	0.22 (0.26)	20	20	30
11	27.0	24.6	43.2	29.7	48	6SE7022-7EP60	0.29 (0.34)	11	36	54
15	34.0	30.9	54.4	37.4	60	6SE7023-4EP60	0.39 (0.46)	11	36	54

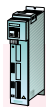
Compact PLUS inverters

Nominal power rating	Rated output current	Base load current	Short-time current ¹⁾	Rated DC link current	Order No.	Power loss at 2.5 kHz
kW	I_N A	I_G A	A	A		kW
DC voltage 510 V to 650 V DC						
0.75	2.0	1.8	3.2	2.4	6SE7012-0TP60	0.05
1.5	4.0	3.6	6.4	4.8	6SE7014-0TP60	0.06
2.2	6.1	5.6	9.8	7.3	6SE7016-0TP60	0.07
4	10.2	9.3	16.3	12.1	6SE7021-0TP60	0.09
5.5	13.2	12.0	21.1	15.7	6SE7021-3TP60	0.14
7.5	17.5	15.9	28.0	20.8	6SE7021-8TP60	0.17
11	25.5	23.2	40.8	30.3	6SE7022-6TP60	0.22
15	34.0	30.9	54.4	40.5	6SE7023-4TP60	0.30
18.5	37.5	34.1	60.0	44.6	6SE7023-8TP60	0.35

1) Short-time current = $1.6 \times I_N$ for 30 s or $1.36 \times I_N$ for 60 s.

2) Rated supply current for converter without additional inverter. If the converter feeds additional inverters, the rated supply current is $1.76 \times I_N$.

3) Converter feeds additional inverter; Supply current = $1.76 \times I_N$.



SIMOVERT MASTERDRIVES Vector Control Compact PLUS Units

Compact PLUS units

Air-cooled converters and inverters

Dimensions W x H x D	For dimension drawing, see Section 7	Weight, approx.	Cooling air require- ment	Sound pressure level L_{pA} (1 m)	Power connections –Terminals for supply line finely stranded/ multi-stranded	Motor finely stranded/ multi-stranded	Auxiliary current requirement 24 V DC Max. version (max. at 20 V)
mm	No.	kg	m ³ /s	dB	mm ²	mm ²	A
45 x 360 x 260	1	3.4	0.002	18	4 / 4	4 / 4	1.3
67.5 x 360 x 260	1	3.9	0.009	40	4 / 4	4 / 4	1.3
67.5 x 360 x 260	1	4.1	0.009	40	4 / 4	4 / 4	1.3
90 x 360 x 260	1	4.5	0.018	37	4 / 4	4 / 4	1.3
90 x 360 x 260	1	4.5	0.018	37	4 / 4	4 / 4	1.3
135 x 360 x 260	2	10.8	0.041	48	10 / 16	10 / 16	1.5
135 x 360 x 260	2	10.9	0.041	48	10 / 16	10 / 16	1.5
180 x 360 x 260	2	14.7	0.061	59	25 / 35	16 / 25	1.9
180 x 360 x 260	2	14.9	0.061	59	25 / 35	16 / 25	1.9

Dimensions W x H x D	For dimension drawing, see Section 7	Weight, approx.	Cooling air require- ment	Sound pressure level L_{pA} (1 m)	Power connections DC bus	–Terminals for motor finely stranded/ multi-stranded	Auxiliary current requirement 24 V DC Max. version (max. at 20 V)
mm	No.	kg	m ³ /s	dB	DIN 46 433	mm ²	A
45 x 360 x 260	3	3.0	0.002	18	E-Cu 3 x 10	4 / 4	1.3
67.5 x 360 x 260	3	3.4	0.009	40	E-Cu 3 x 10	4 / 4	1.3
67.5 x 360 x 260	3	3.4	0.009	40	E-Cu 3 x 10	4 / 4	1.3
90 x 360 x 260	3	3.8	0.018	37	E-Cu 3 x 10	4 / 4	1.3
135 x 360 x 260	4	8.8	0.041	48	E-Cu 3 x 10	10 / 16	1.5
135 x 360 x 260	4	8.9	0.041	48	E-Cu 3 x 10	10 / 16	1.5
135 x 360 x 260	4	9.0	0.041	48	E-Cu 3 x 10	10 / 16	1.5
180 x 360 x 260	4	12.7	0.061	59	E-Cu 3 x 10	16 / 25	1.7
180 x 360 x 260	4	12.9	0.061	59	E-Cu 3 x 10	16 / 25	1.7

SIMOVERT MASTERDRIVES Vector Control

Compact and Chassis Units



Air-cooled converters and inverters

Compact and chassis units

Selection and ordering data

Nominal power rating	Rated output current	Base load current	Short-time current ¹⁾	Rated DC link current	Supply current (only for converters)	Converter	Inverter	Power loss at 2.5 kHz		Dimensions W x H x D	For dimension drawing, see Section 7	Weight approx.
								Con-verter	In-verter			
	I_{UN}	I_G	$I_{max.}$			Order No.	Order No.	kW	kW	mm	No.	kg
Supply voltage 3-ph. 380 V to 480 V AC and DC voltage 510 V to 650 V DC												
400 V												
2.2	6.1	5.6	8.3	7.3	6.7	6SE7016-1EA61	6SE7016-1TA61	0.11	0.09	90 x 425 x 350	6	8.5
3	8	7.3	10.9	9.5	8.8	6SE7018-0EA61	6SE7018-0TA61	0.12	0.10	90 x 425 x 350	6	8.5
4	10.2	9.3	13.9	12.1	11.2	6SE7021-0EA61	6SE7021-0TA61	0.16	0.12	90 x 425 x 350	6	8.5
5.5	13.2	12	18.0	15.7	14.5	6SE7021-3EB61	6SE7021-3TB61	0.16	0.13	135 x 425 x 350	6	12.5
7.5	17.5	15.9	23.9	20.8	19.3	6SE7021-8EB61	6SE7021-8TB61	0.21	0.16	135 x 425 x 350	6	12.5
11	25.5	23.2	34.8	30.4	28.1	6SE7022-6EC61	6SE7022-6TC61	0.34	0.27	180 x 600 x 350	6	21
15	34	30.9	46.4	40.5	37.4	6SE7023-4EC61	6SE7023-4TC61	0.47	0.37	180 x 600 x 350	6	21
18.5	37.5	34.1	51.2	44.6	41.3	6SE7023-8ED61	6SE7023-8TD61	0.60	0.50	270 x 600 x 350	6	32
22	47	42.8	64.2	55.9	51.7	6SE7024-7ED61	6SE7024-7TD61	0.71	0.58	270 x 600 x 350	6	32
30	59	53.7	80.5	70.2	64.9	6SE7026-0ED61	6SE7026-0TD61	0.85	0.69	270 x 600 x 350	6	32
37	72	65.5	98.3	85.7	79.2	6SE7027-2ED61	6SE7027-2TD61	1.06	0.85	270 x 600 x 350	6	32
45	92	84	126	110	101	6SE7031-0EE60	6SE7031-0TE60	1.18	1.05	270 x 1050 x 365	8	65
55	124	113	169	148	136	6SE7031-2EF60	6SE7031-2TF60	1.67	1.35	360 x 1050 x 365	8	75
75	146	133	199	174	160	6SE7031-5EF60	6SE7031-5TF60	1.95	1.56	360 x 1050 x 365	8	75
90	186	169	254	221	205	6SE7031-8EF60	6SE7031-8TF60	2.17	1.70	360 x 1050 x 365	8	75
110	210	191	287	250	231	6SE7032-1EG60	6SE7032-1TG60	2.68	2.18	508 x 1450 x 465	8	160
132	260	237	355	309	286	6SE7032-6EG60	6SE7032-6TG60	3.40	2.75	508 x 1450 x 465	8	160
160	315	287	430	375	346	6SE7033-2EG60	6SE7033-2TG60	4.30	3.47	508 x 1450 x 465	8	180
200	370	337	503	440	407	6SE7033-7EG60	6SE7033-7TG60	5.05	4.05	508 x 1450 x 465	8	180
250	510	464	694	607	-	-	6SE7035-1TJ60	-	5.8	800 x 1400 x 565	10	350
250	510	464	694	607	561	6SE7035-1EK60	-	7.1	-	800 x 1750 x 565	12	400
315	590	537	802	702	-	-	6SE7036-0TJ60	-	6.6	800 x 1400 x 565	10	350
315	590	537	802	702	649	6SE7036-0EK60	-	8.2	-	800 x 1750 x 565	12	400
400	690	628	938	821	-	-	6SE7037-0TJ60	-	8.8	800 x 1400 x 565	10	350
400	690	628	938	821	759	6SE7037-0EK60	-	10.2	-	800 x 1750 x 565	12	400
500	860	782	1170	1023	-	-	6SE7038-6TK60	-	11.9	800 x 1750 x 565	10	520
630	1100	1000	1496	1310	-	-	6SE7041-1TK60	-	13.4	800 x 1750 x 565	10	520
710	1300	1183	1768	1547	-	-	6SE7041-3TL60	-	14.5	1100 x 1750 x 565	11	625

1) Short-time current = $1.6 \times I_{UN}$, possible for 30 s to 200 kW.



SIMOVERT MASTERDRIVES Vector Control Compact and Chassis Units

Compact and chassis units

Air-cooled converters and inverters

Cooling air requirement	Sound pressure level L_{pA} (1 m)	Power connections			Auxiliary current requirement			
		Finely stranded	Single- and multi-stranded	Retaining bolt	24 V DC Standard version max. at 20 V	24 V DC Max. version max. at 20 V	1-ph. or 2-ph. 230 V fan for inverters	
	50 Hz						50 Hz	60 Hz
m^3/s	dB	mm^2	mm^2		A	A	A	A
0.009	60	2.5 to 10	2.5 to 16		1.5	2.5	none	none
0.009	60	2.5 to 10	2.5 to 16		1.5	2.5	none	none
0.009	60	2.5 to 10	2.5 to 16		1.5	2.5	none	none
0.022	60	2.5 to 10	2.5 to 16		1.5	2.5	none	none
0.022	60	2.5 to 10	2.5 to 16		1.5	2.5	none	none
0.028	60	2.5 to 16	10 to 25		1.5	2.5	none	none
0.028	60	2.5 to 16	10 to 25		1.5	2.5	none	none
0.054	65	2.5 to 35	10 to 50		1.5	2.5	0.35	0.44
0.054	65	2.5 to 35	10 to 50		1.5	2.5	0.35	0.44
0.054	65	2.5 to 35	10 to 50		1.5	2.5	0.35	0.44
0.054	65	2.5 to 35	10 to 50		1.5	2.5	0.35	0.44
0.10	69		max. 2 x 70	M 10	1.7	2.7	0.35	0.44
0.14	69		max. 2 x 70	M 10	2.1	3.2	0.43	0.60
0.14	69		max. 2 x 70	M 10	2.1	3.2	0.43	0.60
0.14	69		max. 2 x 70	M 10	2.1	3.2	0.43	0.60
0.31	80		max. 2 x 150	M 12	2.3	3.5	0.76	1.1
0.31	80		max. 2 x 150	M 12	2.3	3.5	0.76	1.1
0.41	82		max. 2 x 150	M 12	2.3	3.5	0.95	1.4
0.41	82		max. 2 x 150	M 12	2.3	3.5	0.95	1.4
0.46	77		max. 2 x 300	M 12/M 16	3.0	4.2	2.2	3.4
0.46	77		max. 2 x 300	M 12/M 16	3.1	4.3	–	–
0.46	77		max. 2 x 300	M 12/M 16	3.0	4.2	2.2	3.4
0.46	77		max. 2 x 300	M 12/M 16	3.1	4.3	–	–
0.60	80		max. 4 x 300	M 12/M 16	3.0	4.2	4.5	6.9
0.60	80		max. 4 x 300	M 12/M 16	3.1	4.3	–	–
0.60	80		max. 4 x 300	M 12/M 16	3.0	4.2	4.5	6.9
0.88	82		max. 4 x 300	M 12/M 16	3.0	4.2	12.8	22.0
0.92	89		max. 6 x 300	M 12/M 16	3.0	4.2	12.8	22.0