



Compact
PLUS units

SIMOVERT MASTERDRIVES Motion Control

Selection and ordering data



Converters and inverters

Basic units

Nominal power rating ¹⁾	Selection data				Converter units	Inverter units	Total power loss at 5 kHz/10 kHz ²⁾		Dimensions W x H x D	For dimension drawing, see Section 7	Weight	Cooling-air requirement
	Rated output current $I_{n\ conv}$	Short-time current/Overload current ³⁾ I_{max}	Rated DC link current $I_{DCrated}$	Line current (only for converters)	Order No.	Order No.	Conv.	Inv.	mm x mm x mm (in x in x in)	No.	kg (lb)	m³/s (ft³/s)
kW (HP)	A	A	A	A			kW	kW				
Supply voltage 3-ph. 380 V to 480 V AC and DC voltage 510 V to 650 V DC												
Compact PLUS units												
0.55 (0.75)	1.5	4.5/2.4	–	1.7	▲ 6SE7011-5EP□0 ⁴⁾⁶⁾		0.070		45 x 360 x 260 (1.8 x 14.2 x 10.2)	2	3.4 (7.5)	0.002 (0.071)
1.1 (1.5)	3.0	9.0/4.8	–	3.3	▲ 6SE7013-0EP□0 ⁴⁾⁶⁾		0.104		67.5 x 360 x 260 (2.7 x 14.2 x 10.2)	2	3.9 (8.6)	0.009 (0.318)
1.5 (2)	5.0	15/8	–	5.5	▲ 6SE7015-0EP□0 ⁴⁾⁶⁾		0.150		67.5 x 360 x 260 (2.7 x 14.2 x 10.2)	2	4.1 (9)	0.009 (0.318)
3 (4)	8.0	24/12.8	–	8.8	▲ 6SE7018-0EP□0 ⁴⁾⁶⁾		0.216		90 x 360 x 260 (3.5 x 14.2 x 10.2)	2	4.5 (9.9)	0.018 (0.636)
4 (5)	10	30/16	–	9.7	▲ 6SE7021-0EP□0 ⁴⁾⁶⁾		0.240		90 x 360 x 260 (3.5 x 14.2 x 10.2)	2	4.5 (9.9)	0.018 (0.636)
5.5 (7.5)	14	42/22.4	–	12.6	▲ 6SE7021-4EP□0 ⁴⁾		0.270		135 x 360 x 260 (5.3 x 14.2 x 10.2)	2	10.8 (23.8)	0.042 (1.483)
7.5 (10)	20.5	61.5/32.8	–	16.7	▲ 6SE7022-1EP□0 ⁴⁾		0.340		135 x 360 x 260 (5.3 x 14.2 x 10.2)	2	10.9 (24)	0.042 (1.483)
11 (15)	27	81/43.2	–	23.2	▲ 6SE7022-7EP□0 ⁴⁾		0.470		180 x 360 x 260 (7.1 x 14.2 x 10.2)	2	14.7 (32.4)	0.061 (2.154)
15 (20)	34	102/54.4	–	31.7	▲ 6SE7023-4EP□0 ⁴⁾		0.630		180 x 360 x 260 (7.1 x 14.2 x 10.2)	2	14.9 (32.9)	0.061 (2.154)
0.75 (1)	2.0	6.0/3.2	2.5	–	▲ 6SE7012-0TP□0		0.066		45 x 360 x 260 (1.8 x 14.2 x 10.2)	2	3.0 (6.6)	0.002 (0.071)
1.5 (2)	4.0	12/6.4	5.0	–	▲ 6SE7014-0TP□0		0.086		67.5 x 360 x 260 (2.7 x 14.2 x 10.2)	2	3.4 (7.5)	0.009 (0.318)
2.2 (3)	6.1	18.3/9.6	7.3	–	▲ 6SE7016-0TP□0		0.116		67.5 x 360 x 260 (2.7 x 14.2 x 10.2)	2	3.4 (7.5)	0.009 (0.318)
4 (5)	10.2	30.6/16.3	12.1	–	▲ 6SE7021-0TP□0		0.156		90 x 360 x 260 (3.5 x 14.2 x 10.2)	2	3.8 (8.4)	0.018 (0.636)
5.5 (7.5)	13.2	39.6/21.1	15.7	–	▲ 6SE7021-3TP□0		0.240		135 x 360 x 260 (5.3 x 14.2 x 10.2)	2	8.8 (19.4)	0.042 (1.483)
7.5 (10)	17.5	52.5/28	20.8	–	▲ 6SE7021-8TP□0		0.300		135 x 360 x 260 (5.3 x 14.2 x 10.2)	2	8.9 (19.6)	0.042 (1.483)
11 (15)	25.5	76.5/40.8	30.4	–	▲ 6SE7022-6TP□0		0.410		135 x 360 x 260 (5.3 x 14.2 x 10.2)	2	9.0 (19.8)	0.042 (1.483)
15 (20)	34	102/54.4	40.5	–	▲ 6SE7023-4TP□0		0.560		180 x 360 x 260 (7.1 x 14.2 x 10.2)	2	12.7 (28)	0.061 (2.154)
18.5 (25)	37.5	112.5/60	44.6	–	▲ 6SE7023-8TP□0		0.660		180 x 360 x 260 (7.1 x 14.2 x 10.2)	2	12.9 (28.4)	0.061 (2.154)

▲ "Safe Stop" option possible with code **K80**

SIMOVERT MASTERDRIVES Motion Control	5	5
SIMOVERT MASTERDRIVES Motion Control Performance 2 ⁵⁾	7	7

Power ratings over 250 kW (335 HP) to 710 kW (951 HP) possible on request for Performance 2 units.

Conv. = Converters (AC – AC)
Inv. = Inverters (DC – AC)

- 1) The quoted nominal power ratings for SIMOVERT MASTERDRIVES serve only as a guide for the selection of other components. The exact drive output depends on the motors connected, and this should be taken into account when planning.
- 2) 10 kHz with Compact PLUS units, 5 kHz with compact and chassis units. 2.5 kHz for power ratings over 250 kW (335 HP) only possible on request with Performance 2 units.

- 3) Short time current: $3 \times I_{n\ conv}$ for 250 ms (only for Compact PLUS units)/Overload current: $1.6 \times I_{n\ conv}$ for 30 s. For the 200 kW (268 HP) and 250 kW (335 HP) units, this is 1.36 x the rated output current for 60 s.
- 4) In the Compact PLUS converters, the brake chopper is integrated. The braking resistor should be selected accordingly and must be mounted externally.

- 5) Performance 2 stands for a performance increase by a factor of 2. Doubling of computing power and consequently halving of computing times for all functions.
- 6) A firmware version ≥ 1.63 is an absolute prerequisite for standard units ("5" in digit 11 of the order no.) with option K80.

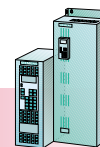
SIMOVERT MASTERDRIVES Motion Control

Selection and ordering data

Converters and inverters



Compact and chassis units



Basic units (continued)

Nominal power rating ¹⁾	Selection data				Converter units	Inverter units	Total power loss at 5 kHz/10 kHz ²⁾		Dimensions W x H x D	For dimension drawing, see Section 7	Weight	Cooling-air requirement
	Rated output current $I_{n\ conv}$	Short-time current/Overload current ³⁾ $I_{max.}$	Rated DC link current $I_{DCrated}$	Line current (only for converters)	Order No.	Order No.	Conv.	Inv.	mm x mm x mm (in x in x in)	No.	kg (lb)	m ³ /s (ft ³ /s)
kW (HP)	A	A	A	A			kW	kW				
Supply voltage 3-ph. 380 V to 480 V AC and DC voltage 510 V to 650 V DC												
Compact units												
2.2 (3)	6.1	9.8	7.3	6.7	■ 6SE7016-1EA□1	● 6SE7016-1TA□1	0.15	0.13	90 x 425 x 350 (3.5 x 16.7 x 13.8)	5	8.5 (18.7)	0.009 (0.318)
3 (4)	8.0	12.8	9.5	8.8	■ 6SE7018-0EA□1	● 6SE7018-0TA□1	0.17	0.15	90 x 425 x 350 (3.5 x 16.7 x 13.8)	5	8.5 (18.7)	0.009 (0.318)
4 (5)	10.2	16.3	12.1	11.2	■ 6SE7021-0EA□1	● 6SE7021-0TA□1	0.21	0.17	90 x 425 x 350 (3.5 x 16.7 x 13.8)	5	8.5 (18.7)	0.009 (0.318)
5.5 (7.5)	13.2	21.1	15.7	14.5	■ 6SE7021-3EB□1	● 6SE7021-3TB□1	0.23	0.20	135 x 425 x 350 (5.3 x 16.7 x 13.8)	5	12.5 (27.6)	0.022 (0.777)
7.5 (10)	17.5	28	20.8	19.3	■ 6SE7021-8EB□1	● 6SE7021-8TB□1	0.30	0.25	135 x 425 x 350 (5.3 x 16.7 x 13.8)	5	12.5 (27.6)	0.022 (0.777)
11 (15)	25.5	40.8	30.4	28.1	■ 6SE7022-6EC□1	● 6SE7022-6TC□1	0.43	0.36	180 x 600 x 350 (7.1 x 23.6 x 13.8)	5	21 (46.3)	0.028 (0.989)
15 (20)	34	54.4	40.5	37.4	■ 6SE7023-4EC□1	● 6SE7023-4TC□1	0.59	0.49	180 x 600 x 350 (7.1 x 23.6 x 13.8)	5	21 (46.3)	0.028 (0.989)
18.5 (25)	37.5	60	44.6	41.3	▲ 6SE7023-8ED□1	● 6SE7023-8TD□1	0.70	0.60	270 x 600 x 350 (10.6 x 23.6 x 13.8)	5	32 (70.5)	0.054 (1.907)
22 (30)	47	75.2	55.9	51.7	▲ 6SE7024-7ED□1	● 6SE7024-7TD□1	0.87	0.74	270 x 600 x 350 (10.6 x 23.6 x 13.8)	5	32 (70.5)	0.054 (1.907)
30 (40)	59	94.4	70.2	64.9	▲ 6SE7026-0ED□1	● 6SE7026-0TD□1	1.02	0.86	270 x 600 x 350 (10.6 x 23.6 x 13.8)	5	32 (70.5)	0.054 (1.907)
37 (50)	72	115.2	85.7	79.2	▲ 6SE7027-2ED□1	● 6SE7027-2TD□1	1.27	1.06	270 x 600 x 350 (10.6 x 23.6 x 13.8)	5	32 (70.5)	0.054 (1.907)

- "Safe Stop" option provided as standard
- ▲ "Safe Stop" option possible with code **K80**
- "Safe Stop" option not possible

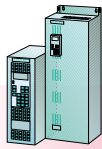
SIMOVERT MASTERDRIVES Motion Control	5	5
SIMOVERT MASTERDRIVES Motion Control Performance 2 ⁴⁾	7	7

Power ratings over 250 kW (335 HP) to 710 kW (951 HP) possible on request for Performance 2 units.

Conv. = Converters (AC – AC)
Inv. = Inverters (DC – AC)

- The quoted nominal power ratings for SIMOVERT MASTERDRIVES serve only as a guide for the selection of other components. The exact drive output depends on the motors connected, and this should be taken into account when planning.
- 10 kHz with Compact PLUS units, 5 kHz with compact and chassis units. 2.5 kHz for power ratings over 250 kW (335 HP) only possible on request with Performance 2 units.

- Short time current: $3 \times I_{n\ conv}$ for 250 ms (only for Compact PLUS units)/Overload current: $1.6 \times I_{n\ conv}$ for 30 s. For the 200 kW (268 HP) and 250 kW (335 HP) units, this is 1.36 x the rated output current for 60 s.
- Performance 2 stands for a performance increase by a factor of 2. Doubling of computing power and consequently halving of computing times for all functions.



Compact and
chassis units

SIMOVERT MASTERDRIVES Motion Control

Selection and ordering data



Converters and inverters

Basic units (continued)

Nominal power rating ¹⁾	Selection data				Converter units	Inverter units	Total power loss at 5 kHz/10 kHz ²⁾		Dimensions W x H x D	For dimension drawing, see Section 7	Weight	Cooling-air requirement
	Rated output current $I_{n\ conv}$	Short-time current/Overload current ³⁾ $I_{max.}$	Rated DC link current $I_{DCrated}$	Line current (only for converters)	Order No.	Order No.	Conv.	Inv.	mm x mm x mm (in x in x in)	No.	kg (lb)	m³/s (ft³/s)
kW (HP)	A	A	A	A			kW	kW				
Supply voltage 3-ph. 380 V to 480 V AC and DC voltage 510 V to 650 V DC												
Chassis units												
45 (60)	92	147	110	101	▲ 6SE7031-0EE□0	▲ 6SE7031-0TE□0	1.38	1.25	270 x 1050 x 365 (10.6 x 41.3 x 14.3)	7	65 (143.3)	0.10 (3.531)
55 (75)	124	198	148	136	▲ 6SE7031-2EF□0	▲ 6SE7031-2TF□0	1.83	1.51	360 x 1050 x 365 (14.1 x 41.3 x 14.3)	7	75 (165.4)	0.14 (4.943)
75 (100)	155	248	184	171	▲ 6SE7031-8EF□0	▲ 6SE7031-8TF□0	2.43	2.04	360 x 1050 x 365 (14.1 x 41.3 x 14.3)	7	75 (165.4)	0.14 (4.943)
90 (120)	175	280	208	192	▲ 6SE7032-1EG□0	▲ 6SE7032-1TG□0	2.77	2.30	508 x 1450 x 465 (20 x 57.1 x 18.3)	7	160 (352.8)	0.31 (0.946)
110 (150)	218	345	254	238	▲ 6SE7032-6EG□0	▲ 6SE7032-6TG□0	3.45	3.00	508 x 1450 x 465 (20 x 57.1 x 18.3)	7	160 (352.8)	0.31 (0.946)
132 (175)	262	419	312	288	▲ 6SE7033-2EG□0	▲ 6SE7033-2TG□0	4.25	3.60	508 x 1450 x 465 (20 x 57.1 x 18.3)	7	180 (396.8)	0.41 (14.477)
160 (215)	308	493	367	339	▲ 6SE7033-7EG□0	▲ 6SE7033-7TG□0	5.30	4.50	508 x 1450 x 465 (20 x 57.1 x 18.3)	7	180 (396.8)	0.41 (14.477)
200 (270)	423	575	–	465	▲ 6SE7035-1EK□0	–	6.30	–	800 x 1750 x 565 (31.5 x 68.9 x 22.2)	9	400 (881.8)	0.46 (16.243)
200 (270)	423	575	504	–	–	▲ 6SE7035-1TJ□0	–	5.20	800 x 1400 x 565 (31.5 x 55.1 x 22.2)	8	350 (771.8)	0.46 (16.243)
250 (335)	491	667	–	539	▲ 6SE7036-0EK□0	–	8.9	–	800 x 1750 x 565 (31.5 x 68.9 x 22.2)	9	400 (881.8)	0.46 (16.243)
250 (335)	491	667	584	–	–	▲ 6SE7036-0TJ□0	–	7.6	800 x 1400 x 565 (31.5 x 55.1 x 22.2)	8	350 (771.8)	0.46 (16.243)

▲ "Safe Stop" option possible with code **K80**

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