

SINAMICS G110D distributed converters ¹⁾

Voltage range 380 ... 500 V 3 AC ²⁾					Absolute losses in standby mode ⁶⁾	Power loss data ³⁾ according to IEC 61800-9-2 at the individual load points								IE class	Comparative losses to the reference converter at the nominal point (90, 100) ⁸⁾
		Rated output ⁴⁾	Rated output current ⁵⁾	Rated apparent power		Partial load 1 (0, 25) ⁷⁾	Partial load 2 (0, 50) ⁷⁾	Partial load 3 (0, 100) ⁷⁾	Partial load 4 (50, 25) ⁷⁾	Partial load 5 (50, 50) ⁷⁾	Partial load 6 (50, 100) ⁷⁾	Partial load 7 (90, 50) ⁷⁾	Rated load (90, 100) ⁷⁾		
						Relative losses P _{L,CDM(xxx)} referring to the converter apparent power S _{r,eqv}									
Article No.	Frame size	kW	A	kVA		W	%	%	%	%	%	%	%		
6SL3511-1PE17-5AM0	FSA	0.75	2.3	1.6	6	2.0	2.2	2.5	2.0	2.2	2.6	2.3	2.7	IE2	28.8
6SL3511-1PE17-5AQ0															
6SL3511-1PE21-5AM0	FSA	1.5	4.3	3.0	6	1.4	1.6	2.0	1.5	1.7	2.2	1.7	2.3	IE2	31.7
6SL3511-1PE21-5AQ0															
6SL3511-1PE23-0AM0	FSA	3	7.7	5.3	6	1.1	1.3	1.7	1.2	1.4	1.8	1.4	2.0	IE2	30.8
6SL3511-1PE23-0AQ0															
6SL3511-1PE24-0AM0	FSB	4	10.2	7.1	6	1.5	1.7	2.1	1.6	1.8	2.2	1.8	2.4	IE2	39.6
6SL3511-1PE25-5AM0	FSC	5.5	13.2	9.1	6	1.2	1.3	1.9	1.2	1.4	2.0	1.5	2.2	IE2	36.8
6SL3511-1PE27-5AM0	FSC	7.5	19	13.2	6	1.0	1.1	1.7	1.0	1.2	1.8	1.3	2.0	IE2	36.5
6SL3511-1PE27-5AQ0															
						Absolute converter losses P _{L,CDM(xxx)}									
					W	W	W	W	W	W	W	W	W		
6SL3511-1PE17-5AM0	FSA	0.75	2.3	1.6	6	32	34	40	32	35	42	36	44	IE2	
6SL3511-1PE17-5AQ0															
6SL3511-1PE21-5AM0	FSA	1.5	4.3	3.0	6	43	48	60	43	50	64	52	68	IE2	
6SL3511-1PE21-5AQ0															
6SL3511-1PE23-0AM0	FSA	3	7.7	5.3	6	60	68	88	62	72	96	76	105	IE2	
6SL3511-1PE23-0AQ0															
6SL3511-1PE24-0AM0	FSB	4	10.2	7.1	6	108	120	148	110	124	157	129	168	IE2	
6SL3511-1PE25-5AM0	FSC	5.5	13.2	9.1	6	105	122	169	107	127	181	133	197	IE2	
6SL3511-1PE27-5AM0	FSC	7.5	19	13.2	6	126	150	219	130	158	237	167	261	IE2	
6SL3511-1PE27-5AQ0															

6SL3511-1PExx-xxxx ■ = Placeholder for "without integrated maintenance switch" („0") and "with integrated maintenance switch" („1")

¹⁾ Pure loss data of the frequency converters without external components such as the braking resistor.

Maximum ambient temperature without derating: 40 °C

²⁾ Reference line voltage for loss data calculation: 400 V 3 AC / 50 Hz.

³⁾ The calculated data include a surcharge of 10%.

All loss values refer to a converter output pulse frequency of 4 kHz.

⁴⁾ Rated output based on the rated output current I_N.

The rated output current I_N is based on the load cycle for high overload HO.

⁵⁾ The rated output current I_N is based on the load cycle for high overload HO.

These current values apply with 400 V and are indicated on the Power Module rating plate.

⁶⁾ In standby mode, the converter does not supply power to the motor (pulse inhibit at the converter is active).

The Control Unit can be supplied via an internal resp. external 24 V electronics power supply.

The stated values apply for an internal 24 V electronics power supply.

In standby mode, the Control Unit is operated via an external 24 V electronics power supply (standby including P_{V 24}).

The losses of the external 24 V electronics power supply must be considered additionally for control cabinet cooling.

⁷⁾ Operating point with relative motor stator frequency in [%] and relative torque current in [%].

⁸⁾ Regarding comparative losses acc. to reference converter at the nominal point (90, 100), relative losses must be used acc. to the formula $[p_{L,CDM(90,100)} / p_{L,RCDM(90,100)}]$.