

Table 5-1 Power modules in the 1-axis version

6SN1123–1AA0 – □=0/1 Internal cooling □=2 Hose cooling 6SN1124–1AA0 – □= External cooling ¹⁾	0HA □	0AA □	0BA □	0CA □	0DA □	0LA □	0EA □	0FA □	0JA □	0KA □	
Mounting frame external cooling 6SN1162–0BA04 –	0AA □			0FA □	0BA □	0CA □		0EA □			
Type of cooling	Non–ventilated		Fan								
For operation of induction motors											
Nominal current I _n	A _{eff}	3	5	8	24	30	45	60	85	120	200
Current for S6–40% I _{S6–40%}	A _{eff}	3	5	10	32	40	60	80	110	150	250
Peak current I _{max}	A _{eff}	3	8	16	32	51	76	102	127	193	257
Inverter pulse frequency f ₀	kHz	3.2									
Derating factor X _L	%	50				55		50		55	
Power loss, total P _{Vtot}	W	30	40	74	260	320	460	685	850	1290	2170
Power loss, internal P _{Vint}	W	12	16	29	89	32	19	30	100	190	325
Power loss, external P _{Vext}	W	18	24	45	171	288	441	655	750	1100	1845
For operation of synchronous motors											
Nominal current I _n	A _{eff}	3	5	9	18	28	42	56	70	100	140
Peak current I _{max}	A _{eff}	6	10	18	36	56	64	112	140	100	210
Inverter pulse frequency f ₀	kHz	4									
Derating factor X _L	%	55			50			55			
Power loss, total P _{Vtot}	W	35	50	90	190	300	460	645	730	1300	1910
Power loss, internal P _{Vint}	W	14	19	35	65	30	25	25	90	170	250
Power loss, external P _{Vext}	W	21	31	55	125	270	435	620	640	1130	1660
General technical data for the regulated infeed											
Input voltage	V DC	Regulated: 600 V or 625 V DC, unregulated: U _{DC link} =U _{Supply} • 1.35									
Maximum output voltage	V _{eff}	U _{a_max} = U _{DC link} /1.4									
Minimum motor current I _{min} ⁵⁾	A	0.6	1.1	1.8	3.6	5.7	8.5	11	14	21	28
Transistor limit current	A	8	15	25	50	80	108	160	200	300	400
Efficiency		0.98									
Module width	mm	50				100	150		300 ²⁾		
Weight, (incl. packing) approx.											
Internal cooling	kg	5,6	5,6	5,7	6,1	8,6	10,3	10,3	17,3	20,7	22,9
External cooling	kg	5,2	5,3	5,6	5,9	8,4	12,2	12,2	16,0	16,3	18,4
Hose cooling	kg								20,4		
Maximum air flow of fan (volumetric flow, unobstructed flow per fan)	m ³ /hr	–	–	19	29	56	2x56	2x56	2x56 ³⁾	400	400
Motor connection		Connectors					Terminals				

- 1) For a module width of 300 mm with external cooling, mounting frames are required that must be separately ordered. The fan assembly required to mount the built-on fan is included in the scope of supply of the mounting frame. The built-on fan must be separately ordered! Mounting frames are also available for smaller module widths. However, these are not required if openings are cut out in the rear cabinet panel for the module heatsinks as shown in this Configuration Manual.
- 2) For 6SN1123-1AA0□–0JA□/0KA□ and 6SN1124-1AA0□–0FA□/–0JA□/–0KA□, the built-on fan 6SN1162-0BA02-0AA2 is required.
- 3) Is applicable for internal cooling. For external cooling with mounted fan 2) 400 m³/h