

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors
Forced ventilation, IP55 degree of protection

Selection and ordering data

Rated speed	Shaft height	Rated power	Rated torque	Rated current	Rated voltage	Rated frequency	Operating speed during field weakening, max. ¹⁾	Speed, max. ²⁾	1PH8 asynchronous motor Forced ventilation	
n_{rated} rpm	SH	P_{rated} kW (HP)	M_{rated} Nm (lb _r -ft)	I_{rated} A	U_{rated} V	f_{rated} Hz	n_2 rpm	n_{max} rpm	Order No.	
Line voltage 400 V 3 AC, Smart/Basic Line Module										
400	160	9.5 (12.74)	227 (167)	30	260	14.3	2150	6500	1PH8163-1 B -... 1	
		13 (17.43)	310 (229)	36	300	14.1	1750	6500	1PH8165-1 B -... 1	
1000	100	3.7 (4.96)	35 (25.8)	10	333	35.8	2550	9000	1PH8103-1 D -... 1	
		6.3 (8.45)	60 (44.3)	17.5	307	35.5	4300	9000	1PH8107-1 D -... 1	
	132	12 (16.1)	115 (84.8)	30	319	35.0	3000	8000	1PH8133-1 D -... 1	
		17 (22.8)	162 (119)	43	307	34.8	4300	8000	1PH8137-1 D -... 1	
160	22 (29.5)	210 (155)	55	300	34.2	2800	6500	1PH8163-1 D -... 1		
	28 (37.55)	267 (197)	71	292	34.2	4600	6500	1PH8165-1 D -... 1		
1500	80	2.8 (3.75)	18 (13.3)	7.5	346	53.3	4700	10000	1PH8083-1 F -... 1	
		3.7 (4.96)	24 (17.7)	10	336	53.2	5200	10000	1PH8087-1 F -... 1	
	100	3.7 (4.96)	24 (17.7)	12.5	265	52.4	5000	9000	1PH8101-1 F -... 1	
		5.5 (7.38)	35 (25.8)	13.5	368	52.4	4200	9000	1PH8103-1 F -... 1	
		7.0 (9.39)	45 (33.2)	17.5	348	51.9	5250	9000	1PH8105-1 F -... 1	
		9.0 (12.1)	57 (42)	23.5	330	52.2	4500	9000	1PH8107-1 F -... 1	
	132	11 (14.75)	70 (51.6)	24	360	51.4	4800	8000	1PH8131-1 F -... 1	
		15 (20.12)	96 (70.8)	34	342	51.3	5500	8000	1PH8133-1 F -... 1	
		18.5 (24.81)	118 (87)	43	330	51.3	6150	8000	1PH8135-1 F -... 1	
		22 (29.5)	140 (103)	56	308	51.3	4300	8000	1PH8137-1 F -... 1	
	160	30 (40.23)	191 (141)	71	319	50.8	3500	6500	1PH8163-1 F -... 1	
		37 (49.62)	236 (174)	78	350	50.8	2800	6500	1PH8165-1 F -... 1	
2000	80	3.7 (4.96)	18 (13.3)	11.6	293	70.2	9200	10000	1PH8083-1 G -... 1	
		4.9 (6.57)	23 (17.0)	14.1	320	69.8	8400	10000	1PH8087-1 G -... 1	
	100	7 (9.39)	33 (24.3)	17.5	345	69.0	6000	9000	1PH8103-1 G -... 1	
		10.5 (14.18)	50 (36.9)	26	355	68.6	4000	9000	1PH8107-1 G -... 1	
	132	20 (26.82)	96 (70.8)	45	350	68.1	4000	8000	1PH8133-1 G -... 1	
		28 (37.55)	134 (98.8)	60	350	68.1	4000	8000	1PH8137-1 G -... 1	
	160	36 (48.28)	172 (127)	83	324	67.5	3000	6500	1PH8163-1 G -... 1	
		41 (54.98)	196 (145)	88	350	67.4	2750	6500	1PH8165-1 G -... 1	
	3000	80	4.1 (5.50)	13 (9.59)	13.6	298	102.6	10000	10000	1PH8083-1 M -... 1
			4.8 (6.44)	15 (11.1)	17.3	284	102.2	10000	10000	1PH8087-1 M -... 1
100		8.4 (11.3)	27 (20.0)	25.7	297	102.1	14250	9000	1PH8103-1 M -... 1	
		12 (16.1)	38 (28.0)	38	294	101.6	16500	9000	1PH8107-1 M -... 1	

For versions, see
 Order No. supplement
 and options on page 5/54.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors
Forced ventilation, IP55 degree of protection

Motor type (repeated)	Power factor $\cos \varphi$	Magnetizing current I_{μ} A	Efficiency η	Moment of inertia J kgm ² (lb _F -in-s ²)	Weight, approx. kg (lb)	Terminal box Type	SINAMICS S120 Motor Module	
							Rated output current ³⁾ I_{rated} A	For additional versions and components see chapter SINAMICS S120 drive system Order No.
1PH8163-1. B...	0.91	8.1	0.823	0.2160 (1.912)	196 (432)	gk863	30	6SL312-1TE23-0AA3
1PH8165-1. B...	0.86	14.9	0.826	0.2320 (2.053)	230 (507)	gk863	45	6SL312-1TE24-5AA3
1PH8103-1. D...	0.82	4.6	0.814	0.0172 (0.152)	51 (112)	gk813	18	6SL312-1TE21-8AA3
1PH8107-1. D...	0.82	8.2	0.834	0.0289 (0.256)	73 (161)	gk813	18	6SL312-1TE21-8AA3
1PH8133-1. D...	0.88	10.1	0.871	0.0760 (0.673)	106 (234)	gk833	30	6SL312-1TE23-0AA3
1PH8137-1. D...	0.88	15.1	0.881	0.1090 (0.965)	141 (311)	gk833	45	6SL312-1TE24-5AA3
1PH8163-1. D...	0.89	17.3	0.909	0.2160 (1.912)	196 (432)	gk863	60	6SL312-1TE26-0AA3
1PH8165-1. D...	0.89	22.2	0.914	0.2320 (2.053)	230 (507)	gk863	85	6SL312-1TE28-5AA3
1PH8083-1. F...	0.80	3.8	0.809	0.0064 (0.057)	32 (70.6)	gk803	9	6SL312-1TE21-0AA3
1PH8087-1. F...	0.81	4.9	0.817	0.0089 (0.079)	39 (86.0)	gk803	18	6SL312-1TE21-8AA3
1PH8101-1. F...	0.80	6.0	0.835	0.0138 (0.122)	42 (92.6)	gk813	18	6SL312-1TE21-8AA3
1PH8103-1. F...	0.80	6.5	0.852	0.0172 (0.152)	51 (112)	gk813	18	6SL312-1TE21-8AA3
1PH8105-1. F...	0.79	8.8	0.867	0.0252 (0.223)	65 (143)	gk813	18	6SL312-1TE21-8AA3
1PH8107-1. F...	0.81	10.8	0.869	0.0289 (0.256)	73 (161)	gk813	30	6SL312-1TE23-0AA3
1PH8131-1. F...	0.84	10.4	0.899	0.0590 (0.522)	89 (196)	gk833	30	6SL312-1TE23-0AA3
1PH8133-1. F...	0.85	14.2	0.899	0.0760 (0.673)	106 (234)	gk833	45	6SL312-1TE24-5AA3
1PH8135-1. F...	0.85	18.1	0.898	0.0940 (0.832)	125 (276)	gk833	45	6SL312-1TE24-5AA3
1PH8137-1. F...	0.84	24.2	0.904	0.1090 (0.965)	141 (311)	gk833	60	6SL312-1TE26-0AA3
1PH8163-1. F...	0.87	25.6	0.923	0.2160 (1.912)	196 (432)	gk863	85	6SL312-1TE28-5AA3
1PH8165-1. F...	0.88	27.0	0.926	0.2320 (2.053)	230 (507)	gk863	85	6SL312-1TE28-5AA3
1PH8083-1. G...	0.79	5.7	0.832	0.0064 (0.057)	32 (70.6)	gk803	18	6SL312-1TE21-8AA3
1PH8087-1. G...	0.78	7.3	0.853	0.0089 (0.079)	39 (86.0)	gk803	18	6SL312-1TE21-8AA3
1PH8103-1. G...	0.79	8.7	0.877	0.0172 (0.152)	51 (112)	gk813	18	6SL312-1TE21-8AA3
1PH8107-1. G...	0.78	12.9	0.897	0.0289 (0.256)	73 (161)	gk813	30	6SL312-1TE23-0AA3
1PH8133-1. G...	0.85	18.1	0.919	0.0760 (0.673)	106 (234)	gk833	45	6SL312-1TE24-5AA3
1PH8137-1. G...	0.87	21.5	0.924	0.1090 (0.965)	141 (311)	gk833	60	6SL312-1TE26-0AA3
1PH8163-1. G...	0.88	28.1	0.929	0.2160 (1.912)	196 (432)	gk863	85	6SL312-1TE28-5AA3
1PH8165-1. G...	0.87	32.4	0.927	0.2320 (2.053)	230 (507)	gk863	85 ⁴⁾	6SL312-1TE28-5AA3
1PH8083-1. M...	0.74	7.3	0.869	0.0064 (0.057)	32 (70.6)	gk803	18	6SL312-1TE21-8AA3
1PH8087-1. M...	0.72	9.6	0.871	0.0089 (0.079)	39 (86.0)	gk803	18	6SL312-1TE21-8AA3
1PH8103-1. M...	0.78	12.2	0.900	0.0172 (0.152)	51 (112)	gk813	30	6SL312-1TE23-0AA3
1PH8107-1. M...	0.76	19.2	0.900	0.0289 (0.256)	73 (161)	gk813	45	6SL312-1TE24-5AA3

Cooling:

Internal air cooling
External air cooling

0
1

¹⁾ n_2 : Max. permissible thermal speed at constant power or speed which is at the voltage limit when $P = P_{\text{rated}}$.

²⁾ n_{max} : Maximum speed that must not be exceeded (applicable to Standard: 14th data position B to D).

³⁾ The rated pulse frequencies must be taken into account. The rated motor data is valid for 4 kHz. For lower power ratings, Motor Modules in blocksize format can be configured as an alternative (levels of output current: 7.7 A/10.2 A/18 A).

⁴⁾ The rated output current of the Motor Module is lower than the rated motor current at 4 kHz.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors Forced ventilation, IP55 degree of protection

Selection and ordering data

Rated speed	Shaft height	Rated power	Rated torque	Rated current	Rated voltage	Rated frequency	Operating speed during field weakening, max. ¹⁾	Speed, max. ²⁾	1PH8 asynchronous motor Forced ventilation	
n_{rated} rpm	SH	P_{rated} kW (HP)	M_{rated} Nm (lb _f -ft)	I_{rated} A	U_{rated} V	f_{rated} Hz	n_2 rpm	n_{max} rpm	Order No.	
Line voltage 400 V 3 AC, Active Line Module										
500	160	12 (16.1)	229 (169)	30	325	17.6	2200	6500	1PH8163-1 B -... 1	
		16 (21.5)	306 (221)	36	365	17.5	1850	6500	1PH8165-1 B -... 1	
1150	100	4.3 (5.77)	36 (26.6)	10	380	40.7	2450	9000	1PH8103-1 D -... 1	
		7.2 (9.66)	60 (44.3)	17.5	348	40.6	4750	9000	1PH8107-1 D -... 1	
	132	13.5 (18.1)	112 (82.6)	29	361	40.0	3000	8000	1PH8133-1 D -... 1	
		19.5 (26.1)	162 (119)	43	350	39.8	4000	8000	1PH8137-1 D -... 1	
	160	25 (33.5)	208 (153)	55	343	39.2	3550	6500	1PH8163-1 D -... 1	
		31 (41.6)	257 (190)	69	333	39.2	4850	6500	1PH8165-1 D -... 1	
1750	80	3.3 (4.43)	18 (13.3)	7.5	398	61.7	5200	10000	1PH8083-1 F -... 1	
		4.3 (5.77)	23 (17.0)	10	396	61.3	5850	10000	1PH8087-1 F -... 1	
	100	4.3 (5.77)	23 (17.0)	12.5	304	60.8	5000	9000	1PH8101-1 F -... 1	
		6.3 (8.45)	34 (25.1)	13.1	412	60.8	4000	9000	1PH8103-1 F -... 1	
		8 (10.7)	44 (32.5)	17.5	400	60.2	5900	9000	1PH8105-1 F -... 1	
		10 (13.4)	55 (40.6)	22	380	60.4	5000	9000	1PH8107-1 F -... 1	
	132	13 (17.4)	71 (52.4)	24	416	59.8	5150	8000	1PH8131-1 F -... 1	
		17.5 (23.5)	96 (70.8)	34	392	59.7	5000	8000	1PH8133-1 F -... 1	
		21.5 (28.8)	117 (86.3)	43	383	59.6	5500	8000	1PH8135-1 F -... 1	
		25 (33.5)	136 (100)	56	353	59.6	5000	8000	1PH8137-1 F -... 1	
		160	34 (45.6)	186 (137)	70	366	59.2	3050	6500	1PH8163-1 F -... 1
			41 (55.0)	224 (165)	76	400	59.1	2650	6500	1PH8165-1 F -... 1
	2300	80	4.1 (5.50)	17 (12.5)	11.3	332	80.0	10000	10000	1PH8083-1 G -... 1
			5.4 (7.24)	22 (16.2)	13.7	353	79.8	9650	10000	1PH8087-1 G -... 1
100		7.5 (10.1)	31 (22.9)	17	382	78.9	6000	9000	1PH8103-1 G -... 1	
		12.0 (16.1)	50 (36.9)	26	406	78.6	4600	9000	1PH8107-1 G -... 1	
132		22.5 (30.2)	93 (68.6)	44	400	78.1	5000	8000	1PH8133-1 G -... 1	
		29 (38.9)	120 (88.5)	56	400	77.9	5000	8000	1PH8137-1 G -... 1	
160		38 (51.0)	158 (116)	78	370	77.4	3200	6500	1PH8163-1 G -... 1	
		44 (59.0)	183 (135)	85	394	77.4	3000	6500	1PH8165-1 G -... 1	
3300		80	4.5 (6.03)	13 (9.59)	13.5	327	112.6	10000	10000	1PH8083-1 M -... 1
			5.2 (6.97)	15 (11.1)	17.1	303	112.3	10000	10000	1PH8087-1 M -... 1
	100	9.3 (12.5)	27 (20.0)	25.7	326	112.1	16000	9000	1PH8103-1 M -... 1	
		13 (17.4)	38 (28.0)	38	314	111.7	18000	9000	1PH8107-1 M -... 1	

For versions, see
Order No. supplement
and options on page 5/54.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors
Forced ventilation, IP55 degree of protection

Motor type (repeated)	Power factor $\cos \varphi$	Magne- tizing current I_{μ} A	Efficiency η	Moment of inertia J kgm ² (lb _F -in-s ²)	Weight, approx. kg (lb)	Terminal box Type	SINAMICS S120 Motor Module	
							Rated output current ³⁾ I_{rated} A	For additional versions and components see chapter SINAMICS S120 drive system Order No.
1PH8163-1. B...	0.90	8.9	0.819	0.2160 (1.912)	196 (432)	gk863	30	6SL312-1TE23-0AA3
1PH8165-1. B...	0.85	14.8	0.830	0.2320 (2.053)	230 (507)	gk863	45	6SL312-1TE24-5AA3
1PH8103-1. D...	0.81	4.8	0.824	0.0172 (0.152)	51 (112)	gk813	18	6SL312-1TE21-8AA3
1PH8107-1. D...	0.82	8.2	0.852	0.0289 (0.256)	73 (161)	gk813	18	6SL312-1TE21-8AA3
1PH8133-1. D...	0.87	10.7	0.884	0.0760 (0.673)	106 (234)	gk833	30	6SL312-1TE23-0AA3
1PH8137-1. D...	0.87	16.1	0.891	0.1090 (0.965)	141 (311)	gk833	45	6SL312-1TE24-5AA3
1PH8163-1. D...	0.88	17.5	0.915	0.2160 (1.912)	196 (432)	gk863	60	6SL312-1TE26-0AA3
1PH8165-1. D...	0.89	20.9	0.921	0.2320 (2.053)	230 (507)	gk863	85	6SL312-1TE28-5AA3
1PH8083-1. F...	0.80	3.8	0.831	0.0064 (0.057)	32 (70.6)	gk803	9	6SL312-1TE21-0AA3
1PH8087-1. F...	0.78	5.3	0.838	0.0089 (0.079)	39 (86.0)	gk803	18	6SL312-1TE21-8AA3
1PH8101-1. F...	0.80	6.0	0.852	0.0138 (0.122)	42 (92.6)	gk813	18	6SL312-1TE21-8AA3
1PH8103-1. F...	0.81	6.0	0.859	0.0172 (0.152)	51 (112)	gk813	18	6SL312-1TE21-8AA3
1PH8105-1. F...	0.78	8.8	0.878	0.0252 (0.223)	65 (143)	gk813	18	6SL312-1TE21-8AA3
1PH8107-1. F...	0.80	10.9	0.878	0.0289 (0.256)	73 (161)	gk813	30	6SL312-1TE23-0AA3
1PH8131-1. F...	0.84	10.3	0.914	0.0590 (0.522)	89 (196)	gk833	30	6SL312-1TE23-0AA3
1PH8133-1. F...	0.85	13.6	0.913	0.0760 (0.673)	106 (234)	gk833	45	6SL312-1TE24-5AA3
1PH8135-1. F...	0.84	18.3	0.909	0.0940 (0.832)	125 (276)	gk833	45	6SL312-1TE24-5AA3
1PH8137-1. F...	0.86	23.1	0.907	0.1090 (0.965)	141 (311)	gk833	60	6SL312-1TE26-0AA3
1PH8163-1. F...	0.87	24.6	0.926	0.2160 (1.912)	196 (432)	gk863	85	6SL312-1TE28-5AA3
1PH8165-1. F...	0.88	25.8	0.934	0.2320 (2.053)	230 (507)	gk863	85	6SL312-1TE28-5AA3
1PH8083-1. G...	0.78	5.7	0.852	0.0064 (0.057)	32 (70.6)	gk803	18	6SL312-1TE21-8AA3
1PH8087-1. G...	0.79	6.8	0.859	0.0089 (0.079)	39 (86.0)	gk803	18	6SL312-1TE21-8AA3
1PH8103-1. G...	0.79	8.1	0.891	0.0172 (0.152)	51 (112)	gk813	18	6SL312-1TE21-8AA3
1PH8107-1. G...	0.78	13.0	0.909	0.0289 (0.256)	73 (161)	gk813	30	6SL312-1TE23-0AA3
1PH8133-1. G...	0.84	18.1	0.933	0.0760 (0.673)	106 (234)	gk833	45	6SL312-1TE24-5AA3
1PH8137-1. G...	0.86	21.9	0.929	0.1090 (0.965)	141 (311)	gk833	60	6SL312-1TE26-0AA3
1PH8163-1. G...	0.87	28.2	0.935	0.2160 (1.912)	196 (432)	gk863	85	6SL312-1TE28-5AA3
1PH8165-1. G...	0.86	31.0	0.932	0.2320 (2.053)	230 (507)	gk863	85	6SL312-1TE28-5AA3
1PH8083-1. M...	0.74	7.3	0.875	0.0064 (0.057)	32 (70.6)	gk803	18	6SL312-1TE21-8AA3
1PH8087-1. M...	0.73	9.2	0.878	0.0089 (0.079)	39 (86.0)	gk803	18	6SL312-1TE21-8AA3
1PH8103-1. M...	0.78	12.2	0.900	0.0172 (0.152)	51 (112)	gk813	30	6SL312-1TE23-0AA3
1PH8107-1. M...	0.78	12.2	0.900	0.0289 (0.256)	73 (161)	gk813	45	6SL312-1TE24-5AA3

Cooling:

Internal air cooling
External air cooling

0
1

¹⁾ n_2 : Max. permissible thermal speed at constant power or speed which is at the voltage limit when $P = P_{\text{rated}}$.

²⁾ n_{max} : Maximum speed that must not be exceeded (applicable to Standard; 14th data position B to D).

³⁾ The rated pulse frequencies must be taken into account. The rated motor data is valid for 4 kHz. For lower power ratings, Motor Modules in blocksize format can be configured as an alternative (levels of output current: 7.7 A/10.2 A/18 A).

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors Forced ventilation, IP55 degree of protection

Selection and ordering data

Rated speed	Shaft height	Rated power	Rated torque	Rated current	Rated voltage	Rated frequency	Operating speed during field weakening, max. ¹⁾	Speed, max. ²⁾	1PH8 asynchronous motor Forced ventilation
n_{rated} rpm	SH	P_{rated} kW (HP)	M_{rated} Nm (lb _f -ft)	I_{rated} A	U_{rated} V	f_{rated} Hz	n_2 rpm	n_{max} rpm	Order No.
Line voltage 480 V 3 AC, Smart/Basic/Active Line Module									
600	160	14.5 (19.4)	231 (170)	30	370	21.0	2150	6500	1PH8163-1 B -... 1
		19 (25.5)	302 (223)	35	420	20.8	1800	6500	1PH8165-1 B -... 1
1350	100	4.7 (6.30)	33 (24.3)	9.7	423	47.3	3500	9000	1PH8103-1 D -... 1
		8 (10.7)	57 (42.0)	17	400	47.1	5045	9000	1PH8107-1 D -... 1
	132	15 (20.1)	106 (78.2)	28	417	46.5	3500	8000	1PH8133-1 D -... 1
		22 (29.5)	156 (115)	42	404	46.4	4000	8000	1PH8137-1 D -... 1
160	28 (37.6)	198 (146)	52	400	45.8	4000	6500	1PH8163-1 D -... 1	
	34 (45.6)	241 (178)	66	387	45.8	5600	6500	1PH8165-1 D -... 1	
2000	80	3.7 (4.96)	18 (13.3)	7.6	447	70.0	5550	10000	1PH8083-1 F -... 1
		4.9 (6.57)	23 (17.0)	10	435	69.9	6100	10000	1PH8087-1 F -... 1
	100	4.7 (6.30)	22 (16.2)	12.5	343	69.0	7500	9000	1PH8101-1 F -... 1
		7 (9.39)	33 (24.3)	12.7	460	69.1	4100	9000	1PH8103-1 F -... 1
		9 (12.1)	43 (31.7)	17	453	68.5	6180	9000	1PH8105-1 F -... 1
		11 (14.8)	53 (39.1)	21.5	428	68.6	5500	9000	1PH8107-1 F -... 1
	132	15 (20.1)	72 (53.1)	24	460	68.2	5300	8000	1PH8131-1 F -... 1
		20 (26.8)	96 (70.8)	34	445	68.0	6200	8000	1PH8133-1 F -... 1
		24 (32.2)	115 (84.8)	43	434	67.9	7100	8000	1PH8135-1 F -... 1
		28 (37.6)	134 (98.8)	55	401	67.9	4000	8000	1PH8137-1 F -... 1
160	37 (49.6)	177 (131)	68	416	67.4	3550	6500	1PH8163-1 F -... 1	
	45 (60.4)	215 (159)	75	440	67.5	3300	6500	1PH8165-1 F -... 1	
2650	80	4.6 (6.17)	17 (12.5)	11.2	376	91.6	10000	10000	1PH8083-1 G -... 1
		6 (8.05)	22 (16.2)	13.6	390	91.6	10000	10000	1PH8087-1 G -... 1
	100	8 (10.7)	29 (21.4)	16	434	90.4	7500	9000	1PH8103-1 G -... 1
		13 (17.4)	47 (34.7)	24	460	90.0	7000	9000	1PH8107-1 G -... 1
	132	24 (32.2)	86 (63.4)	41	456	89.6	7000	8000	1PH8133-1 G -... 1
		30 (40.2)	108 (79.7)	52	460	89.4	4250	8000	1PH8137-1 G -... 1
	160	40 (53.6)	144 (106)	76	390	89.2	3500	6500	1PH8163-1 G -... 1
		50 (67.1)	180 (133)	85	440	89.0	3250	6500	1PH8165-1 G -... 1
3600	80	4.9 (6.57)	13 (9.59)	14	355	122.6	10000	10000	1PH8083-1 M -... 1
		5.7 (7.64)	15 (11.1)	17.1	329	122.4	10000	10000	1PH8087-1 M -... 1
	100	10 (13.4)	27 (19.9)	25.4	355	122.1	17650	9000	1PH8103-1 M -... 1
		14 (18.8)	37 (27.3)	37.5	350	121.6	18000	9000	1PH8107-1 M -... 1

For versions, see
Order No. supplement
and options on page 5/54.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors
Forced ventilation, IP55 degree of protection

Motor type (repeated)	Power factor $\cos \varphi$	Magne- tizing current I_{μ} A	Efficiency η	Moment of inertia J kgm ² (lb _r -in-s ²)	Weight, approx. kg (lb)	Terminal box Type	SINAMICS S120 Motor Module	
							Rated output current ³⁾ I_{rated} A	For additional versions and components see chapter SINAMICS S120 drive system Order No.
1PH8163-1. B...	0.90	8.1	0.851	0.2160 (1.912)	196 (432)	gk863	30	6SL312-1TE23-0AA3
1PH8165-1. B...	0.88	12.0	0.850	0.2320 (2.053)	230 (507)	gk863	45	6SL312-1TE24-5AA3
1PH8103-1. D...	0.82	4.4	0.848	0.0172 (0.152)	51 (112)	gk813	18	6SL312-1TE21-8AA3
1PH8107-1. D...	0.80	8.2	0.867	0.0289 (0.256)	73 (161)	gk813	18	6SL312-1TE21-8AA3
1PH8133-1. D...	0.86	10.7	0.904	0.0760 (0.673)	106 (234)	gk833	30	6SL312-1TE23-0AA3
1PH8137-1. D...	0.86	15.9	0.902	0.1090 (0.965)	141 (311)	gk833	45	6SL312-1TE24-5AA3
1PH8163-1. D...	0.88	17.7	0.924	0.2160 (1.912)	196 (432)	gk863	60	6SL312-1TE26-0AA3
1PH8165-1. D...	0.86	22.5	0.928	0.2320 (2.053)	230 (507)	gk863	85	6SL312-1TE28-5AA3
1PH8083-1. F...	0.79	3.7	0.850	0.0064 (0.057)	32 (70.6)	gk803	9	6SL312-1TE21-0AA3
1PH8087-1. F...	0.80	4.9	0.864	0.0089 (0.079)	39 (86.0)	gk803	18	6SL312-1TE21-8AA3
1PH8101-1. F...	0.79	6.0	0.871	0.0138 (0.122)	42 (92.6)	gk813	18	6SL312-1TE21-8AA3
1PH8103-1. F...	0.81	5.8	0.894	0.0172 (0.152)	51 (112)	gk813	18	6SL312-1TE21-8AA3
1PH8105-1. F...	0.78	8.7	0.911	0.0252 (0.223)	65 (143)	gk813	18	6SL312-1TE21-8AA3
1PH8107-1. F...	0.79	10.8	0.901	0.0289 (0.256)	73 (161)	gk813	30	6SL312-1TE23-0AA3
1PH8131-1. F...	0.86	9.2	0.931	0.0590 (0.522)	89 (196)	gk833	30	6SL312-1TE23-0AA3
1PH8133-1. F...	0.85	13.5	0.933	0.0760 (0.673)	106 (234)	gk833	45	6SL312-1TE24-5AA3
1PH8135-1. F...	0.84	18.1	0.929	0.0940 (0.832)	125 (276)	gk833	45	6SL312-1TE24-5AA3
1PH8137-1. F...	0.84	23.1	0.931	0.1090 (0.965)	141 (311)	gk833	60	6SL312-1TE26-0AA3
1PH8163-1. F...	0.86	24.6	0.932	0.2160 (1.912)	196 (432)	gk863	85	6SL312-1TE28-5AA3
1PH8165-1. F...	0.89	23.6	0.936	0.2320 (2.053)	230 (507)	gk863	85	6SL312-1TE28-5AA3
1PH8083-1. G...	0.78	5.7	0.862	0.0064 (0.057)	32 (70.6)	gk803	18	6SL312-1TE21-8AA3
1PH8087-1. G...	0.79	6.5	0.884	0.0089 (0.079)	39 (86.0)	gk803	18	6SL312-1TE21-8AA3
1PH8103-1. G...	0.78	8.1	0.913	0.0172 (0.152)	51 (112)	gk813	18	6SL312-1TE21-8AA3
1PH8107-1. G...	0.77	12.8	0.932	0.0289 (0.256)	73 (161)	gk813	30	6SL312-1TE23-0AA3
1PH8133-1. G...	0.83	18.1	0.949	0.0760 (0.673)	106 (234)	gk833	45	6SL312-1TE24-5AA3
1PH8137-1. G...	0.83	22.4	0.941	0.1090 (0.965)	141 (311)	gk833	60	6SL312-1TE26-0AA3
1PH8163-1. G...	0.89	23.1	0.936	0.2160 (1.912)	196 (432)	gk863	85	6SL312-1TE28-5AA3
1PH8165-1. G...	0.87	28.9	0.932	0.2320 (2.053)	230 (507)	gk863	85	6SL312-1TE28-5AA3
1PH8083-1. M...	0.74	7.3	0.881	0.0064 (0.057)	32 (70.6)	gk803	18	6SL312-1TE21-8AA3
1PH8087-1. M...	0.73	9.2	0.878	0.0089 (0.079)	39 (86.0)	gk803	18	6SL312-1TE21-8AA3
1PH8103-1. M...	0.77	12.3	0.910	0.0172 (0.152)	51 (112)	gk813	30	6SL312-1TE23-0AA3
1PH8107-1. M...	0.77	12.3	0.910	0.0289 (0.256)	73 (161)	gk813	45	6SL312-1TE24-5AA3

Cooling:

Internal air cooling
External air cooling

0
1

¹⁾ n_2 : Max. permissible thermal speed at constant power or speed which is at the voltage limit when $P = P_{\text{rated}}$.

²⁾ n_{max} : Maximum speed that must not be exceeded (applicable to Standard: 14th data position B to D).

³⁾ The rated pulse frequencies must be taken into account. The rated motor data is valid for 4 kHz. For lower power ratings, Motor Modules in blocksize format can be configured as an alternative (levels of output current: 7.7 A/10.2 A/18 A).

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors Forced ventilation, IP55 degree of protection

Selection and ordering data

Rated speed	Shaft height	Rated power	Rated torque	Rated current	Rated voltage	Rated frequency	Operating speed during field weakening, max. ¹⁾	Speed, max. ²⁾	1PH8 asynchronous motor Forced ventilation
n_{rated} rpm	SH	P_{rated} kW (HP)	M_{rated} Nm (lb _f -ft)	I_{rated} A	U_{rated} V	f_{rated} Hz	n_2 rpm	n_{max} rpm	Order No.
Line voltage 400 V 3 AC, Active Line Module (noise value 77 dB)									
480	355	160 (215)	3183 (2348)	315	400	24.2	1150	2800	1PH8350-1B1-... 0
		190 (255)	3780 (2788)	375	400	24.2	1150	2800	1PH8352-1B1-... 0
		225 (302)	4477 (3302)	420	400	24.2	1150	2800	1PH8354-1B1-... 0
		255 (342)	5073 (3742)	485	400	24.2	1150	2800	1PH8356-1B1-... 0
		295 (396)	5869 (4329)	560	400	24.2	1150	2800	1PH8358-1B1-... 0
640	355	210 (282)	3134 (2312)	405	400	32.2	1150	2800	1PH8350-1Q1-... 0
		250 (335)	3730 (2751)	475	400	32.2	1150	2800	1PH8352-1Q1-... 0
		290 (389)	4327 (3192)	560	400	32.2	1150	2800	1PH8354-1Q1-... 0
		335 (449)	4999 (3687)	640	400	32.2	1150	2800	1PH8356-1Q1-... 0
		385 (516)	5745 (4238)	700	400	32.2	1150	2800	1PH8358-1Q1-... 0
800	355	250 (335)	2984 (2201)	490	400	40.2	1200	2800	1PH8350-1C1-... 0
		305 (409)	3641 (2686)	570	400	40.2	1200	2800	1PH8352-1C1-... 0
		355 (476)	4238 (3126)	650	400	40.2	1200	2800	1PH8354-1C1-... 0
		410 (550)	4894 (3610)	750	400	40.2	1300	2800	1PH8356-1C1-... 0
830	355	475 (637)	5444 (4015)	920	400	41.9	1350	2800	1PH8358-1C1-... 0
1080	355	270 (362)	2388 (1761)	495	400	54.2	1450	2800	1PH8350-1D1-... 0
		330 (443)	2918 (2152)	620	400	54.2	1450	2800	1PH8352-1D1-... 0
		375 (503)	3316 (2446)	670	400	54.2	1400	2800	1PH8354-1D1-... 0
		440 (590)	3891 (2870)	810	400	54.2	1400	2800	1PH8356-1D1-... 0
		470 (630)	4156 (3065)	880	400	54.2	1400	2800	1PH8358-1D1-... 0

For versions, see
Order No. supplement
and options on page 5/58.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors
Forced ventilation, IP55 degree of protection

Motor type (repeated)	Power factor $\cos \varphi$	Magne- tizing current I_{μ} A	Efficiency η	Moment of inertia J kgm ² (lb _F -in-s ²)	Weight, approx. kg (lb)	Terminal box Type	SINAMICS S120 Motor Module	
							Rated output current ³⁾ I_{rated} A	For additional versions and components see chapter SINAMICS S120 drive system Order No.
1PH8350-1. B 1...	0.76	194	0.955	14.74 (130)	2235 (4928)	1XB7712-P01	380	6SL3320-1TE33-8AA3
1PH8352-1. B 1...	0.77	223	0.957	17.40 (154)	2560 (5645)	1XB7712-P01	490	6SL3320-1TE35-0AA3
1PH8354-1. B 1...	0.79	236	0.959	20.66 (183)	2889 (6370)	1XB7712-P03	490	6SL3320-1TE35-0AA3
1PH8356-1. B 1...	0.78	285	0.961	24.22 (214)	3256 (7179)	1XB7712-P03	745	6SL3320-1TE37-5AA3
1PH8358-1. B 1...	0.79	316	0.962	27.79 (246)	3629 (8002)	1XB7712-P03	840	6SL3320-1TE38-4AA3
1PH8350-1. Q 1...	0.77	235	0.961	14.74 (130)	2235 (4928)	1XB7712-P01	490	6SL3320-1TE35-0AA3
1PH8352-1. Q 1...	0.78	267	0.964	17.40 (154)	2560 (5645)	1XB7712-P03	745	6SL3320-1TE37-5AA3
1PH8354-1. Q 1...	0.77	334	0.965	20.66 (183)	2889 (6370)	1XB7712-P03	840	6SL3320-1TE38-4AA3
1PH8356-1. Q 1...	0.78	380	0.966	24.22 (214)	3256 (7179)	1XB7712-P03	840	6SL3320-1TE38-4AA3
1PH8358-1. Q 1...	0.82	359	0.967	27.79 (246)	3629 (8002)	1XB7712-P03	985	6SL3320-1TE41-0AA3
1PH8350-1. C 1...	0.76	294	0.965	14.74 (130)	2235 (4928)	1XB7712-P01	745	6SL3320-1TE37-5AA3
1PH8352-1. C 1...	0.80	302	0.967	17.40 (154)	2560 (5645)	1XB7712-P03	840	6SL3320-1TE38-4AA3
1PH8354-1. C 1...	0.81	328	0.968	20.66 (183)	2889 (6370)	1XB7712-P03	840	6SL3320-1TE38-4AA3
1PH8356-1. C 1...	0.80	410	0.969	24.22 (214)	3256 (7179)	1XB7712-P03	985	6SL3320-1TE41-0AA3
1PH8358-1. C 1...	0.76	567	0.969	27.79 (246)	3629 (8002)	1XB7712-P03	1260	6SL3320-1TE41-2AA3
1PH8350-1. D 1...	0.82	235	0.968	14.74 (130)	2235 (4928)	1XB7712-P03	745	6SL3320-1TE37-5AA3
1PH8352-1. D 1...	0.79	338	0.969	17.40 (154)	2560 (5645)	1XB7712-P03	840	6SL3320-1TE38-4AA3
1PH8354-1. D 1...	0.83	314	0.970	20.66 (183)	2889 (6370)	1XB7712-P03	840 ⁴⁾	6SL3320-1TE38-4AA3
1PH8356-1. D 1...	0.80	433	0.970	24.22 (214)	3256 (7179)	1XB7712-P03	985	6SL3320-1TE41-0AA3
1PH8358-1. D 1...	0.79	489	0.970	27.79 (246)	3629 (8002)	1XB7712-P03	1260	6SL3320-1TE41-2AA3

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¹⁾ n_2 : Max. permissible thermal speed at constant power or speed which is at the voltage limit when $P = P_{\text{rated}}$.

²⁾ n_{max} : Maximum speed that must not be exceeded (applicable to Standard: 14th data position A, B, E or F).

³⁾ The rated pulse frequencies must be taken into account. The rated motor data is valid for 2.5 kHz.

⁴⁾ The rated output current of the Motor Module is lower than the rated motor current at 2.5 kHz.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors Forced ventilation, IP55 degree of protection

Selection and ordering data

Rated speed	Shaft height	Rated power	Rated torque	Rated current	Rated voltage	Rated frequency	Operating speed during field weakening, max. ¹⁾	Speed, max. ²⁾	1PH8 asynchronous motor Forced ventilation
n_{rated} rpm	SH	P_{rated} kW (HP)	M_{rated} Nm (lb _f -ft)	I_{rated} A	U_{rated} V	f_{rated} Hz	n_2 rpm	n_{max} rpm	Order No.
Line voltage 480 V 3 AC, Smart/Basic Line Module (noise value 77 dB)									
550	355	185 (248)	3212 (2369)	320	460	27.7	1400	2800	1PH8350-1■B1■-... 0
		220 (295)	3820 (2818)	375	460	27.7	1400	2800	1PH8352-1■B1■-... 0
		255 (342)	4428 (3266)	420	460	27.7	1400	2800	1PH8354-1■B1■-... 0
		295 (396)	5122 (3778)	490	460	27.7	1400	2800	1PH8356-1■B1■-... 0
		340 (456)	5904 (4355)	560	460	27.7	1400	2800	1PH8358-1■B1■-... 0
750	355	245 (329)	3120 (2301)	405	465	37.7	1400	2800	1PH8350-1■Q1■-... 0
		295 (396)	3756 (2770)	475	465	37.7	1400	2800	1PH8352-1■Q1■-... 0
		340 (456)	4329 (3193)	560	465	37.7	1400	2800	1PH8354-1■Q1■-... 0
		395 (530)	5030 (3710)	640	465	37.7	1400	2800	1PH8356-1■Q1■-... 0
		450 (603)	5730 (4226)	700	465	37.7	1400	2800	1PH8358-1■Q1■-... 0
900	355	280 (375)	2971 (2191)	490	450	45.2	1500	2800	1PH8350-1■C1■-... 0
		340 (456)	3608 (2661)	560	450	45.2	1500	2800	1PH8352-1■C1■-... 0
		400 (536)	4244 (3130)	650	450	45.2	1500	2800	1PH8354-1■C1■-... 0
		460 (617)	4881 (3600)	760	450	45.2	1600	2800	1PH8356-1■C1■-... 0
		515 (691)	5465 (4031)	920	430	45.2	1600	2800	1PH8358-1■C1■-... 0
1250	355	315 (422)	2407 (1775)	495	460	62.7	1800	2800	1PH8350-1■D1■-... 0
		380 (510)	2903 (2141)	620	460	62.7	1800	2800	1PH8352-1■D1■-... 0
		435 (583)	3323 (2451)	670	460	62.7	1700	2800	1PH8354-1■D1■-... 0
		510 (684)	3896 (2874)	810	460	62.7	1700	2800	1PH8356-1■D1■-... 0
		545 (731)	4164 (3071)	880	460	62.7	1700	2800	1PH8358-1■D1■-... 0
Line voltage 480 V 3 AC, Active Line Module (noise value 77 dB)									
600	355	200 (268)	3183 (2348)	315	500	30.2	1400	2800	1PH8350-1■B1■-... 0
		240 (322)	3820 (2818)	375	500	30.2	1400	2800	1PH8352-1■B1■-... 0
		280 (375)	4457 (3287)	420	500	30.2	1400	2800	1PH8354-1■B1■-... 0
		320 (429)	5093 (3757)	485	500	30.2	1400	2800	1PH8356-1■B1■-... 0
		370 (496)	5889 (4344)	560	500	30.2	1400	2800	1PH8358-1■B1■-... 0
800	355	260 (349)	3104 (2290)	405	500	40.2	1400	2800	1PH8350-1■Q1■-... 0
		315 (422)	3760 (2773)	475	500	40.2	1400	2800	1PH8352-1■Q1■-... 0
		365 (489)	4357 (3214)	560	500	40.2	1400	2800	1PH8354-1■Q1■-... 0
		420 (563)	5014 (3698)	640	500	40.2	1400	2800	1PH8356-1■Q1■-... 0
		480 (644)	5730 (4226)	700	500	40.2	1400	2800	1PH8358-1■Q1■-... 0
1000	355	310 (416)	2961 (2184)	490	500	50.2	1500	2800	1PH8350-1■C1■-... 0
		380 (510)	3629 (2677)	570	500	50.2	1500	2800	1PH8352-1■C1■-... 0
		445 (597)	4250 (3135)	650	500	50.2	1500	2800	1PH8354-1■C1■-... 0
		510 (684)	4871 (3593)	750	500	50.2	1600	2800	1PH8356-1■C1■-... 0
		570 (764)	5444 (4015)	920	480	50.2	1600	2800	1PH8358-1■C1■-... 0
1350	355	340 (456)	2405 (1774)	495	500	67.7	1800	2800	1PH8350-1■D1■-... 0
		410 (550)	2900 (2139)	620	500	67.7	1800	2800	1PH8352-1■D1■-... 0
		470 (630)	3325 (2453)	670	500	67.7	1700	2800	1PH8354-1■D1■-... 0
		550 (738)	3891 (2870)	810	500	67.7	1700	2800	1PH8356-1■D1■-... 0
		590 (791)	4174 (3079)	880	500	67.7	1700	2800	1PH8358-1■D1■-... 0

For versions, see
Order No. supplement
and options on page 5/58.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors
Forced ventilation, IP55 degree of protection

Motor type (repeated)	Power factor $\cos \varphi$	Magnetizing current I_{μ} A	Efficiency η	Moment of inertia J kgm ² (lb _F -in-s ²)	Weight, approx. kg (lb)	Terminal box Type	SINAMICS S120 Motor Module	
							Rated output current ³⁾ I_{rated} A	For additional versions and components see chapter SINAMICS S120 drive system Order No.
1PH8350-1. B 1...	0.75	197	0.958	14.74 (130)	2235 (4928)	1XB7712-P01	380	6SL3320-1TE33-8AA3
1PH8352-1. B 1...	0.77	225	0.960	17.40 (154)	2560 (5645)	1XB7712-P01	490	6SL3320-1TE35-0AA3
1PH8354-1. B 1...	0.79	238	0.962	20.66 (183)	2889 (6370)	1XB7712-P03	490	6SL3320-1TE35-0AA3
1PH8356-1. B 1...	0.78	287	0.963	24.22 (214)	3256 (7179)	1XB7712-P03	745	6SL3320-1TE37-5AA3
1PH8358-1. B 1...	0.79	321	0.965	27.79 (246)	3629 (8002)	1XB7712-P03	840	6SL3320-1TE38-4AA3
1PH8350-1. Q 1...	0.77	231	0.964	14.74 (130)	2235 (4928)	1XB7712-P01	490	6SL3320-1TE35-0AA3
1PH8352-1. Q 1...	0.79	262	0.966	17.40 (154)	2560 (5645)	1XB7712-P03	745	6SL3320-1TE37-5AA3
1PH8354-1. Q 1...	0.78	328	0.967	20.66 (183)	2889 (6370)	1XB7712-P03	840	6SL3320-1TE38-4AA3
1PH8356-1. Q 1...	0.78	372	0.968	24.22 (214)	3256 (7179)	1XB7712-P03	840	6SL3320-1TE38-4AA3
1PH8358-1. Q 1...	0.82	351	0.969	27.79 (246)	3629 (8002)	1XB7712-P03	985	6SL3320-1TE41-0AA3
1PH8350-1. C 1...	0.76	295	0.966	14.74 (130)	2235 (4928)	1XB7712-P01	745	6SL3320-1TE37-5AA3
1PH8352-1. C 1...	0.80	303	0.968	17.40 (154)	2560 (5645)	1XB7712-P03	840	6SL3320-1TE38-4AA3
1PH8354-1. C 1...	0.81	328	0.969	20.66 (183)	2889 (6370)	1XB7712-P03	840	6SL3320-1TE38-4AA3
1PH8356-1. C 1...	0.80	410	0.970	24.22 (214)	3256 (7179)	1XB7712-P03	985	6SL3320-1TE41-0AA3
1PH8358-1. C 1...	0.77	557	0.970	27.79 (246)	3629 (8002)	1XB7712-P03	1260	6SL3320-1TE41-2AA3
1PH8350-1. D 1...	0.82	232	0.969	14.74 (130)	2235 (4928)	1XB7712-P03	745	6SL3320-1TE37-5AA3
1PH8352-1. D 1...	0.79	329	0.969	17.40 (154)	2560 (5645)	1XB7712-P03	840	6SL3320-1TE38-4AA3
1PH8354-1. D 1...	0.83	311	0.971	20.66 (183)	2889 (6370)	1XB7712-P03	840 ⁴⁾	6SL3320-1TE38-4AA3
1PH8356-1. D 1...	0.81	427	0.971	24.22 (214)	3256 (7179)	1XB7712-P03	985	6SL3320-1TE41-0AA3
1PH8358-1. D 1...	0.80	484	0.971	27.79 (246)	3629 (8002)	1XB7712-P03	1260	6SL3320-1TE41-2AA3
1PH8350-1. B 1...	0.75	194	0.960	14.74 (130)	2235 (4928)	1XB7712-P01	380	6SL3320-1TE33-8AA3
1PH8352-1. B 1...	0.77	223	0.962	17.40 (154)	2560 (5645)	1XB7712-P01	490	6SL3320-1TE35-0AA3
1PH8354-1. B 1...	0.79	236	0.964	20.66 (183)	2889 (6370)	1XB7712-P03	490	6SL3320-1TE35-0AA3
1PH8356-1. B 1...	0.78	285	0.965	24.22 (214)	3256 (7179)	1XB7712-P03	745	6SL3320-1TE37-5AA3
1PH8358-1. B 1...	0.79	316	0.966	27.79 (246)	3629 (8002)	1XB7712-P03	840	6SL3320-1TE38-4AA3
1PH8350-1. Q 1...	0.77	235	0.965	14.74 (130)	2235 (4928)	1XB7712-P01	490	6SL3320-1TE35-0AA3
1PH8352-1. Q 1...	0.78	267	0.967	17.40 (154)	2560 (5645)	1XB7712-P03	745	6SL3320-1TE37-5AA3
1PH8354-1. Q 1...	0.77	334	0.967	20.66 (183)	2889 (6370)	1XB7712-P03	840	6SL3320-1TE38-4AA3
1PH8356-1. Q 1...	0.78	380	0.968	24.22 (214)	3256 (7179)	1XB7712-P03	840	6SL3320-1TE38-4AA3
1PH8358-1. Q 1...	0.82	359	0.970	27.79 (246)	3629 (8002)	1XB7712-P03	985	6SL3320-1TE41-0AA3
1PH8350-1. C 1...	0.75	294	0.967	14.74 (130)	2235 (4928)	1XB7712-P01	745	6SL3320-1TE37-5AA3
1PH8352-1. C 1...	0.80	302	0.969	17.40 (154)	2560 (5645)	1XB7712-P03	840	6SL3320-1TE38-4AA3
1PH8354-1. C 1...	0.81	328	0.970	20.66 (183)	2889 (6370)	1XB7712-P03	840	6SL3320-1TE38-4AA3
1PH8356-1. C 1...	0.80	410	0.970	24.22 (214)	3256 (7179)	1XB7712-P03	985	6SL3320-1TE41-0AA3
1PH8358-1. C 1...	0.76	567	0.970	27.79 (246)	3629 (8002)	1XB7712-P03	1260	6SL3320-1TE41-2AA3
1PH8350-1. D 1...	0.82	235	0.969	14.74 (130)	2235 (4928)	1XB7712-P03	745	6SL3320-1TE37-5AA3
1PH8352-1. D 1...	0.79	338	0.969	17.40 (154)	2560 (5645)	1XB7712-P03	840	6SL3320-1TE38-4AA3
1PH8354-1. D 1...	0.83	314	0.971	20.66 (183)	2889 (6370)	1XB7712-P03	840 ⁴⁾	6SL3320-1TE38-4AA3
1PH8356-1. D 1...	0.80	433	0.971	24.22 (214)	3256 (7179)	1XB7712-P03	985	6SL3320-1TE41-0AA3
1PH8358-1. D 1...	0.79	489	0.970	27.79 (246)	3629 (8002)	1XB7712-P03	1260	6SL3320-1TE41-2AA3

¹⁾ n_2 : Max. permissible thermal speed at constant power or speed which is at the voltage limit when $P = P_{\text{rated}}$.

²⁾ n_{max} : Maximum speed that must not be exceeded (applicable to Standard: 14th data position A, B, E or F).

³⁾ The rated pulse frequencies must be taken into account. The rated motor data is valid for 2.5 kHz.

⁴⁾ The rated output current of the Motor Module is lower than the rated motor current at 2.5 kHz.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors Forced ventilation, IP55 degree of protection

Selection and ordering data

Rated speed	Shaft height	Rated power	Rated torque	Rated current	Rated voltage	Rated frequency	Operating speed during field weakening, max. ¹⁾	Speed, max. ²⁾	1PH8 asynchronous motor Forced ventilation
n_{rated} rpm	SH	P_{rated} kW (HP)	M_{rated} Nm (lb _r -ft)	I_{rated} A	U_{rated} V	f_{rated} Hz	n_2 rpm	n_{max} rpm	Order No.
Line voltage 690 V 3 AC, Basic Line Module (noise value 77 dB)									
550	355	185 (248)	3212 (2369)	230	635	27.7	1400	2800	1PH8350-1H1-...0
		220 (295)	3820 (2818)	265	635	27.7	1400	2800	1PH8352-1H1-...0
		255 (342)	4428 (3266)	305	635	27.7	1400	2800	1PH8354-1H1-...0
		295 (396)	5122 (3778)	355	635	27.7	1400	2800	1PH8356-1H1-...0
		340 (456)	5904 (4355)	410	635	27.7	1400	2800	1PH8358-1H1-...0
750	355	245 (329)	3120 (2301)	290	650	37.7	1400	2800	1PH8350-1K1-...0
		295 (396)	3756 (2770)	350	650	37.7	1400	2800	1PH8352-1K1-...0
		340 (456)	4329 (3193)	390	650	37.7	1400	2800	1PH8354-1K1-...0
		395 (530)	5030 (3710)	455	650	37.7	1400	2800	1PH8356-1K1-...0
		450 (603)	5730 (4226)	510	650	37.7	1400	2800	1PH8358-1K1-...0
900	355	280 (375)	2971 (2191)	355	620	45.2	1500	2800	1PH8350-1U1-...0
		340 (456)	3608 (2661)	415	620	45.2	1500	2800	1PH8352-1U1-...0
		400 (536)	4244 (3130)	480	620	45.2	1500	2800	1PH8354-1U1-...0
		460 (617)	4881 (3600)	540	620	45.2	1600	2800	1PH8356-1U1-...0
		515 (691)	5465 (4031)	620	620	45.2	1600	2800	1PH8358-1U1-...0
1250	355	315 (422)	2407 (1775)	360	640	62.7	1800	2800	1PH8350-1V1-...0
		380 (510)	2903 (2141)	430	640	62.7	1800	2800	1PH8352-1V1-...0
		435 (583)	3323 (2451)	480	640	62.7	1700	2800	1PH8354-1V1-...0
		510 (684)	3896 (2874)	590	640	62.7	1700	2800	1PH8356-1V1-...0
		545 (731)	4164 (3071)	620	640	62.7	1700	2800	1PH8358-1V1-...0
Line voltage 690 V 3 AC, Active Line Module (noise value 77 dB)									
600	355	200 (268)	3183 (2348)	230	690	30.2	1400	2800	1PH8350-1H1-...0
		240 (322)	3820 (2818)	265	690	30.2	1400	2800	1PH8352-1H1-...0
		280 (375)	4457 (3287)	310	690	30.2	1400	2800	1PH8354-1H1-...0
		320 (429)	5093 (3757)	355	690	30.2	1400	2800	1PH8356-1H1-...0
		370 (496)	5889 (4344)	410	690	30.2	1400	2800	1PH8358-1H1-...0
800	355	260 (349)	3104 (2290)	290	690	40.2	1400	2800	1PH8350-1K1-...0
		315 (422)	3760 (2773)	350	690	40.2	1400	2800	1PH8352-1K1-...0
		365 (489)	4357 (3214)	395	690	40.2	1400	2800	1PH8354-1K1-...0
		420 (563)	5014 (3698)	453	690	40.2	1400	2800	1PH8356-1K1-...0
		480 (644)	5730 (4226)	510	690	40.2	1400	2800	1PH8358-1K1-...0
1000	355	310 (416)	2961 (2184)	355	690	50.2	1500	2800	1PH8350-1U1-...0
		380 (510)	3629 (2677)	415	690	50.2	1500	2800	1PH8352-1U1-...0
		445 (597)	4250 (3135)	480	690	50.2	1500	2800	1PH8354-1U1-...0
		510 (684)	4871 (3593)	540	690	50.2	1600	2800	1PH8356-1U1-...0
		570 (764)	5444 (4015)	610	690	50.2	1600	2800	1PH8358-1U1-...0
1350	355	340 (456)	2405 (1774)	360	690	67.7	1800	2800	1PH8350-1V1-...0
		410 (550)	2900 (2139)	430	690	67.7	1800	2800	1PH8352-1V1-...0
		470 (630)	3325 (2453)	485	690	67.7	1700	2800	1PH8354-1V1-...0
		550 (738)	3891 (2870)	590	690	67.7	1700	2800	1PH8356-1V1-...0
		590 (791)	4174 (3079)	620	690	67.7	1700	2800	1PH8358-1V1-...0

For versions, see
Order No. supplement
and options on page 5/58.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors
Forced ventilation, IP55 degree of protection

Motor type (repeated)	Power factor $\cos \varphi$	Magne- tizing current I_{μ} A	Effi- ciency η	Moment of inertia J kgm ² (lb _F -in-s ²)	Weight, approx. kg (lb)	Terminal box Type	SINAMICS S120 Motor Module	
							Rated output current ³⁾ I_{rated} A	For additional versions and components see chapter SINAMICS S120 drive system Order No.
1PH8350-1. H 1...	0.76	140	0.959	14.74 (130)	2235 (4928)	1XB7712-P01	260 ⁴⁾	6SL3320-1TG32-6AA3
1PH8352-1. H 1...	0.78	151	0.960	17.40 (154)	2560 (5645)	1XB7712-P01	330	6SL3320-1TG33-3AA3
1PH8354-1. H 1...	0.78	178	0.962	20.66 (183)	2889 (6370)	1XB7712-P01	410	6SL3320-1TG34-1AA3
1PH8356-1. H 1...	0.78	211	0.964	24.22 (214)	3256 (7179)	1XB7712-P01	465	6SL3320-1TG34-7AA3
1PH8358-1. H 1...	0.78	247	0.964	27.79 (246)	3629 (8002)	1XB7712-P01	465 ⁴⁾	6SL3320-1TG34-7AA3
1PH8350-1. K 1...	0.78	164	0.964	14.74 (130)	2235 (4928)	1XB7712-P01	410	6SL3320-1TG34-1AA3
1PH8352-1. K 1...	0.77	210	0.965	17.40 (154)	2560 (5645)	1XB7712-P01	465	6SL3320-1TG34-7AA3
1PH8354-1. K 1...	0.79	218	0.967	20.66 (183)	2889 (6370)	1XB7712-P01	465	6SL3320-1TG34-7AA3
1PH8356-1. K 1...	0.80	252	0.968	24.22 (214)	3256 (7179)	1XB7712-P03	575	6SL3320-1TG35-8AA3
1PH8358-1. K 1...	0.81	275	0.969	27.79 (246)	3629 (8002)	1XB7712-P03	735	6SL3320-1TG37-4AA3
1PH8350-1. U 1...	0.75	216	0.966	14.74 (130)	2235 (4928)	1XB7712-P01	465	6SL3320-1TG34-7AA3
1PH8352-1. U 1...	0.79	231	0.968	17.40 (154)	2560 (5645)	1XB7712-P01	575	6SL3320-1TG35-8AA3
1PH8354-1. U 1...	0.79	268	0.969	20.66 (183)	2889 (6370)	1XB7712-P03	575	6SL3320-1TG35-8AA3
1PH8356-1. U 1...	0.81	283	0.970	24.22 (214)	3256 (7179)	1XB7712-P03	735	6SL3320-1TG37-4AA3
1PH8358-1. U 1...	0.80	338	0.971	27.79 (246)	3629 (8002)	1XB7712-P03	810	6SL3320-1TG38-1AA3
1PH8350-1. V 1...	0.81	179	0.969	14.74 (130)	2235 (4928)	1XB7712-P01	465	6SL3320-1TG34-7AA3
1PH8352-1. V 1...	0.82	208	0.970	17.40 (154)	2560 (5645)	1XB7712-P01	575	6SL3320-1TG35-8AA3
1PH8354-1. V 1...	0.83	220	0.971	20.66 (183)	2889 (6370)	1XB7712-P03	575	6SL3320-1TG35-8AA3
1PH8356-1. V 1...	0.80	319	0.971	24.22 (214)	3256 (7179)	1XB7712-P03	735 ⁴⁾	6SL3320-1TG37-4AA3
1PH8358-1. V 1...	0.81	322	0.971	27.79 (246)	3629 (8002)	1XB7712-P03	810	6SL3320-1TG38-1AA3
1PH8350-1. H 1...	0.76	139	0.961	14.74 (130)	2235 (4928)	1XB7712-P01	260 ⁴⁾	6SL3320-1TG32-6AA3
1PH8352-1. H 1...	0.78	149	0.961	17.40 (154)	2560 (5645)	1XB7712-P01	330	6SL3320-1TG33-3AA3
1PH8354-1. H 1...	0.79	176	0.964	20.66 (183)	2889 (6370)	1XB7712-P01	410	6SL3320-1TG34-1AA3
1PH8356-1. H 1...	0.78	209	0.965	24.22 (214)	3256 (7179)	1XB7712-P01	465	6SL3320-1TG34-7AA3
1PH8358-1. H 1...	0.78	242	0.966	27.79 (246)	3629 (8002)	1XB7712-P01	465 ⁴⁾	6SL3320-1TG34-7AA3
1PH8350-1. K 1...	0.78	162	0.965	14.74 (130)	2235 (4928)	1XB7712-P01	410	6SL3320-1TG34-1AA3
1PH8352-1. K 1...	0.77	207	0.966	17.40 (154)	2560 (5645)	1XB7712-P01	465	6SL3320-1TG34-7AA3
1PH8354-1. K 1...	0.80	215	0.968	20.66 (183)	2889 (6370)	1XB7712-P01	465	6SL3320-1TG34-7AA3
1PH8356-1. K 1...	0.80	249	0.969	24.22 (214)	3256 (7179)	1XB7712-P03	575	6SL3320-1TG35-8AA3
1PH8358-1. K 1...	0.81	272	0.970	27.79 (246)	3629 (8002)	1XB7712-P03	735	6SL3320-1TG37-4AA3
1PH8350-1. U 1...	0.75	216	0.967	14.74 (130)	2235 (4928)	1XB7712-P01	465	6SL3320-1TG34-7AA3
1PH8352-1. U 1...	0.78	232	0.968	17.40 (154)	2560 (5645)	1XB7712-P01	575	6SL3320-1TG35-8AA3
1PH8354-1. U 1...	0.79	269	0.969	20.66 (183)	2889 (6370)	1XB7712-P03	575	6SL3320-1TG35-8AA3
1PH8356-1. U 1...	0.81	283	0.971	24.22 (214)	3256 (7179)	1XB7712-P03	735	6SL3320-1TG37-4AA3
1PH8358-1. U 1...	0.80	339	0.971	27.79 (246)	3629 (8002)	1XB7712-P03	810	6SL3320-1TG38-1AA3
1PH8350-1. V 1...	0.81	178	0.969	14.74 (130)	2235 (4928)	1XB7712-P01	465	6SL3320-1TG34-7AA3
1PH8352-1. V 1...	0.82	208	0.970	17.40 (154)	2560 (5645)	1XB7712-P01	575	6SL3320-1TG35-8AA3
1PH8354-1. V 1...	0.84	219	0.971	20.66 (183)	2889 (6370)	1XB7712-P03	575	6SL3320-1TG35-8AA3
1PH8356-1. V 1...	0.80	317	0.970	24.22 (214)	3256 (7179)	1XB7712-P03	735 ⁴⁾	6SL3320-1TG37-4AA3
1PH8358-1. V 1...	0.81	322	0.971	27.79 (246)	3629 (8002)	1XB7712-P03	810	6SL3320-1TG38-1AA3

¹⁾ n_2 : Max. permissible thermal speed at constant power or speed which is at the voltage limit when $P = P_{\text{rated}}$.

²⁾ n_{max} : Maximum speed that must not be exceeded (applicable to Standard: 14th data position A, B, E or F).

³⁾ The rated pulse frequencies must be taken into account. The rated motor data is valid for 2.5 kHz.

⁴⁾ The rated output current of the Motor Module is lower than the rated motor current at 2.5 kHz.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors Forced ventilation, IP23 degree of protection

Selection and ordering data

Rated speed	Shaft height	Rated power	Rated torque	Rated current	Rated voltage	Rated frequency	Operating speed during field weakening, max. ¹⁾	Speed, max. ²⁾	1PH8 asynchronous motor Forced ventilation
n_{rated} rpm	SH	P_{rated} kW (HP)	M_{rated} Nm (lb _f -ft)	I_{rated} A	U_{rated} V	f_{rated} Hz	n_2 rpm	n_{max} rpm	Order No.
Line voltage 400 V 3 AC, Active Line Module (noise value 77 dB)									
480	355	275 (369)	5471 (4035)	495	400	24.4	850	2800	1PH8350-1■B4■-...0
		310 (416)	6168 (4550)	550	400	24.5	850	2800	1PH8351-1■B4■-...0
		370 (496)	7361 (5429)	650	400	24.5	800	2800	1PH8352-1■B4■-...0
		435 (583)	8655 (6384)	750	400	24.5	800	2800	1PH8354-1■B4■-...0
		510 (684)	10147 (7484)	880	400	24.4	700	2800	1PH8356-1■B4■-...0
		585 (784)	11639 (8585)	990	400	24.4	700	2800	1PH8358-1■B4■-...0
640	355	340 (456)	5073 (3742)	600	400	32.4	1100	2800	1PH8350-1■Q4■-...0
		375 (503)	5596 (4128)	660	400	32.4	1100	2800	1PH8351-1■Q4■-...0
		455 (610)	6789 (5008)	790	400	32.4	1000	2800	1PH8352-1■Q4■-...0
		535 (717)	7983 (5888)	930	400	32.4	1000	2800	1PH8354-1■Q4■-...0
		625 (838)	9326 (6879)	1060	400	32.4	950	2800	1PH8356-1■Q4■-...0
		705 (945)	10520 (7760)	1180	400	32.4	950	2800	1PH8358-1■Q4■-...0
800	355	435 (583)	5193 (3830)	770	400	40.4	1200	2800	1PH8350-1■C4■-...0
		490 (657)	5849 (4314)	860	400	40.4	1200	2800	1PH8351-1■C4■-...0
		570 (764)	6804 (5019)	980	400	40.5	1100	2800	1PH8352-1■C4■-...0
		665 (892)	7938 (5855)	1120	400	40.4	1000	2800	1PH8354-1■C4■-...0
		760 (1019)	9073 (6692)	1280	400	40.4	950	2800	1PH8356-1■C4■-...0
830	355	915 (1227)	10486 (7734)	1560	400	42.0	1000	2800	1PH8358-1■C4■-...0
1080	355	485 (650)	4289 (3164)	830	400	54.4	1350	2800	1PH8350-1■D4■-...0
		545 (731)	4819 (3554)	940	400	54.5	1350	2800	1PH8351-1■D4■-...0
		655 (878)	5792 (4272)	1120	400	54.4	1350	2800	1PH8352-1■D4■-...0
		760 (1019)	6720 (4957)	1280	400	54.5	1100	2800	1PH8354-1■D4■-...0
		855 (1147)	7560 (5576)	1440	400	54.4	1100	2800	1PH8356-1■D4■-...0
		985 (1321)	8710 (6424)	1640	400	54.4	1100	2800	1PH8358-1■D4■-...0

For versions, see
Order No. supplement
and options on page 5/58.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors
Forced ventilation, IP23 degree of protection

Motor type (repeated)	Power factor $\cos \varphi$	Magne- tizing current I_{μ} A	Effi- ciency η	Moment of inertia J kgm ² (lb _f -in-s ²)	Weight, approx. kg (lb)	Terminal box Type	SINAMICS S120 Motor Module	
							Rated output current ³⁾ I_{rated} A	For additional versions and components see chapter SINAMICS S120 drive system Order No.
1PH8350-1. B 4...	0.84	194	0.944	14.74 (130)	2235 (4928)	1XB7712-P03	745	6SL3320-1TE37-5AA3
1PH8351-1. B 4...	0.85	194	0.938	14.74 (130)	2235 (4928)	1XB7712-P03	840	6SL3320-1TE38-4AA3
1PH8352-1. B 4...	0.86	223	0.942	17.40 (154)	2560 (5645)	1XB7712-P03	840	6SL3320-1TE38-4AA3
1PH8354-1. B 4...	0.88	236	0.943	20.66 (183)	2889 (6370)	1XB7712-P03	985	6SL3320-1TE41-0AA3
1PH8356-1. B 4...	0.88	285	0.946	24.22 (214)	3256 (7179)	1XB7712-P03	1260	6SL3320-1TE41-2AA3
1PH8358-1. B 4...	0.89	316	0.948	27.79 (246)	3629 (8002)	1XB7712-P03	1260	6SL3320-1TE41-2AA3
1PH8350-1. Q 4...	0.84	235	0.956	14.74 (130)	2235 (4928)	1XB7712-P03	840	6SL3320-1TE38-4AA3
1PH8351-1. Q 4...	0.85	235	0.953	14.74 (130)	2235 (4928)	1XB7712-P03	840	6SL3320-1TE38-4AA3
1PH8352-1. Q 4...	0.86	267	0.955	17.40 (154)	2560 (5645)	1XB7712-P03	985	6SL3320-1TE41-0AA3
1PH8354-1. Q 4...	0.86	334	0.958	20.66 (183)	2889 (6370)	1XB7712-P03	1260	6SL3320-1TE41-2AA3
1PH8356-1. Q 4...	0.87	380	0.959	24.22 (214)	3256 (7179)	1XB7712-P03	1260	6SL3320-1TE41-2AA3
1PH8358-1. Q 4...	0.89	359	0.958	27.79 (246)	3629 (8002)	1XB7820-P00	1405	6SL3320-1TE41-4AA3
1PH8350-1. C 4...	0.84	294	0.961	14.74 (130)	2235 (4928)	1XB7712-P03	985	6SL3320-1TE41-0AA3
1PH8351-1. C 4...	0.85	294	0.958	14.74 (130)	2235 (4928)	1XB7712-P03	985 ⁴⁾	6SL3320-1TE41-0AA3
1PH8352-1. C 4...	0.87	302	0.960	17.40 (154)	2560 (5645)	1XB7712-P03	1260	6SL3320-1TE41-2AA3
1PH8354-1. C 4...	0.88	328	0.961	20.66 (183)	2889 (6370)	1XB7712-P03	1260 ⁴⁾	6SL3320-1TE41-2AA3
1PH8356-1. C 4...	0.88	410	0.964	24.22 (214)	3256 (7179)	1XB7820-P00	1405	6SL3320-1TE41-4AA3
1PH8358-1. C 4...	0.87	567	0.967	27.79 (246)	3629 (8002)	1XB7820-P00	2 × 985	2 × 6SL3320-1TE41-0AA3
1PH8350-1. D 4...	0.86	235	0.965	14.74 (130)	2235 (4928)	1XB7712-P03	985	6SL3320-1TE41-0AA3
1PH8351-1. D 4...	0.86	235	0.963	14.74 (130)	2235 (4928)	1XB7712-P03	1260	6SL3320-1TE41-2AA3
1PH8352-1. D 4...	0.87	338	0.967	17.40 (154)	2560 (5645)	1XB7712-P03	1260 ⁴⁾	6SL3320-1TE41-2AA3
1PH8354-1. D 4...	0.88	314	0.966	20.66 (183)	2889 (6370)	1XB7820-P00	1405	6SL3320-1TE41-4AA3
1PH8356-1. D 4...	0.88	433	0.970	24.22 (214)	3256 (7179)	1XB7820-P00	2 × 985	2 × 6SL3320-1TE41-0AA3
1PH8358-1. D 4...	0.89	489	0.971	27.79 (246)	3629 (8002)	1XB7820-P00	2 × 985 ⁴⁾	2 × 6SL3320-1TE41-0AA3

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¹⁾ n_2 : Max. permissible thermal speed at constant power or speed which is at the voltage limit when $P = P_{\text{rated}}$.

²⁾ n_{max} : Maximum speed that must not be exceeded (applicable to Standard: 14th data position A, B, E or F).

³⁾ The rated pulse frequencies must be taken into account. The rated motor data is valid for 2.5 kHz.

⁴⁾ The rated output current of the Motor Module is lower than the rated motor current at 2.5 kHz.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors Forced ventilation, IP23 degree of protection

Selection and ordering data

Rated speed	Shaft height	Rated power	Rated torque	Rated current	Rated voltage	Rated frequency	Operating speed during field weakening, max. ¹⁾	Speed, max. ²⁾	1PH8 asynchronous motor Forced ventilation
n_{rated} rpm	SH	P_{rated} kW (HP)	M_{rated} Nm (lb _f -ft)	I_{rated} A	U_{rated} V	f_{rated} Hz	n_2 rpm	n_{max} rpm	Order No.
Line voltage 480 V 3 AC, Smart/Basic Line Module (noise value 77 dB)									
550	355	315 (422)	5470 (4035)	490	460	27.9	1100	2800	1PH8350-1■B4■-... 0
		355 (476)	6164 (4547)	550	460	28.0	1100	2800	1PH8351-1■B4■-... 0
		420 (563)	7293 (5379)	640	460	27.9	1000	2800	1PH8352-1■B4■-... 0
		500 (671)	8682 (6404)	750	460	28.0	1000	2800	1PH8354-1■B4■-... 0
		585 (784)	10158 (7493)	870	460	27.9	900	2800	1PH8356-1■B4■-... 0
		670 (898)	11634 (8581)	990	460	27.9	900	2800	1PH8358-1■B4■-... 0
750	355	400 (536)	5093 (3757)	610	465	37.9	1400	2800	1PH8350-1■Q4■-... 0
		440 (590)	5603 (4133)	670	465	37.9	1400	2800	1PH8351-1■Q4■-... 0
		535 (717)	6812 (5025)	800	465	37.9	1300	2800	1PH8352-1■Q4■-... 0
		630 (845)	8022 (5917)	930	465	37.9	1300	2800	1PH8354-1■Q4■-... 0
		730 (979)	9295 (6856)	1080	465	37.9	1200	2800	1PH8356-1■Q4■-... 0
		825 (1106)	10505 (7748)	1200	465	37.9	1200	2800	1PH8358-1■Q4■-... 0
900	355	490 (657)	5199 (3835)	770	450	45.4	1500	2800	1PH8350-1■C4■-... 0
		550 (738)	5836 (4305)	860	450	45.4	1500	2800	1PH8351-1■C4■-... 0
		640 (858)	6791 (5009)	980	450	45.5	1400	2800	1PH8352-1■C4■-... 0
		745 (999)	7905 (5831)	1120	450	45.4	1300	2800	1PH8354-1■C4■-... 0
		855 (1147)	9073 (6692)	1280	450	45.4	1200	2800	1PH8356-1■C4■-... 0
		990 (1328)	10505 (7748)	1560	430	45.4	1200	2800	1PH8358-1■C4■-... 0
1250	355	560 (751)	4278 (3155)	840	460	62.9	1700	2800	1PH8350-1■D4■-... 0
		630 (845)	4813 (3550)	940	460	63.0	1700	2800	1PH8351-1■D4■-... 0
		760 (1019)	5806 (4283)	1120	460	62.9	1700	2800	1PH8352-1■D4■-... 0
		880 (1180)	6723 (4959)	1280	460	63.0	1400	2800	1PH8354-1■D4■-... 0
		990 (1328)	7564 (5579)	1440	460	62.9	1400	2800	1PH8356-1■D4■-... 0
		1140 (1529)	8710 (6424)	1660	460	62.9	1400	2800	1PH8358-1■D4■-... 0

For versions, see
Order No. supplement
and options on page 5/58.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors
Forced ventilation, IP23 degree of protection

Motor type (repeated)	Power factor $\cos \varphi$	Magne- tizing current I_{μ} A	Effi- ciency η	Moment of inertia J kgm ² (lb _f -in-s ²)	Weight, approx. kg (lb)	Terminal box Type	SINAMICS S120 Motor Module	
							Rated output current ³⁾ I_{rated} A	For additional versions and components see chapter SINAMICS S120 drive system Order No.
1PH8350-1. B 4...	0.84	197	0.950	14.74 (130)	2235 (4928)	1XB7712-P03	745	6SL3320-1TE37-5AA3
1PH8351-1. B 4...	0.85	197	0.945	14.74 (130)	2235 (4928)	1XB7712-P03	840	6SL3320-1TE38-4AA3
1PH8352-1. B 4...	0.86	225	0.949	17.40 (154)	2560 (5645)	1XB7712-P03	840	6SL3320-1TE38-4AA3
1PH8354-1. B 4...	0.88	238	0.949	20.66 (183)	2889 (6370)	1XB7712-P03	985	6SL3320-1TE41-0AA3
1PH8356-1. B 4...	0.88	287	0.952	24.22 (214)	3256 (7179)	1XB7712-P03	1260	6SL3320-1TE41-2AA3
1PH8358-1. B 4...	0.88	321	0.953	27.79 (246)	3629 (8002)	1XB7712-P03	1260	6SL3320-1TE41-2AA3
1PH8350-1. Q 4...	0.84	231	0.960	14.74 (130)	2235 (4928)	1XB7712-P03	840	6SL3320-1TE38-4AA3
1PH8351-1. Q 4...	0.85	231	0.958	14.74 (130)	2235 (4928)	1XB7712-P03	840 ⁴⁾	6SL3320-1TE38-4AA3
1PH8352-1. Q 4...	0.86	262	0.959	17.40 (154)	2560 (5645)	1XB7712-P03	985	6SL3320-1TE41-0AA3
1PH8354-1. Q 4...	0.87	328	0.962	20.66 (183)	2889 (6370)	1XB7712-P03	1260	6SL3320-1TE41-2AA3
1PH8356-1. Q 4...	0.87	372	0.963	24.22 (214)	3256 (7179)	1XB7712-P03	1260	6SL3320-1TE41-2AA3
1PH8358-1. Q 4...	0.89	351	0.962	27.79 (246)	3629 (8002)	1XB7820-P00	1405	6SL3320-1TE41-4AA3
1PH8350-1. C 4...	0.84	295	0.964	14.74 (130)	2235 (4928)	1XB7712-P03	985	6SL3320-1TE41-0AA3
1PH8351-1. C 4...	0.85	295	0.961	14.74 (130)	2235 (4928)	1XB7712-P03	985 ⁴⁾	6SL3320-1TE41-0AA3
1PH8352-1. C 4...	0.87	303	0.963	17.40 (154)	2560 (5645)	1XB7712-P03	1260	6SL3320-1TE41-2AA3
1PH8354-1. C 4...	0.88	328	0.964	20.66 (183)	2889 (6370)	1XB7712-P03	1260 ⁴⁾	6SL3320-1TE41-2AA3
1PH8356-1. C 4...	0.88	410	0.966	24.22 (214)	3256 (7179)	1XB7820-P00	1405	6SL3320-1TE41-4AA3
1PH8358-1. C 4...	0.87	557	0.968	27.79 (246)	3629 (8002)	1XB7820-P00	2 × 985	2 × 6SL3320-1TE41-0AA3
1PH8350-1. D 4...	0.86	232	0.968	14.74 (130)	2235 (4928)	1XB7712-P03	985	6SL3320-1TE41-0AA3
1PH8351-1. D 4...	0.86	232	0.966	14.74 (130)	2235 (4928)	1XB7712-P03	1260	6SL3320-1TE41-2AA3
1PH8352-1. D 4...	0.87	329	0.969	17.40 (154)	2560 (5645)	1XB7712-P03	1260 ⁴⁾	6SL3320-1TE41-2AA3
1PH8354-1. D 4...	0.88	311	0.969	20.66 (183)	2889 (6370)	1XB7820-P00	1405	6SL3320-1TE41-4AA3
1PH8356-1. D 4...	0.88	427	0.972	24.22 (214)	3256 (7179)	1XB7820-P00	2 × 985	2 × 6SL3320-1TE41-0AA3
1PH8358-1. D 4...	0.89	484	0.972	27.79 (246)	3629 (8002)	1XB7820-P00	2 × 985 ⁴⁾	2 × 6SL3320-1TE41-0AA3

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¹⁾ n_2 : Max. permissible thermal speed at constant power or speed which is at the voltage limit when $P = P_{\text{rated}}$.

²⁾ n_{max} : Maximum speed that must not be exceeded (applicable to Standard: 14th data position A, B, E or F).

³⁾ The rated pulse frequencies must be taken into account. The rated motor data is valid for 2.5 kHz.

⁴⁾ The rated output current of the Motor Module is lower than the rated motor current at 2.5 kHz.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors Forced ventilation, IP23 degree of protection

Selection and ordering data

Rated speed	Shaft height	Rated power	Rated torque	Rated current	Rated voltage	Rated frequency	Operating speed during field weakening, max. ¹⁾	Speed, max. ²⁾	1PH8 asynchronous motor Forced ventilation
n_{rated} rpm	SH	P_{rated} kW (HP)	M_{rated} Nm (lb _r -ft)	I_{rated} A	U_{rated} V	f_{rated} Hz	n_2 rpm	n_{max} rpm	Order No.
Line voltage 480 V 3 AC, Active Line Module (noise value 77 dB)									
600	355	345 (463)	5491 (4050)	495	500	30.4	1100	2800	1PH8350-1■B4■-...0
		385 (516)	6128 (4520)	550	500	30.5	1100	2800	1PH8351-1■B4■-...0
		460 (617)	7322 (5401)	650	500	30.4	1000	2800	1PH8352-1■B4■-...0
		545 (731)	8675 (6399)	750	500	30.5	1000	2800	1PH8354-1■B4■-...0
		640 (858)	10187 (7514)	880	500	30.4	900	2800	1PH8356-1■B4■-...0
		730 (979)	11619 (8570)	990	500	30.4	900	2800	1PH8358-1■B4■-...0
800	355	425 (570)	5073 (3742)	600	500	40.4	1400	2800	1PH8350-1■Q4■-...0
		470 (630)	5611 (4139)	660	500	40.4	1400	2800	1PH8351-1■Q4■-...0
		570 (764)	6804 (5019)	790	500	40.4	1300	2800	1PH8352-1■Q4■-...0
		670 (898)	7998 (5899)	930	500	40.4	1300	2800	1PH8354-1■Q4■-...0
		780 (1046)	9311 (6868)	1060	500	40.4	1200	2800	1PH8356-1■Q4■-...0
		880 (1180)	10505 (7748)	1180	500	40.4	1200	2800	1PH8358-1■Q4■-...0
1000	355	545 (731)	5205 (3839)	770	500	50.4	1500	2800	1PH8350-1■C4■-...0
		610 (818)	5826 (4297)	860	500	50.4	1500	2800	1PH8351-1■C4■-...0
		710 (952)	6781 (5002)	980	500	50.5	1400	2800	1PH8352-1■C4■-...0
		830 (1113)	7927 (5847)	1120	500	50.4	1300	2800	1PH8354-1■C4■-...0
		950 (1274)	9073 (6692)	1280	500	50.4	1200	2800	1PH8356-1■C4■-...0
		1100 (1475)	10505 (7748)	1560	480	50.4	1200	2800	1PH8358-1■C4■-...0
1350	355	605 (811)	4280 (3157)	830	500	67.9	1700	2800	1PH8350-1■D4■-...0
		680 (912)	4810 (3548)	940	500	68.0	1700	2800	1PH8351-1■D4■-...0
		820 (1100)	5801 (4279)	1120	500	67.9	1700	2800	1PH8352-1■D4■-...0
		950 (1274)	6720 (4957)	1280	500	68.0	1400	2800	1PH8354-1■D4■-...0
		1070 (1435)	7569 (5583)	1440	500	67.9	1400	2800	1PH8356-1■D4■-...0
		1230 (1649)	8701 (6418)	1640	500	67.9	1400	2800	1PH8358-1■D4■-...0

For versions, see
Order No. supplement
and options on page 5/58.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors
Forced ventilation, IP23 degree of protection

Motor type (repeated)	Power factor $\cos \varphi$	Magne- tizing current I_{μ} A	Effi- ciency η	Moment of inertia J kgm ² (lb _f -in-s ²)	Weight, approx. kg (lb)	Terminal box Type	SINAMICS S120 Motor Module	
							Rated output current ³⁾ I_{rated} A	For additional versions and components see chapter SINAMICS S120 drive system Order No.
1PH8350-1. B 4...	0.84	194	0.953	14.74 (130)	2235 (4928)	1XB7712-P03	745	6SL3320-1TE37-5AA3
1PH8351-1. B 4...	0.85	194	0.949	14.74 (130)	2235 (4928)	1XB7712-P03	840	6SL3320-1TE38-4AA3
1PH8352-1. B 4...	0.86	223	0.951	17.40 (154)	2560 (5645)	1XB7712-P03	840	6SL3320-1TE38-4AA3
1PH8354-1. B 4...	0.87	236	0.952	20.66 (183)	2889 (6370)	1XB7712-P03	985	6SL3320-1TE41-0AA3
1PH8356-1. B 4...	0.88	285	0.954	24.22 (214)	3256 (7179)	1XB7712-P03	1260	6SL3320-1TE41-2AA3
1PH8358-1. B 4...	0.88	316	0.956	27.79 (246)	3629 (8002)	1XB7712-P03	1260	6SL3320-1TE41-2AA3
1PH8350-1. Q 4...	0.84	235	0.962	14.74 (130)	2235 (4928)	1XB7712-P03	840	6SL3320-1TE38-4AA3
1PH8351-1. Q 4...	0.85	235	0.960	14.74 (130)	2235 (4928)	1XB7712-P03	840	6SL3320-1TE38-4AA3
1PH8352-1. Q 4...	0.86	267	0.961	17.40 (154)	2560 (5645)	1XB7712-P03	985	6SL3320-1TE41-0AA3
1PH8354-1. Q 4...	0.86	334	0.964	20.66 (183)	2889 (6370)	1XB7712-P03	1260	6SL3320-1TE41-2AA3
1PH8356-1. Q 4...	0.87	380	0.965	24.22 (214)	3256 (7179)	1XB7712-P03	1260	6SL3320-1TE41-2AA3
1PH8358-1. Q 4...	0.89	359	0.964	27.79 (246)	3629 (8002)	1XB7820-P00	1405	6SL3320-1TE41-4AA3
1PH8350-1. C 4...	0.84	294	0.966	14.74 (130)	2235 (4928)	1XB7712-P03	985	6SL3320-1TE41-0AA3
1PH8351-1. C 4...	0.85	294	0.964	14.74 (130)	2235 (4928)	1XB7712-P03	985 ⁴⁾	6SL3320-1TE41-0AA3
1PH8352-1. C 4...	0.86	302	0.965	17.40 (154)	2560 (5645)	1XB7712-P03	1260	6SL3320-1TE41-2AA3
1PH8354-1. C 4...	0.88	328	0.966	20.66 (183)	2889 (6370)	1XB7712-P03	1260 ⁴⁾	6SL3320-1TE41-2AA3
1PH8356-1. C 4...	0.88	410	0.968	24.22 (214)	3256 (7179)	1XB7820-P00	1405	6SL3320-1TE41-4AA3
1PH8358-1. C 4...	0.87	567	0.970	27.79 (246)	3629 (8002)	1XB7820-P00	2 × 985	2 × 6SL3320-1TE41-0AA3
1PH8350-1. D 4...	0.86	235	0.969	14.74 (130)	2235 (4928)	1XB7712-P03	985	6SL3320-1TE41-0AA3
1PH8351-1. D 4...	0.86	235	0.967	14.74 (130)	2235 (4928)	1XB7712-P03	1260	6SL3320-1TE41-2AA3
1PH8352-1. D 4...	0.87	338	0.970	17.40 (154)	2560 (5645)	1XB7712-P03	1260 ⁴⁾	6SL3320-1TE41-2AA3
1PH8354-1. D 4...	0.88	314	0.970	20.66 (183)	2889 (6370)	1XB7820-P00	1405	6SL3320-1TE41-4AA3
1PH8356-1. D 4...	0.88	433	0.973	24.22 (214)	3256 (7179)	1XB7820-P00	2 × 985	2 × 6SL3320-1TE41-0AA3
1PH8358-1. D 4...	0.89	489	0.973	27.79 (246)	3629 (8002)	1XB7820-P00	2 × 985 ⁴⁾	2 × 6SL3320-1TE41-0AA3

¹⁾ n_2 : Max. permissible thermal speed at constant power or speed which is at the voltage limit when $P = P_{\text{rated}}$.

²⁾ n_{max} : Maximum speed that must not be exceeded (applicable to Standard: 14th data position A, B, E or F).

³⁾ The rated pulse frequencies must be taken into account. The rated motor data is valid for 2.5 kHz.

⁴⁾ The rated output current of the Motor Module is lower than the rated motor current at 2.5 kHz.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors Forced ventilation, IP23 degree of protection

Selection and ordering data

Rated speed	Shaft height	Rated power	Rated torque	Rated current	Rated voltage	Rated frequency	Operating speed during field weakening, max. ¹⁾	Speed, max. ²⁾	1PH8 asynchronous motor Forced ventilation
n_{rated} rpm	SH	P_{rated} kW (HP)	M_{rated} Nm (lb _f -ft)	I_{rated} A	U_{rated} V	f_{rated} Hz	n_2 rpm	n_{max} rpm	Order No.
Line voltage 690 V 3 AC, Basic Line Module (noise value 77 dB)									
550	355	315 (422)	5470 (4035)	355	635	28.0	1100	2800	1PH8350-1H4-...0
		355 (476)	6164 (4547)	400	635	28.0	1100	2800	1PH8351-1H4-...0
		420 (563)	7293 (5379)	465	635	28.0	1000	2800	1PH8352-1H4-...0
		500 (671)	8682 (6404)	550	635	28.0	1000	2800	1PH8354-1H4-...0
		585 (784)	10158 (7493)	630	635	27.9	900	2800	1PH8356-1H4-...0
		670 (898)	11634 (8581)	720	635	27.9	900	2800	1PH8358-1H4-...0
750	355	400 (536)	5093 (3757)	435	650	37.9	1400	2800	1PH8350-1K4-...0
		440 (590)	5603 (4133)	475	650	37.9	1400	2800	1PH8351-1K4-...0
		535 (717)	6812 (5025)	580	650	37.9	1300	2800	1PH8352-1K4-...0
		630 (845)	8022 (5917)	660	650	37.9	1300	2800	1PH8354-1K4-...0
		730 (979)	9295 (6856)	760	650	37.9	1200	2800	1PH8356-1K4-...0
		825 (1106)	10505 (7748)	880	650	37.8	1200	2800	1PH8358-1K4-...0
900	355	490 (657)	5199 (3835)	560	620	45.4	1500	2800	1PH8350-1U4-...0
		550 (738)	5836 (4305)	620	620	45.4	1500	2800	1PH8351-1U4-...0
		640 (858)	6791 (5009)	710	620	45.4	1400	2800	1PH8352-1U4-...0
		745 (999)	7905 (5831)	820	620	45.4	1300	2800	1PH8354-1U4-...0
		855 (1147)	9073 (6692)	930	620	45.4	1200	2800	1PH8356-1U4-...0
		990 (1328)	10505 (7748)	1080	620	45.4	1200	2800	1PH8358-1U4-...0
1250	355	560 (751)	4278 (3155)	600	640	63.0	1700	2800	1PH8350-1V4-...0
		630 (845)	4813 (3550)	680	640	63.0	1700	2800	1PH8351-1V4-...0
		760 (1019)	5806 (4283)	810	640	63.0	1700	2800	1PH8352-1V4-...0
		880 (1180)	6723 (4959)	920	640	63.0	1400	2800	1PH8354-1V4-...0
		990 (1328)	7564 (5579)	1040	640	62.9	1400	2800	1PH8356-1V4-...0
		1140 (1529)	8710 (6424)	1180	640	62.9	1400	2800	1PH8358-1V4-...0

For versions, see
Order No. supplement
and options on page 5/58.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors
Forced ventilation, IP23 degree of protection

Motor type (repeated)	Power factor $\cos \varphi$	Magne- tizing current I_{μ} A	Effi- ciency η	Moment of inertia J kgm ² (lb _f -in-s ²)	Weight, approx. kg (lb)	Terminal box Type	SINAMICS S120 Motor Module	
							Rated output current ³⁾ I_{rated} A	For additional versions and components see chapter SINAMICS S120 drive system Order No.
1PH8350-1. H 4...	0.85	140	0.946	14.74 (130)	2235 (4928)	1XB7712-P01	465	6SL3320-1TG34-7AA3
1PH8351-1. H 4...	0.85	140	0.946	14.74 (130)	2235 (4928)	1XB7712-P01	465	6SL3320-1TG34-7AA3
1PH8352-1. H 4...	0.87	151	0.946	17.40 (154)	2560 (5645)	1XB7712-P03	575	6SL3320-1TG35-8AA3
1PH8354-1. H 4...	0.87	178	0.949	20.66 (183)	2889 (6370)	1XB7712-P03	735	6SL3320-1TG37-4AA3
1PH8356-1. H 4...	0.88	211	0.952	24.22 (214)	3256 (7179)	1XB7712-P03	810	6SL3320-1TG38-1AA3
1PH8358-1. H 4...	0.88	247	0.954	27.79 (246)	3629 (8002)	1XB7712-P03	810	6SL3320-1TG38-1AA3
1PH8350-1. K 4...	0.85	164	0.958	14.74 (130)	2235 (4928)	1XB7712-P03	575	6SL3320-1TG35-8AA3
1PH8351-1. K 4...	0.85	164	0.958	14.74 (130)	2235 (4928)	1XB7712-P03	575	6SL3320-1TG35-8AA3
1PH8352-1. K 4...	0.85	210	0.960	17.40 (154)	2560 (5645)	1XB7712-P03	735	6SL3320-1TG37-4AA3
1PH8354-1. K 4...	0.87	218	0.961	20.66 (183)	2889 (6370)	1XB7712-P03	810	6SL3320-1TG38-1AA3
1PH8356-1. K 4...	0.88	252	0.963	24.22 (214)	3256 (7179)	1XB7712-P03	810	6SL3320-1TG38-1AA3
1PH8358-1. K 4...	0.86	275	0.966	27.79 (246)	3629 (8002)	1XB7712-P03	1025	6SL3320-1TG41-0AA3
1PH8350-1. U 4...	0.85	216	0.962	14.74 (130)	2235 (4928)	1XB7712-P03	735	6SL3320-1TG37-4AA3
1PH8351-1. U 4...	0.85	216	0.962	14.74 (130)	2235 (4928)	1XB7712-P03	810	6SL3320-1TG38-1AA3
1PH8352-1. U 4...	0.86	231	0.963	17.40 (154)	2560 (5645)	1XB7712-P03	810	6SL3320-1TG38-1AA3
1PH8354-1. U 4...	0.87	268	0.965	20.66 (183)	2889 (6370)	1XB7712-P03	1025	6SL3320-1TG41-0AA3
1PH8356-1. U 4...	0.88	283	0.966	24.22 (214)	3256 (7179)	1XB7712-P03	1270	6SL3320-1TG41-3AA3
1PH8358-1. U 4...	0.88	338	0.967	27.79 (246)	3629 (8002)	1XB7712-P03	2 × 735	2 × 6SL3320-1TG37-4AA3
1PH8350-1. V 4...	0.86	179	0.966	14.74 (130)	2235 (4928)	1XB7712-P03	735 ⁴⁾	6SL3320-1TG37-4AA3
1PH8351-1. V 4...	0.86	179	0.966	14.74 (130)	2235 (4928)	1XB7712-P03	810	6SL3320-1TG38-1AA3
1PH8352-1. V 4...	0.87	208	0.968	17.40 (154)	2560 (5645)	1XB7712-P03	910 ⁴⁾	6SL3320-1TG38-8AA3
1PH8354-1. V 4...	0.88	220	0.969	20.66 (183)	2889 (6370)	1XB7712-P03	1270	6SL3320-1TG41-3AA3
1PH8356-1. V 4...	0.88	319	0.972	24.22 (214)	3256 (7179)	1XB7712-P03	1270 ⁴⁾	6SL3320-1TG41-3AA3
1PH8358-1. V 4...	0.89	322	0.972	27.79 (246)	3629 (8002)	1XB7820-P00	2 × 810	2 × 6SL3320-1TG38-1AA3

¹⁾ n_2 : Max. permissible thermal speed at constant power or speed which is at the voltage limit when $P = P_{\text{rated}}$.

²⁾ n_{max} : Maximum speed that must not be exceeded (applicable to Standard: 14th data position A, B, E or F).

³⁾ The rated pulse frequencies must be taken into account. The rated motor data is valid for 2.5 kHz.

⁴⁾ The rated output current of the Motor Module is lower than the rated motor current at 2.5 kHz.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors Forced ventilation, IP23 degree of protection

Selection and ordering data

Rated speed	Shaft height	Rated power	Rated torque	Rated current	Rated voltage	Rated frequency	Operating speed during field weakening, max. ¹⁾	Speed, max. ²⁾	1PH8 asynchronous motor Forced ventilation
n_{rated} rpm	SH	P_{rated} kW (HP)	M_{rated} Nm (lb _f -ft)	I_{rated} A	U_{rated} V	f_{rated} Hz	n_2 rpm	n_{max} rpm	Order No.
Line voltage 690 V 3 AC, Active Line Module (noise value 77 dB)									
600	355	345 (463)	5491 (4050)	355	690	30.5	1100	2800	1PH8350-1H4-...0
		385 (516)	6128 (4520)	395	690	30.5	1100	2800	1PH8351-1H4-...0
		460 (617)	7322 (5401)	465	690	30.5	1000	2800	1PH8352-1H4-...0
		545 (731)	8675 (6399)	550	690	30.5	1000	2800	1PH8354-1H4-...0
		640 (858)	10187 (7514)	640	690	30.4	900	2800	1PH8356-1H4-...0
		730 (979)	11619 (8570)	720	690	30.4	900	2800	1PH8358-1H4-...0
800	355	425 (570)	5073 (3742)	435	690	40.4	1400	2800	1PH8350-1K4-...0
		470 (630)	5611 (4139)	480	690	40.4	1400	2800	1PH8351-1K4-...0
		570 (764)	6804 (5019)	580	690	40.4	1300	2800	1PH8352-1K4-...0
		670 (898)	7998 (5899)	660	690	40.4	1300	2800	1PH8354-1K4-...0
		780 (1046)	9311 (6868)	770	690	40.4	1200	2800	1PH8356-1K4-...0
		880 (1180)	10505 (7748)	880	690	40.3	1200	2800	1PH8358-1K4-...0
1000	355	545 (731)	5205 (3839)	560	690	50.4	1500	2800	1PH8350-1U4-...0
		610 (818)	5826 (4297)	620	690	50.4	1500	2800	1PH8351-1U4-...0
		710 (952)	6781 (5002)	710	690	50.4	1400	2800	1PH8352-1U4-...0
		830 (1113)	7927 (5847)	820	690	50.4	1300	2800	1PH8354-1U4-...0
		950 (1274)	9073 (6692)	930	690	50.4	1200	2800	1PH8356-1U4-...0
		1100 (1475)	10505 (7748)	1080	690	50.4	1200	2800	1PH8358-1U4-...0
1350	355	605 (811)	4280 (3157)	600	690	68.0	1700	2800	1PH8350-1V4-...0
		680 (912)	4810 (3548)	680	690	68.0	1700	2800	1PH8351-1V4-...0
		820 (1100)	5801 (4279)	810	690	68.0	1700	2800	1PH8352-1V4-...0
		950 (1274)	6720 (4957)	920	690	68.0	1400	2800	1PH8354-1V4-...0
		1070 (1435)	7569 (5583)	1040	690	67.9	1400	2800	1PH8356-1V4-...0
		1230 (1649)	8701 (6418)	1180	690	67.9	1400	2800	1PH8358-1V4-...0

For versions, see
Order No. supplement
and options on page 5/58.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors
Forced ventilation, IP23 degree of protection

Motor type (repeated)	Power factor $\cos \varphi$	Magne- tizing current I_{μ} A	Effi- ciency η	Moment of inertia J kgm ² (lb _f -in-s ²)	Weight, approx. kg (lb)	Terminal box Type	SINAMICS S120 Motor Module	
							Rated output current ³⁾ I_{rated} A	For additional versions and components see chapter SINAMICS S120 drive system Order No.
1PH8350-1. H 4...	0.85	139	0.949	14.74 (130)	2235 (4928)	1XB7712-P01	465	6SL3320-1TG34-7AA3
1PH8351-1. H 4...	0.85	139	0.949	14.74 (130)	2235 (4928)	1XB7712-P01	465	6SL3320-1TG34-7AA3
1PH8352-1. H 4...	0.87	149	0.949	17.40 (154)	2560 (5645)	1XB7712-P03	575	6SL3320-1TG35-8AA3
1PH8354-1. H 4...	0.87	176	0.952	20.66 (183)	2889 (6370)	1XB7712-P03	735	6SL3320-1TG37-4AA3
1PH8356-1. H 4...	0.88	209	0.955	24.22 (214)	3256 (7179)	1XB7712-P03	810	6SL3320-1TG38-1AA3
1PH8358-1. H 4...	0.88	245	0.957	27.79 (246)	3629 (8002)	1XB7712-P03	810	6SL3320-1TG38-1AA3
1PH8350-1. K 4...	0.85	162	0.959	14.74 (130)	2235 (4928)	1XB7712-P03	575	6SL3320-1TG35-8AA3
1PH8351-1. K 4...	0.85	162	0.959	14.74 (130)	2235 (4928)	1XB7712-P03	575	6SL3320-1TG35-8AA3
1PH8352-1. K 4...	0.86	207	0.961	17.40 (154)	2560 (5645)	1XB7712-P03	735	6SL3320-1TG37-4AA3
1PH8354-1. K 4...	0.87	215	0.962	20.66 (183)	2889 (6370)	1XB7712-P03	810	6SL3320-1TG38-1AA3
1PH8356-1. K 4...	0.88	249	0.964	24.22 (214)	3256 (7179)	1XB7712-P03	810	6SL3320-1TG38-1AA3
1PH8358-1. K 4...	0.86	272	0.967	27.79 (246)	3629 (8002)	1XB7712-P03	1025	6SL3320-1TG41-0AA3
1PH8350-1. U 4...	0.85	216	0.964	14.74 (130)	2235 (4928)	1XB7712-P03	735	6SL3320-1TG37-4AA3
1PH8351-1. U 4...	0.85	216	0.964	14.74 (130)	2235 (4928)	1XB7712-P03	810	6SL3320-1TG38-1AA3
1PH8352-1. U 4...	0.86	232	0.965	17.40 (154)	2560 (5645)	1XB7712-P03	810	6SL3320-1TG38-1AA3
1PH8354-1. U 4...	0.87	269	0.967	20.66 (183)	2889 (6370)	1XB7712-P03	1025	6SL3320-1TG41-0AA3
1PH8356-1. U 4...	0.88	283	0.968	24.22 (214)	3256 (7179)	1XB7712-P03	1270	6SL3320-1TG41-3AA3
1PH8358-1. U 4...	0.88	339	0.969	27.79 (246)	3629 (8002)	1XB7712-P03	2 × 735	2 × 6SL3320-1TG37-4AA3
1PH8350-1. V 4...	0.86	178	0.967	14.74 (130)	2235 (4928)	1XB7712-P03	735 ⁴⁾	6SL3320-1TG37-4AA3
1PH8351-1. V 4...	0.86	178	0.967	14.74 (130)	2235 (4928)	1XB7712-P03	810	6SL3320-1TG38-1AA3
1PH8352-1. V 4...	0.87	208	0.969	17.40 (154)	2560 (5645)	1XB7712-P03	910 ⁴⁾	6SL3320-1TG38-8AA3
1PH8354-1. V 4...	0.88	219	0.969	20.66 (183)	2889 (6370)	1XB7712-P03	1270	6SL3320-1TG41-3AA3
1PH8356-1. V 4...	0.88	317	0.973	24.22 (214)	3256 (7179)	1XB7712-P03	1270 ⁴⁾	6SL3320-1TG41-3AA3
1PH8358-1. V 4...	0.89	322	0.973	27.79 (246)	3629 (8002)	1XB7820-P00	2 × 810	2 × 6SL3320-1TG38-1AA3

¹⁾ n_2 : Max. permissible thermal speed at constant power or speed which is at the voltage limit when $P = P_{\text{rated}}$.

²⁾ n_{max} : Maximum speed that must not be exceeded (applicable to Standard: 14th data position A, B, E or F).

³⁾ The rated pulse frequencies must be taken into account. The rated motor data is valid for 2.5 kHz.

⁴⁾ The rated output current of the Motor Module is lower than the rated motor current at 2.5 kHz.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors Water cooling, IP65 degree of protection

Selection and ordering data

Rated speed	Shaft height	Rated power	Rated torque	Rated current	Rated voltage	Rated frequency	Operating speed during field weakening, max. ¹⁾	Speed, max. ²⁾	1PH8 asynchronous motor Water cooling	
n_{rated} rpm	SH	P_{rated} kW (HP)	M_{rated} Nm lb _f -ft	I_{rated} A	U_{rated} V	f_{rated} Hz	n_2 rpm	n_{max} rpm	Order No.	
Line voltage 400 V 3 AC, Smart/Basic Line Module										
1500	80	3.5 (4.69)	22 (16.2)	8.9	357	54.5	3550	10000	1PH8083-1■F2■-... 1	
		4.6 (6.17)	29 (21.4)	13.7	316	53.3	6000	10000	1PH8087-1■F2■-... 1	
	100	5 (6.71)	32 (23.6)	12.8	357	53.1	2500	9000	1PH8101-1■F2■-... 1	
		7.1 (9.52)	45 (33.2)	19.7	317	53.0	4000	9000	1PH8103-1■F2■-... 1	
		11 (14.8)	70 (51.6)	28.5	340	52.8	3500	9000	1PH8105-1■F2■-... 1	
	132	14 (18.8)	89 (65.6)	43.7	277	53.3	5600	9000	1PH8107-1■F2■-... 1	
		15 (20.1)	96 (70.8)	30	380	52.3	2500	8000	1PH8131-1■F2■-... 1	
		17 (22.8)	108 (79.7)	38	345	51.5	3500	8000	1PH8133-1■F2■-... 1	
		22 (29.5)	140 (103)	51	342	51.5	4000	8000	1PH8135-1■F2■-... 1	
	160	27 (36.2)	172 (127)	67	315	51.6	4000	8000	1PH8137-1■F2■-... 1	
		30 (40.2)	191 (141)	80	289	51.9	5000	8000	1PH8138-1■F2■-... 1	
		37 (49.62)	236 (174)	84	328	51.1	3000	6500	1PH8163-1■F2■-... 1	
		46 (61.7)	293 (216)	104	330	50.9	3050	6500	1PH8165-1■F2■-... 1	
	2000	80	52 (69.7)	331 (224)	116	332	51.2	3050	6500	1PH8166-1■F2■-... 1
			4.3 (5.8)	21 (15.5)	12	322	70.4	7200	10000	1PH8083-1■G2■-... 1
100		6.1 (8.2)	29 (21.4)	17.5	312	70.3	7950	10000	1PH8087-1■G2■-... 1	
		6.4 (8.6)	31 (22.9)	16.8	335	69.8	4000	9000	1PH8101-1■G2■-... 1	
		9.5 (12.7)	45 (33.2)	23.8	343	69.8	3000	9000	1PH8103-1■G2■-... 1	
132		13.0 (17.4)	62 (45.7)	34.5	326	69.3	4000	9000	1PH8105-1■G2■-... 1	
		18 (24.1)	86 (63.4)	40	352	69.1	4000	8000	1PH8131-1■G2■-... 1	
		22 (29.5)	105 (77.4)	52	336	68.2	5000	8000	1PH8133-1■G2■-... 1	
160		29 (38.9)	138 (102)	64	348	68.3	4500	8000	1PH8135-1■G2■-... 1	
		42 (56.3)	201 (148)	93	335	67.6	5000	6500	1PH8163-1■G2■-... 1	
		53 (71.1)	253 (187)	110	352	67.6	3500	6500	1PH8165-1■G2■-... 1	
3000		100	64 (85.8)	306 (221)	125	376	67.8	3000	6500	1PH8166-1■G2■-... 1
			10.6 (14.2)	34 (25.1)	30	309	102.4	11900	9000	1PH8103-1■M2■-... 1
			16.8 (22.5)	53 (39.1)	45	324	102.3	8050	9000	1PH8105-1■M2■-... 1
			18 (24.1)	57 (42.0)	60	264	102.2	17000	9000	1PH8107-1■M2■-... 1

For versions, see
Order No. supplement
and options on page 5/54.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors
Water cooling, IP65 degree of protection

Motor type (repeated)	Power factor $\cos \varphi$	Magne- tizing current I_{μ} A	Effi- ciency η	Moment of inertia J kgm ² (lb _F -in-s ²)	Weight, approx. kg (lb)	Terminal box Type	SINAMICS S120 Motor Module	
							Rated output current ³⁾ I_{rated} A	For additional versions and components see chapter SINAMICS S120 drive system Order No.
1PH8083-1. F 2...	0.84	3.6	0.784	0.0064 (0.057)	36 (79.4)	gk803	9	6SL312-1TE21-0AA3
1PH8087-1. F 2...	0.78	7.2	0.814	0.0089 (0.079)	44 (97.0)	gk803	18	6SL312-1TE21-8AA3
1PH8101-1. F 2...	0.81	6.0	0.813	0.0138 (0.122)	51 (112)	gk823	18	6SL312-1TE21-8AA3
1PH8103-1. F 2...	0.82	8.6	0.827	0.0172 (0.152)	60 (132)	gk823	30	6SL312-1TE23-0AA3
1PH8105-1. F 2...	0.81	13.3	0.843	0.0252 (0.223)	74 (163)	gk823	30	6SL312-1TE23-0AA3
1PH8107-1. F 2...	0.83	17.8	0.829	0.0289 (0.256)	83 (183)	gk823	45	6SL312-1TE24-5AA3
1PH8131-1. F 2...	0.89	9.2	0.883	0.0590 (0.522)	105 (232)	gk843	30	6SL312-1TE23-0AA3
1PH8133-1. F 2...	0.86	14.2	0.897	0.0760 (0.673)	123 (271)	gk843	45	6SL312-1TE24-5AA3
1PH8135-1. F 2...	0.85	20.3	0.901	0.0940 (0.832)	141 (311)	gk843	60	6SL312-1TE26-0AA3
1PH8137-1. F 2...	0.86	25.3	0.900	0.1090 (0.965)	157 (346)	gk843	85	6SL312-1TE28-5AA3
1PH8138-1. F 2...	0.88	27.1	0.882	0.1090 (0.965)	157 (346)	gk843	85	6SL312-1TE28-5AA3
1PH8163-1. F 2...	0.88	27.4	0.916	0.2160 (1.912)	229 (505)	gk873	85	6SL312-1TE28-5AA3
1PH8165-1. F 2...	0.87	37.2	0.930	0.2320 (2.053)	264 (582)	gk873	132	6SL312-1TE31-3AA3
1PH8166-1. F 2...	0.88	36.7	0.936	0.2320 (2.053)	269 (593)	gk873	132	6SL312-1TE31-3AA3
1PH8083-1. G 2...	0.80	5.9	0.833	0.0064 (0.057)	36 (79.4)	gk803	18	6SL312-1TE21-8AA3
1PH8087-1. G 2...	0.80	8.4	0.843	0.0089 (0.079)	44 (97.0)	gk803	18	6SL312-1TE21-8AA3
1PH8101-1. G 2...	0.81	7.6	0.857	0.0138 (0.122)	51 (112)	gk823	18	6SL312-1TE21-8AA3
1PH8103-1. G 2...	0.82	10.3	0.857	0.0172 (0.152)	60 (132)	gk823	30	6SL312-1TE23-0AA3
1PH8105-1. G 2...	0.81	15.6	0.879	0.0252 (0.223)	74 (163)	gk823	45	6SL312-1TE24-5AA3
1PH8131-1. G 2...	0.85	15.5	0.908	0.0590 (0.522)	105 (232)	gk843	45	6SL312-1TE24-5AA3
1PH8133-1. G 2...	0.84	22.2	0.909	0.0760 (0.673)	123 (271)	gk843	60	6SL312-1TE26-0AA3
1PH8135-1. G 2...	0.86	23.9	0.924	0.0940 (0.832)	141 (311)	gk843	85	6SL312-1TE28-5AA3
1PH8163-1. G 2...	0.88	30.8	0.937	0.2160 (1.912)	229 (505)	gk873	132	6SL312-1TE31-3AA3
1PH8165-1. G 2...	0.89	32.1	0.938	0.2320 (2.053)	264 (582)	gk873	132	6SL312-1TE31-3AA3
1PH8166-1. G 2...	0.88	39.3	0.937	0.2320 (2.053)	269 (593)	gk873	132	6SL312-1TE31-3AA3
1PH8103-1. M 2...	0.80	13.0	0.900	0.0172 (0.152)	60 (132)	gk823	30	6SL312-1TE23-0AA3
1PH8105-1. M 2...	0.80	20.3	0.900	0.0252 (0.223)	74 (163)	gk823	45	6SL312-1TE24-5AA3
1PH8107-1. M 2...	0.80	26.0	0.900	0.0289 (0.256)	83 (183)	gk823	60	6SL312-1TE26-0AA3

Cooling:
Internal air cooling
External air cooling

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- ¹⁾ n_2 : Max. permissible thermal speed at constant power or speed which is at the voltage limit when $P = P_{rated}$.
²⁾ n_{max} : Maximum speed that must not be exceeded (applicable to Standard: 14th data position B to D).
³⁾ The rated pulse frequencies must be taken into account. The rated pulse data is valid for 4 kHz.
 For lower power ratings, Motor Modules in blocksize format can be configured as an alternative (levels of output current: 7.7 A/10.2 A/18 A).

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors Water cooling, IP65 degree of protection

Selection and ordering data

Rated speed	Shaft height	Rated power	Rated torque	Rated current	Rated voltage	Rated frequency	Operating speed during field weakening, max. ¹⁾	Speed, max. ²⁾	1PH8 asynchronous motor Water cooling	
n_{rated} rpm	SH	P_{rated} kW (HP)	M_{rated} Nm (lb _f -ft)	I_{rated} A	U_{rated} V	f_{rated} Hz	n_2 rpm	n_{max} rpm	Order No.	
Line voltage 400 V 3 AC, Active Line Module										
1750	80	4.0 (5.36)	22 (16.2)	8.7	416	62.4	4100	10000	1PH8083-1F2-... 1	
		5.4 (7.24)	29 (21.4)	13.7	358	61.8	6600	10000	1PH8087-1F2-... 1	
	100	5.8 (7.78)	32 (23.6)	12.8	400	61.7	2500	9000	1PH8101-1F2-... 1	
		8.2 (11.0)	45 (33.2)	19.7	364	61.4	5000	9000	1PH8103-1F2-... 1	
		12.5 (16.8)	68 (50.2)	28.5	380	61.2	3400	9000	1PH8105-1F2-... 1	
	132	15.5 (20.8)	85 (62.7)	42	314	61.4	4500	9000	1PH8107-1F2-... 1	
		17 (22.8)	93 (68.6)	30	425	60.7	2500	8000	1PH8131-1F2-... 1	
		19.5 (26.1)	106 (78.2)	38	403	59.8	3500	8000	1PH8133-1F2-... 1	
		25.5 (34.2)	139 (103)	51	395	59.8	4000	8000	1PH8135-1F2-... 1	
	160	31.5 (42.2)	172 (127)	67	365	59.9	4500	8000	1PH8137-1F2-... 1	
		33 (44.3)	180 (133)	77	332	60.0	5000	8000	1PH8138-1F2-... 1	
		43 (57.7)	235 (173)	84	380	59.4	3500	6500	1PH8163-1F2-... 1	
		53 (71.1)	289 (213)	104	374	59.3	3050	6500	1PH8165-1F2-... 1	
	1750	61 (81.8)	333 (246)	116	381	59.5	3050	6500	1PH8166-1F2-... 1	
		2300	80	4.9 (6.57)	20 (14.8)	12	362	80.5	8150	10000
7.0 (9.39)			29 (21.4)	17.7	355	80.3	8850	10000	1PH8087-1G2-... 1	
100	7.3 (9.79)	30 (22.1)	16.8	382	79.7	5000	9000	1PH8101-1G2-... 1		
	10.9 (14.6)	45 (33.2)	23.8	390	79.8	3000	9000	1PH8103-1G2-... 1		
	15 (20.1)	62 (45.7)	34	370	79.3	3500	9000	1PH8105-1G2-... 1		
132	20 (26.8)	83 (61.2)	39	400	78.5	4000	8000	1PH8131-1G2-... 1		
	25 (33.5)	104 (76.7)	52	373	78.3	6000	8000	1PH8133-1G2-... 1		
	31 (41.6)	129 (95.2)	61	397	78.1	4500	8000	1PH8135-1G2-... 1		
160	48 (64.4)	199 (147)	93	382	77.6	4000	6500	1PH8163-1G2-... 1		
	60 (80.5)	249 (184)	107	410	77.6	3000	6500	1PH8165-1G2-... 1		
	72 (96.6)	299 (221)	124	420	77.8	3000	6500	1PH8166-1G2-... 1		
3300	100	11.7 (15.7)	34 (25.1)	30	340	112.4	13550	9000	1PH8103-1M2-... 1	
		18.5 (24.81)	54 (39.8)	45	355	112.4	9050	9000	1PH8105-1M2-... 1	
		20 (26.82)	58 (42.8)	60	290	112.6	18050	9000	1PH8107-1M2-... 1	

For versions, see
Order No. supplement
and options on page 5/54.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors
Water cooling, IP65 degree of protection

Motor type (repeated)	Power factor $\cos \varphi$	Magne- tizing current I_{μ} A	Effi- ciency η	Moment of inertia J kgm ² (lb _F -in-s ²)	Weight, approx. kg (lb)	Terminal box Type	SINAMICS S120 Motor Module	
							Rated output current ³⁾ I_{rated} A	For additional versions and components see chapter SINAMICS S120 drive system Order No.
1PH8083-1. F 2...	0.82	4.0	0.808	0.0064 (0.057)	36 (79.4)	gk803	9	6SL312-1TE21-0AA3
1PH8087-1. F 2...	0.80	6.8	0.831	0.0089 (0.079)	44 (97.0)	gk803	18	6SL312-1TE21-8AA3
1PH8101-1. F 2...	0.83	5.4	0.834	0.0138 (0.122)	51 (112)	gk823	18	6SL312-1TE21-8AA3
1PH8103-1. F 2...	0.82	8.6	0.851	0.0172 (0.152)	60 (132)	gk823	30	6SL312-1TE23-0AA3
1PH8105-1. F 2...	0.81	12.1	0.862	0.0252 (0.223)	74 (163)	gk823	30	6SL312-1TE23-0AA3
1PH8107-1. F 2...	0.83	17.5	0.847	0.0289 (0.256)	83 (183)	gk823	45	6SL312-1TE24-5AA3
1PH8131-1. F 2...	0.89	8.2	0.897	0.0590 (0.522)	105 (232)	gk843	30	6SL312-1TE23-0AA3
1PH8133-1. F 2...	0.85	14.9	0.913	0.0760 (0.673)	123 (271)	gk843	45	6SL312-1TE24-5AA3
1PH8135-1. F 2...	0.85	20.1	0.914	0.0940 (0.832)	141 (311)	gk843	60	6SL312-1TE26-0AA3
1PH8137-1. F 2...	0.86	24.8	0.911	0.1090 (0.965)	157 (346)	gk843	85	6SL312-1TE28-5AA3
1PH8138-1. F 2...	0.87	27.1	0.898	0.1090 (0.965)	157 (346)	gk843	85	6SL312-1TE28-5AA3
1PH8163-1. F 2...	0.88	27.3	0.924	0.2160 (1.912)	229 (505)	gk873	85	6SL312-1TE28-5AA3
1PH8165-1. F 2...	0.88	33.8	0.935	0.2320 (2.053)	264 (582)	gk873	132	6SL312-1TE31-3AA3
1PH8166-1. F 2...	0.89	35.2	0.940	0.2320 (2.053)	269 (593)	gk873	132	6SL312-1TE31-3AA3
1PH8083-1. G 2...	0.80	5.8	0.846	0.0064 (0.057)	36 (79.4)	gk803	18	6SL312-1TE21-8AA3
1PH8087-1. G 2...	0.79	8.6	0.860	0.0089 (0.079)	44 (97.0)	gk803	18	6SL312-1TE21-8AA3
1PH8101-1. G 2...	0.80	7.8	0.874	0.0138 (0.122)	51 (112)	gk823	18	6SL312-1TE21-8AA3
1PH8103-1. G 2...	0.82	10.3	0.883	0.0172 (0.152)	60 (132)	gk823	30	6SL312-1TE23-0AA3
1PH8105-1. G 2...	0.81	15.1	0.891	0.0252 (0.223)	74 (163)	gk823	45	6SL312-1TE24-5AA3
1PH8131-1. G 2...	0.85	15.4	0.920	0.0590 (0.522)	105 (232)	gk843	45	6SL312-1TE24-5AA3
1PH8133-1. G 2...	0.86	19.4	0.923	0.0760 (0.673)	123 (271)	gk843	60	6SL312-1TE26-0AA3
1PH8135-1. G 2...	0.85	24.1	0.933	0.0940 (0.832)	141 (311)	gk843	85	6SL312-1TE28-5AA3
1PH8163-1. G 2...	0.88	30.2	0.939	0.2160 (1.912)	229 (505)	gk873	132	6SL312-1TE31-3AA3
1PH8165-1. G 2...	0.88	33.7	0.946	0.2320 (2.053)	264 (582)	gk873	132	6SL312-1TE31-3AA3
1PH8166-1. G 2...	0.89	35.5	0.946	0.2320 (2.053)	269 (593)	gk873	132	6SL312-1TE31-3AA3
1PH8103-1. M 2...	0.80	13.2	0.900	0.0172 (0.152)	60 (132)	gk823	30	6SL312-1TE23-0AA3
1PH8105-1. M 2...	0.80	20.2	0.910	0.0252 (0.223)	74 (163)	gk823	45	6SL312-1TE24-5AA3
1PH8107-1. M 2...	0.80	26.1	0.900	0.0289 (0.256)	83 (183)	gk823	60	6SL312-1TE26-0AA3

Cooling:

Internal air cooling
External air cooling

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- ¹⁾ n_2 : Max. permissible thermal speed at constant power or speed which is at the voltage limit when $P = P_{\text{rated}}$.
²⁾ n_{max} : Maximum speed that must not be exceeded (applicable to Standard: 14th data position B to D).
³⁾ The rated pulse frequencies must be taken into account. The rated pulse data is valid for 4 kHz.
 For lower power ratings, Motor Modules in blocksize format can be configured as an alternative (levels of output current: 7.7 A/10.2 A/18 A).

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors Water cooling, IP65 degree of protection

Selection and ordering data

Rated speed	Shaft height	Rated power	Rated torque	Rated current	Rated voltage	Rated frequency	Operating speed during field weakening, max. ¹⁾	Speed, max. ²⁾	1PH8 asynchronous motor Water cooling
n_{rated} rpm	SH	P_{rated} kW (HP)	M_{rated} Nm (lb _f -ft)	I_{rated} A	U_{rated} V	f_{rated} Hz	n_2 rpm	n_{max} rpm	Order No.
Line voltage 480 V 3 AC, Smart/Basic/Active Line Module									
2000	80	4.6 (6.17)	22 (16.2)	8.7	457	71.0	4250	10000	1PH8083-1F2-... 1
		6.1 (8.18)	29 (21.4)	13.7	402	70.0	6950	10000	1PH8087-1F2-... 1
	100	6.6 (8.85)	32 (23.6)	12.5	450	69.9	2500	9000	1PH8101-1F2-... 1
		9.4 (12.6)	45 (33.2)	19.7	411	69.7	5000	9000	1PH8103-1F2-... 1
		14 (18.8)	67 (49.4)	27.5	426	69.5	3000	9000	1PH8105-1F2-... 1
		18 (24.1)	86 (63.4)	42.6	363	69.7	3000	9000	1PH8107-1F2-... 1
	132	18.5 (24.8)	88 (64.9)	30	460	68.7	2500	8000	1PH8131-1F2-... 1
		22.5 (30.2)	107 (78.9)	38	452	68.2	4000	8000	1PH8133-1F2-... 1
		29 (38.9)	138 (102)	52	448	68.2	4500	8000	1PH8135-1F2-... 1
		36 (48.3)	172 (127)	67	415	68.3	4000	8000	1PH8137-1F2-... 1
		37 (49.62)	177 (131)	76	380	68.4	6000	8000	1PH8138-1F2-... 1
	160	49 (65.7)	234 (173)	84	430	67.7	3500	6500	1PH8163-1F2-... 1
		60 (80.5)	287 (212)	103	426	67.6	3050	6500	1PH8165-1F2-... 1
		68 (91.2)	325 (240)	116	426	67.9	3050	6500	1PH8166-1F2-... 1
	2650	80	5.6 (7.51)	20 (14.8)	12	425	91.8	8500	10000
8.1 (10.9)			29 (21.4)	17.8	415	91.8	9150	10000	1PH8087-1G2-... 1
100		8.4 (11.3)	30 (22.1)	16.8	435	91.4	4000	9000	1PH8101-1G2-... 1
		12.5 (16.8)	45 (33.2)	23.5	454	91.2	4000	9000	1PH8103-1G2-... 1
		17 (22.8)	61 (45.0)	33.5	424	90.9	4500	9000	1PH8105-1G2-... 1
132		23 (30.8)	83 (61.2)	39	458	90.1	4500	8000	1PH8131-1G2-... 1
		28 (37.5)	101 (74.5)	50	427	89.9	6000	8000	1PH8133-1G2-... 1
		32 (42.9)	115 (84.8)	58	448	89.6	5500	8000	1PH8135-1G2-... 1
160		55 (73.8)	198 (146)	90	450	89.2	5000	6500	1PH8163-1G2-... 1
		65 (87.2)	234 (173)	100	460	89.2	4000	6500	1PH8165-1G2-... 1
		83 (111)	299 (221)	125	460	89.6	3000	6500	1PH8166-1G2-... 1
3600		100	12.7 (17.0)	34 (25.1)	29.7	368	122.5	17650	9000
	20 (26.8)		53 (39.1)	45	375	122.5	10000	9000	1PH8105-1M2-... 1
	21 (28.2)		56 (41.3)	59	315	122.1	17650	9000	1PH8107-1M2-... 1

For versions, see
Order No. supplement
and options on page 5/54.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors
Water cooling, IP65 degree of protection

Motor type (repeated)	Power factor $\cos \varphi$	Magne- tizing current I_{μ} A	Effi- ciency η	Moment of inertia J kgm ² (lb _F -in-s ²)	Weight, approx. kg (lb)	Terminal box Type	SINAMICS S120 Motor Module	
							Rated output current ³⁾ I_{rated} A	For additional versions and components see chapter SINAMICS S120 drive system Order No.
1PH8083-1. F 2...	0.83	3.8	0.839	0.0064 (0.057)	36 (79.4)	gk803	9	6SL312-1TE21-0AA3
1PH8087-1. F 2...	0.79	6.8	0.868	0.0089 (0.079)	44 (97.0)	gk803	18	6SL312-1TE21-8AA3
1PH8101-1. F 2...	0.82	4.4	0.858	0.0138 (0.122)	51 (112)	gk823	18	6SL312-1TE21-8AA3
1PH8103-1. F 2...	0.82	8.5	0.869	0.0172 (0.152)	60 (132)	gk823	30	6SL312-1TE23-0AA3
1PH8105-1. F 2...	0.82	11.7	0.894	0.0252 (0.223)	74 (163)	gk823	30	6SL312-1TE23-0AA3
1PH8107-1. F 2...	0.81	19.1	0.873	0.0289 (0.256)	83 (183)	gk823	45	6SL312-1TE24-5AA3
1PH8131-1. F 2...	0.90	7.2	0.912	0.0590 (0.522)	105 (232)	gk843	30	6SL312-1TE23-0AA3
1PH8133-1. F 2...	0.86	14.4	0.938	0.0760 (0.673)	123 (271)	gk843	45	6SL312-1TE24-5AA3
1PH8135-1. F 2...	0.85	19.9	0.931	0.0940 (0.832)	141 (311)	gk843	60	6SL312-1TE26-0AA3
1PH8137-1. F 2...	0.86	25.4	0.928	0.1090 (0.965)	157 (346)	gk843	85	6SL312-1TE28-5AA3
1PH8138-1. F 2...	0.86	28.4	0.920	0.1090 (0.965)	157 (346)	gk843	85	6SL312-1TE28-5AA3
1PH8163-1. F 2...	0.88	26.9	0.925	0.2160 (1.912)	229 (505)	gk873	85	6SL312-1TE28-5AA3
1PH8165-1. F 2...	0.88	34.0	0.940	0.2320 (2.053)	264 (582)	gk873	132	6SL312-1TE31-3AA3
1PH8166-1. F 2...	0.89	32.8	0.941	0.2320 (2.053)	269 (593)	gk873	132	6SL312-1TE31-3AA3
1PH8083-1. G 2...	0.76	6.5	0.862	0.0064 (0.057)	36 (79.4)	gk803	18	6SL312-1TE21-8AA3
1PH8087-1. G 2...	0.77	9.3	0.871	0.0089 (0.079)	44 (97.0)	gk803	18	6SL312-1TE21-8AA3
1PH8101-1. G 2...	0.80	7.7	0.888	0.0138 (0.122)	51 (112)	gk823	18	6SL312-1TE21-8AA3
1PH8103-1. G 2...	0.79	11.3	0.904	0.0172 (0.152)	60 (132)	gk823	30	6SL312-1TE23-0AA3
1PH8105-1. G 2...	0.81	15.3	0.911	0.0252 (0.223)	74 (163)	gk823	45	6SL312-1TE24-5AA3
1PH8131-1. G 2...	0.85	15.4	0.938	0.0590 (0.522)	105 (232)	gk843	45	6SL312-1TE24-5AA3
1PH8133-1. G 2...	0.85	19.5	0.933	0.0760 (0.673)	123 (271)	gk843	60	6SL312-1TE26-0AA3
1PH8135-1. G 2...	0.84	23.0	0.942	0.0940 (0.832)	141 (311)	gk843	85	6SL312-1TE28-5AA3
1PH8163-1. G 2...	0.86	33.6	0.940	0.2160 (1.912)	229 (505)	gk873	132	6SL312-1TE31-3AA3
1PH8165-1. G 2...	0.89	31.9	0.948	0.2320 (2.053)	264 (582)	gk873	132	6SL312-1TE31-3AA3
1PH8166-1. G 2...	0.90	35.7	0.948	0.2320 (2.053)	269 (593)	gk873	132	6SL312-1TE31-3AA3
1PH8103-1. M 2...	0.80	13.0	0.910	0.0172 (0.152)	60 (132)	gk823	30	6SL312-1TE23-0AA3
1PH8105-1. M 2...	0.81	18.6	0.920	0.0252 (0.223)	74 (163)	gk823	45	6SL312-1TE24-5AA3
1PH8107-1. M 2...	0.79	26.1	0.910	0.0289 (0.256)	83 (183)	gk823	60	6SL312-1TE26-0AA3

Cooling:
Internal air cooling
External air cooling

0
1

¹⁾ n_2 : Max. permissible thermal speed at constant power or speed which is at the voltage limit when $P = P_{rated}$.

²⁾ n_{max} : Maximum speed that must not be exceeded (applicable to Standard: 14th data position B to D).

³⁾ The rated pulse frequencies must be taken into account; the rated motor data is valid for 4 kHz.
For lower power ratings, Motor Modules in blocksize format can be configured as an alternative (levels of output current: 7.7 A/10.2 A/18 A).

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors Water cooling, IP55 degree of protection

Selection and ordering data

Rated speed	Shaft height	Rated power	Rated torque	Rated current	Rated voltage	Rated frequency	Operating speed during field weakening, max. ¹⁾	Speed, max. ²⁾	1PH8 asynchronous motor Water cooling
n_{rated} rpm	SH	P_{rated} kW (HP)	M_{rated} Nm (lb _f -ft)	I_{rated} A	U_{rated} V	f_{rated} Hz	n_2 rpm	n_{max} rpm	Order No.
Line voltage 400 V 3 AC, Smart/Basic Line Module									
400	180	17 (22.8)	406 (299)	50	271	14.0	1500	5000	1PH8184-1B2-... 1
		23 (30.8)	549 (405)	68	268	13.9	1800	5000	1PH8186-1B2-... 1
	225	36 (48.3)	859 (634)	100	268	14.0	1400	4500	1PH8224-1B2-... 1
		47 (63.0)	1122 (828)	130	264	14.0	1600	4500	1PH8226-1B2-... 1
		58 (77.8)	1385 (1022)	154	272	13.9	1700	4500	1PH8228-1B2-... 1
	280	71 (95.2)	1695 (1250)	170	295	13.8	2200	3300	1PH8284-1B2-... 1
		89 (119)	2125 (1567)	210	300	13.7	2200	3300	1PH8286-1B2-... 1
		109 (146)	2602 (1919)	260	295	13.7	2200	3300	1PH8288-1B2-... 1
	700	180	33 (44.3)	450 (332)	77	320	24.2	2500	5000
43 (57.7)			587 (433)	97	330	23.9	3000	5000	1PH8186-1C2-... 1
225		61 (81.8)	832 (614)	128	340	24.0	2100	4500	1PH8224-1C2-... 1
		81 (109)	1105 (815)	184	310	23.9	2300	4500	1PH8226-1C2-... 1
		96 (129)	1310 (966)	210	315	23.9	2500	4500	1PH8228-1C2-... 1
280		123 (165)	1678 (1238)	260	330	23.7	2200	3300	1PH8284-1C2-... 1
		153 (205)	2087 (1539)	320	325	23.7	2200	3300	1PH8286-1C2-... 1
		188 (252)	2565 (1892)	400	324	23.6	2200	3300	1PH8288-1C2-... 1
1000		180	47 (63.0)	449 (331)	114	300	34.2	5000	5000
	64 (85.8)		611 (451)	148	320	34.0	5000	5000	1PH8186-1D2-... 1
	225	89 (119)	850 (627)	188	335	33.9	2800	4500	1PH8224-1D2-... 1
		115 (154)	1098 (810)	235	340	33.9	2400	4500	1PH8226-1D2-... 1
		141 (189)	1346 (993)	280	340	33.9	2300	4500	1PH8228-1D2-... 1
	280	172 (231)	1643 (1212)	350	335	33.7	2200	3300	1PH8284-1D2-... 1
		214 (287)	2044 (1508)	460	330	33.6	2200	3300	1PH8286-1D2-... 1
		264 (354)	2521 (1859)	550	335	33.6	2200	3300	1PH8288-1D2-... 1
	1500	180	70 (93.9)	446 (329)	150	335	51.0	5000	5000
93 (125)			592 (437)	198	330	51.0	5000	5000	1PH8186-1F2-... 1
225		119 (160)	758 (559)	240	340	50.6	3500	4500	1PH8224-1F2-... 1
		145 (194)	923 (681)	295	340	50.5	3700	4500	1PH8226-1F2-... 1
		192 (257)	1222 (901)	390	340	50.5	3700	4500	1PH8228-1F2-... 1
280		227 (304)	1445 (1066)	445	343	50.4	2200	3300	1PH8284-1F2-... 1
		281 (377)	1789 (1320)	540	343	50.4	2200	3300	1PH8286-1F2-... 1
		345 (463)	2197 (1621)	660	345	50.3	2200	3300	1PH8288-1F2-... 1
2500		180	95 (127)	363 (268)	196	340	85.2	5000	5000
	120 (161)		458 (338)	250	335	83.9	5000	5000	1PH8186-1L2-... 1
	225	153 (205)	584 (431)	310	340	83.8	3200	4500	1PH8224-1L2-... 1
		185 (248)	707 (521)	380	335	83.8	3200	4500	1PH8226-1L2-... 1
	226 (303)	863 (637)	455	340	83.7	3200	4500	1PH8228-1L2-... 1	

For versions, see
Order No. supplement
and options on page 5/56.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors
Water cooling, IP55 degree of protection

Motor type (repeated)	Power factor $\cos \varphi$	Magne- tizing current I_{μ} A	Effi- ciency η	Moment of inertia J kgm ² (lb _f -in-s ²)	Weight, approx. kg (lb)	Terminal box Type	SINAMICS S120 Motor Module	
							Rated output current ³⁾ I_{rated} A	For additional versions and components see chapter SINAMICS S120 drive system Order No.
1PH8184-1. B 2...	0.87	28	0.831	0.489 (4.3)	340 (750)	1XB7322-P05	60	6SL3120-1TE26-0AA3
1PH8186-1. B 2...	0.86	42	0.845	0.652 (5.8)	410 (904)	1XB7322-P05	85	6SL3120-1TE28-5AA3
1PH8224-1. B 2...	0.91	37	0.858	1.45 (12.8)	610 (1345)	1XB7322-P05	132	6SL3120-1TE31-3AA3
1PH8226-1. B 2...	0.90	49	0.875	1.90 (16.8)	740 (1632)	1XB7322-P05	132	6SL3120-1TE31-3AA3
1PH8228-1. B 2...	0.90	62	0.886	2.35 (20.8)	870 (1918)	1XB7322-P05	200	6SL3120-1TE32-0AA3
1PH8284-1. B 2...	0.89	70	0.914	4.21 (37.3)	1280 (2822)	1XB7322-P05	200	6SL3120-1TE32-0AA3
1PH8286-1. B 2...	0.89	83	0.916	5.16 (45.7)	1490 (3285)	1XB7322-P05	210	6SL3320-1TE32-1AA3
1PH8288-1. B 2...	0.89	110	0.925	6.29 (55.7)	1750 (3859)	1XB7700-P02	260	6SL3320-1TE32-6AA3
1PH8184-1. C 2...	0.89	33	0.872	0.489 (4.3)	340 (750)	1XB7322-P05	85	6SL3120-1TE28-5AA3
1PH8186-1. C 2...	0.86	49	0.898	0.652 (5.8)	410 (904)	1XB7322-P05	132	6SL3120-1TE31-3AA3
1PH8224-1. C 2...	0.89	48	0.914	1.45 (12.8)	610 (1345)	1XB7322-P05	132	6SL3120-1TE31-3AA3
1PH8226-1. C 2...	0.88	79	0.928	1.90 (16.8)	740 (1632)	1XB7322-P05	200	6SL3120-1TE32-0AA3
1PH8228-1. C 2...	0.90	82	0.930	2.35 (20.8)	870 (1918)	1XB7322-P05	210	6SL3320-1TE32-1AA3
1PH8284-1. C 2...	0.87	108	0.945	4.21 (37.3)	1280 (2822)	1XB7700-P02	260	6SL3320-1TE32-6AA3
1PH8286-1. C 2...	0.89	123	0.948	5.16 (45.7)	1490 (3285)	1XB7700-P02	380	6SL3320-1TE33-8AA3
1PH8288-1. C 2...	0.88	172	0.952	6.29 (55.7)	1750 (3859)	1XB7700-P02	490	6SL3320-1TE35-0AA3
1PH8184-1. D 2...	0.88	45	0.904	0.489 (4.3)	340 (750)	1XB7322-P05	132	6SL3120-1TE31-3AA3
1PH8186-1. D 2...	0.85	78	0.920	0.652 (5.8)	410 (904)	1XB7322-P05	200	6SL3120-1TE32-0AA3
1PH8224-1. D 2...	0.87	79	0.937	1.45 (12.8)	610 (1345)	1XB7322-P05	200	6SL3120-1TE32-0AA3
1PH8226-1. D 2...	0.89	87	0.938	1.90 (16.8)	740 (1632)	1XB7422-P06	260	6SL3320-1TE32-6AA3
1PH8228-1. D 2...	0.91	98	0.943	2.35 (20.8)	870 (1918)	1XB7700-P02	310	6SL3320-1TE33-1AA3
1PH8284-1. D 2...	0.88	144	0.957	4.21 (37.3)	1280 (2822)	1XB7700-P02	380	6SL3320-1TE33-8AA3
1PH8286-1. D 2...	0.85	215	0.960	5.16 (45.7)	1490 (3285)	1XB7700-P02	490	6SL3320-1TE35-0AA3
1PH8288-1. D 2...	0.86	251	0.962	6.29 (55.7)	1750 (3859)	1XB7712-P03	745	6SL3320-1TE37-5AA3
1PH8184-1. F 2...	0.87	66	0.928	0.489 (4.3)	340 (750)	1XB7322-P05	200	6SL3120-1TE32-0AA3
1PH8186-1. F 2...	0.88	85	0.935	0.652 (5.8)	410 (904)	1XB7322-P05	200	6SL3120-1TE32-0AA3
1PH8224-1. F 2...	0.89	87	0.951	1.45 (12.8)	610 (1345)	1XB7422-P06	260	6SL3320-1TE32-6AA3
1PH8226-1. F 2...	0.87	119	0.957	1.90 (16.8)	740 (1632)	1XB7700-P02	310	6SL3320-1TE33-1AA3
1PH8228-1. F 2...	0.87	169	0.959	2.35 (20.8)	870 (1918)	1XB7700-P02	490	6SL3320-1TE35-0AA3
1PH8284-1. F 2...	0.89	161	0.964	4.21 (37.3)	1280 (2822)	1XB7700-P02	490	6SL3320-1TE35-0AA3
1PH8286-1. F 2...	0.90	181	0.966	5.16 (45.7)	1490 (3285)	1XB7712-P03	745	6SL3320-1TE37-5AA3
1PH8288-1. F 2...	0.90	234	0.967	6.29 (55.7)	1750 (3859)	1XB7712-P03	840	6SL3320-1TE38-4AA3
1PH8184-1. L 2...	0.87	75	0.945	0.489 (4.3)	340 (750)	1XB7322-P05	200	6SL3120-1TE32-0AA3
1PH8186-1. L 2...	0.87	109	0.948	0.652 (5.8)	410 (904)	1XB7422-P06	260	6SL3320-1TE32-6AA3
1PH8224-1. L 2...	0.87	113	0.961	1.45 (12.8)	610 (1345)	1XB7700-P02	310	6SL3320-1TE33-1AA3
1PH8226-1. L 2...	0.87	151	0.963	1.90 (16.8)	740 (1632)	1XB7700-P02	380	6SL3320-1TE33-8AA3
1PH8228-1. L 2...	0.87	181	0.964	2.35 (20.8)	870 (1918)	1XB7700-P02	490	6SL3320-1TE35-0AA3

¹⁾ n_2 : Max. permissible thermal speed at constant power or speed which is at the voltage limit when $P = P_{\text{rated}}$.

²⁾ n_{max} : Maximum speed that must not be exceeded (applicable to Standard: 14th data position A to D, E and F).

³⁾ The rated pulse frequencies must be taken into account. The rated motor data is valid for 4 kHz or 2 kHz.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors Water cooling, IP55 degree of protection

Selection and ordering data

Rated speed	Shaft height	Rated power	Rated torque	Rated current	Rated voltage	Rated frequency	Operating speed during field weakening, max. ¹⁾	Speed, max. ²⁾	1PH8 asynchronous motor Water cooling
n_{rated} rpm	SH	P_{rated} kW (HP)	M_{rated} Nm (lb _f -ft)	I_{rated} A	U_{rated} V	f_{rated} Hz	n_2 rpm	n_{max} rpm	Order No.
Line voltage 400 V 3 AC, Active Line Module									
500	180	23 (30.8)	439 (324)	54	335	17.4	1800	5000	1PH8184-1B2-... 1
		30 (40.2)	573 (423)	70	335	17.3	2200	5000	1PH8186-1B2-... 1
	225	46 (61.7)	879 (648)	100	335	17.3	1500	4500	1PH8224-1B2-... 1
		59 (79.1)	1127 (831)	128	330	17.3	1700	4500	1PH8226-1B2-... 1
	280	72 (96.6)	1375 (1014)	150	340	17.2	1800	4500	1PH8228-1B2-... 1
		89 (119)	1700 (1254)	172	365	17.1	2200	3300	1PH8284-1B2-... 1
	280	111 (149)	2120 (1564)	205	375	17.0	2200	3300	1PH8286-1B2-... 1
		136 (182)	2598 (1916)	260	365	17.0	2200	3300	1PH8288-1B2-... 1
800	180	38 (51.0)	454 (335)	77	365	27.5	2900	5000	1PH8184-1C2-... 1
		49 (65.7)	585 (431)	99	360	27.4	3500	5000	1PH8186-1C2-... 1
	225	70 (93.9)	836 (617)	130	380	27.3	2300	4500	1PH8224-1C2-... 1
		93 (125)	1110 (819)	186	350	27.2	2500	4500	1PH8226-1C2-... 1
	280	110 (148)	1313 (968)	210	360	27.2	2700	4500	1PH8228-1C2-... 1
		141 (189)	1683 (1241)	260	375	27.0	2200	3300	1PH8284-1C2-... 1
	280	175 (235)	2089 (1541)	320	375	27.0	2200	3300	1PH8286-1C2-... 1
		215 (288)	2567 (1893)	405	370	27.0	2200	3300	1PH8288-1C2-... 1
1150	180	54 (72.4)	448 (330)	112	350	39.2	5000	5000	1PH8184-1D2-... 1
		74 (99.2)	615 (454)	148	370	38.9	5000	5000	1PH8186-1D2-... 1
	225	101 (135)	839 (619)	186	385	38.9	3000	4500	1PH8224-1D2-... 1
		131 (176)	1088 (803)	230	390	38.9	2700	4500	1PH8226-1D2-... 1
	280	161 (216)	1337 (986)	280	390	38.9	2500	4500	1PH8228-1D2-... 1
		198 (266)	1644 (1213)	355	385	38.7	2200	3300	1PH8284-1D2-... 1
	280	246 (330)	2043 (1507)	455	380	38.6	2200	3300	1PH8286-1D2-... 1
		304 (408)	2525 (1862)	550	385	38.6	2300	3300	1PH8288-1D2-... 1
1750	180	82 (110)	447 (330)	150	390	59.3	5000	5000	1PH8184-1F2-... 1
		111 (149)	606 (447)	200	385	59.3	5000	5000	1PH8186-1F2-... 1
	225	138 (185)	753 (555)	240	395	58.9	3800	4500	1PH8224-1F2-... 1
		169 (227)	922 (680)	295	390	58.8	3900	4500	1PH8226-1F2-... 1
	280	221 (296)	1206 (890)	390	390	58.8	3900	4500	1PH8228-1F2-... 1
		265 (355)	1446 (1067)	445	400	58.7	2200	3300	1PH8284-1F2-... 1
	280	328 (440)	1790 (1320)	540	400	58.7	2300	3300	1PH8286-1F2-... 1
		403 (540)	2199 (1622)	670	400	58.7	2400	3300	1PH8288-1F2-... 1
2900	180	102 (137)	336 (248)	182	395	97.5	5000	5000	1PH8184-1L2-... 1
		135 (181)	445 (328)	245	385	97.3	5000	5000	1PH8186-1L2-... 1
	225	164 (220)	540 (398)	285	395	97.1	3600	4500	1PH8224-1L2-... 1
		204 (274)	672 (496)	360	390	97.1	3600	4500	1PH8226-1L2-... 1
	280	237 (318)	780 (575)	415	395	97.0	3600	4500	1PH8228-1L2-... 1

For versions, see
Order No. supplement
and options on page 5/56.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors
Water cooling, IP55 degree of protection

Motor type (repeated)	Power factor $\cos \varphi$	Magne- tizing current I_{μ} A	Effi- ciency η	Moment of inertia J kgm ² (lb _F -in-s ²)	Weight, approx. kg (lb)	Terminal box Type	SINAMICS S120 Motor Module	
							Rated output current ³⁾ I_{rated} A	For additional versions and components see chapter SINAMICS S120 drive system Order No.
1PH8184-1. B 2...	0.86	27	0.850	0.489 (4.3)	340 (750)	1XB7322-P05	60	6SL3120-1TE26-0AA3
1PH8186-1. B 2...	0.85	43	0.868	0.652 (5.8)	410 (904)	1XB7322-P05	85	6SL3120-1TE28-5AA3
1PH8224-1. B 2...	0.90	38	0.883	1.45 (12.8)	610 (1345)	1XB7322-P05	132	6SL3120-1TE31-3AA3
1PH8226-1. B 2...	0.90	50	0.899	1.90 (16.8)	740 (1632)	1XB7322-P05	132	6SL3120-1TE31-3AA3
1PH8228-1. B 2...	0.90	63	0.908	2.35 (20.8)	870 (1918)	1XB7322-P05	200	6SL3120-1TE32-0AA3
1PH8284-1. B 2...	0.88	69	0.929	4.21 (37.3)	1280 (2822)	1XB7322-P05	200	6SL3120-1TE32-0AA3
1PH8286-1. B 2...	0.89	84	0.931	5.16 (45.7)	1490 (3285)	1XB7322-P05	210	6SL3320-1TE32-1AA3
1PH8288-1. B 2...	0.88	109	0.938	6.29 (55.7)	1750 (3859)	1XB7700-P02	260	6SL3320-1TE32-6AA3
1PH8184-1. C 2...	0.88	33	0.885	0.489 (4.3)	340 (750)	1XB7322-P05	85	6SL3120-1TE28-5AA3
1PH8186-1. C 2...	0.88	44	0.904	0.652 (5.8)	410 (904)	1XB7322-P05	132	6SL3120-1TE31-3AA3
1PH8224-1. C 2...	0.89	46	0.920	1.45 (12.8)	610 (1345)	1XB7322-P05	132	6SL3120-1TE31-3AA3
1PH8226-1. C 2...	0.88	77	0.934	1.90 (16.8)	740 (1632)	1XB7322-P05	200	6SL3120-1TE32-0AA3
1PH8228-1. C 2...	0.90	82	0.937	2.35 (20.8)	870 (1918)	1XB7322-P05	210	6SL3320-1TE32-1AA3
1PH8284-1. C 2...	0.88	108	0.950	4.21 (37.3)	1280 (2822)	1XB7700-P02	260	6SL3320-1TE32-6AA3
1PH8286-1. C 2...	0.88	126	0.953	5.16 (45.7)	1490 (3285)	1XB7700-P02	380	6SL3320-1TE33-8AA3
1PH8288-1. C 2...	0.87	172	0.956	6.29 (55.7)	1750 (3859)	1XB7700-P02	490	6SL3320-1TE35-0AA3
1PH8184-1. D 2...	0.87	46	0.915	0.489 (4.3)	340 (750)	1XB7322-P05	132	6SL3120-1TE31-3AA3
1PH8186-1. D 2...	0.84	80	0.927	0.652 (5.8)	410 (904)	1XB7322-P05	200	6SL3120-1TE32-0AA3
1PH8224-1. D 2...	0.86	79	0.944	1.45 (12.8)	610 (1345)	1XB7322-P05	200	6SL3120-1TE32-0AA3
1PH8226-1. D 2...	0.89	87	0.945	1.90 (16.8)	740 (1632)	1XB7422-P06	260	6SL3320-1TE32-6AA3
1PH8228-1. D 2...	0.90	98	0.948	2.35 (20.8)	870 (1918)	1XB7700-P02	310	6SL3320-1TE33-1AA3
1PH8284-1. D 2...	0.87	144	0.960	4.21 (37.3)	1280 (2822)	1XB7700-P02	380	6SL3320-1TE33-8AA3
1PH8286-1. D 2...	0.85	216	0.962	5.16 (45.7)	1490 (3285)	1XB7700-P02	490	6SL3320-1TE35-0AA3
1PH8288-1. D 2...	0.86	251	0.964	6.29 (55.7)	1750 (3859)	1XB7712-P03	745	6SL3320-1TE37-5AA3
1PH8184-1. F 2...	0.87	65	0.933	0.489 (4.3)	340 (750)	1XB7322-P05	200	6SL3120-1TE32-0AA3
1PH8186-1. F 2...	0.89	85	0.939	0.652 (5.8)	410 (904)	1XB7322-P05	200	6SL3120-1TE32-0AA3
1PH8224-1. F 2...	0.88	87	0.954	1.45 (12.8)	610 (1345)	1XB7422-P06	260	6SL3320-1TE32-6AA3
1PH8226-1. F 2...	0.88	116	0.959	1.90 (16.8)	740 (1632)	1XB7700-P02	310	6SL3320-1TE33-1AA3
1PH8228-1. F 2...	0.87	165	0.961	2.35 (20.8)	870 (1918)	1XB7700-P02	490	6SL3320-1TE35-0AA3
1PH8284-1. F 2...	0.89	161	0.966	4.21 (37.3)	1280 (2822)	1XB7700-P02	490	6SL3320-1TE35-0AA3
1PH8286-1. F 2...	0.90	182	0.967	5.16 (45.7)	1490 (3285)	1XB7712-P03	745	6SL3320-1TE37-5AA3
1PH8288-1. F 2...	0.90	232	0.968	6.29 (55.7)	1750 (3859)	1XB7712-P03	840	6SL3320-1TE38-4AA3
1PH8184-1. L 2...	0.87	77	0.945	0.489 (4.3)	340 (750)	1XB7322-P05	200	6SL3120-1TE32-0AA3
1PH8186-1. L 2...	0.87	108	0.948	0.652 (5.8)	410 (904)	1XB7422-P06	260	6SL3320-1TE32-6AA3
1PH8224-1. L 2...	0.88	114	0.961	1.45 (12.8)	610 (1345)	1XB7700-P02	310	6SL3320-1TE33-1AA3
1PH8226-1. L 2...	0.87	152	0.962	1.90 (16.8)	740 (1632)	1XB7700-P02	380	6SL3320-1TE33-8AA3
1PH8228-1. L 2...	0.87	182	0.963	2.35 (20.8)	870 (1918)	1XB7700-P02	490	6SL3320-1TE35-0AA3

¹⁾ n_2 : Max. permissible thermal speed at constant power or speed which is at the voltage limit when $P = P_{rated}$.

²⁾ n_{max} : Maximum speed that must not be exceeded (applicable to Standard: 14th data position A to D, E and F).

³⁾ The rated pulse frequencies must be taken into account. The rated motor data is valid for 4 kHz or 2 kHz.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors Water cooling, IP55 degree of protection

Selection and ordering data

Rated speed	Shaft height	Rated power	Rated torque	Rated current	Rated voltage	Rated frequency	Operating speed during field weakening, max. ¹⁾	Speed, max. ²⁾	1PH8 asynchronous motor Water cooling
n_{rated} rpm	SH	P_{rated} kW (HP)	M_{rated} Nm (lb _f -ft)	I_{rated} A	U_{rated} V	f_{rated} Hz	n_2 rpm	n_{max} rpm	Order No.
Line voltage 480 V 3 AC, Smart/Basic/Active Line Module									
600	180	29 (38.9)	462 (341)	55	405	20.8	1800	5000	1PH8184-1B2-... 1
		38 (51.0)	605 (446)	73	405	20.6	2500	5000	1PH8186-1B2-... 1
	225	53 (71.1)	844 (623)	94	410	20.6	1900	4500	1PH8224-1B2-... 1
		70 (93.9)	1114 (822)	122	410	20.5	2000	4500	1PH8226-1B2-... 1
		85 (114)	1353 (998)	148	410	20.5	2100	4500	1PH8228-1B2-... 1
	280	107 (143)	1703 (1256)	170	440	20.4	2200	3300	1PH8284-1B2-... 1
		133 (178)	2117 (1561)	205	445	20.4	2200	3300	1PH8286-1B2-... 1
		164 (220)	2610 (1925)	260	440	20.3	2200	3300	1PH8288-1B2-... 1
1000	180	48 (64)	458 (338)	77	460	34.1	3100	5000	1PH8184-1C2-... 1
		61 (82)	583 (430)	98	450	34.0	3700	5000	1PH8186-1C2-... 1
	225	87 (117)	831 (613)	132	460	34.0	2500	4500	1PH8224-1C2-... 1
		116 (156)	1108 (817)	184	440	33.9	2700	4500	1PH8226-1C2-... 1
		138 (185)	1318 (972)	210	450	33.9	2900	4500	1PH8228-1C2-... 1
	280	176 (236)	1681 (1240)	265	455	33.7	2200	3300	1PH8284-1C2-... 1
		219 (294)	2091 (1542)	325	455	33.7	2200	3300	1PH8286-1C2-... 1
		269 (361)	2569 (1895)	405	460	33.6	2200	3300	1PH8288-1C2-... 1
1350	180	64 (85.8)	453 (334)	112	410	45.8	5000	5000	1PH8184-1D2-... 1
		86 (115)	608 (448)	148	420	45.7	5000	5000	1PH8186-1D2-... 1
	225	115 (154)	813 (600)	180	450	45.5	3400	4500	1PH8224-1D2-... 1
		150 (201)	1061 (783)	225	460	45.5	3200	4500	1PH8226-1D2-... 1
		184 (247)	1302 (960)	270	460	45.5	3000	4500	1PH8228-1D2-... 1
	280	232 (311)	1641 (1210)	355	450	45.4	2200	3300	1PH8284-1D2-... 1
		289 (388)	2044 (1508)	460	445	45.3	2300	3300	1PH8286-1D2-... 1
		357 (479)	2525 (1862)	550	450	45.3	2400	3300	1PH8288-1D2-... 1
2000	180	95 (127)	454 (335)	152	450	67.3	5000	5000	1PH8184-1F2-... 1
		126 (169)	602 (444)	200	445	67.3	5000	5000	1PH8186-1F2-... 1
	225	155 (208)	740 (546)	235	460	67.2	4200	4500	1PH8224-1F2-... 1
		191 (256)	912 (673)	290	450	67.1	4100	4500	1PH8226-1F2-... 1
		245 (329)	1170 (863)	380	450	67.1	4100	4500	1PH8228-1F2-... 1
	280	303 (406)	1447 (1067)	445	455	67.0	2300	3300	1PH8284-1F2-... 1
		375 (503)	1791 (1321)	550	455	67.0	2400	3300	1PH8286-1F2-... 1
		460 (617)	2197 (1621)	670	455	67.0	2500	3300	1PH8288-1F2-... 1
3400	180	100 (134)	281 (207)	158	460	114.0	5000	5000	1PH8184-1L2-... 1
		121 (162)	340 (251)	200	455	113.5	5000	5000	1PH8186-1L2-... 1
	225	164 (220)	461 (340)	255	460	114.0	4100	4500	1PH8224-1L2-... 1
		199 (267)	559 (412)	310	460	114.0	4100	4500	1PH8226-1L2-... 1
		237 (318)	666 (491)	370	460	114.0	4100	4500	1PH8228-1L2-... 1

For versions, see
Order No. supplement
and options on page 5/56.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors
Water cooling, IP55 degree of protection

Motor type (repeated)	Power factor $\cos \varphi$	Magne- tizing current I_{μ} A	Effi- ciency η	Moment of inertia J kgm ² (lb _F -in-s ²)	Weight, approx. kg (lb)	Terminal box Type	SINAMICS S120 Motor Module	
							Rated output current ³⁾ I_{rated} A	For additional versions and components see chapter SINAMICS S120 drive system Order No.
1PH8184-1. B 2...	0.86	28	0.869	0.489 (4.3)	340 (750)	1XB7322-P05	60	6SL3120-1TE26-0AA3
1PH8186-1. B 2...	0.84	44	0.883	0.652 (5.8)	410 (904)	1XB7322-P05	85	6SL3120-1TE28-5AA3
1PH8224-1. B 2...	0.87	40	0.908	1.45 (12.8)	610 (1345)	1XB7322-P05	132	6SL3120-1TE31-3AA3
1PH8226-1. B 2...	0.88	55	0.919	1.90 (16.8)	740 (1632)	1XB7322-P05	132	6SL3120-1TE31-3AA3
1PH8228-1. B 2...	0.88	64	0.923	2.35 (20.8)	870 (1918)	1XB7322-P05	200	6SL3120-1TE32-0AA3
1PH8284-1. B 2...	0.88	71	0.939	4.21 (37.3)	1280 (2822)	1XB7322-P05	200	6SL3120-1TE32-0AA3
1PH8286-1. B 2...	0.89	83	0.940	5.16 (45.7)	1490 (3285)	1XB7322-P05	210	6SL3320-1TE32-1AA3
1PH8288-1. B 2...	0.88	111	0.946	6.29 (55.7)	1750 (3859)	1XB7700-P02	260	6SL3320-1TE32-6AA3
1PH8184-1. C 2...	0.86	34	0.905	0.489 (4.3)	340 (750)	1XB7322-P05	85	6SL3120-1TE28-5AA3
1PH8186-1. C 2...	0.87	44	0.920	0.652 (5.8)	410 (904)	1XB7322-P05	132	6SL3120-1TE31-3AA3
1PH8224-1. C 2...	0.89	44	0.931	1.45 (12.8)	610 (1345)	1XB7322-P05	132	6SL3120-1TE31-3AA3
1PH8226-1. C 2...	0.88	79	0.944	1.90 (16.8)	740 (1632)	1XB7322-P05	200	6SL3120-1TE32-0AA3
1PH8228-1. C 2...	0.89	83	0.946	2.35 (20.8)	870 (1918)	1XB7322-P05	210	6SL3320-1TE32-1AA3
1PH8284-1. C 2...	0.88	102	0.956	4.21 (37.3)	1280 (2822)	1XB7700-P02	260	6SL3320-1TE32-6AA3
1PH8286-1. C 2...	0.89	120	0.958	5.16 (45.7)	1490 (3285)	1XB7700-P02	380	6SL3320-1TE33-8AA3
1PH8288-1. C 2...	0.87	171	0.961	6.29 (55.7)	1750 (3859)	1XB7700-P02	490	6SL3320-1TE35-0AA3
1PH8184-1. D 2...	0.87	46	0.924	0.489 (4.3)	340 (750)	1XB7322-P05	132	6SL3120-1TE31-3AA3
1PH8186-1. D 2...	0.86	73	0.933	0.652 (5.8)	410 (904)	1XB7322-P05	200	6SL3120-1TE32-0AA3
1PH8224-1. D 2...	0.86	79	0.950	1.45 (12.8)	610 (1345)	1XB7322-P05	200	6SL3120-1TE32-0AA3
1PH8226-1. D 2...	0.88	88	0.951	1.90 (16.8)	740 (1632)	1XB7422-P06	260	6SL3320-1TE32-6AA3
1PH8228-1. D 2...	0.90	99	0.954	2.35 (20.8)	870 (1918)	1XB7700-P02	310	6SL3320-1TE33-1AA3
1PH8284-1. D 2...	0.87	143	0.963	4.21 (37.3)	1280 (2822)	1XB7700-P02	380	6SL3320-1TE33-8AA3
1PH8286-1. D 2...	0.85	216	0.964	5.16 (45.7)	1490 (3285)	1XB7700-P02	490	6SL3320-1TE35-0AA3
1PH8288-1. D 2...	0.86	249	0.966	6.29 (55.7)	1750 (3859)	1XB7712-P03	745	6SL3320-1TE37-5AA3
1PH8184-1. F 2...	0.85	68	0.938	0.489 (4.3)	340 (750)	1XB7322-P05	200	6SL3120-1TE32-0AA3
1PH8186-1. F 2...	0.87	89	0.943	0.652 (5.8)	410 (904)	1XB7322-P05	200	6SL3120-1TE32-0AA3
1PH8224-1. F 2...	0.86	90	0.958	1.45 (12.8)	610 (1345)	1XB7422-P06	260	6SL3320-1TE32-6AA3
1PH8226-1. F 2...	0.88	118	0.961	1.90 (16.8)	740 (1632)	1XB7700-P02	310	6SL3320-1TE33-1AA3
1PH8228-1. F 2...	0.86	169	0.963	2.35 (20.8)	870 (1918)	1XB7700-P02	490	6SL3320-1TE35-0AA3
1PH8284-1. F 2...	0.89	160	0.967	4.21 (37.3)	1280 (2822)	1XB7700-P02	490	6SL3320-1TE35-0AA3
1PH8286-1. F 2...	0.90	180	0.968	5.16 (45.7)	1490 (3285)	1XB7712-P03	745	6SL3320-1TE37-5AA3
1PH8288-1. F 2...	0.90	230	0.969	6.29 (55.7)	1750 (3859)	1XB7712-P03	840	6SL3320-1TE38-4AA3
1PH8184-1. L 2...	0.84	76	0.944	0.489 (4.3)	340 (750)	1XB7322-P05	200	6SL3120-1TE32-0AA3
1PH8186-1. L 2...	0.81	110	0.942	0.652 (5.8)	410 (904)	1XB7422-P06	260	6SL3320-1TE32-6AA3
1PH8224-1. L 2...	0.84	113	0.959	1.45 (12.8)	610 (1345)	1XB7700-P02	310	6SL3320-1TE33-1AA3
1PH8226-1. L 2...	0.84	153	0.958	1.90 (16.8)	740 (1632)	1XB7700-P02	380	6SL3320-1TE33-8AA3
1PH8228-1. L 2...	0.84	180	0.959	2.35 (20.8)	870 (1918)	1XB7700-P02	490	6SL3320-1TE35-0AA3

¹⁾ n_2 : Max. permissible thermal speed at constant power or speed which is at the voltage limit when $P = P_{rated}$.

²⁾ n_{max} : Maximum speed that must not be exceeded (applicable to Standard: 14th data position A to D, E and F).

³⁾ The rated pulse frequencies must be taken into account. The rated motor data is valid for 4 kHz or 2 kHz.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors Water cooling, IP55 degree of protection

Selection and ordering data

Rated speed	Shaft height	Rated power	Rated torque	Rated current	Rated voltage	Rated frequency	Operating speed during field weakening, max. ¹⁾	Speed, max. ²⁾	1PH8 asynchronous motor Water cooling
n_{rated} rpm	SH	P_{rated} kW (HP)	M_{rated} Nm (lb _f -ft)	I_{rated} A	U_{rated} V	f_{rated} Hz	n_2 rpm	n_{max} rpm	Order No.
Line voltage 690 V 3 AC, Basic Line Module									
400	280	68 (91.2)	1624 (1198)	89	555	13.7	2000	3300	1PH8284-1 H 2 -... 1
		85 (114)	2029 (1497)	108	555	13.7	2000	3300	1PH8286-1 H 2 -... 1
		105 (141)	2507 (1849)	134	555	13.7	2000	3300	1PH8288-1 H 2 -... 1
700	280	119 (160)	1624 (1197)	136	605	23.7	2200	3300	1PH8284-1 K 2 -... 1
		148 (198)	2019 (1489)	174	605	23.6	2200	3300	1PH8286-1 K 2 -... 1
		182 (244)	2483 (1831)	205	605	23.7	2200	3300	1PH8288-1 K 2 -... 1
1000	280	167 (224)	1595 (1176)	196	600	33.6	2200	3300	1PH8284-1 U 2 -... 1
		208 (279)	1986 (1465)	260	570	33.6	2200	3300	1PH8286-1 U 2 -... 1
		256 (343)	2445 (1803)	310	580	33.6	2200	3300	1PH8288-1 U 2 -... 1
1500	280	220 (295)	1401 (1033)	250	590	50.4	2200	3300	1PH8284-1 W 2 -... 1
		273 (366)	1738 (1282)	310	590	50.4	2200	3300	1PH8286-1 W 2 -... 1
		335 (449)	2133 (1573)	375	590	50.3	2200	3300	1PH8288-1 W 2 -... 1
Line voltage 690 V 3 AC, Active Line Module									
500	280	85 (114)	1624 (1198)	89	690	17.0	2000	3300	1PH8284-1 H 2 -... 1
		106 (142)	2025 (1494)	108	690	17.0	2000	3300	1PH8286-1 H 2 -... 1
		131 (176)	2502 (1845)	134	690	17.0	2000	3300	1PH8288-1 H 2 -... 1
800	280	137 (184)	1635 (1206)	138	690	27.0	2200	3300	1PH8284-1 K 2 -... 1
		170 (228)	2029 (1497)	176	690	27.0	2200	3300	1PH8286-1 K 2 -... 1
		209 (280)	2495 (1840)	205	690	27.0	2200	3300	1PH8288-1 K 2 -... 1
1150	280	192 (257)	1594 (1176)	198	690	38.6	2200	3300	1PH8284-1 U 2 -... 1
		239 (320)	1985 (1464)	260	655	38.6	2200	3300	1PH8286-1 U 2 -... 1
		295 (396)	2450 (1807)	310	665	38.6	2300	3300	1PH8288-1 U 2 -... 1
1750	280	257 (345)	1401 (1033)	250	690	58.7	2200	3300	1PH8284-1 W 2 -... 1
		318 (426)	1735 (1280)	305	690	58.7	2300	3300	1PH8286-1 W 2 -... 1
		391 (524)	2134 (1574)	375	690	58.7	2400	3300	1PH8288-1 W 2 -... 1

For versions, see
Order No. supplement
and options on page 5/56.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous motors
Water cooling, IP55 degree of protection

Motor type (repeated)	Power factor $\cos \varphi$	Magne- tizing current I_{μ} A	Effi- ciency η	Moment of inertia J kgm ² (lb _f -in-s ²)	Weight, approx. kg (lb)	Terminal box Type	SINAMICS S120 Motor Module	
							Rated output current ³⁾ I_{rated} A	For additional versions and components see chapter SINAMICS S120 drive system Order No.
1PH8284-1.H 2...	0.87	41	0.917	4.21 (37.3)	1280 (2822)	1XB7322-P05	100	6SL3320-1TG31-0AA3
1PH8286-1.H 2...	0.89	45	0.917	5.16 (45.7)	1490 (3285)	1XB7322-P05	120	6SL3320-1TG31-2AA3
1PH8288-1.H 2...	0.88	58	0.923	6.29 (55.7)	1750 (3859)	1XB7322-P05	150	6SL3320-1TG31-5AA3
1PH8284-1.K 2...	0.88	54	0.942	4.21 (37.3)	1280 (2822)	1XB7322-P05	150	6SL3320-1TG31-5AA3
1PH8286-1.K 2...	0.85	84	0.950	5.16 (45.7)	1490 (3285)	1XB7322-P05	215	6SL3320-1TG32-2AA3
1PH8288-1.K 2...	0.90	77	0.946	6.29 (55.7)	1750 (3859)	1XB7322-P05	260	6SL3320-1TG32-6AA3
1PH8284-1.U 2...	0.86	89	0.956	4.21 (37.3)	1280 (2822)	1XB7322-P05	215	6SL3320-1TG32-2AA3
1PH8286-1.U 2...	0.85	123	0.959	5.16 (45.7)	1490 (3285)	1XB7700-P02	330	6SL3320-1TG33-3AA3
1PH8288-1.U 2...	0.86	145	0.961	6.29 (55.7)	1750 (3859)	1XB7700-P02	410	6SL3320-1TG34-1AA3
1PH8284-1.W 2...	0.89	92	0.963	4.21 (37.3)	1280 (2822)	1XB7422-P06	330	6SL3320-1TG33-3AA3
1PH8286-1.W 2...	0.90	104	0.965	5.16 (45.7)	1490 (3285)	1XB7700-P02	410	6SL3320-1TG34-1AA3
1PH8288-1.W 2...	0.90	132	0.966	6.29 (55.7)	1750 (3859)	1XB7700-P02	465	6SL3320-1TG34-7AA3
1PH8284-1.H 2...	0.86	41	0.931	4.21 (37.3)	1280 (2822)	1XB7322-P05	100	6SL3320-1TG31-0AA3
1PH8286-1.H 2...	0.88	45	0.931	5.16 (45.7)	1490 (3285)	1XB7322-P05	120	6SL3320-1TG31-2AA3
1PH8288-1.H 2...	0.88	58	0.936	6.29 (55.7)	1750 (3859)	1XB7322-P05	150	6SL3320-1TG31-5AA3
1PH8284-1.K 2...	0.88	54	0.947	4.21 (37.3)	1280 (2822)	1XB7322-P05	150	6SL3320-1TG31-5AA3
1PH8286-1.K 2...	0.85	84	0.954	5.16 (45.7)	1490 (3285)	1XB7322-P05	215	6SL3320-1TG32-2AA3
1PH8288-1.K 2...	0.90	77	0.951	6.29 (55.7)	1750 (3859)	1XB7322-P05	260	6SL3320-1TG32-6AA3
1PH8284-1.U 2...	0.85	90	0.959	4.21 (37.3)	1280 (2822)	1XB7322-P05	215	6SL3320-1TG32-2AA3
1PH8286-1.U 2...	0.85	123	0.962	5.16 (45.7)	1490 (3285)	1XB7700-P02	330	6SL3320-1TG33-3AA3
1PH8288-1.U 2...	0.86	144	0.963	6.29 (55.7)	1750 (3859)	1XB7700-P02	410	6SL3320-1TG34-1AA3
1PH8284-1.W 2...	0.89	92	0.965	4.21 (37.3)	1280 (2822)	1XB7422-P06	330	6SL3320-1TG33-3AA3
1PH8286-1.W 2...	0.90	104	0.967	5.16 (45.7)	1490 (3285)	1XB7700-P02	410	6SL3320-1TG34-1AA3
1PH8288-1.W 2...	0.90	133	0.968	6.29 (55.7)	1750 (3859)	1XB7700-P02	465	6SL3320-1TG34-7AA3

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¹⁾ n_2 : Max. permissible thermal speed at constant power or speed which is at the voltage limit when $P = P_{rated}$.

²⁾ n_{max} : Maximum speed that must not be exceeded (applicable to Standard: 14th data position A and B, E and F).

³⁾ The rated pulse frequencies must be taken into account. The rated motor data is valid for 2 kHz.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous and synchronous motors

Order No. supplements for 1PH808/1PH810/1PH813/1PH816 motors

Data position of the Order No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
Shaft height 80	1	P	H	8	0	8	.	-	.	■	.	■	■	-	■	■	■	1	-	Z
Shaft height 100	1	P	H	8	1	0	.													
Shaft height 132	1	P	H	8	1	3	.													
Shaft height 160	1	P	H	8	1	6	.													
Overall length¹⁾							.													
Asynchronous variant									1											
Synchronous variant (1PH813/1PH816)									2											
Encoder systems for motors without DRIVE-CLiQ interface																				
Without encoder ²⁾																				
Absolute encoder 2048 S/R, 4096 revolutions, multi-turn (encoder AM2048S/R) ³⁾																				
Incremental encoder HTL 1024 S/R (encoder HTL1024S/R) ²⁾⁴⁾																				
Incremental encoder HTL 2048 S/R (encoder HTL2048S/R) ²⁾⁵⁾																				
Incremental encoder sin/cos 1 V _{pp} 2048 S/R with C and D tracks (encoder IC2048S/R) ³⁾																				
Encoder systems for motors with DRIVE-CLiQ interface																				
Absolute encoder 22 bit (resolution 4194304, internal 2048 S/R) + 12 bit multi-turn (traversing range 4096 revolutions) (encoder AM22DQ) ³⁾																				
Incremental encoder 22 bit (resolution 4194304, internal 2048 S/R) + commutation position 11 bit (encoder IC22DQ) ³⁾																				
Rated speeds at 380 V to 480 V 3 AC (winding design)																				
400 rpm/500 rpm/600 rpm																				
1000 rpm/1150 rpm/1350 rpm																				
1500 rpm/1750 rpm/2000 rpm																				
2000 rpm/2300 rpm/2650 rpm																				
2500 rpm/2800 rpm/3000 rpm																				
3000 rpm/3300 rpm/3600 rpm																				
Cooling																				
Degree of protection																				
Forced ventilation IP55																				
DE → NDE																				
Forced ventilation IP55																				
NDE → DE																				
Water cooling IP65																				
Type of construction																				
IM B3 (IM V5, IM V6)																				
IM B5 (IM V1, IM V3)																				
IM B35 (IM V15, IM V35) ⁶⁾																				

For 13th to 15th data position of the Order No., see page 5/55.

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- 1) Not selectable. Determined by the choice of rated power.
- 2) Only possible with 8th data position "1" (asynchronous variant).
- 3) Limited to $n_{max} = 12000$ rpm.
- 4) Limited to $n_{max} = 9000$ rpm.
- 5) Limited to $n_{max} = 4600$ rpm.
- 6) Only possible with 1PH810 to 1PH816.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous and synchronous motors

Order No. supplements for 1PH808/1PH810/1PH813/1PH816 motors (continued)

Data position of the Order No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
	1	P	H	8	.	.	.	-	.	■	■	■	-	■	■	■	1	-	Z	
Shaft extension DE	Balancing																			
Plain shaft	-													0						
Fitted key	Full-key													1						
Fitted key	Half-key													2						
Bearing	Vibration magnitude acc. to Siemens/EN 60034-14²⁾												Shaft and flange accuracy²⁾							
Standard	R/A												R				B			
Standard	S/A												R				C			
Standard ¹⁾	SR/A												SPECIAL				D			
Performance ³⁾	SPECIAL/B												SPECIAL				L			
Advanced lifetime ⁴⁾	S/A												R				Q			
Cable connection (view of DE)																				
<u>Terminal box</u>	<u>Cable entry</u>					<u>Signal connection</u>														
Top	Right					DE						A								
Top	Left					DE						B								
Top	NDE					Left						C								
<u>Power connector⁵⁾</u>																				
Top	Right					DE						E								
Top	Left					DE						F								
Top	NDE					Left						G								
Top	DE					Left						H								
Version status																1				
Special version (order codes are required for options, see page 5/60)																	-	Z		

Ordering example

Selection criteria	Design	Structure of the order number
1PH8 motor	Synchronous variant, water cooling Shaft height 132 version status 1	1PH8131-2..2.-...1
Encoder system	Incremental encoder sin/cos 1 V _{pp} 2048 S/R with C and D tracks (encoder IC2048S/R)	1PH8131-2M.2.-...1
Rated operating point	1500 rpm, 17.6 kW (23.6 HP), 112 Nm (82.6 lb _f -ft)	1PH8131-2MF2.-...1
Type of construction	IM B3 (IM V5, IM V6)	1PH8131-2MF20-...1
Shaft extension DE	Plain shaft	1PH8131-2MF20-0..1
Bearing version	Standard Vibration magnitude R/A Shaft and flange accuracy R	1PH8131-2MF20-0B.1
Connection	Cable connection terminal box top Cable entry on the right Signal connection DE	1PH8131-2MF20-0BA1
Options		1PH8131-2MF20-0BA1-Z
	Additional PTC thermistor chain for alarm and tripping	1PH8131-2MF20-0BA1-Z A12
	Special paint finish worldwide: sky blue, RAL 5015	1PH8131-2MF20-0BA1-Z A12+K23+X05

¹⁾ Only possible with 8th data position "1" (asynchronous variant).

²⁾ For definition, see [1PH8 Configuration Manual](#)

³⁾ Only possible with 8th data position "1" (asynchronous variant),
 1PH808: Limited to $n_{max} = 15000$ rpm
 1PH810: Limited to $n_{max} = 12000$ rpm
 1PH813: Limited to $n_{max} = 10000$ rpm
 1PH816: Limited to $n_{max} = 9000$ rpm. Not possible with 12th data position "2" (IM B5)

⁴⁾ Limited to $n_{max} = 5000$ rpm.
 1PH813: Limited to $n_{max} = 4500$ rpm
 1PH816: Limited to $n_{max} = 4000$ rpm.

⁵⁾ With 1PH810, power connector is only possible up to a maximum static current of $I_0 = 36$ A.
 With 1PH813, power connector is only possible up to a maximum static current of $I_0 = 85$ A.
 Not possible for 1PH816.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous and synchronous motors

Order No. supplements for 1PH818/1PH822/1PH828 motors

Data position of the Order No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
Shaft height 180	1	P	H	8	1	8	.	-	.	■	.	■	■	-	■	■	■	1	-	Z
Shaft height 225	1	P	H	8	2	2	.													
Shaft height 280	1	P	H	8	2	8	.													
Overall length¹⁾	.																			
Asynchronous variant									1											
Synchronous variant (1PH818/1PH822)									2											
Encoder systems for motors without DRIVE-CLiQ interface																				
Without encoder ²⁾																				
Absolute encoder 2048 S/R, 4096 revolutions, multi-turn (encoder AM2048S/R)																				
Incremental encoder HTL 1024 S/R (encoder HTL1024S/R) ²⁾																				
Incremental encoder HTL 2048 S/R (encoder HTL2048S/R) ²⁾³⁾																				
Incremental encoder sin/cos 1 V _{pp} 2048 S/R with C and D tracks (encoder IC2048S/R)																				
Encoder systems for motors with DRIVE-CLiQ interface																				
Absolute encoder 22 bit (resolution 4194304, internal 2048 S/R) + 12 bit multi-turn (traversing range 4096 revolutions) (encoder AM22DQ)																				
Incremental encoder 22 bit (resolution 4194304, internal 2048 S/R) + commutation position 11 bit (encoder IC22DQ)																				
Rated speeds at 380 V to 480 V 3 AC (winding design)																				
400 rpm/500 rpm/600 rpm																				
700 rpm/800 rpm/1000 rpm																				
1000 rpm/1150 rpm/1350 rpm																				
1500 rpm/1750 rpm/2000 rpm																				
2500 rpm/2900 rpm/3200 (3400) rpm																				
Rated speeds at 690 V 3 AC (1PH828) (winding design)																				
400 rpm/500 rpm																				
700 rpm/800 rpm																				
1000 rpm/1150 rpm																				
1500 rpm/1750 rpm																				
Cooling																				
Degree of protection																				
Water cooling																				
IP55																				
Type of construction																				
1PH818																				
1PH822																				
1PH828																				
• IM B3 (IM B6, IM B7, IM B8, IM V6)																				
• IM V5																				
• IM B5 with A450 flange (IM V3) ⁴⁾																				
• IM B35 with A450 flange (IM V35)																				
• IM V15 with A450 flange																				
• IM V5																				
• IM B5 with A550 flange (IM V3) ⁵⁾																				
• IM B35 with A550 flange (IM V35)																				
• IM V15 with A550 flange																				
• IM B3 (IM V6)																				
• IM V5 ⁷⁾																				
• IM B5 with A660 flange (IM V3) ⁶⁾⁷⁾																				
• IM B35 with A660 flange (IM V35)																				
• IM V15 with A660 flange ⁷⁾																				

For 13th to 15th data position of the Order No., see page 5/57.

¹⁾ Not selectable. Determined by the choice of rated power.

²⁾ Only possible with 8th data position "1" (asynchronous variant).

³⁾ Limited to $n_{max} = 4600$ rpm.

⁴⁾ Limited to $n_{max} = 3000$ rpm. Not possible with 14th data position "L" (bearing performance).

⁵⁾ Limited to $n_{max} = 2500$ rpm. Not possible with 14th data position "L" (bearing performance).

⁶⁾ Limited to $n_{max} = 2000$ rpm.

⁷⁾ Only possible with 14th data position A or B (standard bearing).

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous and synchronous motors

Order No. supplements for 1PH818/1PH822/1PH828 motors (continued)

Data position of the Order No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16										
	1	P	H	8	.	.	.	-	.	■	■	■	-	■	■	■	1	-	Z							
Shaft extension DE	Balancing																									
Plain shaft	-													0												
Fitted key	Full-key													1												
Fitted key	Half-key													2												
Bearing	Vibration magnitude acc. to Siemens/EN 60034-14¹⁾												Shaft and flange accuracy¹⁾													
Standard	A						N						A													
Standard	R/A						R						B													
Increased radial forces	A						N						E													
Increased radial forces	R/A						R						F													
<u>Also possible with 1PH818 and 1PH822:</u>																										
Standard	S/A						R						C													
Standard ²⁾	SR/A						R						D													
Performance ²⁾³⁾	SR/A						R						L													
Cable connection (view of DE)																										
<u>Terminal box</u>	<u>Cable entry</u>					<u>Signal connection</u>																				
Top	Right					DE						A														
Top	Left					DE						B														
Top	NDE					Right						C														
Top	DE					Right						D														
Version status																1										
Special version (order codes are required for options, see page 5/60)																										Z

Ordering example

Selection criteria	Design	Structure of the order number
1PH8 motor	Asynchronous variant, water cooling Shaft height 180 Version status 1	1PH8184- 1 . . 2 . - . . . 1
Encoder system	Incremental encoder sin/cos 1 V _{pp} 2048 S/R with C and D tracks (encoder IC2048S/R)	1PH8184- 1M . 2 . - . . . 1
Rated operating point	1750 rpm, 82 kW (110 HP), 447 Nm (330 lb _f -ft)	1PH8184- 1MF2 . - . . . 1
Type of construction	IM B3 (IM B6, IM B7, IM B8, IM V6)	1PH8184- 1MF20- . . . 1
Shaft extension DE	Plain shaft	1PH8184- 1MF20-0 . . 1
Bearing version	Standard Vibration magnitude R/A Shaft and flange accuracy R	1PH8184- 1MF20-0B . 1
Connection	Cable connection terminal box top Cable entry on the right Signal connection DE	1PH8184- 1MF20-0BA1
Options		1PH8184- 1MF20-0BA1-Z
	Additional PTC thermistor chain for alarm and tripping	1PH8184- 1MF20-0BA1-Z A12
	Special paint finish worldwide: sky blue, RAL 5015	1PH8184- 1MF20-0BA1-Z A12+K23+X05

¹⁾ For definition, see 1PH8 Configuration Manual

²⁾ Only possible with 8th data position "1" (asynchronous variant).

³⁾ Only possible with 1PH818: Limited to $n_{\max} = 7500$ rpm. Not possible with 12th data position "2" (IM B5 type of construction).
Only possible with 1PH822: Limited to $n_{\max} = 6000$ rpm. Not possible with 12th data position "2" (IM B5 type of construction).

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous and synchronous motors

Order No. supplements for 1PH835 motors

Data position of the Order No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16					
Shaft height 355	1	P	H	8	3	5	.	-	1	■	.	■	■	-	■	■	0	-	Z		
Overall length¹⁾	.																				
Asynchronous variant																					
Forced ventilation with noise value 77 dB ²⁾									1												
Encoder systems for motors without DRIVE-CLiQ interface																					
Without encoder										A											
Absolute encoder 2048 S/R, 4096 revolutions, multi-turn (encoder AM2048S/R)										E											
Incremental encoder HTL 1024 S/R (encoder HTL1024S/R)										H											
Incremental encoder HTL 2048 S/R (encoder HTL2048S/R)										J											
Incremental encoder sin/cos 1 V _{pp} 2048 S/R with C and D tracks (encoder IC2048S/R)										M											
Encoder systems for motors with DRIVE-CLiQ interface																					
Absolute encoder 22 bit (resolution 4194304, internal 2048 S/R) + 12 bit multi-turn (traversing range 4096 revolutions) (encoder AM22DQ)										F											
Incremental encoder 22 bit (resolution 4194304, internal 2048 S/R) + commutation position 11 bit (encoder IC22DQ)										D											
Prepared for mounting external encoder systems³⁾																					
Incremental encoder HTL1024 S/R with solid shaft Mounting of incremental encoder POG 10 D 1024	Order code H56 required									K									-	Z	
Incremental encoder HTL1024 S/R with solid shaft Incremental encoder POG 10 supplied by customer	Order code G80 required									K										-	Z
Incremental encoder HTL1024 S/R with hollow shaft Incremental encoder HOG 28 supplied by customer	Order code H75 required									G										-	Z
Rated speeds at 400 V to 500 V 3 AC (winding design)																					
480 rpm/550 rpm/600 rpm										B											
640 rpm/750 rpm/800 rpm										Q											
800 (830) rpm/900 rpm/1000 rpm										C											
1080 rpm/1250 rpm/1350 rpm										D											
Rated speeds at 690 V 3 AC (winding design)																					
550 rpm/600 rpm										H											
750 rpm/800 rpm										K											
900 rpm/1000 rpm										U											
1250 rpm/1350 rpm										V											
Cooling		Degree of protection																			
Forced ventilation	IP55																				
Forced ventilation	IP23 (open-circuit cooling)																				
Type of construction																					
IM B3	0																				
IM B35 with A800 flange	3																				

For 13th to 15th data position of the Order No., see page 5/59.

¹⁾ Not selectable. Determined by the choice of rated power.

²⁾ 1PH835.-7 asynchronous motors with forced ventilation and noise value of 85 dB, see Catalog CR 1.

³⁾ For more information on incremental encoders, see: www.baumerhuebner.com

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous and synchronous motors

Order No. supplements for 1PH835 motors (continued)

Data position of the Order No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16			
	1	P	H	8	3	5	.	-	1	■	■	■	-	■	■	■	0	-	Z
Shaft extension DE	Balancing																		
Plain shaft	-													0					
Fitted key	Full-key													1					
Fitted key	Half-key													2					
Bearing	Vibration magnitude acc. to Siemens/EN 60034-1¹⁾											Shaft and flange accuracy¹⁾							
Standard	A											N		A					
Standard	R/A											R		B					
Increased radial forces	A											N		E					
Increased radial forces	R/A											R		F					
Cable connection (view of DE)																			
<u>Terminal box</u>			<u>Cable entry</u>			<u>Signal connection</u>			External fan NDE with air inlet from NDE air-flow direction NDE → DE										
NDE right			Bottom			NDE			Top				U						
									Left (order code G00 required)				U		-	Z			
NDE left			Bottom			NDE			Top				V						
									Right (order code G02 required)				V		-	Z			
NDE top			Right			NDE			Left (order code G00 required)				W		-	Z			
									Right (order code G02 required)				W		-	Z			
DE top ²⁾			Right			NDE			Top ²⁾³⁾				X						
									Left (order code G00 required) ²⁾				X		-	Z			
									Right (order code G02 required) ²⁾				X		-	Z			
Version status															0				
Special version (additional order codes are required for options, see page 5/60)																			
																	-	Z	

Ordering example

Selection criteria	Design	Structure of the order number
1PH8 motor	Asynchronous variant, forced ventilation with noise value of 77 dB Shaft height 355 IP55 degree of protection Version status 0	1PH8350-1 . . 1 . - . . . 0
Encoder system	Incremental encoder 22 bit (resolution 4194304, internal 2048 S/R) + commutation position 11 bit (encoder IC22DQ)	1PH8350-1D.1 . - . . . 0
Rated operating point	1080 rpm, 270 kW (362 HP), 2388 Nm (1761 lb _f -ft)	1PH8350-1DF1 . - . . . 0
Type of construction	IM B3	1PH8350-1DF10- . . . 0
Shaft extension DE	Plain shaft	1PH8350-1DF10-0 . . 0
Bearing version	Standard Vibration magnitude R/A Shaft and flange accuracy R	1PH8350-1DF10-0B. 0
Connection	Cable connection, terminal box NDE top Cable entry on the right Signal connection NDE External fan NDE left with air inlet from NDE, air-flow direction NDE → DE	1PH8350-1DF10-0BW0-Z
Options	With air filter	1PH8350-1DF10-0BW0-Z G00+G14
	Special paint finish worldwide: sky blue, RAL 5015	1PH8350-1DF10-0BW0-Z G00+G14+K23+X05

¹⁾ For definition, see 1PH8 Configuration Manual

²⁾ Only possible with 12th data position "0" (IM B3).

³⁾ Only possible for assignments with terminal box 1XB7712-P.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous and synchronous motors

Options

Order code	Description	For use with motors		
		1PH808 1PH810 1PH813 1PH816	1PH818 1PH822 1PH828	1PH835
A12	Additional PTC thermistor chain for alarm and tripping (only possible for version with terminal box)	✓	✓	✓
A25	Additional KTY84 temperature sensor as reserve connected to signal terminal strip (only possible for version with terminal box)	✓	Standard	Standard
G00	External fan NDE left (possible if 15th data position is U, W or X)	–	–	✓
G02	External fan NDE right (possible if 15th data position is V, W or X)	–	–	✓
G14	With air filter	–	–	✓
G80	Mounting of a POG 10 incremental encoder supplied by customer (possible if 9th data position is K)	–	–	✓
H56	Mounting of the POG 10 D 1024 incremental encoder (possible if 9th data position is K)	–	–	✓
H75	Mounting of an HOG 28 incremental encoder supplied by customer (possible if 9th data position is G)	–	–	✓
K08	Encoder connector mounted opposite	–	✓	–
K09	Terminal box or power connector NDE right	✓ For 1PH810 only ^{1)/} 1PH813/1PH816	–	–
	Terminal box NDE right, cable entry DE, signal connection top (possible if 15th data position is A)	–	✓	–
K10	Terminal box or power connector NDE left	✓ For 1PH810 only ^{1)/} 1PH813/1PH816	–	–
	Terminal box NDE left, cable entry DE, signal connection top (possible if 15th data position is A)	–	✓	–
K16	Second shaft extension (d × l: 120 mm × 210 mm (4.72 in × 8.27 in)) (possible if 9th data position is A or G)	–	–	✓
K18	Radial shaft sealing ring DE ²⁾	✓	✓	–
K40	Regreasing system, DE and NDE	–	✓ Only for 1PH818/1PH822	Standard
		–	Standard with 1PH828	
K80	Axial pipe connection NDE (only possible with forced ventilation)	✓	–	✓
K83	Rotation of terminal box by +90 degrees (possible in combination with options K09 or K10)	–	✓ ⁴⁾	–
K84	Rotation of terminal box by -90 degrees (possible in combination with options K09 or K10)	–	✓ ⁴⁾	–
K85	Rotation of terminal box by +180 degrees (possible in combination with options K09 or K10)	–	✓	–
K90	Version with flange size A400 (possible if 12th data position 2, 3 and 5)	–	✓ Only for 1PH818	–
L00	Replace terminal box (standard) with the next largest terminal box Note dimension implications, see CAD CREATOR.	–	✓	✓
L27	NDE bearing in insulated version	–	✓ Only for 1PH818	Standard
		–	Standard with 1PH822/1PH828	
L74	Fan version in IP65 degree of protection ³⁾	✓	–	–

✓ Option available

– Option not available

¹⁾ Not possible with 12th data position "2" (IM B5 type of construction).

²⁾ Only appropriate if oil spray or oil vapor is occasionally deposited on the sealing ring. Radial shaft sealing ring is not possible with: 14th data position E, F and L.

³⁾ Regardless of the degree of protection, at high levels of atmospheric pollution, the fan must be cleaned.

⁴⁾ Not possible for 1PH822 and 1XB7712-P03 terminal box.

Main motors

Asynchronous and synchronous motors for SINAMICS S120

1PH8 asynchronous and synchronous motors

Options (continued)

Order code	Description	For use with motors		
		1PH808 1PH810 1PH813 1PH816	1PH818 1PH822 1PH828	1PH835
P00	Undrilled cable entry plate	–	✓	✓ Not for 1XB7820-P00
P01	Cable entry plate 3 × M63 × 1.5	–	✓ Only for 1XB7700-P02 1XB7712-P03	✓ Only for 1XB7712-P03
P02	Cable entry plate 3 × M75 × 1.5	–	✓ Only for 1XB7712-P03	✓ Only for 1XB7712-P01 1XB7712-P03
P03	Cable entry plate 4 × M75 × 1.5	–	–	✓ Only for 1XB7712-P01
P04	Cable entry plate 4 × M63 × 1.5	–	✓ Only for 1XB7712-P03	✓ Only for 1XB7712-P01 1XB7712-P03
V90	1PH7-compatible shaft extension ($d \times l$: 42 mm × 110 mm (1.65 in × 4.33 in)) (note reduced radial forces)	✓ Only for 1PH813	–	–
–	Paint finish: anthracite RAL 7016	Standard	Standard	Standard
X01	Paint finish: jet black, matt RAL 9005	✓	✓	✓
X02	Paint finish: cream white RAL9001	✓	✓	✓
X03	Paint finish: reseda green RAL 6011	✓	✓	✓
X04	Paint finish: pebble gray RAL 7032	✓	✓	✓
X05	Paint finish: sky blue RAL 5015	✓	✓	✓
X06	Paint finish: light ivory RAL 1015	✓	✓	✓
X08	Paint finish: white aluminum RAL 9006	✓	✓	✓
K24	Primer	✓ Pale green	✓ Red brown	✓ Red brown
K23	Special paint finish worldwide, primer and paint finish: anthracite RAL 7016	✓	✓	✓
K23+X..	Special paint finish worldwide, primer and other paint finish can be selected from X01 to X08	✓	✓	✓

✓ Option available

– Option not available

When ordering a motor with options, **-Z** should be added to the order number.