

Asynchronous motors

1PL6 motors Forced ventilation

Selection and ordering data

Rated speed	Shaft height SH	Rated power	Rated torque	Rated current	Rated voltage	Speed during field weakening ¹⁾	Continuous speed, max. ²⁾	Speed, max. ³⁾	1PL6 asynchronous motor
n_{rated} rpm		P_{rated} kW (HP)	M_{rated} Nm (lbf-ft)	I_{rated} A	V_{rated} V	n_2 rpm	n_{S1} rpm	n_{max} rpm	Order No.
400 V 3 AC line voltage, Servo Control									
400	180	20.5 (27.5)	489 (361)	58	290	1500	3500 ⁴⁾⁵⁾	5000 ⁵⁾	1PL6184-■ ■ B ■ ■ - 0 ...
		30.5 (40.9)	728 (537)	87	290	1600	3500 ⁴⁾⁵⁾	5000 ⁵⁾	1PL6186-■ ■ B ■ ■ - 0 ...
	225	40 (53.6)	955 (704)	105	296	1400	3100 ⁴⁾⁵⁾	4500 ⁵⁾	1PL6224-■ ■ B ■ ■ - 0 ...
		57 (76.4)	1361 (1004)	145	305	1400	3100 ⁴⁾⁵⁾	4500 ⁵⁾	1PL6226-■ ■ B ■ ■ - 0 ...
		72 (96.6)	1719 (1268)	181	305	1300	3100 ⁴⁾⁵⁾	4500 ⁴⁾⁵⁾	1PL6228-■ ■ B ■ ■ - 0 ...
1000	180	57 (76.4)	544 (401)	122	345	2100	3500 ⁴⁾	5000	1PL6184-■ ■ D ■ ■ - 0 ...
		74 (99.2)	707 (522)	157	345	2400	3500 ⁴⁾	5000	1PL6186-■ ■ D ■ ■ - 0 ...
	225	105 (141)	1003 (740)	220	345	2500	3100 ⁴⁾	4500	1PL6224-■ ■ D ■ ■ - 0 ...
		135 (181)	1289 (951)	278	345	2200	3100 ⁴⁾	4500	1PL6226-■ ■ D ■ ■ - 0 ...
		165 (221)	1576 (1163)	331	348	2200	3100 ⁴⁾	4500 ⁴⁾	1PL6228-■ ■ D ■ ■ - 0 ...
1500	180	76 (102)	484 (357)	165	345	4000	3500 ⁴⁾	5000	1PL6184-■ ■ F ■ ■ - 0 ...
		108 (145)	688 (508)	233	340	4000	3500 ⁴⁾	5000	1PL6186-■ ■ F ■ ■ - 0 ...
	225	142 (190)	904 (667)	292	345	2900	3100 ⁴⁾	4500	1PL6224-■ ■ F ■ ■ - 0 ...
		175 (235)	1114 (822)	356	345	2900	3100 ⁴⁾	4500	1PL6226-■ ■ F ■ ■ - 0 ...
		230 (308)	1465 (1081)	468	345	2900	3100 ⁴⁾	4500 ⁴⁾	1PL6228-■ ■ F ■ ■ - 0 ...
2500	180	100 (134)	382 (282)	208	345	5000	3500 ⁴⁾	5000	1PL6184-■ ■ L ■ ■ - 0 ...
		130 (174)	497 (367)	275	340	5000	3500 ⁴⁾	5000	1PL6186-■ ■ L ■ ■ - 0 ...
	225	178 (239)	680 (502)	358	345	3500	3100 ⁴⁾	4500	1PL6224-■ ■ L ■ ■ - 0 ...
		235 (315)	698 (515)	476	340	3500	3100 ⁴⁾	4500	1PL6226-■ ■ L ■ ■ - 0 ...
		265 (355)	1013 (747)	535	345	3500	3100 ⁴⁾	4500 ⁴⁾	1PL6228-■ ■ L ■ ■ - 0 ...
Fans:			External fan unit, heavy-gauge threaded cable entry in terminal box Without external fan unit, for pipe connection, heavy-gauge threaded cable entry in terminal box External fan unit, metric cable entry in terminal box Without external fan unit, for pipe connection, metric cable entry in terminal box						4 6 7 8
Encoder systems for motors without DRIVE-CLiQ interface:			Without encoder Absolute encoder EnDat 2048 S/R Incremental encoder HTL 1024 S/R Incremental encoder HTL 2048 S/R Incremental encoder sin/cos 1 V _{pp} with C and D tracks Incremental encoder sin/cos 1 V _{pp} without C and D tracks 2-pole resolver						A E H J M N R
Encoder systems for motors with DRIVE-CLiQ interface:			22 bit absolute encoder single-turn + 12 bit multi-turn 22 bit incremental encoder with 11 bit commutation position 22 bit incremental encoder 14 bit resolver						F D Q P
Terminal box/cable entry (view DE):			Top/from right Top/from DE Top/from NDE Top/from left Radial ventilation for SH 225 ⁶⁾						0 1 2 3 5
Type:			IM B3 IM B3 IM B35 (SH 180: with flange A 450, SH 225: with flange A 550) IM B35 (SH 180: with flange A 450, SH 225: with flange A 550) Hoisting system for different types (IM B6, IM B7, IM B8, IM V5, IM V6) Hoisting system for different types (IM V15, IM V35)						0 1 3 5

Selection and ordering data

Power factor	Magne- tizing current	Efficiency	Rated fre- quency	Moment of inertia	Weight, approx.	1PL6 asynchronous motor	SINAMICS S120 Motor Module	
$\cos \varphi$	I_{μ} A	η_{rated}	f_{rated} Hz	J kgm ² (lb _F -in-s ²)	kg (lb)	Order No.	Rated out- put current I_{rated} A	Order No.
400 V 3 AC line voltage, Servo Control								
0.84	33.4	0.820	14.2	0.503 (4.45)	370 (816)	1PL6184- . . B . . - 0 ■■■	60	6SL3120-1 TE26-0AA3
0.84	48.6	0.828	14.1	0.666 (5.89)	440 (970)	1PL6186- . . B . . - 0 ■■■	85 ⁷⁾	6SL3120-1 TE28-5AA3
0.86	45.8	0.864	14	1.479 (13.1)	630 (1389)	1PL6224- . . B . . - 0 ■■■	132	6SL3120-1 TE31-3AA3
0.85	67	0.868	14	1.930 (17.1)	750 (1654)	1PL6226- . . B . . - 0 ■■■	200	6SL3120-1 TE32-0AA3
0.86	77	0.871	14.1	2.326 (20.6)	860 (1896)	1PL6228- . . B . . - 0 ■■■	200	6SL3120-1 TE32-0AA3
0.87	45	0.897	34.4	0.503 (4.45)	370 (816)	1PL6184- . . D . . - 0 ■■■	132	6SL3120-1 TE31-3AA3
0.86	61	0.907	34.3	0.666 (5.89)	440 (970)	1PL6186- . . D . . - 0 ■■■	200	6SL3120-1 TE32-0AA3
0.86	86	0.927	34.5	1.479 (13.1)	630 (1389)	1PL6224- . . D . . - 0 ■■■	210 ⁷⁾	6SL3320-1 TE32-1AA0
0.88	90	0.927	31.1	1.930 (17.1)	750 (1654)	1PL6226- . . D . . - 0 ■■■	310	6SL3320-1 TE33-1AA0
0.89	103	0.928	34.2	2.326 (20.6)	860 (1896)	1PL6228- . . D . . - 0 ■■■	380	6SL3320-1 TE33-8AA0
0.84	70	0.924	50.9	0.503 (4.45)	370 (816)	1PL6184- . . F . . - 0 ■■■	200	6SL3120-1 TE32-0AA3
0.85	91	0.930	50.9	0.666 (5.89)	440 (970)	1PL6186- . . F . . - 0 ■■■	260	6SL3320-1 TE32-1AA0
0.87	91	0.940	50.9	1.479 (13.1)	630 (1389)	1PL6224- . . F . . - 0 ■■■	310	6SL3320-1 TE33-1AA0
0.87	125	0.944	50.7	1.930 (17.1)	750 (1654)	1PL6226- . . F . . - 0 ■■■	380	6SL3320-1 TE33-8AA0
0.86	177	0.947	50.7	2.326 (20.6)	860 (1896)	1PL6228- . . F . . - 0 ■■■	490	6SL3320-1 TE35-0AA0
0.86	80	0.936	84.2	0.503 (4.45)	370 (816)	1PL6184- . . L . . - 0 ■■■	210	6SL3320-1 TE32-1AA0
0.85	113	0.943	84.1	0.666 (5.89)	440 (970)	1PL6186- . . L . . - 0 ■■■	310	6SL3320-1 TE33-1AA0
0.87	119	0.950	84.1	1.479 (13.1)	630 (1389)	1PL6224- . . L . . - 0 ■■■	380	6SL3320-1 TE33-8AA0
0.88	157	0.953	84	1.930 (17.1)	750 (1654)	1PL6226- . . L . . - 0 ■■■	490	6SL3320-1 TE35-0AA0
0.87	189	0.952	84	2.326 (20.6)	860 (1896)	1PL6228- . . L . . - 0 ■■■	605	6SL3320-1 TE36-1AA0
Output type:		Vibrat. magnitude:		Shaft and flange accuracy:		A B C D E F G H A B C D J K 0 3 6 –Z		
Coupling		Grade R		Tolerance N				
Coupling		Grade R		Tolerance R				
Coupling		Grade S		Tolerance R				
Coupling		Grade SR		Tolerance R				
Belt		Grade R		Tolerance N				
Belt		Grade R		Tolerance R				
Increased cantilever forces		Grade R		Tolerance N				
Increased cantilever forces		Grade R		Tolerance R				
Shaft extension (DE):		Balancing:		Direction of air flow (fan):				
Fitted key		Half-key		DE → NDE				
Fitted key		Half-key		NDE → DE ⁸⁾				
Fitted key		Full-key		DE → NDE				
Fitted key		Full-key		NDE → DE ⁸⁾				
Plain shaft		–		DE → NDE				
Plain shaft		–		NDE → DE ⁸⁾				
Paint finish:								
Primed								
Anthracite RAL 7016, standard paint finish								
Anthracite RAL 7016, special paint finish								
Special versions:		Specify supplementary order code and plain text if applicable (see Options).						

¹⁾ η_2 : Max. permissible thermal speed at constant output or speed, which is at the voltage limit when $P = P_{\text{rated}}$.

²⁾ η_{S1} : Max. permissible speed that is continuously permitted without speed duty cycles.

³⁾ η_{max} : Maximum speed which must not be exceeded.

⁴⁾ The speed needs to be reduced for increased cantilever forces, see selection guides.

⁵⁾ The speed is limited to lower values in some cases. The following restriction applies: Max. output frequency < 5 × motor rated frequency.

⁶⁾ Digit "5" for SH 225: Radial ventilation, for possible versions see table "Permissible combinations of mechanical designs", page 5/48.

⁷⁾ The rated output current of the Motor Module is lower than the motor rated current.

⁸⁾ Preferred direction of air flow in a polluted environment.

Asynchronous motors

1PL6 motors Forced ventilation

Selection and ordering data

Rated speed	Shaft height SH	Rated power	Rated torque	Rated current	Rated voltage	Speed during field weakening ¹⁾	Continuous speed, max. ²⁾	Speed, max. ³⁾	1PL6 asynchronous motor
n_{rated} rpm		P_{rated} kW (HP)	M_{rated} Nm (lb _F -ft)	I_{rated} A	V_{rated} V	n_2 rpm	n_{S1} rpm	n_{max} rpm	Order No.
400 V 3 AC line voltage, Vector Control									
400	180	24.5 (32.9)	585 (432)	69	300	1700	3500 ⁴⁾⁵⁾	5000 ⁵⁾	1PL6184-■ ■ B ■ ■ - 0 ...
		31.5 (42.2)	752 (555)	90	290	1900	3500 ⁴⁾⁵⁾	5000 ⁵⁾	1PL6186-■ ■ B ■ ■ - 0 ...
	225	45 (60.4)	1074 (792)	117	300	1600	3100 ⁴⁾⁵⁾	4500 ⁵⁾	1PL6224-■ ■ B ■ ■ - 0 ...
		57 (76.4)	1361 (1004)	145	305	1800	3100 ⁴⁾⁵⁾	4500 ⁵⁾	1PL6226-■ ■ B ■ ■ - 0 ...
		72 (96.6)	1719 (1268)	181	305	1800	3100 ⁴⁾⁵⁾	4500 ⁴⁾⁵⁾	1PL6228-■ ■ B ■ ■ - 0 ...
1150	180	65 (87.2)	540 (398)	121	400	2500	3500 ⁴⁾	5000	1PL6184-■ ■ D ■ ■ - 0 ...
		85 (114)	706 (521)	158	400	2700	3500 ⁴⁾	5000	1PL6186-■ ■ D ■ ■ - 0 ...
	225	120 (161)	997 (735)	218	400	2800	3100 ⁴⁾	4500	1PL6224-■ ■ D ■ ■ - 0 ...
		155 (208)	1287 (949)	275	400	2600	3100 ⁴⁾	4500	1PL6226-■ ■ D ■ ■ - 0 ...
		190 (255)	1578 (1164)	334	400	2500	3100 ⁴⁾	4500 ⁴⁾	1PL6228-■ ■ D ■ ■ - 0 ...
1750	180	89 (119)	486 (359)	166	400	4500	3500 ⁴⁾	5000	1PL6184-■ ■ F ■ ■ - 0 ...
		125 (168)	682 (503)	231	400	4500	3500 ⁴⁾	5000	1PL6186-■ ■ F ■ ■ - 0 ...
	225	165 (221)	900 (664)	292	400	2900	3100 ⁴⁾	4500	1PL6224-■ ■ F ■ ■ - 0 ...
		200 (268)	1091 (805)	350	400	2900	3100 ⁴⁾	4500	1PL6226-■ ■ F ■ ■ - 0 ...
		265 (355)	1446 (1067)	470	400	2900	3100 ⁴⁾	4500 ⁴⁾	1PL6228-■ ■ F ■ ■ - 0 ...
2900	180	113 (152)	372 (274)	209	400	5000	3500 ⁴⁾	5000	1PL6184-■ ■ L ■ ■ - 0 ...
		150 (201)	494 (364)	280	390	5000	3500 ⁴⁾	5000	1PL6186-■ ■ L ■ ■ - 0 ...
	225	205 (275)	675 (498)	365	400	3500	3100 ⁴⁾	4500	1PL6224-■ ■ L ■ ■ - 0 ...
		270 (362)	889 (656)	470	400	3500	3100 ⁴⁾	4500	1PL6226-■ ■ L ■ ■ - 0 ...
		300 (402)	988 (729)	530	400	3500	3100 ⁴⁾	4500 ⁴⁾	1PL6228-■ ■ L ■ ■ - 0 ...
Fans:			External fan unit, heavy-gauge threaded cable entry in terminal box Without external fan unit, for pipe connection, heavy-gauge threaded cable entry in terminal box External fan unit, metric cable entry in terminal box Without external fan unit, for pipe connection, metric cable entry in terminal box						4 6 7 8
Encoder systems for motors without DRIVE-CLiQ interface:			Without encoder Absolute encoder EnDat 2048 S/R Incremental encoder HTL 1024 S/R Incremental encoder HTL 2048 S/R Incremental encoder sin/cos 1 V _{pp} with C and D tracks Incremental encoder sin/cos 1 V _{pp} without C and D tracks 2-pole resolver						A E H J M N R
Encoder systems for motors with DRIVE-CLiQ interface:			22 bit absolute encoder single-turn + 12 bit multi-turn 22 bit incremental encoder with 11 bit commutation position 22 bit incremental encoder 14 bit resolver						F D Q P
Terminal box/cable entry (view DE):			Top/from right Top/from DE Top/from NDE Top/from left Radial ventilation for SH 225 ⁶⁾						0 1 2 3 5
Type:			IM B3 IM B3 IM B35 (SH 180: with flange A 450, SH 225: with flange A 550) IM B35 (SH 180: with flange A 450, SH 225: with flange A 550)						0 1 3 5
			Hoisting system for different types (IM B6, IM B7, IM B8, IM V5, IM V6) Hoisting system for different types (IM V15, IM V35)						

Selection and ordering data

Power factor	Magne- tizing current	Efficiency	Rated fre- quency	Moment of inertia	Weight, approx.	1PL6 asynchronous motor	SINAMICS S120 Motor Module	
$\cos \varphi$	I_{μ} A	η_{rated}	f_{rated} Hz	J kgm ² (lb _F -in-s ²)	kg (lb)	Order No.	Rated out- put current I_{rated} A	Order No.
400 V 3 AC line voltage, Vector Control								
0.86	33	0.800	14.4	0.503 (4.45)	370 (816)	1PL6184- . . B . . - 0 ■ ■ ■	85	6SL3120-1 TE28-5AA3
0.85	47	0.814	14.3	0.666 (5.89)	440 (970)	1PL6186- . . B . . - 0 ■ ■ ■	85 ⁷⁾	6SL3120-1 TE28-5AA3
0.87	45	0.844	14.2	1.479 (13.1)	630 (1389)	1PL6224- . . B . . - 0 ■ ■ ■	132	6SL3120-1 TE31-3AA3
0.85	67	0.868	14.0	1.930 (17.1)	750 (1654)	1PL6226- . . B . . - 0 ■ ■ ■	200	6SL3120-1 TE32-0AA3
0.86	77	0.871	14.0	2.326 (20.6)	860 (1896)	1PL6228- . . B . . - 0 ■ ■ ■	200	6SL3120-1 TE32-0AA3
0.86	46	0.906	39.4	0.503 (4.45)	370 (816)	1PL6184- . . D . . - 0 ■ ■ ■	132	6SL3120-1 TE31-3AA3
0.86	62	0.910	39.4	0.666 (5.89)	440 (970)	1PL6186- . . D . . - 0 ■ ■ ■	200	6SL3120-1 TE32-0AA3
0.85	86	0.930	39.1	1.479 (13.1)	630 (1389)	1PL6224- . . D . . - 0 ■ ■ ■	260	6SL3320-1 TE32-6AA0
0.87	92	0.930	39.2	1.930 (17.1)	750 (1654)	1PL6226- . . D . . - 0 ■ ■ ■	310	6SL3320-1 TE33-1AA0
0.88	102	0.931	39.2	2.326 (20.6)	860 (1896)	1PL6228- . . D . . - 0 ■ ■ ■	380	6SL3320-1 TE33-8AA0
0.84	68	0.921	59.3	0.503 (4.45)	370 (816)	1PL6184- . . F . . - 0 ■ ■ ■	200	6SL3120-1 TE32-0AA3
0.84	92	0.935	59.3	0.666 (5.89)	440 (970)	1PL6186- . . F . . - 0 ■ ■ ■	260	6SL3320-1 TE32-6AA0
0.87	90	0.942	59.2	1.479 (13.1)	630 (1389)	1PL6224- . . F . . - 0 ■ ■ ■	310	6SL3320-1 TE33-1AA0
0.87	122	0.942	59.1	1.930 (17.1)	750 (1654)	1PL6226- . . F . . - 0 ■ ■ ■	380	6SL3320-1 TE33-8AA0
0.86	174	0.948	59.0	2.326 (20.6)	860 (1896)	1PL6228- . . F . . - 0 ■ ■ ■	490	6SL3320-1 TE35-0AA0
0.85	79	0.938	97.6	0.503 (4.45)	370 (816)	1PL6184- . . L . . - 0 ■ ■ ■	210	6SL3320-1 TE32-1AA0
0.84	110	0.943	97.5	0.666 (5.89)	440 (970)	1PL6186- . . L . . - 0 ■ ■ ■	310	6SL3320-1 TE33-1AA0
0.86	118	0.950	97.5	1.479 (13.1)	630 (1389)	1PL6224- . . L . . - 0 ■ ■ ■	380	6SL3320-1 TE33-8AA0
0.87	160	0.952	97.4	1.930 (17.1)	750 (1654)	1PL6226- . . L . . - 0 ■ ■ ■	490	6SL3320-1 TE35-0AA0
0.86	188	0.952	97.3	2.326 (20.6)	860 (1896)	1PL6228- . . L . . - 0 ■ ■ ■	605	6SL3320-1 TE36-1AA0
Output type:		Vibrat. magnitude:		Shaft and flange accuracy:		A B C D E F G H		
Coupling		Grade R		Tolerance N				
Coupling		Grade R		Tolerance R				
Coupling		Grade S		Tolerance R				
Coupling		Grade SR		Tolerance R				
Belt		Grade R		Tolerance N				
Belt		Grade R		Tolerance R				
Increased cantilever forces		Grade R		Tolerance N				
Increased cantilever forces		Grade R		Tolerance R		A B C D J K		
Shaft extension (DE):		Balancing:		Direction of air flow (fan):				
Fitted key		Half-key		DE → NDE				
Fitted key		Half-key		NDE → DE ⁸⁾				
Fitted key		Full-key		DE → NDE				
Fitted key		Full-key		NDE → DE ⁸⁾				
Plain shaft		–		DE → NDE				
Plain shaft		–		NDE → DE ⁸⁾				
Paint finish:						0 3 6		
Primed								
Anthracite RAL 7016, standard paint finish								
Anthracite RAL 7016, special paint finish								
Special versions:		Specify supplementary order code and plain text if applicable (see Options).					–Z	

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

²⁾ n_{S1} : Max. permissible speed that is continuously permitted without speed duty cycles.

³⁾ n_{max} : Maximum speed which must not be exceeded.

⁴⁾ The speed is reduced for increased cantilever forces, see selection guides.

⁵⁾ The speed is limited to lower values in some cases. The following restriction applies: Max. output frequency < 5 × motor rated frequency.

⁶⁾ Digit "5" for SH 225: Radial ventilation, for possible versions see table "Permissible combinations of mechanical designs", page 5/48.

⁷⁾ The rated output current of the Motor Module is lower than the motor rated current.

⁸⁾ Preferred direction of air flow in a polluted environment.

Asynchronous motors

1PL6 motors Forced ventilation

Selection and ordering data

Rated speed	Shaft height SH	Rated power	Rated torque	Rated current	Rated voltage	Speed during field weakening ¹⁾	Continuous speed, max. ²⁾	Speed, max. ³⁾	1PL6 asynchronous motor					
n_{rated} rpm		P_{rated} kW (HP)	M_{rated} Nm (lb _F -ft)	I_{rated} A	V_{rated} V	n_2 rpm	n_{S1} rpm	n_{max} rpm	Order No.					
400 V 3 AC line voltage, Vector Control														
800	280	195 (262)	2328 (1717)	335	400	1700	2200	3300	1PL6284-■ ■ C ■ ■ - 0 . . .					
		250 (335)	2984 (2201)	440	385	1900	2200	3300	1PL6286-■ ■ C ■ ■ - 0 . . .					
		310 (416)	3701 (2730)	570	370	2200	2200	3300	1PL6288-■ ■ C ■ ■ - 0 . . .					
1150	280	280 (375)	2325 (1715)	478	400	2200	2200	3300	1PL6284-■ ■ D ■ ■ - 0 . . .					
		355 (476)	2944 (2172)	637	380	2200	2200	3300	1PL6286-■ ■ D ■ ■ - 0 . . .					
		435 (583)	3607 (2688)	765	385	2200	2200	3300	1PL6288-■ ■ D ■ ■ - 0 . . .					
1750	280	370 (496)	2019 (1489)	616	400	2200	2200	3300	1PL6284-■ ■ F ■ ■ - 0 . . .					
		445 (597)	2429 (1792)	736	400	2200	2200	3300	1PL6286-■ ■ F ■ ■ - 0 . . .					
		560 (751)	3055 (2253)	924	400	2200	2200	3300	1PL6288-■ ■ F ■ ■ - 0 . . .					
Fans ⁴⁾ :			External fan unit, NDE at top, air-flow direction NDE to DE External fan unit, NDE on right, air-flow direction NDE to DE External fan unit, NDE on left, air-flow direction NDE to DE External fan unit, DE at top, air-flow direction DE to NDE External fan unit, DE on right, air-flow direction DE to NDE External fan unit, DE on left, air-flow direction DE to NDE Without external fan unit, for single pipe connection at NDE on right						0 1 2 3 4 5 6					
Encoder systems for motors without DRIVE-CLiQ interface:			Without encoder Absolute encoder EnDat 2048 S/R Incremental encoder HTL 1024 S/R Incremental encoder HTL 2048 S/R Incremental encoder sin/cos 1 V _{pp} with C and D tracks Incremental encoder sin/cos 1 V _{pp} without C and D tracks 2-pole resolver							A E H J M N R				
Encoder systems for motors with DRIVE-CLiQ interface:			22 bit absolute encoder single-turn + 12 bit multi-turn 22 bit incremental encoder with 11 bit commutation position 22 bit incremental encoder 14 bit resolver							F D Q P				
Terminal box/cable entry (view DE) ⁴⁾ :			NDE on right/from below/encoder connector DE NDE on left/from below/encoder connector DE NDE at top/from right/encoder connector DE DE at top/from right/encoder connector NDE								0 1 2 5			
Type ⁴⁾ :			IM B3 IM V5 (can be subsequently modified to IM V6) IM B35 (with flange A 660) IM V15 (with flange A 660; can be subsequently modified to IM V35)									0 1 3 5		

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1PL6 motors
Forced ventilation

Selection and ordering data

Power factor	Magne- tizing current	Efficiency	Rated fre- quency	Moment of inertia	Weight, approx.	1PL6 asynchronous motor	SINAMICS S120 Motor Module	
$\cos \varphi$	I_{μ} A	η_{rated}	f_{rated} Hz	J kgm ² (lb _F -in-s ²)	kg (lb)	Order No.	Rated out- put current I_{rated} A	Order No.
400 V 3 AC line voltage, Vector Control								
0.90	95	0.929	27.3	4.2 (37.2)	1300 (2867)	1PL6284- . . C . . - 0 ■ ■ ■	380	6SL3320-1TE33-8AA0
0.90	135	0.934	27.3	5.2 (46.0)	1500 (3308)	1PL6286- . . C . . - 0 ■ ■ ■	490	6SL3320-1TE35-0AA0
0.90	170	0.939	27.3	6.3 (55.8)	1700 (3749)	1PL6288- . . C . . - 0 ■ ■ ■	605	6SL3320-1TE36-1AA0
0.89	156	0.950	38.9	4.2 (37.2)	1300 (2867)	1PL6284- . . D . . - 0 ■ ■ ■	490	6SL3320-1TE35-0AA0
0.89	214	0.953	38.9	5.2 (46.0)	1500 (3308)	1PL6286- . . D . . - 0 ■ ■ ■	745	6SL3320-1TE37-5AA0
0.89	248	0.955	38.9	6.3 (55.8)	1700 (3749)	1PL6288- . . D . . - 0 ■ ■ ■	840	6SL3320-1TE38-4AA0
0.90	162	0.959	59.0	4.2 (37.2)	1300 (2867)	1PL6284- . . F . . - 0 ■ ■ ■	605 ⁵⁾	6SL3320-1TE36-1AA0
0.91	182	0.960	59.0	5.2 (46.0)	1500 (3308)	1PL6286- . . F . . - 0 ■ ■ ■	745	6SL3320-1TE37-5AA0
0.91	232	0.962	59.0	6.3 (55.8)	1700 (3749)	1PL6288- . . F . . - 0 ■ ■ ■	985	6SL3320-1TE41-0AA0
Output type ⁴⁾ :		Vibrat. magnitude:		Shaft and flange accuracy:		A B E F		
Coupling		Grade N		Tolerance N				
Coupling		Grade R		Tolerance R				
Belt/increased cantilever forces		Grade N		Tolerance N				
Belt/increased cantilever forces		Grade R		Tolerance R		F		
Shaft extension (DE):		Balancing:				A C J		
Fitted key		Half-key						
Fitted key		Full-key						
Plain shaft		–						
Paint finish:						0 3 6		
Primed								
Anthracite RAL 7016, standard paint finish								
Anthracite RAL 7016, special paint finish								
Special versions:		Specify supplementary order code and plain text if applicable (see Options).					–Z	

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

²⁾ n_{S1} : Max. permissible speed that is continuously permitted without speed duty cycles.

³⁾ n_{max} : Maximum speed which must not be exceeded.

⁴⁾ See table "Permissible combinations of mechanical designs", page 5/48.

⁵⁾ The rated output current of the Motor Module is lower than the motor rated current.

Asynchronous motors

1PL6 motors Forced ventilation

Selection and ordering data

Rated speed	Shaft height SH	Rated power	Rated torque	Rated current	Rated voltage	Speed during field weakening ¹⁾	Continuous speed, max. ²⁾	Speed, max. ³⁾	1PL6 asynchronous motor				
n_{rated} rpm		P_{rated} kW (HP)	M_{rated} Nm (lb _f -ft)	I_{rated} A	V_{rated} V	n_2 rpm	n_{S1} rpm	n_{max} rpm	Order No.				
480 V 3 AC line voltage, Servo/Vector Control													
500	180	30 (40.2)	573 (423)	66	370	1900	3500 ⁴⁾⁵⁾	5000 ⁵⁾	1PL6184-■ ■ B ■ 7 - 0 ...				
		40 (53.6)	764 (564)	91	355	2000	3500 ⁴⁾⁵⁾	5000 ⁵⁾	1PL6186-■ ■ B ■ ■ - 0 ...				
	225	55 (73.8)	1050 (774)	114	370	1800	3100 ⁴⁾⁵⁾	4500 ⁵⁾	1PL6224-■ ■ B ■ ■ - 0 ...				
		72 (96.6)	1375 (1014)	147	375	2000	3100 ⁴⁾⁵⁾	4500 ⁵⁾	1PL6226-■ ■ B ■ ■ - 0 ...				
		90 (121)	1719 (1268)	180	380	1900	3100 ⁴⁾⁵⁾	4500 ⁴⁾⁵⁾	1PL6228-■ ■ B ■ ■ - 0 ...				
1350	180	74 (99.2)	523 (386)	119	460	3000	3500 ⁴⁾	5000	1PL6184-■ ■ D ■ ■ - 0 ...				
		98 (131)	693 (511)	156	460	3100	3500 ⁴⁾	5000	1PL6186-■ ■ D ■ ■ - 0 ...				
	225	137 (184)	969 (715)	215	460	2900	3100 ⁴⁾	4500	1PL6224-■ ■ D ■ ■ - 0 ...				
		172 (231)	1217 (898)	265	460	2900	3100 ⁴⁾	4500	1PL6226-■ ■ D ■ ■ - 0 ...				
		218 (292)	1542 (1137)	332	460	2900	3100 ⁴⁾	4500 ⁴⁾	1PL6228-■ ■ D ■ ■ - 0 ...				
2000	180	98 (131)	468 (345)	161	460	5000	3500 ⁴⁾	5000	1PL6184-■ ■ F ■ ■ - 0 ...				
		135 (181)	645 (476)	220	460	5000	3500 ⁴⁾	5000	1PL6186-■ ■ F ■ ■ - 0 ...				
	225	178 (239)	850 (627)	275	460	2900	3100 ⁴⁾	4500	1PL6224-■ ■ F ■ ■ - 0 ...				
		220 (295)	1050 (774)	342	460	2900	3100 ⁴⁾	4500	1PL6226-■ ■ F ■ ■ - 0 ...				
		288 (386)	1375 (1014)	450	460	2900	3100 ⁴⁾	4500 ⁴⁾	1PL6228-■ ■ F ■ ■ - 0 ...				
2900	180	113 (152)	372 (274)	209	400	5000	3500 ⁴⁾	5000	1PL6184-■ ■ L ■ ■ - 0 ...				
		150 (201)	494 (364)	280	390	5000	3500 ⁴⁾	5000	1PL6186-■ ■ L ■ ■ - 0 ...				
	225	205 (275)	675 (498)	365	400	3500	3100 ⁴⁾	4500	1PL6224-■ ■ L ■ ■ - 0 ...				
		270 (362)	889 (656)	470	395	3500	3100 ⁴⁾	4500	1PL6226-■ ■ L ■ ■ - 0 ...				
		300 (402)	988 (729)	530	400	3500	3100 ⁴⁾	4500 ⁴⁾	1PL6228-■ ■ L ■ ■ - 0 ...				
Fans:			External fan unit, heavy-gauge threaded cable entry in terminal box Without external fan unit, for pipe connection, heavy-gauge threaded cable entry in terminal box External fan unit, metric cable entry in terminal box Without external fan unit, for pipe connection, metric cable entry in terminal box						4 6 7 8				
Encoder systems for motors without DRIVE-CLiQ interface:			Without encoder Absolute encoder EnDat 2048 S/R Incremental encoder HTL 1024 S/R Incremental encoder HTL 2048 S/R Incremental encoder sin/cos 1 V _{pp} with C and D tracks Incremental encoder sin/cos 1 V _{pp} without C and D tracks 2-pole resolver						A E H J M N R				
Encoder systems for motors with DRIVE-CLiQ interface:			22 bit absolute encoder single-turn + 12 bit multi-turn 22 bit incremental encoder with 11 bit commutation position 22 bit incremental encoder 14 bit resolver						F D Q P				
Terminal box/cable entry (view DE):			Top/from right Top/from DE Top/from NDE Top/from left Radial ventilation for SH 225 ⁶⁾								0 1 2 3 5		
Type:			IM B3 IM B3 IM B35 (SH 180: with flange A 450, SH 225: with flange A 550) IM B35 (SH 180: with flange A 450, SH 225: with flange A 550)						Hoisting system for different types (IM B6, IM B7, IM B8, IM V5, IM V6) Hoisting system for different types (IM V15, IM V35)		0 1 3 5		

Selection and ordering data

Power factor	Magne- tizing current	Efficiency	Rated fre- quency	Moment of inertia	Weight, approx.	1PL6 asynchronous motor	SINAMICS S120 Motor Module	
							Rated out- put current	
cos φ	I _μ A	η _{rated}	f _{rated} Hz	J kgm ² (lb _f -in-s ²)	kg (lb)	Order No.	I _{rated} A	Order No.
480 V 3 AC line voltage, Servo/Vector Control								
0.84	34	0.844	17.6	0.503 (4.45)	370 (816)	1PL6184- . . B . . - 0 ■■■	85	6SL3120-1TE28-5AA3
0.84	46	0.845	17.6	0.666 (5.89)	440 (970)	1PL6186- . . B . . - 0 ■■■	132	6SL3120-1TE31-3AA3
0.86	46	0.875	17.5	1.479 (13.1)	630 (1389)	1PL6224- . . B . . - 0 ■■■	132	6SL3120-1TE31-3AA3
0.85	66	0.887	17.4	1.930 (17.1)	750 (1654)	1PL6226- . . B . . - 0 ■■■	200	6SL3120-1TE32-0AA3
0.85	79	0.894	17.4	2.326 (20.6)	860 (1896)	1PL6228- . . B . . - 0 ■■■	200	6SL3120-1TE32-0AA3
0.86	44	0.918	46.1	0.503 (4.45)	370 (816)	1PL6184- . . D . . - 0 ■■■	132	6SL3120-1TE31-3AA3
0.85	60	0.920	46.0	0.666 (5.89)	440 (970)	1PL6186- . . D . . - 0 ■■■	200	6SL3120-1TE32-0AA3
0.85	82	0.940	45.8	1.479 (13.1)	630 (1389)	1PL6224- . . D . . - 0 ■■■	210 ⁷⁾	6SL3320-1TE32-1AA0
0.87	88	0.940	45.8	1.930 (17.1)	750 (1654)	1PL6226- . . D . . - 0 ■■■	260 ⁷⁾	6SL3320-1TE32-6AA0
0.88	100	0.938	45.8	2.326 (20.6)	860 (1896)	1PL6228- . . D . . - 0 ■■■	380	6SL3320-1TE33-8AA0
0.83	70	0.934	67.5	0.503 (4.45)	370 (816)	1PL6184- . . F . . - 0 ■■■	200	6SL3120-1TE32-0AA3
0.83	94	0.940	67.5	0.666 (5.89)	440 (970)	1PL6186- . . F . . - 0 ■■■	260	6SL3320-1TE32-6AA0
0.86	91	0.944	67.5	1.479 (13.1)	630 (1389)	1PL6224- . . F . . - 0 ■■■	310	6SL3320-1TE33-1AA0
0.86	124	0.948	67.5	1.930 (17.1)	750 (1654)	1PL6226- . . F . . - 0 ■■■	380	6SL3320-1TE33-8AA0
0.85	176	0.948	67.3	2.326 (20.6)	860 (1896)	1PL6228- . . F . . - 0 ■■■	490	6SL3320-1TE35-0AA0
0.85	79	0.938	97.6	0.503 (4.45)	370 (816)	1PL6184- . . L . . - 0 ■■■	210	6SL3320-1TE32-1AA0
0.84	110	0.943	97.5	0.666 (5.89)	440 (970)	1PL6186- . . L . . - 0 ■■■	310	6SL3320-1TE33-1AA0
0.86	118	0.950	97.5	1.479 (13.1)	630 (1389)	1PL6224- . . L . . - 0 ■■■	380	6SL3320-1TE33-8AA0
0.87	160	0.952	97.4	1.930 (17.1)	750 (1654)	1PL6226- . . L . . - 0 ■■■	490	6SL3320-1TE35-0AA0
0.86	188	0.952	97.3	2.326 (20.6)	860 (1896)	1PL6228- . . L . . - 0 ■■■	605	6SL3320-1TE36-1AA0
Output type:		Vibrat. magnitude:	Shaft and flange accuracy:			A B C D E F G H		
Coupling		Grade R	Tolerance N					
Coupling		Grade R	Tolerance R					
Coupling		Grade S	Tolerance R					
Coupling		Grade SR	Tolerance R					
Belt		Grade R	Tolerance N					
Belt		Grade R	Tolerance R					
Increased cantilever forces		Grade R	Tolerance N					
Increased cantilever forces		Grade R	Tolerance R					
Shaft extension (DE):		Balancing:	Direction of air flow (fan):			A B C D J K		
Fitted key		Half-key	DE → NDE					
Fitted key		Half-key	NDE → DE ⁸⁾					
Fitted key		Full-key	DE → NDE					
Fitted key		Full-key	NDE → DE ⁸⁾					
Plain shaft		–	DE → NDE					
Plain shaft		–	NDE → DE ⁸⁾					
Paint finish:						0 3 6		
Primed								
Anthracite RAL 7016, standard paint finish								
Anthracite RAL 7016, special paint finish								
Special versions:		Specify supplementary order code and plain text if applicable (see Options).					–Z	

- ¹⁾ n_2 : Max. permissible thermal speed at constant output or speed, which is at the voltage limit when $P = P_{\text{rated}}$.
- ²⁾ n_{S1} : Max. permissible speed that is continuously permitted without speed duty cycles.
- ³⁾ n_{max} : Maximum speed which must not be exceeded.
- ⁴⁾ The speed is reduced for increased cantilever forces, see selection guides.
- ⁵⁾ The speed is limited to lower values in some cases. The following restriction applies: Max. output frequency < 5 × motor rated frequency.

- ⁶⁾ Digit "5" for SH 225: Radial ventilation, for possible versions see table "Permissible combinations of mechanical designs", page 5/48.
- ⁷⁾ The rated output current of the Motor Module is lower than the motor rated current.
- ⁸⁾ Preferred direction of air flow in a polluted environment.

Asynchronous motors

1PL6 motors Forced ventilation

Selection and ordering data

Rated speed	Shaft height SH	Rated power	Rated torque	Rated current	Rated voltage	Speed during field weakening ¹⁾	Continuous speed, max. ²⁾	Speed, max. ³⁾	1PL6 asynchronous motor					
n_{rated} rpm		P_{rated} kW (HP)	M_{rated} Nm (lb _f -ft)	I_{rated} A	V_{rated} V	n_2 rpm	n_{S1} rpm	n_{max} rpm	Order No.					
480 V 3 AC line voltage, Servo/Vector Control														
1000	280	235 (315)	2244 (1655)	335	480	2200	2200	3300	1PL6284-■ ■ C ■ ■ - 0 . . .					
		310 (416)	2961 (2184)	440	480	2200	2200	3300	1PL6286-■ ■ C ■ ■ - 0 . . .					
		385 (516)	3677 (2712)	570	460	2200	2200	3300	1PL6288-■ ■ C ■ ■ - 0 . . .					
1350	280	325 (436)	2299 (1696)	478	470	2200	2200	3300	1PL6284-■ ■ D ■ ■ - 0 . . .					
		410 (550)	2901 (2140)	637	445	2200	2200	3300	1PL6286-■ ■ D ■ ■ - 0 . . .					
		505 (677)	3573 (2635)	765	450	2200	2200	3300	1PL6288-■ ■ D ■ ■ - 0 . . .					
2000	280	415 (557)	1981 (1461)	616	455	2200	2200	3300	1PL6284-■ ■ F ■ ■ - 0 . . .					
		500 (671)	2387 (1761)	736	455	2200	2200	3300	1PL6286-■ ■ F ■ ■ - 0 . . .					
		630 (845)	3009 (2219)	924	455	2200	2200	3300	1PL6288-■ ■ F ■ ■ - 0 . . .					
Fans ⁴⁾ :			External fan unit, NDE at top, air-flow direction NDE to DE External fan unit, NDE on right, air-flow direction NDE to DE External fan unit, NDE on left, air-flow direction NDE to DE External fan unit, DE at top, air-flow direction DE to NDE External fan unit, DE on right, air-flow direction DE to NDE External fan unit, DE on left, air-flow direction DE to NDE Without external fan unit, for single pipe connection at NDE on right						0 1 2 3 4 5 6					
Encoder systems for motors without DRIVE-CLiQ interface:			Without encoder Absolute encoder EnDat 2048 S/R Incremental encoder HTL 1024 S/R Incremental encoder HTL 2048 S/R Incremental encoder sin/cos 1 V _{pp} with C and D tracks Incremental encoder sin/cos 1 V _{pp} without C and D tracks 2-pole resolver							A E H J M N R				
Encoder systems for motors with DRIVE-CLiQ interface:			22 bit absolute encoder single-turn + 12 bit multi-turn 22 bit incremental encoder with 11 bit commutation position 22 bit incremental encoder 14 bit resolver							F D Q P				
Terminal box/cable entry (view DE) ⁴⁾ :			NDE on right/from below/encoder connector DE NDE on left/from below/encoder connector DE NDE at top/from right/encoder connector DE DE at top/from right/encoder connector NDE								0 1 2 5			
Type ⁴⁾ :			IM B3 IM V5 (can be subsequently modified to IM V6) IM B35 (with flange A 660) IM V15 (with flange A 660; can be subsequently modified to IM V35)									0 1 3 5		

Asynchronous motors

1PL6 motors
Forced ventilation

Selection and ordering data

Power factor	Magne- tizing current	Efficiency	Rated fre- quency	Moment of inertia	Weight, approx.	1PL6 asynchronous motor	SINAMICS S120 Motor Module	
$\cos \varphi$	I_{μ} A	η_{rated}	f_{rated} Hz	J kgm ² (lb _F -in-s ²)	kg (lb)	Order No.	Rated out- put current I_{rated} A	Order No.
480 V 3 AC line voltage, Servo/Vector Control								
0.90	90	0.939	34.0	4.2 (37.2)	1300 (2867)	1PL6284- . . C . . - 0 ■ ■ ■	380	6SL3320-1TE33-8AA0
0.90	135	0.945	34.0	5.2 (46.0)	1500 (3308)	1PL6286- . . C . . - 0 ■ ■ ■	490	6SL3320-1TE35-0AA0
0.90	170	0.948	34.0	6.3 (55.8)	1700 (3749)	1PL6288- . . C . . - 0 ■ ■ ■	605	6SL3320-1TE36-1AA0
0.89	157	0.955	45.5	4.2 (37.2)	1300 (2867)	1PL6284- . . D . . - 0 ■ ■ ■	490	6SL3320-1TE35-0AA0
0.89	215	0.957	45.5	5.2 (46.0)	1500 (3308)	1PL6286- . . D . . - 0 ■ ■ ■	745	6SL3320-1TE37-5AA0
0.89	248	0.959	45.5	6.3 (55.8)	1700 (3749)	1PL6288- . . D . . - 0 ■ ■ ■	840	6SL3320-1TE38-4AA0
0.90	161	0.961	67.3	4.2 (37.2)	1300 (2867)	1PL6284- . . F . . - 0 ■ ■ ■	745	6SL3320-1TE37-5AA0
0.91	181	0.963	67.3	5.2 (46.0)	1500 (3308)	1PL6286- . . F . . - 0 ■ ■ ■	745	6SL3320-1TE37-5AA0
0.91	231	0.965	67.3	6.3 (55.8)	1700 (3749)	1PL6288- . . F . . - 0 ■ ■ ■	985	6SL3320-1TE41-0AA0
Output type ⁴⁾ : Coupling Coupling Belt/increased cantilever forces Belt/increased cantilever forces		Vibrat. magnitude: Grade N Grade R Grade N Grade R		Shaft and flange accuracy: Tolerance N Tolerance R Tolerance N Tolerance R		A B E F		
Shaft extension (DE): Fitted key Fitted key Plain shaft		Balancing: Half-key Full-key –				A C J		
Paint finish: Primed Anthracite RAL 7016, standard paint finish Anthracite RAL 7016, special paint finish						0 3 6		
Special versions:		Specify supplementary order code and plain text if applicable (see Options).					–Z	

5

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

²⁾ n_{S1} : Max. permissible speed that is continuously permitted without speed duty cycles.

³⁾ n_{max} : Maximum speed which must not be exceeded.

⁴⁾ See table "Permissible combinations of mechanical designs", page 5/51.

Asynchronous motors

1PL6 motors Forced ventilation

Selection and ordering data

Rated speed	Shaft height SH	Rated power	Rated torque	Rated current	Rated voltage	Speed during field weakening ¹⁾	Continuous speed, max. ²⁾	Speed, max. ³⁾	1PL6 asynchronous motor					
n_{rated} rpm		P_{rated} kW (HP)	M_{rated} Nm (lb _f -ft)	I_{rated} A	V_{rated} V	n_2 rpm	n_{S1} rpm	n_{max} rpm	Order No.					
690 V 3 AC line voltage, Servo/Vector Control														
800	280	185 (248)	2208 (1629)	185	690	2000	2200	3300	1PL6284-■ ■ C ■ ■ - 0 ...					
		240 (322)	2865 (2113)	250	665	2100	2200	3300	1PL6286-■ ■ C ■ ■ - 0 ...					
		300 (402)	3581 (2641)	320	640	2200	2200	3300	1PL6288-■ ■ C ■ ■ - 0 ...					
1150	280	272 (365)	2259 (1666)	270	690	2200	2200	3300	1PL6284-■ ■ D ■ ■ - 0 ...					
		344 (461)	2857 (2107)	359	655	2200	2200	3300	1PL6286-■ ■ D ■ ■ - 0 ...					
		422 (566)	3504 (2585)	431	665	2200	2200	3300	1PL6288-■ ■ D ■ ■ - 0 ...					
1750	280	359 (481)	1959 (1445)	347	690	2200	2200	3300	1PL6284-■ ■ F ■ ■ - 0 ...					
		432 (579)	2357 (1739)	415	690	2200	2200	3300	1PL6286-■ ■ F ■ ■ - 0 ...					
		543 (728)	2963 (2186)	520	690	2200	2200	3300	1PL6288-■ ■ F ■ ■ - 0 ...					
Fans ⁴⁾ :			External fan unit, NDE top, air-flow direction NDE to DE External fan unit, NDE right, air-flow direction NDE to DE External fan unit, NDE left, air-flow direction NDE to DE External fan unit, DE top, air-flow direction DE to NDE External fan unit, DE right, air-flow direction DE to NDE External fan unit, DE left, air-flow direction DE to NDE Without external fan unit, for single pipe connection at NDE right						0 1 2 3 4 5 6					
Encoder systems for motors without DRIVE-CLiQ interface:			Without encoder Absolute encoder EnDat 2048 S/R Incremental encoder HTL 1024 S/R Incremental encoder HTL 2048 S/R Incremental encoder sin/cos 1 V _{pp} with C and D track Incremental encoder sin/cos 1 V _{pp} without C and D track 2-pole resolver							A E H J M N R				
Encoder systems for motors with DRIVE-CLiQ interface:			22 bit absolute encoder single-turn + 12 bit multi-turn 22 bit incremental encoder with 11 bit commutation position 22 bit incremental encoder 14 bit resolver							F D Q P				
Terminal box/cable entry (view DE) ⁴⁾ :			NDE right/from below/encoder connector DE NDE left/from below/encoder connector DE NDE top/from right/encoder connector DE DE top/from right/encoder connector NDE								0 1 2 5			
Type ⁴⁾ :			IM B3 IM V5 (can be subsequently modified to IM V6) IM B35 (with flange A 660) IM V15 (with flange A 660, can be subsequently modified to IM V35)									0 1 3 5		

Selection and ordering data

Power factor	Magne- tizing current	Efficiency	Rated fre- quency	Moment of inertia	Weight, approx.	1PL6 asynchronous motor	SINAMICS S120 Motor Module	
	I_{μ} A	η_{rated}	f_{rated} Hz	J kgm ² (lb _F -in-s ²)	kg (lb)		Rated out- put current I_{rated} A	Order No.
cos φ	A		Hz	kgm ² (lb _F -in-s ²)	kg (lb)	Order No.	A	Order No.
690 V 3 AC line voltage, Servo/Vector Control								
0.90	55	0.928	27	4.2 (37.2)	1300 (2867)	1PL6284- . . C . . - 0 ■ ■ ■	215	6SL3320-1T G32-2AA0
0.90	80	0.934	27	5.2 (46.0)	1500 (3308)	1PL6286- . . C . . - 0 ■ ■ ■	260	6SL3320-1T G32-6AA0
0.90	100	0.938	27	6.3 (55.8)	1700 (3749)	1PL6288- . . C . . - 0 ■ ■ ■	330	6SL3320-1T G33-3AA0
0.89	89	0.949	38.9	4.2 (37.2)	1300 (2867)	1PL6284- . . D . . - 0 ■ ■ ■	330	6SL3320-1T G33-3AA0
0.89	123	0.953	38.9	5.2 (46.0)	1500 (3308)	1PL6286- . . D . . - 0 ■ ■ ■	410	6SL3320-1T G34-1AA0
0.89	143	0.955	38.9	6.3 (55.8)	1700 (3749)	1PL6288- . . D . . - 0 ■ ■ ■	465	6SL3320-1T G34-7AA0
0.90	93	0.958	59	4.2 (37.2)	1300 (2867)	1PL6284- . . F . . - 0 ■ ■ ■	410	6SL3320-1T G34-1AA0
0.91	105	0.960	59	5.2 (46.0)	1500 (3308)	1PL6286- . . F . . - 0 ■ ■ ■	410 ⁵⁾	6SL3320-1T G34-1AA0
0.91	133	0.962	59	6.3 (55.8)	1700 (3749)	1PL6288- . . F . . - 0 ■ ■ ■	575	6SL3320-1T G35-8AA0
Output type ⁴⁾ :		Vibrat. magnitude:		Shaft and flange accuracy:		A B E F		
Coupling		Grade N		Tolerance N				
Coupling		Grade R		Tolerance R				
Belt/increased cantilever forces		Grade N		Tolerance N				
Belt/increased cantilever forces		Grade R		Tolerance R		A C J		
Shaft extension (DE):		Balancing:						
Fitted key		Half-key						
Fitted key		Full-key						
Plain shaft		–						
Paint finish:								
Primed								
Anthracite RAL 7016, standard paint finish								
Anthracite RAL 7016, special paint finish								
Special versions:								
							</	

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

²⁾ n_{S1} : Max. permissible speed that is continuously permitted without speed duty cycles.

³⁾ n_{max} : Maximum speed which must not be exceeded.

⁴⁾ See table "Permissible combinations of mechanical designs", page 5/51.

⁵⁾ The rated output current of the Motor Module is lower than the motor rated current.

Asynchronous motors

Permissible combinations of mechanical designs for 1PL6 motors, shaft height 225

Selection and ordering data – supplements

Permissible combinations of mechanical designs, radial ventilation

1PL6 2... motors

Shaft height 225

Position in Order No. 1PL6224 1PL6226 1PL6228	-	8. ■	9. .	10. .	11. ■	12. ■	-	13. ■	14. .	15. ■	16. .	External fan unit, radially mounted -Z				
		External fan unit			Radial ventilation ²⁾	Type (IM B3 and IM B35)				Direction of air flow NDE → DE, shaft ext.		G04	G02	G00		
											NDE top , air inlet from NDE, dir. of air flow NDE → DE	NDE right , air inlet from NDE, dir. of air flow NDE → DE	NDE left , air inlet from NDE, dir. of air flow NDE → DE			
With external fan unit	-	4 7	.	.	5	0 3	-		.	B D K	.					
Without external fan unit, for pipe conn.	-	6 8	.	.	5	0 3	-		.	B D K	.					
Order codes for options																
R1Y Standard finish RAL ...																
R2Y Special finish RAL ...																
G14 With air filter																
G80 Prepared for POG10 pulse encoder mounting (encoder is supplied)																
K55 Cable entry plate, terminal box, customer-specific ¹⁾																
K16 Second standard shaft extension (possible only for encoderless systems)												On request				
K31 Second rating plate																
Y55 Non-standard shaft extension DE																
K40 230 V standstill heating												On request				
Y80 Different rating plate data ¹⁾												On request				
Y82 Extra rating plate with customer data												On request				

Standard design

Released supplementary versions

¹⁾ Plain text required

²⁾ Direction of cable entry for **K09**: Power DE, encoder connector on top
 Direction of cable entry for **K10**: Power DE, encoder connector on top
 Direction of cable entry for **K11**: Cable entry on right, encoder connector DE

5

5/49

Asynchronous motors

Permissible combinations of mechanical designs for 1PL6 motors, shaft height 280

Selection and ordering data – supplements

Permissible combinations of mechanical designs

1PL6 28 . motors Shaft height 280

Position in
Order No. 8 9 10 11 12 13 14 15 16

1PL628 . -

Permissible combinations of mechanical designs

External fan unit
8th position in Order No.

1PL628 . -

Order No. supplement

0	1	2	3	4	5	6
NDE top NDE → DE	NDE right NDE → DE	NDE left NDE → DE	DE top DE → NDE	DE right DE → NDE	DE left DE → NDE	Single pipe connection NDE right (can be modified subseq. to NDE left)

1PL628 . - 0 - Type IM B3

1PL628 . - 1 - Type IM V5
(can be modified
subsequently to IM V6)

1PL628 . - 3 - Type IM B35

1PL628 . - 5 - Type IM V15
(can be modified
subsequently to IM V35)

Order codes for options

R1Y Standard finish RAL ...

R2Y Special finish RAL ...

G14 With air filter

K08 Encoder connector mounted opposite

K55 Cable entry plate, terminal box, customer-specific ¹⁾

K83 Terminal box rotated through +90 degrees

K84 Terminal box rotated through -90 degrees

K85 Terminal box rotated through 180 degrees

K16 Second standard shaft extension
(only possible without encoder)

K31 Second rating plate

K45 230 V standstill heating

C30 690 V version

Y55 Non-standard shaft extension DE

Y80 Different rating plate data ¹⁾

Y82 Extra rating plate with customer data ¹⁾

M83 Additional thread for a setting screw on motor feet

	Standard design
	Released supplementary versions

¹⁾ Plain text is necessary

5

5/51