

AC motors

Asynchronous motors

1PL6 motors

Selection and ordering data

Rated speed	Shaft height SH	Rated power	Rated torque	Rated current	Rated voltage	Speed during field weakening ¹⁾	Max. permissible continuous speed ²⁾	Max. speed ³⁾	1PL6 asynchronous motor
n_{rated} rpm		P_{rated} kW/HP	M_{rated} Nm/lb.-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	489/360.4	58	290	1500	3500 ⁴⁾⁷⁾	5000 ⁷⁾	1PL6184-■ ■ B ■ ■ - 0 ...
		30.5/40.9	728/536.5	87	290	1600	3500 ⁴⁾⁷⁾	5000 ⁷⁾	1PL6186-■ ■ B ■ ■ - 0 ...
	225	40/53.6	955/703.8	105	296	1400	3100 ⁴⁾⁷⁾	4500 ⁷⁾	1PL6224-■ ■ B ■ ■ - 0 ...
		57/76.4	1361/1003.1	145	305	1400	3100 ⁴⁾⁷⁾	4500 ⁷⁾	1PL6226-■ ■ B ■ ■ - 0 ...
		72/96.6	1719/1266.9	181	305	1300	3100 ⁴⁾⁷⁾	4500 ⁴⁾⁷⁾	1PL6228-■ ■ B ■ ■ - 0 ...
1000	180	57/76.4	544/400.9	122	345	2100	3500 ⁴⁾	5000	1PL6184-■ ■ D ■ ■ - 0 ...
		74/99.2	707/521.1	157	345	2400	3500 ⁴⁾	5000	1PL6186-■ ■ D ■ ■ - 0 ...
	225	105/140.8	1003/739.2	220	345	2500	3100 ⁴⁾	4500	1PL6224-■ ■ D ■ ■ - 0 ...
		135/181.0	1289/950	278	345	2200	3100 ⁴⁾	4500	1PL6226-■ ■ D ■ ■ - 0 ...
		165/221.3	1576/1161.5	331	348	2200	3100 ⁴⁾	4500 ⁴⁾	1PL6228-■ ■ D ■ ■ - 0 ...
1500	180	76/101.9	484/356.7	165	345	4000	3500 ⁴⁾	5000	1PL6184-■ ■ F ■ ■ - 0 ...
		108/144.8	688/507.1	233	340	4000	3500 ⁴⁾	5000	1PL6186-■ ■ F ■ ■ - 0 ...
	225	142/190.4	904/666.2	292	345	2900	3100 ⁴⁾	4500	1PL6224-■ ■ F ■ ■ - 0 ...
		175/234.7	1114/821	356	345	2900	3100 ⁴⁾	4500	1PL6226-■ ■ F ■ ■ - 0 ...
		230/308.4	1465/1079.7	468	345	2900	3100 ⁴⁾	4500 ⁴⁾	1PL6228-■ ■ F ■ ■ - 0 ...
2500	180	100/134.1	382/281.5	208	345	5000	3500 ⁴⁾	5000	1PL6184-■ ■ L ■ ■ - 0 ...
		130/174.3	497/366.3	275	340	5000	3500 ⁴⁾	5000	1PL6186-■ ■ L ■ ■ - 0 ...
	225	178/238.7	680/501.2	358	345	3500	3100 ⁴⁾	4500	1PL6224-■ ■ L ■ ■ - 0 ...
		235/315.1	698/514.4	476	340	3500	3100 ⁴⁾	4500	1PL6226-■ ■ L ■ ■ - 0 ...
		265/355.4	1013/746.6	535	345	3500	3100 ⁴⁾	4500 ⁴⁾	1PL6228-■ ■ L ■ ■ - 0 ...

Fans:	External fan unit, heavy-gauge threaded cable entry in terminal box	4
	Without external fan unit, for pipe connection, heavy-gauge threaded cable entry in terminal box	6
	External fan unit, metric cable entry in terminal box	7
	Without external fan unit, for pipe connection, metric cable entry in terminal box	8
Encoder systems for motors without DRIVE-CLiQ interface:	Without encoder	A
	Absolute encoder EnDat 2048 pulses/revolution	E
	Incremental encoder HTL 1024 pulses/revolution	H
	Incremental encoder HTL 2048 pulses/revolution	J
	Incremental encoder sin/cos 1 V _{pp} with C and D tracks ⁷⁾	M
	Incremental encoder sin/cos 1 V _{pp} without C and D tracks ⁷⁾ 2-pole resolver	N R
Encoder systems for motors with DRIVE-CLiQ interface:	Absolute encoder EnDat 2048 pulses/revolution	F
	Incremental encoder sin/cos 1 V _{pp} with C and D tracks ⁷⁾	D
	Incremental encoder sin/cos 1 V _{pp} without C and D tracks ⁷⁾	Q
	2-pole resolver	P
Terminal box/ cable entry (view onto DE):	Top/from right	0
	Top/from DE	1
	Top/from NDE	2
	Top/from left	3
	Radial ventilation for SH 225 ⁸⁾	5
Type:	IM B3	0
	IM B3	1
	IM B35 (SH 180: with flange A 450, SH 225: with flange A 550)	3
	IM B35 (SH 180: with flange A 450, SH 225: with flange A 550)	5

Selection and ordering data

Power factor cos φ	Magnetizing current I_{μ} A	Efficiency η_{rated}	Rated frequency f_{rated} Hz	Moment of inertia of J kgm ² / lb _f -in-s ²	Weight, approx. kg/lb	1PL6 asynchronous motor	SINAMICS S120 Motor Module Rated output current	
						Order No.	I_{rated} A	Order No.
400 V 3 AC line voltage, Servo Control								
0.84	33.4	0.820	14.2	0.503/4.452	370/815.85	1PL6184- . . B . . - 0 ■ ■ ■ ■	60	6SL3120-1 TE26-0AA1
0.84	48.6	0.828	14.1	0.666/5.895	440/970.2	1PL6186- . . B . . - 0 ■ ■ ■ ■	85 ⁹⁾	6SL3120-1 TE28-5AA1
0.86	45.8	0.864	14	1.479/13.09	630/1389.2	1PL6224- . . B . . - 0 ■ ■ ■ ■	132	6SL3120-1 TE31-3AA0
0.85	67	0.868	14	1.930/17.082	750/1653.8	1PL6226- . . B . . - 0 ■ ■ ■ ■	200	6SL3120-1 TE32-0AA0
0.86	77	0.871	14.1	2.326/20.587	860/1896.3	1PL6228- . . B . . - 0 ■ ■ ■ ■	200	6SL3120-1 TE32-0AA0
0.87	45	0.897	34.4	0.503/4.452	370/815.85	1PL6184- . . D . . - 0 ■ ■ ■ ■	132	6SL3120-1 TE31-3AA0
0.86	61	0.907	34.3	0.666/5.895	440/970.2	1PL6186- . . D . . - 0 ■ ■ ■ ■	200	6SL3120-1 TE32-0AA0
0.86	86	0.927	34.5	1.479/13.09	630/1389.2	1PL6224- . . D . . - 0 ■ ■ ■ ■	210 ⁹⁾	6SL3320-1 TE32-1AA0
0.88	90	0.927	31.1	1.930/17.082	750/1653.8	1PL6226- . . D . . - 0 ■ ■ ■ ■	310	6SL3320-1 TE33-1AA0
0.89	103	0.928	34.2	2.326/20.587	860/1896.3	1PL6228- . . D . . - 0 ■ ■ ■ ■	380	6SL3320-1 TE33-8AA0
0.84	70	0.924	50.9	0.503/4.452	370/815.85	1PL6184- . . F . . - 0 ■ ■ ■ ■	200	6SL3120-1 TE32-0AA0
0.85	91	0.930	50.9	0.666/5.895	460/	1PL6186- . . F . . - 0 ■ ■ ■ ■	260	6SL3320-1 TE32-1AA0
0.87	91	0.940	50.9	1.479/13.09	640/	1PL6224- . . F . . - 0 ■ ■ ■ ■	310	6SL3320-1 TE33-1AA0
0.87	125	0.944	50.7	1.930/17.082	760/	1PL6226- . . F . . - 0 ■ ■ ■ ■	380	6SL3320-1 TE33-8AA0
0.86	177	0.947	50.7	2.326/20.587	870/	1PL6228- . . F . . - 0 ■ ■ ■ ■	490	6SL3320-1 TE35-0AA0
0.86	80	0.936	84.2	0.503/4.452	390/	1PL6184- . . L . . - 0 ■ ■ ■ ■	210	6SL3320-1 TE32-1AA0
0.85	113	0.943	84.1	0.666/5.895	470/	1PL6186- . . L . . - 0 ■ ■ ■ ■	310	6SL3320-1 TE33-1AA0
0.87	119	0.950	84.1	1.479/13.09	640/	1PL6224- . . L . . - 0 ■ ■ ■ ■	380	6SL3320-1 TE33-8AA0
0.88	157	0.953	84	1.930/17.082	760/	1PL6226- . . L . . - 0 ■ ■ ■ ■	490	6SL3320-1 TE35-0AA0
0.87	189	0.952	84	2.326/20.587	870/	1PL6228- . . L . . - 0 ■ ■ ■ ■	605	6SL3320-1 TE36-1AA0
Output type:		Vibration severity grade:		Shaft and flange accuracy:		A B C D E F G H		
Coupling		R		N				
Coupling		R		R				
Coupling		S		R				
Coupling		SR		R				
Belt		R		N				
Belt		R		R				
Incr. cantilever forces		R		N				
Incr. cantilever forces		R		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 ⁵⁾				
Fitted key		Full-key		DE → NDE				
Fitted key		Full-key		NDE → DE ⁵⁾				
Plain shaft		–		DE → NDE				
Plain shaft		–		NDE → DE ⁵⁾				
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⁾ Speed is reduced with increased cantilever forces, see selection guides.
- ⁵⁾ Preferred air-flow direction in polluted environment.

- ⁶⁾ The rated output current of the Motor Module is lower than the motor rated current.
- ⁷⁾ When ordering option **L27**, please also select option **M84** (insulated version of encoder).
- ⁸⁾ Digit "5" for SH 225: radial ventilation; for possible designs, see table "Permissible combinations of mechanical designs on page 3/154 et seq."
- ⁹⁾ Speed is limited to lower values in some cases. The following restriction applies: Max. output frequency < 5 × motor rated frequency.

AC motors

Asynchronous motors

1PL6 motors

Selection and ordering data

Rated speed	Shaft height SH	Rated power	Rated torque	Rated current	Rated voltage	Speed during field weakening ¹⁾	Max. permissible continuous speed ²⁾	Max. speed 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	585/431.1	69	300	1700	3500 ⁴⁾⁹⁾	5000 ⁹⁾	1PL6184-■ ■ B ■ ■ - 0 ...
		31.5/42.2	752/554.2	90	290	1900	3500 ⁴⁾⁹⁾	5000 ⁹⁾	1PL6186-■ ■ B ■ ■ - 0 ...
	225	45/60.4	1074/791.5	117	300	1600	3100 ⁴⁾⁹⁾	4500 ⁹⁾	1PL6224-■ ■ B ■ ■ - 0 ...
		57/76.4	1361/1003.1	145	305	1800	3100 ⁴⁾⁹⁾	4500 ⁹⁾	1PL6226-■ ■ B ■ ■ - 0 ...
		72/96.6	1719/1266.9	181	305	1800	3100 ⁴⁾⁹⁾	4500 ⁴⁾⁹⁾	1PL6228-■ ■ B ■ ■ - 0 ...
1150	180	65/87.2	540/398	121	400	2500	3500 ⁴⁾	5000	1PL6184-■ ■ D ■ ■ - 0 ...
		85/114.0	706/520.3	158	400	2700	3500 ⁴⁾	5000	1PL6186-■ ■ D ■ ■ - 0 ...
	225	120/160.9	997/734.8	218	400	2800	3100 ⁴⁾	4500	1PL6224-■ ■ D ■ ■ - 0 ...
		155/207.9	1287/948.5	275	400	2600	3100 ⁴⁾	4500	1PL6226-■ ■ D ■ ■ - 0 ...
		190/254.8	1578/1163	334	400	2500	3100 ⁴⁾	4500 ⁴⁾	1PL6228-■ ■ D ■ ■ - 0 ...
1750	180	89/119.4	486/358.2	166	400	4500	3500 ⁴⁾	5000	1PL6184-■ ■ F ■ ■ - 0 ...
		125/167.6	682/502.6	231	400	4500	3500 ⁴⁾	5000	1PL6186-■ ■ F ■ ■ - 0 ...
	225	165/221.3	900/663.3	292	400	2900	3100 ⁴⁾	4500	1PL6224-■ ■ F ■ ■ - 0 ...
		200/268.2	1091/1003.1	350	400	2900	3100 ⁴⁾	4500	1PL6226-■ ■ F ■ ■ - 0 ...
		265/355.4	1446/1065.7	470	400	2900	3100 ⁴⁾	4500 ⁴⁾	1PL6228-■ ■ F ■ ■ - 0 ...
2900	180	113/151.5	372/274.2	209	400	5000	3500 ⁴⁾	5000	1PL6184-■ ■ L ■ ■ - 0 ...
		150/201.2	494/364.1	280	390	5000	3500 ⁴⁾	5000	1PL6186-■ ■ L ■ ■ - 0 ...
	225	205/274.9	675/497.5	365	400	3500	3100 ⁴⁾	4500	1PL6224-■ ■ L ■ ■ - 0 ...
		270/362.1	889/655.2	470	400	3500	3100 ⁴⁾	4500	1PL6226-■ ■ L ■ ■ - 0 ...
		300/402.3	988/728.2	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 pulses/revolution Incremental encoder HTL 1024 pulses/revolution Incremental encoder HTL 2048 pulses/revolution Incremental encoder sin/cos 1 V _{pp} with C and D tracks ⁷⁾ Incremental encoder sin/cos 1 V _{pp} without C and D tracks ⁷⁾ 2-pole resolver	A E H J M N R
Encoder systems for motors with DRIVE-CLiQ interface:	Absolute encoder EnDat 2048 pulses/revolution Incremental encoder sin/cos 1 V _{pp} with C and D tracks ⁷⁾ Incremental encoder sin/cos 1 V _{pp} without C and D tracks ⁷⁾ 2-pole resolver	F D Q P
Terminal box/ cable entry (view onto DE):	Top/from right Top/from DE Top/from NDE Top/from left Radial ventilation for SH 225 ⁸⁾	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 construction types (IM B6, IM B7, IM B8, IM V5, IM V6)	
	Hoisting system for different construction types (IM V15, IM V36)	

Selection and ordering data

Power factor	Magnetizing current	Efficiency	Rated frequency	Moment of inertia of	Weight, approx.	1PL6 asynchronous motor	SINAMICS S120 Motor Module Rated output current	
cos φ	I_{μ} A	η_{rated}	f_{rated} Hz	J kgm ² / lb _r -in-s ²	kg/lb	Order No.	I_{rated} A	Order No.
400 V 3 AC line voltage, Vector Control								
0.86	33	0.800	14.4	0.503/4.452	370/815.85	1PL6184- . . B . . - 0 ■■■	85	6SL3120-1 TE28-5AA1
0.85	47	0.814	14.3	0.666/5.895	440/970.2	1PL6186- . . B . . - 0 ■■■	85 ⁶⁾	6SL3120-1 TE28-5AA1
0.87	45	0.844	14.2	1.479/13.09	630/1389.2	1PL6224- . . B . . - 0 ■■■	132	6SL3120-1 TE31-3AA0
0.85	67	0.868	14.0	1.930/17.082	750/1653.8	1PL6226- . . B . . - 0 ■■■	200	6SL3120-1 TE32-0AA0
0.86	77	0.871	14.0	2.326/20.587	860/1896.3	1PL6228- . . B . . - 0 ■■■	200	6SL3120-1 TE32-0AA0
0.86	46	0.906	39.4	0.503/4.452	370/815.85	1PL6184- . . D . . - 0 ■■■	132	6SL3120-1 TE31-3AA0
0.86	62	0.910	39.4	0.666/5.895	440/970.2	1PL6186- . . D . . - 0 ■■■	200	6SL3120-1 TE32-0AA0
0.85	86	0.930	39.1	1.479/13.09	630/1389.2	1PL6224- . . D . . - 0 ■■■	260	6SL3320-1 TE32-6AA0
0.87	92	0.930	39.2	1.930/17.082	750/1653.8	1PL6226- . . D . . - 0 ■■■	310	6SL3320-1 TE33-1AA0
0.88	102	0.931	39.2	2.326/20.587	860/1896.3	1PL6228- . . D . . - 0 ■■■	380	6SL3320-1 TE33-8AA0
0.84	68	0.921	59.3	0.503/4.452	370/815.85	1PL6184- . . F . . - 0 ■■■	200	6SL3120-1 TE32-0AA0
0.84	92	0.935	59.3	0.666/5.895	440/970.2	1PL6186- . . F . . - 0 ■■■	260	6SL3320-1 TE32-6AA0
0.87	90	0.942	59.2	1.479/13.09	630/1389.2	1PL6224- . . F . . - 0 ■■■	310	6SL3320-1 TE33-1AA0
0.87	122	0.942	59.1	1.930/17.082	750/1653.8	1PL6226- . . F . . - 0 ■■■	380	6SL3320-1 TE33-8AA0
0.86	174	0.948	59.0	2.326/20.587	860/1896.3	1PL6228- . . F . . - 0 ■■■	490	6SL3320-1 TE35-0AA0
0.85	79	0.938	97.6	0.503/4.452	370/815.85	1PL6184- . . L . . - 0 ■■■	210	6SL3320-1 TE32-1AA0
0.84	110	0.943	97.5	0.666/5.895	440/970.2	1PL6186- . . L . . - 0 ■■■	310	6SL3320-1 TE33-1AA0
0.86	118	0.950	97.5	1.479/13.09	630/1389.2	1PL6224- . . L . . - 0 ■■■	380	6SL3320-1 TE33-8AA0
0.87	160	0.952	97.4	1.930/17.082	750/1653.8	1PL6226- . . L . . - 0 ■■■	490	6SL3320-1 TE35-0AA0
0.86	188	0.952	97.3	2.326/20.587	860/1896.3	1PL6228- . . L . . - 0 ■■■	605	6SL3320-1 TE36-1AA0
Output type:		Vibration severity grade:	Shaft and flange accuracy:			A B C D E F G H A B C D J K 0 3 6 –Z		
Coupling	R	N						
Coupling	R	R						
Coupling	S	R						
Coupling	SR	R						
Belt	R	N						
Belt	R	R						
Incr. cantilever forces	R	N						
Incr. cantilever forces	R	R						
Shaft extension (DE):		Balancing:	Direction of air flow (fan):					
Fitted key	Half-key	DE → NDE						
Fitted key	Half-key	NDE → DE ⁵⁾						
Fitted key	Full-key	DE → NDE						
Fitted key	Full-key	NDE → DE ⁵⁾						
Plain shaft	–	DE → NDE						
Plain shaft	–	NDE → DE ⁵⁾						
Paint finish:								
Primed							0	
Anthracite (RAL 7016), standard paint finish							3	
Anthracite (RAL 7016), special paint finish							6	
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⁾ Speed is reduced with increased cantilever forces, see selection guides.
- ⁵⁾ Preferred air-flow direction in polluted environment.

- ⁶⁾ The rated output current of the Motor Module is lower than the motor rated current.
- ⁷⁾ When ordering option **L27**, please also select option **M84** (insulated version of encoder).
- ⁸⁾ Digit "5" for SH 225: radial ventilation; for possible designs, see table "Permissible combinations of mechanical designs on page 3/154 et seq."
- ⁹⁾ Speed is limited to lower values in some cases. The following restriction applies: Max. output frequency < 5 × motor rated frequency.

AC motors

Asynchronous motors

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Selection and ordering data

Rated speed	Shaft height SH	Rated power	Rated torque	Rated current	Rated voltage	Speed during field weakening ¹⁾	Max. permissible continuous speed ²⁾	Max. speed ³⁾	1PL6 asynchronous motor				
n_{rated} rpm		P_{rated} kW/HP	M_{rated} Nm/lb ₋ 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	195/261.5	2328/1715.7	335	400	1700	2200	3300	1PL6284-■ ■ C ■ ■ - 0 ...				
		250/335.3	2984/2199.2	440	385	1900	2200	3300	1PL6286-■ ■ C ■ ■ - 0 ...				
		310/415.7	3701/2727.6	570	370	2200	2200	3300	1PL6288-■ ■ C ■ ■ - 0 ...				
1150	280	280/375.5	2325/1713.5	478	400	2200	2200	3300	1PL6284-■ ■ D ■ ■ - 0 ...				
		355/476.1	2944/2169.7	637	380	2200	2200	3300	1PL6286-■ ■ D ■ ■ - 0 ...				
		435/583.3	3607/2658.4	765	385	2200	2200	3300	1PL6288-■ ■ D ■ ■ - 0 ...				
1750	280	370/496.2	2019/1488	616	400	2200	2200	3300	1PL6284-■ ■ F ■ ■ - 0 ...				
		445/596.8	2429/1790	736	400	2200	2200	3300	1PL6286-■ ■ F ■ ■ - 0 ...				
		560/751.0	3055/2251.5	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 pulses/revolution Incremental encoder HTL 1024 pulses/revolution Incremental encoder HTL 2048 pulses/revolution Incremental encoder sin/cos 1 V _{pp} with C and D tracks ⁶⁾ Incremental encoder sin/cos 1 V _{pp} without C and D tracks ⁶⁾ 2-pole resolver						A E H J M N R				
Encoder systems for motors with DRIVE-CLiQ interface:			Absolute encoder EnDat 2048 pulses/revolution Incremental encoder sin/cos 1 V _{pp} with C and D tracks ⁶⁾ Incremental encoder sin/cos 1 V _{pp} without C and D tracks ⁶⁾ 2-pole resolver						F D Q P				
Terminal box/cable entry (view onto 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 V36)						0 1 3 5				

Selection and ordering data

Power factor	Magnetizing current	Efficiency	Rated frequency	Moment of inertia of	Weight, approx.	1PL6 asynchronous motor	SINAMICS S120 Motor Module	
	I_{μ}	η_{rated}	f_{rated}	J			Rated output current	
$\cos \varphi$	A		Hz	kgm ² / lb _F -in-s ²	kg/lb	Order No.	I_{rated} A	Order No.
400 V 3 AC line voltage, Vector Control								
0.90	95	0.929	27.3	4.2/37.2	1300/2866.5	1PL6284- . . C . . - 0 ■ ■ ■	380	6SL3320-1TE33-8AA0
0.90	135	0.934	27.3	5.2/46.0	1500/3307.5	1PL6286- . . C . . - 0 ■ ■ ■	490	6SL3320-1TE35-0AA0
0.90	170	0.939	27.3	6.3/55.8	1700/3748.5	1PL6288- . . C . . - 0 ■ ■ ■	605	6SL3320-1TE36-1AA0
0.89	156	0.950	38.9	4.2/37.2	1300/2866.5	1PL6284- . . D . . - 0 ■ ■ ■	490	6SL3320-1TE35-0AA0
0.89	214	0.953	38.9	5.2/46.0	1500/3307.5	1PL6286- . . D . . - 0 ■ ■ ■	745	6SL3320-1TE37-5AA0
0.89	248	0.955	38.9	6.3/55.8	1700/3748.5	1PL6288- . . D . . - 0 ■ ■ ■	840	6SL3320-1TE38-4AA0
0.90	162	0.959	59.0	4.2/37.2	1300/2866.5	1PL6284- . . F . . - 0 ■ ■ ■	605 ⁵⁾	6SL3320-1TE36-1AA0
0.91	182	0.960	59.0	5.2/46.0	1500/3307.5	1PL6286- . . F . . - 0 ■ ■ ■	745	6SL3320-1TE37-5AA0
0.91	232	0.962	59.0	6.3/55.8	1700/3748.5	1PL6288- . . F . . - 0 ■ ■ ■	985	6SL3320-1TE41-0AA0
Output type ⁴⁾ :		Vibration severity grade:		Shaft and flange accuracy:			A B E F	
Coupling		N		N				
Coupling		R		R				
Belt/incr. cantilever forces		N		N				
Belt/incr. cantilever forces		R		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".

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

⁶⁾ Only in conjunction with option **M84** (insulated version of encoder).

AC motors

Asynchronous motors

1PL6 motors

Selection and ordering data

Rated speed	Shaft height SH	Rated power	Rated torque	Rated current	Rated voltage	Speed during field weakening ¹⁾	Max. permissible continuous speed ²⁾	Max. speed ³⁾	1PL6 asynchronous motor		
n_{rated} rpm		P_{rated} kW/HP	M_{rated} Nm/lb _r -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	573/422.3	66	370	1900	3500 ⁴⁾⁹⁾	5000 ⁹⁾	1PL6184-■ ■ B ■ ■ - 0 ...		
		40/53.6	764/563.1	91	355	2000	3500 ⁴⁾⁹⁾	5000 ⁹⁾	1PL6186-■ ■ B ■ ■ - 0 ...		
	225	55/73.8	1050/773.9	114	370	1800	3100 ⁴⁾⁹⁾	4500 ⁹⁾	1PL6224-■ ■ B ■ ■ - 0 ...		
		72/96.6	1375/1013.4	147	375	2000	3100 ⁴⁾⁹⁾	4500 ⁹⁾	1PL6226-■ ■ B ■ ■ - 0 ...		
		90/120.7	1719/1266.9	180	380	1900	3100 ⁴⁾⁹⁾	4500 ⁴⁾⁹⁾	1PL6228-■ ■ B ■ ■ - 0 ...		
1350	180	74/99.2	523/385.5	119	460	3000	3500 ⁴⁾	5000	1PL6184-■ ■ D ■ ■ - 0 ...		
		98/131.4	693/510.7	156	460	3100	3500 ⁴⁾	5000	1PL6186-■ ■ D ■ ■ - 0 ...		
	225	137/183.7	969/714.2	215	460	3300	3100 ⁴⁾	4500	1PL6224-■ ■ D ■ ■ - 0 ...		
		172/230.7	1217/896.9	265	460	3200	3100 ⁴⁾	4500	1PL6226-■ ■ D ■ ■ - 0 ...		
		218/292.3	1542/1136.5	332	460	2900	3100 ⁴⁾	4500 ⁴⁾	1PL6228-■ ■ D ■ ■ - 0 ...		
2000	180	98/131.4	468/344.9	161	460	5000	3500 ⁴⁾	5000	1PL6184-■ ■ F ■ ■ - 0 ...		
		135/181.0	645/475.4	220	460	5000	3500 ⁴⁾	5000	1PL6186-■ ■ F ■ ■ - 0 ...		
	225	178/238.7	850/626.5	275	460	2900	3100 ⁴⁾	4500	1PL6224-■ ■ F ■ ■ - 0 ...		
		220/131.4	1050/773.9	342	460	2900	3100 ⁴⁾	4500	1PL6226-■ ■ F ■ ■ - 0 ...		
		288/386.2	1375/1013.4	450	460	2900	3100 ⁴⁾	4500 ⁴⁾	1PL6228-■ ■ F ■ ■ - 0 ...		
2900	180	113/151.5	372/274.2	209	400	5000	3500 ⁴⁾	5000	1PL6184-■ ■ L ■ ■ - 0 ...		
		150/201.2	494/364.1	280	390	5000	3500 ⁴⁾	5000	1PL6186-■ ■ L ■ ■ - 0 ...		
	225	205/274.9	675/497.5	365	400	3500	3100 ⁴⁾	4500	1PL6224-■ ■ L ■ ■ - 0 ...		
		270/362.1	889/655.2	470	395	3500	3100 ⁴⁾	4500	1PL6226-■ ■ L ■ ■ - 0 ...		
		300/402.3	988/728.2	530	400	3500	3100 ⁴⁾	4500 ⁴⁾	1PL6228-■ ■ L ■ ■ - 0 ...		
Fans:			External fan unit, heavy-gauge threaded cable entry in terminal box						4		
			Without external fan unit, for pipe connection, heavy-gauge threaded cable entry in terminal box						6		
			External fan unit, metric cable entry in terminal box						7		
			Without external fan unit, for pipe connection, metric cable entry in terminal box						8		
Encoder systems for motors without DRIVE-CLiQ interface:			Without encoder						A E H J M N R		
			Absolute encoder EnDat 2048 pulses/revolution								
			Incremental encoder HTL 1024 pulses/revolution								
			Incremental encoder HTL 2048 pulses/revolution								
			Incremental encoder sin/cos 1 V _{pp} with C and D tracks ⁷⁾								
			Incremental encoder sin/cos 1 V _{pp} without C and D tracks ⁷⁾								
			2-pole resolver						F D Q P		
Encoder systems for motors with DRIVE-CLiQ interface:			Absolute encoder EnDat 2048 pulses/revolution								
			Incremental encoder sin/cos 1 V _{pp} with C and D tracks ⁷⁾								
			Incremental encoder sin/cos 1 V _{pp} without C and D tracks ⁷⁾								
			2-pole resolver								
Terminal box/cable entry (view onto DE):			Top/from right						0 1 2 3 5		
			Top/from DE								
			Top/from NDE								
			Top/from left								
			Radial ventilation for SH 225 ⁸⁾								
Type:			IM B3						0 1 3 5		
			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 construction types (IM B6, IM B7, IM B8, IM V5, IM V6)					
						Hoisting system for different construction types (IM V15, IM V36)					

Selection and ordering data

Power factor	Magnetizing current	Efficiency	Rated frequency	Moment of inertia of	Weight, approx.	1PL6 asynchronous motor	SINAMICS S120 Motor Module Rated output current	
cos φ	I _μ A	η _{rated}	f _{rated} Hz	J kgm ² / lb _r -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	0.503/4.452	370/815.85	1PL6184- . . B . . - 0 ■■■	85	6SL3120-1TE28-5AA1
0.84	46	0.845	17.6	0.666/5.895	440/970.2	1PL6186- . . B . . - 0 ■■■	132	6SL3120-1TE31-3AA0
0.86	46	0.875	17.5	1.479/13.09	630/1389.2	1PL6224- . . B . . - 0 ■■■	132	6SL3120-1TE31-3AA0
0.85	66	0.887	17.4	1.930/17.082	750/1653.8	1PL6226- . . B . . - 0 ■■■	200	6SL3120-1TE32-0AA0
0.85	79	0.894	17.4	2.326/20.587	860/1896.3	1PL6228- . . B . . - 0 ■■■	200	6SL3120-1TE32-0AA0
0.86	44	0.918	46.1	0.503/4.452	370/815.85	1PL6184- . . D . . - 0 ■■■	132	6SL3120-1TE31-3AA0
0.85	60	0.920	46.0	0.666/5.895	440/970.2	1PL6186- . . D . . - 0 ■■■	200	6SL3120-1TE32-0AA0
0.85	82	0.940	45.8	1.479/13.09	630/1389.2	1PL6224- . . D . . - 0 ■■■	210 ⁶⁾	6SL3320-1TE32-1AA0
0.87	88	0.940	45.8	1.930/17.082	750/1653.8	1PL6226- . . D . . - 0 ■■■	260 ⁶⁾	6SL3320-1TE32-6AA0
0.88	100	0.938	45.8	2.326/20.587	860/1896.3	1PL6228- . . D . . - 0 ■■■	380	6SL3320-1TE33-8AA0
0.83	70	0.934	67.5	0.503/4.452	370/815.85	1PL6184- . . F . . - 0 ■■■	200	6SL3120-1TE32-0AA0
0.83	94	0.940	67.5	0.666/5.895	440/970.2	1PL6186- . . F . . - 0 ■■■	260	6SL3320-1TE32-6AA0
0.86	91	0.944	67.5	1.479/13.09	630/1389.2	1PL6224- . . F . . - 0 ■■■	310	6SL3320-1TE33-1AA0
0.86	124	0.948	67.5	1.930/17.082	750/1653.8	1PL6226- . . F . . - 0 ■■■	380	6SL3320-1TE33-8AA0
0.85	176	0.948	67.3	2.326/20.587	860/1896.3	1PL6228- . . F . . - 0 ■■■	490	6SL3320-1TE35-0AA0
0.85	79	0.938	97.6	0.503/4.452	370/815.85	1PL6184- . . L . . - 0 ■■■	210	6SL3320-1TE32-1AA0
0.84	110	0.943	97.5	0.666/5.895	440/970.2	1PL6186- . . L . . - 0 ■■■	310	6SL3320-1TE33-1AA0
0.86	118	0.950	97.5	1.479/13.09	630/1389.2	1PL6224- . . L . . - 0 ■■■	380	6SL3320-1TE33-8AA0
0.87	160	0.952	97.4	1.930/17.082	750/1653.8	1PL6226- . . L . . - 0 ■■■	490	6SL3320-1TE35-0AA0
0.86	188	0.952	97.3	2.326/20.587	860/1896.3	1PL6228- . . L . . - 0 ■■■	605	6SL3320-1TE36-1AA0
Output type:		Vibration severity grade:		Shaft and flange accuracy:			A B C D E F G H	
Coupling		R		N				
Coupling		R		R				
Coupling		S		R				
Coupling		SR		R				
Belt		R		N				
Belt		R		R				
Increased cantilever forces		R		N				
Increased cantilever forces		R		R			H	
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 ⁵⁾				
Fitted key		Full-key		DE → NDE				
Fitted key		Full-key		NDE → DE ⁵⁾				
Plain shaft		–		DE → NDE				
Plain shaft		–		NDE → DE ⁵⁾				
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⁾ Speed is reduced with increased cantilever forces, see selection guides.
- ⁵⁾ Preferred air-flow direction in polluted environment.

- ⁶⁾ The rated output current of the Motor Module is lower than the motor rated current.
- ⁷⁾ When ordering option **L27**, please also select option **M84** (insulated version of encoder).
- ⁸⁾ Digit "5" for SH 225: radial ventilation; for possible designs, see table "Permissible combinations of mechanical designs on page 3/154 et seq."
- ⁹⁾ Speed is limited to lower values in some cases. The following restriction applies: Max. output frequency < 5 × motor rated frequency.

AC motors

Asynchronous motors

1PL6 motors

Selection and ordering data

Rated speed	Shaft height SH	Rated power	Rated torque	Rated current	Rated voltage	Speed during field weakening ¹⁾	Max. permissible continuous speed ²⁾	Max. speed 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	235/315.1	2244/1653.8	335	480	2200	2200	3300	1PL6284- ■ ■ C ■ ■ - 0 ...		
		310/415.7	2961/2182.3	440	480	2200	2200	3300	1PL6286- ■ ■ C ■ ■ - 0 ...		
		385/516.3	3677/2709.9	570	460	2200	2200	3300	1PL6288- ■ ■ C ■ ■ - 0 ...		
1350	280	325/435.8	2299/1694.4	478	470	2200	2200	3300	1PL6284- ■ ■ D ■ ■ - 0 ...		
		410/549.8	2901/2138.0	637	445	2200	2200	3300	1PL6286- ■ ■ D ■ ■ - 0 ...		
		505/677.2	3573/2633.3	765	450	2200	2200	3300	1PL6288- ■ ■ D ■ ■ - 0 ...		
2000	280	415/556.5	1981/1460.0	616	455	2200	2200	3300	1PL6284- ■ ■ F ■ ■ - 0 ...		
		500/670.5	2387/1759.2	736	455	2200	2200	3300	1PL6286- ■ ■ F ■ ■ - 0 ...		
		630/844.8	3009/2217.6	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 pulses/revolution Incremental encoder HTL 1024 pulses/revolution Incremental encoder HTL 2048 pulses/revolution Incremental encoder sin/cos 1 V _{pp} with C and D tracks ⁶⁾ Incremental encoder sin/cos 1 V _{pp} without C and D tracks ⁶⁾ 2-pole resolver						A E H J M N R		
Encoder systems for motors with DRIVE-CLiQ interface:			Absolute encoder EnDat 2048 pulses/revolution Incremental encoder sin/cos 1 V _{pp} with C and D tracks ⁶⁾ Incremental encoder sin/cos 1 V _{pp} without C and D tracks ⁶⁾ 2-pole resolver						F D Q P		
Terminal box/cable entry (view onto 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 V36)						0 1 3 5		

Selection and ordering data

Power factor	Magnetizing current	Efficiency	Rated frequency	Moment of inertia of	Weight, approx.	1PL6 asynchronous motor	SINAMICS S120 Motor Module Rated output 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								
0.90	90	0.939	34.0	4.2/37.173	1300/2866.5	1PL6284- . . C . . - 0 ■ ■ ■	380	6SL3320-1TE33-8AA0
0.90	135	0.945	34.0	5.2/46.02	1500/3307.5	1PL6286- . . C . . - 0 ■ ■ ■	490	6SL3320-1TE35-0AA0
0.90	170	0.948	34.0	6.3/55.76	1700/3748.5	1PL6288- . . C . . - 0 ■ ■ ■	605	6SL3320-1TE36-1AA0
0.89	157	0.955	45.5	4.2/37.173	1300/2866.5	1PL6284- . . D . . - 0 ■ ■ ■	490	6SL3320-1TE35-0AA0
0.89	215	0.957	45.5	5.2/46.02	1500/3307.5	1PL6286- . . D . . - 0 ■ ■ ■	745	6SL3320-1TE37-5AA0
0.89	248	0.959	45.5	6.3/55.76	1700/3748.5	1PL6288- . . D . . - 0 ■ ■ ■	840	6SL3320-1TE38-4AA0
0.90	161	0.961	67.3	4.2/37.173	1300/2866.5	1PL6284- . . F . . - 0 ■ ■ ■	745	6SL3320-1TE37-5AA0
0.91	181	0.963	67.3	5.2/46.02	1500/3307.5	1PL6286- . . F . . - 0 ■ ■ ■	745	6SL3320-1TE37-5AA0
0.91	231	0.965	67.3	6.3/55.76	1700/3748.5	1PL6288- . . F . . - 0 ■ ■ ■	985	6SL3320-1TE41-0AA0
Output type ⁴⁾ :		Vibration severity grade:		Shaft and flange accuracy:			A B E F	
Coupling		N		N				
Coupling		R		R				
Belt/increased cantilever forces		N		N				
Belt/increased cantilever forces		R		R				
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".
- ⁵⁾ The rated output current of the Motor Module is lower than the motor rated current.
- ⁶⁾ Only in conjunction with option **M84** (insulated version of encoder).

AC motors

Asynchronous motors

1PL6 motors

Selection and ordering data

Rated speed	Shaft height SH	Rated power	Rated torque	Rated current	Rated voltage	Speed during field weakening ¹⁾	Max. permissible continuous speed ²⁾	Max. speed 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	185/248.1	2208/1627.3	185	690	2000	2200	3300	1PL6284-■ ■ C ■ ■ - 0 . . .				
		240/321.8	2865/2111.5	250	665	2100	2200	3300	1PL6286-■ ■ C ■ ■ - 0 . . .				
		300/402.3	3581/2639.2	320	640	2200	2200	3300	1PL6288-■ ■ C ■ ■ - 0 . . .				
1150	280	272/364.8	2259/1664.9	270	690	2200	2200	3300	1PL6284-■ ■ D ■ ■ - 0 . . .				
		344/461.3	2857/2105.6	359	655	2200	2200	3300	1PL6286-■ ■ D ■ ■ - 0 . . .				
		422/565.9	3504/2582.4	431	665	2200	2200	3300	1PL6288-■ ■ D ■ ■ - 0 . . .				
1750	280	359/481.4	1959/1443.8	347	690	2200	2200	3300	1PL6284-■ ■ F ■ ■ - 0 . . .				
		432/579.3	2357/1737.1	415	690	2200	2200	3300	1PL6286-■ ■ F ■ ■ - 0 . . .				
		543/728.2	2963/2183.7	520	690	2200	2200	3300	1PL6288-■ ■ F ■ ■ - 0 . . .				
Fans ⁵⁾ :			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 pulses/revolution Incremental encoder HTL 1024 pulses/revolution Incremental encoder HTL 2048 pulses/revolution Incremental encoder sin/cos 1 V _{pp} with C and D tracks ⁶⁾ Incremental encoder sin/cos 1 V _{pp} without C and D tracks ⁶⁾ 2-pole resolver							A E H J M N R			
Encoder systems for motors with DRIVE-CLiQ interface:			Absolute encoder EnDat 2048 pulses/revolution Incremental encoder sin/cos 1 V _{pp} with C and D tracks ⁶⁾ Incremental encoder sin/cos 1 V _{pp} without C and D tracks ⁶⁾ 2-pole resolver							F D Q P			
Terminal box/cable entry (view onto DE) ⁵⁾ :			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 ⁵⁾ :			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 V36)								0 1 3 5		

Selection and ordering data

Power factor	Magnetizing current	Efficiency	Rated frequency	Moment of inertia of	Weight, approx.	1PL6 asynchronous motor	SINAMICS S120 Motor Module	
$\cos \varphi$	I_{μ} A	η_{rated}	f_{rated} Hz	J kgm ² / lb _T -in-s ²	kg/lb	Order No.	I_{rated} A	Order No.
690 V 3 AC line voltage, Servo/Vector Control								
0.90	55	0.928	27	4.2/37.173	1300/2866.5	1PL6284- . . C . . - 0 ■ ■ ■	215	6SL3320-1T H32-2AA0
0.90	80	0.934	27	5.2/46.02	1500/3307.5	1PL6286- . . C . . - 0 ■ ■ ■	260	6SL3320-1T H32-6AA0
0.90	100	0.938	27	6.3/55.76	1700/3748.5	1PL6288- . . C . . - 0 ■ ■ ■	330	6SL3320-1T H33-3AA0
0.89	89	0.949	38.9	4.2/37.173	1300/2866.5	1PL6284- . . D . . - 0 ■ ■ ■	330	6SL3320-1T H33-3AA0
0.89	123	0.953	38.9	5.2/46.02	1500/3307.5	1PL6286- . . D . . - 0 ■ ■ ■	410	6SL3320-1T H34-1AA0
0.89	143	0.955	38.9	6.3/55.76	1700/3748.5	1PL6288- . . D . . - 0 ■ ■ ■	465	6SL3320-1T H34-7AA0
0.90	93	0.958	59	4.2/37.173	1300/2866.5	1PL6284- . . F . . - 0 ■ ■ ■	410	6SL3320-1T H34-1AA0
0.91	105	0.960	59	5.2/46.02	1500/3307.5	1PL6286- . . F . . - 0 ■ ■ ■	410 ⁴⁾	6SL3320-1T H34-1AA0
0.91	133	0.962	59	6.3/55.76	1700/3748.5	1PL6288- . . F . . - 0 ■ ■ ■	575	6SL3320-1T H35-8AA0
Output type ⁵⁾ :		Vibration severity grade:		Shaft and flange accuracy:				
Coupling		N		N			A	
Coupling		R		R			B	
Belt/increased cantilever forces		N		N			E	
Belt/increased cantilever forces		R		R			F	
Shaft extension (DE):		Balancing:						
Fitted key		Half-key					A	
Fitted key		Full-key					C	
Plain shaft		—					J	
Paint finish:								
Primed					0			
Anthracite (RAL 7016), standard paint finish					3			
Anthracite (RAL 7016), special paint finish					6			
Special versions:		Specify supplementary order code and plain text if applicable (see Options). C30 absolutely essential					—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 rated output current of the Motor Module is lower than the motor rated current.

5) See Table "Permissible combinations of mechanical designs".

6) Only in conjunction with option **M84** (insulated version of encoder).

AC motors

Asynchronous motors

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

Selection and ordering data

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					
	-	■	.	.	■	■	-	■	.	■	.	-Z			
	Exter- nal fan unit		Radial ventilation 2)		Type of construc- tion (IM B3 and IM B35)		Air-flow direction NDE → DE, shaft end								
with external fan unit	-	4 7	.	.	5	0 3	-	.	B D K	.					
without external fan unit, for pipe connec- tion	-	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 POG10 pulse encoder, mounting prepared (encoder is supplied)															
K55 Cable entry plate, terminal box, customer-specific 1)															
K16 Second standard shaft end (possible only for encoderless systems)											on request				
K31 Second rating plate															
Y55 Non-standard shaft extension DE															
K40 230 V standstill heating											on request				
L27 NDE bearing in insulated design															
Y80 Different rating plate data 1)											on request				
Y82 Extra rating plate with customer data											on request				
												Standard version			
												Released supplementary versions			

1) Plain text is necessary

2) Cable entry direction for **K09**: Power DE, encoder connector at top
Cable entry direction for **K10**: Power DE, encoder connector at top
Cable entry direction for **K11**: Cable entry on right, encoder connector DE

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

[illegible]

AC motors

Asynchronous motors

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

Selection and ordering data

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 at top NDE → DE	NDE on right NDE → DE	NDE on left NDE → DE	DE at top DE → NDE	DE on right DE → NDE	DE on left DE → NDE	Single pipe connection NDE on right (can be modified subsequently to NDE left)
1PL628 . - 0 - Type of construction IM B3							
1PL628 . - 1 - Type of construction IM V5 (can be modified subsequently to IM V6)							
1PL628 . - 3 - Type construction IM B35							
1PL628 . - 5 - Type construction IM V15 (can be modified subsequently to IM V36)							
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 end (possible only for encoderless systems)							
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							

1) Plain text is necessary

Standard version

Released supplementary versions

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

[illegible]