

Rated output at 50 Hz	Frame size	Operating characteristics at rated output						Starting torque	Starting current	Break-down torque	Torque class	Moment of inertia	Order-No.	Price	Weight
		Rated speed at 50 Hz	Rated torque at 50 Hz	Relevant for IE changeover				with direct starting of rated torque	starting current	as multiple of rated torque			For Order No. supplements for voltage and type of construction, see table below		Construction type IM B3 approx. m
P_{rated} kW	FS	n_{rated} rpm	M_{rated} Nm	Efficiency Class according to IEC 60034-30 standard	Efficiency at 50 Hz 100 %-load	Power factor at 50 Hz 100 %-load	Rated current at 50 Hz 400 V	T_{LR}/T_{rated}	I_{LR}/I_{rated}	T_B/T_{rated}		J kg m ²	► Phase-out model		kg
2-pole, 3000 rpm at 50 Hz, temperature class 155 (F), IP55 degree of protection															
0.18	63 M	2820	0.61		63.0	0.82	0.50	2.0	3.7	2.2	16	0.00018	1PP7 060-2AA□□		4
0.25	63 M	2830	0.84		65.0	0.82	0.68	2.0	4.0	2.2	16	0.00022	1PP7 063-2AA□□		4
0.37	71 M	2740	1.3		66.0	0.82	1.00	2.3	3.5	2.3	16	0.00029	1PP7 070-2AA□□		5
0.55	71 M	2800	1.9		71.0	0.82	1.36	2.5	4.3	2.6	16	0.00041	1PP7 073-2AA□□		6
0.75	80 M	2855	2.5	IE1	72.1	0.86	1.75	2.3	5.6	2.4	16	0.00079	1PP7 080-2AA□□		9
1.1	80 M	2845	3.7	IE1	75.0	0.87	2.45	2.6	6.1	2.7	16	0.0010	1PP7 083-2AA□□		11
1.5	90 S	2860	5.0	IE1	77.2	0.85	3.30	2.4	5.5	2.7	16	0.0014	1PP7 090-2AA□□		13
2.2	90 L	2880	7.3	IE1	79.7	0.85	4.70	2.8	6.3	3.1	16	0.0018	1PP7 096-2AA□□		16
3	100 L	2890	9.9	IE1	81.5	0.85	6.3	2.8	6.8	3.0	16	0.0035	► 1PP7 106-2AA□□		22
4	111 M	2905	13	IE1	83.1	0.86	8.1	2.6	7.2	2.9	16	0.0059	► 1PP7 113-2AA□□		29
5.5	132 S	2925	18	IE1	84.7	0.89	10.5	2.0	5.9	2.8	16	0.015	► 1PP7 130-2AA□□		39
7.5	132 S	2930	24	IE1	86.0	0.89	14.1	2.3	6.9	3.0	16	0.019	► 1PP7 131-2AA□□		48
11	160 M	2940	36	IE1	87.6	0.88	20.5	2.1	6.5	2.9	16	0.034	► 1PP7 163-2AA□□		68
15	160 M	2940	49	IE1	88.7	0.90	27.0	2.2	6.6	3.0	16	0.043	► 1PP7 164-2AA□□		77
18.5	160 L	2940	60	IE1	89.3	0.91	33.0	2.4	7.0	3.1	16	0.051	► 1PP7 166-2AA□□		86
22	180 M	2940	71	IE1	89.9	0.88	40 ¹⁾	2.5	6.9	3.2	16	0.077	1PP5 183-2AA□□		111
30	200 L	2945	97	IE1	90.7	0.89	54	2.4	7.2	2.8	16	0.14	1PP5 206-2AA□□		159
37	200 L	2945	120	IE1	91.2	0.89	66 ¹⁾	2.4	7.7	2.8	16	0.16	1PP5 207-2AA□□		179

Order No. supplements

Motor type	Penultimate position: Voltage code				Final position: Type of construction code							
	50 Hz				Without flange		With flange				With standard flange	
	230 VΔ/400 VY	400 VΔ/690 VY	500 VY	500 VΔ	IM B3/6/7/8, IM V6/5 without protective cover		IM B5, IM V3 ²⁾	IM V1 without protective cover ^{2) 3)}	IM B35		IM B14, IM V19 IM V18 without protective cover	IM B34
	1	6	3	5	0		1	1	6		2	7
1PP7 06 □□	○	○	○	–	□		✓	✓	–		✓	–
1PP7 07 □□	○	○	○	–	□		✓	✓	–		✓	–
1PP7 08 □□	○	○	○	–	□		✓	✓	–		✓	–
1PP7 09 □□	○	○	○	–	□		✓	✓	–		✓	–
1PP7 10 □□	○	○	○	○	□		✓	✓	–		✓	–
1PP7 11 □□	○	○	○	○	□		✓	✓	–		✓	–
1PP7 13 □□	○	○	○	○	□		✓	✓	–		✓	–
1PP7 16 □□	○	○	○	○	□		✓	✓	–		✓	–
1PP5 18 □□	○	○	○	○	□		✓ ⁴⁾	✓	–		–	–
1PP5 20 □□	○	○	○	○	□		✓ ⁴⁾	✓	–		–	–

- Standard version
- Without additional charge
- ✓ With additional charge
- Not possible

► The Order No. for 1PP7 motors marked with this symbol are phase-out models.
1LE1 motors are the successors.
For additional information see part “New Generation 1LE1/1PC1” under “Forced-air cooled motors without external fan and fan cover”.

Order other voltages with voltage code **9** in the penultimate position and the corresponding order code (see “Special versions” in the “Options” under “Voltages”).

Order other types of construction with type of construction code **9** in the final position and the corresponding order code (see “Special versions” in the “Options” under “Types of construction”).

1) For connection to 230 V, parallel feeders are necessary.

2) Motors 1PP5 183-... to 1PP5 223-... (motor series 1PP5, frame size 180 M to 225 M) can be supplied with two additional eyebolts; specify supplement “**Z**” and order code **K32**.

3) The “Second shaft extension” option, order code **K16** is not possible.

4) Type of construction IM V3 is only possible using type of construction code **9** and order code **M1G**.

Rated output at 50 Hz	Frame size	Operating characteristics at rated output						Starting torque	Starting current	Break-down torque	Torque class	Moment of inertia	Order-No.	Price	Weight
		Rated speed at 50 Hz	Rated torque at 50 Hz	Relevant for IE changeover											
				Efficiency Class according to IEC 60034-30 standard	Efficiency at 50 Hz 100 %-load	Power factor at 50 Hz 100 %-load	Rated current at 50 Hz 400 V	with direct starting of rated torque	as multiple of rated current	as multiple of rated torque			For Order No. supplements for voltage and type of construction, see table below		Construction type IM B3 approx. m
P_{rated} kW	FS	n_{rated} rpm	M_{rated} Nm		η_{rated} %	$\cos\varphi_{rated}$	I_{rated} A	T_{LR}/T_{rated}	I_{LR}/I_{rated}	T_B/T_{rated}		J kg m ²	► Phase-out model		kg
4-pole, 1500 rpm at 50 Hz, temperature class 155 (F), IP55 degree of protection															
0.12	63 M	1350	0.85		55.0	75	0.42	1.9	2.8	2.0	13	0.00029	1PP7 060-4AB□□		4
0.18	63 M	1350	1.3		60.0	77	0.56	1.9	3.0	1.9	13	0.00037	1PP7 063-4AB□□		4
0.25	71 M	1350	1.8		60.0	78	0.77	1.9	3.0	1.9	13	0.00052	1PP7 070-4AB□□		5
0.37	71 M	1370	2.6		65.0	78	1.06	1.9	3.3	2.1	13	0.00077	1PP7 073-4AB□□		6
0.55	80 M	1395	3.8		67.0	82	1.44	2.2	3.9	2.2	16	0.0014	1PP7 080-4AA□□		9
0.75	80 M	1395	5.1	IE1	72.1	81	1.88	2.3	4.2	2.3	16	0.0017	1PP7 083-4AA□□		10
1.1	90 S	1415	7.4	IE1	75.0	81	2.60	2.3	4.6	2.4	16	0.0024	1PP7 090-4AA□□		13
1.5	90 L	1420	10	IE1	77.2	81	3.45	2.4	5.3	2.6	16	0.0033	1PP7 096-4AA□□		16
2.2	100 L	1420	15	IE1	79.7	82	4.85	2.5	5.6	2.8	16	0.0047	► 1PP7 106-4AA□□		21
3	100 L	1420	20	IE1	81.5	82	6.5	2.7	5.6	3.0	16	0.0055	► 1PP7 107-4AA□□		24
4	112 M	1440	27	IE1	83.1	83	8.4	2.7	6.0	3.0	16	0.012	► 1PP7 113-4AA□□		31
5.5	132 S	1455	36	IE1	84.7	81	11.6	2.5	6.3	3.1	16	0.018	► 1PP7 130-4AA□□		41
7.5	132 M	1455	49	IE1	86.0	82	15.4	2.7	6.7	3.2	16	0.023	► 1PP7 133-4AA□□		49
11	160 M	1460	72	IE1	87.6	84	21.5	2.2	6.2	2.7	16	0.043	► 1PP7 163-4AA□□		73
15	160 L	1460	98	IE1	88.7	84	29.0	2.6	6.5	3.0	16	0.055	► 1PP7 166-4AA□□		85
18.5	180 M	1460	121	IE1	89.3	83	36 ¹⁾	2.3	7.5	3.0	16	0.13	1PP5 183-4AA□□		108
22	180 L	1460	144	IE1	89.9	84	42 ¹⁾	2.3	7.5	3.0	16	0.15	1PP5 186-4AA□□		118
30	200 L	1465	196	IE1	90.7	86	56	2.6	7.0	3.2	16	0.24	1PP5 207-4AA□□		157

Order No. supplements

Motor type	Penultimate position: Voltage code				Final position: Type of construction code							
	50 Hz				Without flange		With flange				With standard flange	
	230 VΔ/400 VY	400 VΔ/690 VY	500 VY	500 VΔ	IM B3, IM B6/7/8, IM V6/5 without protective cover		IM B5, IM V3 ²⁾	IM V1 without protective cover ^{2) 3)}	IM B35		IM B14, IM V19 IM V18 without protective cover	IM B34
	1	6	3	5	0		1	1	6		2	7
1PP7 06 □□	○	○	○	–	□		✓	✓	–		✓	–
1PP7 07 □□	○	○	○	–	□		✓	✓	–		✓	–
1PP7 08 □□	○	○	○	–	□		✓	✓	–		✓	–
1PP7 09 □□	○	○	○	–	□		✓	✓	–		✓	–
1PP7 10 □□	○	○	○	○	□		✓	✓	–		✓	–
1PP7 11 □□	○	○	○	○	□		✓	✓	–		✓	–
1PP7 13 □□	○	○	○	○	□		✓	✓	–		✓	–
1PP7 16 □□	○	○	○	○	□		✓	✓	–		✓	–
1PP5 18 □□	○	○	○	○	□		✓ ⁴⁾	✓	–		–	–
1PP5 20 □□	○	○	○	○	□		✓ ⁴⁾	✓	–		–	–

- Standard version
○ Without additional charge
✓ With additional charge
– Not possible

► The Order No. for 1PP7 motors marked with this symbol are phase-out models.
1LE1 motors are the successors.
For additional information see part “New Generation 1LE1/1PC1” under “Forced-air cooled motors without external fan and fan cover”.

Order other voltages with voltage code **9** in the penultimate position and the corresponding order code (see “Special versions” in the “Options” under “Voltages”).

Order other types of construction with type of construction code **9** in the final position and the corresponding order code (see “Special versions” in the “Options” under “Types of construction”).

1) For connection to 230 V, parallel feeders are necessary.

2) Motors 1PP5 183-... to 1PP5 223-... (motor series 1PP5, frame size 180 M to 225 M) can be supplied with two additional eyebolts; specify supplement “**Z**” and order code **K32**.

3) The “Second shaft extension” option, order code **K16** is not possible.

4) Type of construction IM V3 is only possible using type of construction code **9** and order code **M1G**.

Rated output at 50 Hz	Frame size	Operating characteristics at rated output						Starting torque	Starting current	Break-down torque	Torque class	Moment of inertia	Order-No.	Price	Weight
		Relevant for IE changeover													
		Rated speed at 50 Hz	Rated torque at 50 Hz	Efficiency Class according to IEC 60034-30 standard	Efficiency at 50 Hz 100 %-load	Power factor at 50 Hz 100 %-load	Rated current at 50 Hz 400 V								
P_{rated} kW	FS	n_{rated} rpm	M_{rated} Nm		η_{rated} %	$\cos\varphi_{\text{rated}}$	I_{rated} A	$T_{\text{LR}}/T_{\text{rated}}$	$I_{\text{LR}}/I_{\text{rated}}$	$T_{\text{B}}/T_{\text{rated}}$		J kg m ²	► Phase-out model		m kg
6-pole, 1000 rpm at 50 Hz, temperature class 155 (F), IP55 degree of protection															
0.09	63 M	850	1.0		45.0	0.66	0.44	1.8	2.0	1.9	13	0.00037	1PP7 063-6AA□□		4
0.18	71 M	850	2.0		53.0	0.73	0.67	2.1	2.3	1.9	16	0.00055	1PP7 070-6AA□□		5
0.25	71 M	860	2.8		60.0	0.76	0.79	2.2	2.7	2.0	16	0.00080	1PP7 073-6AA□□		6
0.37	80 M	920	3.8		62.0	0.72	1.20	1.9	3.1	2.1	16	0.0014	1PP7 080-6AA□□		9
0.55	80 M	910	5.8		67.0	0.74	1.60	2.1	3.4	2.2	16	0.0017	1PP7 083-6AA□□		10
0.75	90 S	915	7.8		69.0	0.76	2.05	2.2	3.7	2.2	16	0.0024	1PP7 090-6AA□□		13
1.1	90 L	915	11		72.0	0.77	2.85	2.3	3.8	2.3	16	0.0033	1PP7 096-6AA□□		16
1.5	100 L	925	15		74.0	0.75	3.90	2.3	4.0	2.3	16	0.0047	► 1PP7 106-6AA□□		21
2.2	112 M	940	22		78.0	0.78	5.20	2.2	4.6	2.5	16	0.0091	► 1PP7 113-6AA□□		26
3	132 S	950	30		79.0	0.76	7.20	1.9	4.2	2.2	16	0.015	► 1PP7 130-6AA□□		38
4	132 M	950	40		80.5	0.76	9.40	2.1	4.5	2.4	15	0.019	► 1PP7 133-6AA□□		44
5.5	132 M	950	55		83.0	0.76	12.6	2.3	5.0	2.6	16	0.025	► 1PP7 134-6AA□□		52
7.5	160 M	960	75		86.0	0.74	17.0	2.1	4.6	2.5	16	0.044	► 1PP7 163-6AA□□		74
11	160 L	960	109		87.5	0.74	24.5	2.3	4.8	2.6	16	0.063	► 1PP7 166-6AA□□		95
15	180 M	970	148	IE1	87.7	0.77	31.5	2.0	5.2	2.4	16	0.15	1PP5 186-6AA□□		124
18.5	200 L	975	181	IE1	88.6	0.77	38.5	2.7	5.5	2.8	16	0.24	1PP5 206-6AA□□		161
22	200 L	975	215	IE1	89.2	0.77	45.5	2.8	5.5	2.9	16	0.28	1PP5 207-6AA□□		183

Order No. supplements

Motor type	Penultimate position: Voltage code				Final position: Type of construction code							
	50 Hz				Without flange				With flange		With standard flange	
												With special flange
	230 VΔ/400 VY	400 VΔ/690 VY	500 VY	500 VΔ	IM B3, IM B6/7/8, IM V6/5 without protective cover	IM B5, IM V3 ¹⁾	IM V1 without protective cover ^{1) 2)}	IM B35	IM B14, IM V19, IM V18 without protective cover	IM B34	IM B14, IM V19, IM V18 without protective cover	
	1	6	3	5	0	1	1	6	2	7	3	
1PP7 06 □□	○	○	○	–	□	✓	✓	–	✓	–	✓	
1PP7 07 □□	○	○	○	–	□	✓	✓	–	✓	–	✓	
1PP7 08 □□	○	○	○	–	□	✓	✓	–	✓	–	✓	
1PP7 09 □□	○	○	○	–	□	✓	✓	–	✓	–	✓	
1PP7 10 □□	○	○	○	○	□	✓	✓	–	✓	–	✓	
1PP7 11 □□	○	○	○	○	□	✓	✓	–	✓	–	✓	
1PP7 13 □□	○	○	○	○	□	✓	✓	–	✓	–	✓	
1PP7 16 □□	○	○	○	○	□	✓	✓	–	✓	–	✓	
1PP5 18 □□	○	○	○	○	□	✓ ³⁾	✓	–	–	–	–	
1PP5 20 □□	○	○	○	○	□	✓ ³⁾	✓	–	–	–	–	

- Standard version
- Without additional charge
- ✓ With additional charge
- Not possible

► The Order No. for 1PP7 motors marked with this symbol are phase-out models.
1LE1 motors are the successors.
For additional information see part “New Generation 1LE1/1PC1” under “Forced-air cooled motors without external fan and fan cover”.

Order other voltages with voltage code **9** in the penultimate position and the corresponding order code (see “Special versions” in the “Options” under “Voltages”).

Order other types of construction with type of construction code **9** in the final position and the corresponding order code (see “Special versions” in the “Options” under “Types of construction”).

1) Motors 1PP5 183-... to 1PP5 223-... (motor series 1PP5, frame size 180 M to 225 M) can be supplied with two additional eyebolts; specify supplement “**Z**” and order code **K32**.
2) The “Second shaft extension” option, order code **K16** is not possible.
3) Type of construction IM V3 is only possible using type of construction code **9** and order code **M1G**.

Rated output at 50 Hz	Frame size	Operating characteristics at rated output		Relevant for IE changeover				Starting torque	Starting current	Break-down torque	Torque class	Moment of inertia	Order-No.	Price	Weight
		Rated speed at 50 Hz	Rated torque at 50 Hz	Efficiency Class according to IEC 60034-30 standard	Efficiency at 50 Hz 100 %-load	Power factor at 50 Hz 100 %-load	Rated current at 50 Hz 400 V	with direct starting as multiple of rated torque	current	torque			For Order No. supplements for voltage and type of construction, see table below		Construction type IM B3 approx. m
P_{rated} kW	FS	n_{rated} rpm	M_{rated} Nm		η_{rated} %	$\cos \varphi_{\text{rated}}$	I_{rated} A	$T_{\text{LR}}/T_{\text{rated}}$	$I_{\text{LR}}/I_{\text{rated}}$	$T_{\text{B}}/T_{\text{rated}}$		J kg m ²	► Phase-out model		kg
8-pole, 750 rpm at 50 Hz, temperature class 155 (F), IP55 degree of protection															
0.09	71 M	630	1.4		53.0	0.68	0.36	1.9	2.2	1.7	13	0.0008	1PP7 070-8AB□□		6
0.12	71 M	645	1.8		53.0	0.64	0.51	2.2	2.2	2.0	13	0.0008	1PP7 073-8AB□□		6
0.18	80 M	675	2.5		51.0	0.68	0.75	1.7	2.3	1.9	13	0.0014	1PP7 080-8AB□□		9
0.25	80 M	685	3.5		55.0	0.64	1.02	2.0	2.6	2.2	13	0.0017	1PP7 083-8AB□□		10
0.37	90 S	675	5.2		63.0	0.75	1.14	1.6	2.9	1.8	13	0.0023	1PP7 090-8AB□□		11
0.55	90 L	675	7.8		66.0	0.76	1.58	1.7	3.0	1.9	13	0.0031	1PP7 096-8AB□□		13
0.75	100 L	680	11		66.0	0.76	2.15	1.6	3.0	1.9	13	0.0051	► 1PP7 106-8AB□□		19
1.1	100 L	680	15		72.0	0.76	2.90	1.8	3.3	2.1	13	0.0063	► 1PP7 107-8AB□□		22
1.5	112 M	705	20		74.0	0.76	3.85	1.8	3.7	2.1	13	0.013	► 1PP7 113-8AB□□		24
2.2	132 S	700	30		75.0	0.74	5.70	1.9	3.9	2.3	13	0.014	► 1PP7 130-8AB□□		38
3	132 M	700	41		77.0	0.74	7.60	2.1	4.1	2.4	13	0.019	► 1PP7 133-8AB□□		44
4	160 M	715	53		80.0	0.72	10.0	2.2	4.5	2.6	13	0.036	► 1PP7 163-8AB□□		64
5.5	160 L	710	74		83.5	0.73	13.0	2.3	4.7	2.7	13	0.046	► 1PP7 164-8AB□□		74
7.5	160 L	715	100		85.5	0.72	17.6	2.7	5.3	3.0	13	0.064	► 1PP7 166-8AB□□		94
11	180 M	725	145		87.0	0.75	24.5	2.0	5.0	2.2	13	0.21	1PP5 186-8AB□□		126
15	200 L	725	198		87.5	0.78	31.5	2.1	5.0	2.2	13	0.37	1PP5 207-8AB□□		176

Order No. supplements

Motor type	Penultimate position: Voltage code				Final position: Type of construction code						
	50 Hz				Without flange		With flange				With standard flange
	230 VΔ/400 VY	400 VΔ/690 VY	500 VY	500 VΔ	IM B3/6/7/8, IM V6/5 without protective cover	IM B5, IM V3 ¹⁾	IM V1 without protective cover ^{1) 2)}	IM B35	IM B14, IM V19 IM V18 without protective cover	IM B34	With special flange
	1	6	3	5	0	1	1	6	2	7	3
1PP7 07 □□	○	○	○	–	□	✓	✓	–	✓	–	✓
1PP7 08 □□	○	○	○	–	□	✓	✓	–	✓	–	✓
1PP7 09 □□	○	○	○	–	□	✓	✓	–	✓	–	✓
1PP7 10 □□	○	○	○	○	□	✓	✓	–	✓	–	✓
1PP7 11 □□	○	○	○	○	□	✓	✓	–	✓	–	✓
1PP7 13 □□	○	○	○	○	□	✓	✓	–	✓	–	✓
1PP7 16 □□	○	○	○	○	□	✓	✓	–	✓	–	✓
1PP5 18 □□	○	○	○	○	□	✓ ³⁾	✓	–	–	–	–
1PP5 20 □□	○	○	○	○	□	✓ ³⁾	✓	–	–	–	–

- Standard version
- Without additional charge
- ✓ With additional charge
- Not possible

► The Order No. for 1PP7 motors marked with this symbol are phase-out models.
1LE1 motors are the successors.
For additional information see part “New Generation 1LE1/1PC1” under “Forced-air cooled motors without external fan and fan cover”.

Order other voltages with voltage code **9** in the penultimate position and the corresponding order code (see “Special versions” in the “Options” under “Voltages”).

Order other types of construction with type of construction code **9** in the final position and the corresponding order code (see “Special versions” in the “Options” under “Types of construction”).

1) Motors 1PP5 183-... to 1PP5 223-... (motor series 1PP5, frame size 180 M to 225 M) can be supplied with two additional eyebolts; specify supplement “**Z**” and order code **K32** .

2) The “Second shaft extension” option, order code **K16** is not possible.

3) Type of construction IM V3 is only possible using type of construction code **9** and order code **M1G**.