

Rated output at		Frame size	Operating values at rated output and sinusoidal supply						Order No.	Price	Weight of IM B3 type of construction approx.
50 Hz	60 Hz		Rated speed at 50 Hz	Rated torque at 50 Hz	Efficiency at 50 Hz 4/4-load	Power factor at 50 Hz 4/4-load	Rated current at 50 Hz 400 V	Rated current at 50 Hz 690 V			
P_{rated} kW	P_{rated} kW	FS	n_{rated} rpm	T_{rated} Nm	η_{rated} %	$\cos\varphi_{\text{rated}}$	I_{rated} A	I_{rated} A	For Order No. supplements for voltage and type of construction, see table below		kg
2-pole, 3000 rpm at 50 Hz, 3600 rpm at 60 Hz, temperature class 155 (F), used acc. to temperature class 155 (F), IP23 degree of protection, specially for operation on SINAMICS or SIMOVERT MASTERDRIVES with standard insulation for voltages ≤500 V											
315	345	315	2974	1010	96.1	0.92	510	300	1LL8 315-2PC□□		1300
400	440	315	2974	1280	96.4	0.92	650	375	1LL8 317-2PC□□		1500
450	–	355	2978	1440	96.4	0.91	740	430	1LL8 353-2PD□□		1900
500	–	355	2979	1600	96.6	0.92	810	470	1LL8 355-2PD□□		2000
630	–	355	2980	2020	96.9	0.93	1000	580	1LL8 357-2PD□□		2200
710	–	400	2984	2270	97.0	0.91	1160	670	1LL8 403-2PD□□		2800
800	–	400	2984	2560	97.1	0.92	1300	750	1LL8 405-2PD□□		3000
900	–	400	2985	2880	97.3	0.92	–	840	1LL8 407-2PD□□		3200
1000	–	450	2987	3200	97.3	0.93	–	920	1LL8 453-2PE□□		4000
1120	–	450	2986	3580	97.3	0.94	–	1020	1LL8 455-2PE□□		4200
1250	–	450	2986	4000	97.4	0.94	–	1140	1LL8 457-2PE□□		4400
4-pole, 1500 rpm at 50 Hz, 1800 rpm at 60 Hz, temperature class 155 (F), used acc. to temperature class 155 (F), IP23 degree of protection, specially for operation on SINAMICS or SIMOVERT MASTERDRIVES with standard insulation for voltages ≤500 V											
315	360	315	1483	2030	96.0	0.87	540	315	1LL8 315-4PC□□		1300
400	460	315	1484	2570	96.2	0.88	680	395	1LL8 317-4PC□□		1500
450	515	355	1487	2890	96.5	0.87	770	450	1LL8 353-4PC□□		1900
500	575	355	1487	3210	96.6	0.88	850	490	1LL8 355-4PC□□		2000
630	725	355	1488	4040	96.9	0.88	1060	620	1LL8 357-4PC□□		2200
710	815	400	1489	4550	96.9	0.88	1200	700	1LL8 403-4PC□□		2800
800	920	400	1490	5130	97.0	0.88	1360	780	1LL8 405-4PC□□		3000
900	1035	400	1491	5760	97.2	0.87	–	890	1LL8 407-4PC□□		3200
1000	1150	450	1492	6400	97.2	0.86	–	1000	1LL8 453-4PD□□		4000
1120	1280	450	1491	7170	97.2	0.89	–	1080	1LL8 455-4PD□□		4200
1250	1430	450	1490	8010	97.2	0.89	–	1200	1LL8 457-4PD□□		4400

Order No. supplements

Motor type	Penultimate position: Voltage code				Final position: Type of construction code			
	400 VΔ	400 VΔ/690 VY ¹⁾	500 VΔ	690 VΔ ¹⁾	Without flange IM B3	With flange IM V1 without protective cover	IM V1 with protective cover	IM B35
	4	8	5	7	0	8	4	6
1LL8 315- ... □□ to 1LL8 405- ... □□	○	□	○	–	□	✓	✓	✓
1LL8 407- ... □□ to 1LL8 457- ... □□	–	–	○	□	□	✓	✓	✓

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

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

Voltages or frequencies that are not covered by the predefined options can be ordered with order code **L1Y**. In this case, the output, voltage and frequency must be specified.

¹⁾ Motors with standard insulation can only be operated with converter circuit (du/dt or sinusoidal filter).

Order No.	Breakdown torque at 50 Hz as multiple of rated torque	Torque class	Moment of inertia	Measuring surface sound pressure level at 50 Hz For rated output and sinusoidal supply, 50 Hz, tolerance +3 dB(A)	Sound power level at 50 Hz	Mech. limit speed	Parallel feeders required		
	T_B/T_{rated}	CL	J kgm ²	L_{pA} dB(A)	L_{WA} dB(A)	n_{max} rpm	f_{max} Hz	400 V	500 V 690 V
2-pole, 3000 rpm at 50 Hz, 3600 rpm at 60 Hz, temperature class 155 (F), used acc. to temperature class 155 (F), IP23 degree of protection, specially for operation on SINAMICS or SIMOVERT MASTERDRIVES with standard insulation for voltages ≤500 V									
1LL8 315-2PC□□	2.8	10	2.7	84 ¹⁾	99	3600	60	Yes	
1LL8 317-2PC□□	2.8	10	3.3	84 ¹⁾	99	3600	60	Yes	
1LL8 353-2PD□□	2.6	7	4.8	86 ¹⁾	101	3600/3100 ²⁾	60/52 ²⁾	Yes	Yes
1LL8 355-2PD□□	2.6	7	5.3	86 ¹⁾	101	3600/3100 ²⁾	60/52 ²⁾	Yes	Yes
1LL8 357-2PD□□	2.6	7	6.4	86 ¹⁾	101	3600/3100 ²⁾	60/52 ²⁾	Yes	
1LL8 403-2PD□□	2.6	7	8.6	88 ¹⁾	103	3600/3100 ²⁾	60/52 ²⁾	Yes	
1LL8 405-2PD□□	2.6	7	9.6	88 ¹⁾	103	3600/3100 ²⁾	60/52 ²⁾	Yes	Yes
1LL8 407-2PD□□	2.7	7	11	88 ¹⁾	103	3600/3100 ²⁾	60/52 ²⁾		Yes
1LL8 453-2PE□□	2.9	5	19	90 ¹⁾	105	3000	50		Yes
1LL8 455-2PE□□	2.7	5	21	90 ¹⁾	105	3000	50		Yes Yes
1LL8 457-2PE□□	2.6	5	23	90 ¹⁾	105	3000	50		Yes Yes
4-pole, 1500 rpm at 50 Hz, 1800 rpm at 60 Hz, temperature class 155 (F), used acc. to temperature class 155 (F), IP23 degree of protection, specially for operation on SINAMICS or SIMOVERT MASTERDRIVES with standard insulation for voltages ≤500 V									
1LL8 315-4PC□□	2.7	10	3.6	75	90	3000/2600 ²⁾	100/87 ²⁾	Yes	
1LL8 317-4PC□□	2.7	10	4.4	75	90	3000/2600 ²⁾	100/87 ²⁾	Yes	
1LL8 353-4PC□□	2.6	10	6.1	77	92	2500/2200 ²⁾	83/73 ²⁾	Yes	Yes
1LL8 355-4PC□□	2.6	10	6.8	77	92	2500/2200 ²⁾	83/73 ²⁾	Yes	Yes
1LL8 357-4PC□□	2.7	10	8.5	77	92	2500/2200 ²⁾	83/73 ²⁾	Yes	
1LL8 403-4PC□□	2.4	10	13	81	96	2200/1900 ²⁾	73/63 ²⁾	Yes	
1LL8 405-4PC□□	2.5	10	14	81	96	2200/1900 ²⁾	73/63 ²⁾	Yes	Yes
1LL8 407-4PC□□	2.6	10	16	81	96	2200/1900 ²⁾	73/63 ²⁾		Yes
1LL8 453-4PD□□	2.8	7	23	84	99	2100/1800 ²⁾	70/60 ²⁾		Yes
1LL8 455-4PD□□	2.6	7	26	84	99	2100/1800 ²⁾	70/60 ²⁾		Yes Yes
1LL8 457-4PD□□	2.5	7	28	84	99	2100/1800 ²⁾	70/60 ²⁾		Yes Yes

¹⁾ The noise values for **1LL8**, 2-pole are for guidance only.

²⁾ For vertical type of construction IM V1.

Rated output at		Frame size	Operating values at rated output and sinusoidal supply					Order No.	Price	Weight of IM B3 type of construction approx.
50 Hz	60 Hz		Rated speed at 50 Hz	Rated torque at 50 Hz	Efficiency at 50 Hz 4/4-load	Power factor at 50 Hz 4/4-load	Rated current at 50 Hz 400 V	Rated current at 50 Hz 690 V		
P_{rated} kW	P_{rated} kW	FS	n_{rated} rpm	T_{rated} Nm	η_{rated} %	$\cos\varphi_{\text{rated}}$	I_{rated} A	I_{rated} A	For Order No. supplements for voltage and type of construction, see table below	kg
6-pole, 1000 rpm at 50 Hz, 1200 rpm at 60 Hz, temperature class 155 (F), used acc. to temperature class 155 (F), IP23 degree of protection, specially for operation on SINAMICS or SIMOVERT MASTERDRIVES with standard insulation for voltages ≤500 V										
250	285	315	988	2420	95.4	0.88	430	250	1LL8 315-6PC□□	1300
315	360	315	988	3040	95.7	0.89	530	310	1LL8 317-6PC□□	1500
400	460	355	991	3850	96.1	0.88	680	395	1LL8 355-6PC□□	2000
500	575	355	991	4820	96.4	0.88	850	495	1LL8 357-6PC□□	2200
560	645	400	993	5390	96.6	0.87	960	560	1LL8 403-6PC□□	2800
630	725	400	993	6060	96.7	0.88	1060	620	1LL8 405-6PC□□	3000
710	815	400	993	6830	96.7	0.88	1200	700	1LL8 407-6PC□□	3200
800	920	450	993	7700	96.8	0.87	1380	790	1LL8 453-6PD□□	4000
900	1035	450	992	8660	96.8	0.88	–	880	1LL8 455-6PD□□	4200
1000	1150	450	993	9620	96.9	0.88	–	980	1LL8 457-6PD□□	4500
8-pole, 750 rpm at 50 Hz, 900 rpm at 60 Hz, temperature class 155 (F), used acc. to temperature class 155 (F), IP23 degree of protection, specially for operation on SINAMICS or SIMOVERT MASTERDRIVES with standard insulation for voltages ≤500 V										
200	230	315	738	2590	94.7	0.82	370	215	1LL8 315-8PC□□	1300
250	285	315	738	3240	95.0	0.82	465	270	1LL8 317-8PC□□	1500
315	360	355	740	4070	95.5	0.83	570	335	1LL8 355-8PC□□	2000
400	460	355	740	5160	95.6	0.84	720	415	1LL8 357-8PC□□	2200
450	515	400	741	5800	95.9	0.84	810	465	1LL8 403-8PD□□	2800
500	575	400	741	6440	96.1	0.84	890	520	1LL8 405-8PD□□	3000
560	645	400	742	7210	96.2	0.83	1020	590	1LL8 407-8PD□□	3200
630	745	450	743	8100	96.3	0.82	1160	670	1LL8 453-8PD□□	4000
710	815	450	743	9130	96.4	0.83	1280	740	1LL8 455-8PD□□	4200
800	920	450	743	10300	96.5	0.83	–	840	1LL8 457-8PD□□	4500

Order No. supplements

Motor type	Penultimate position: Voltage code				Final position: Type of construction code			
	400 VΔ	400 VΔ/690 VY ¹⁾	500 VΔ	690 VΔ ¹⁾	Without flange IM B3	With flange IM V1 without protective cover	IM V1 with protective cover ²⁾	IM B35
	4	8	5	7	0	8	4	6
6-pole								
1LL8 315- ... □□ to 1LL8 453- ... □□	○	□	○	–	□	✓	✓	✓
1LL8 455- ... □□ to 1LL8 457- ... □□	–	–	○	□	□	✓	✓	✓
8-pole								
1LL8 315- ... □□ to 1LL8 455- ... □□	○	□	○	– ³⁾	□	✓	✓	✓
1LL8 457- ... □□	–	–	○	□	□	✓	✓	✓

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

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

Voltages or frequencies that are not covered by the predefined options can be ordered with order code **L1Y**. In this case, the output, voltage and frequency must be specified.

¹⁾ Motors with standard insulation can only be operated with converter circuit (du/dt or sinusoidal filter).

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

³⁾ As special version with voltage code **“9”** and order code **L1Y** (specify output, voltage and frequency).

Order No.	Breakdown torque at 50 Hz as multiple of rated torque	Torque class	Moment of inertia	Measuring surface sound pressure level at 50 Hz	Sound power level at 50 Hz	Mech. limit speed		Parallel feeders required		
	T_B/T_{rated}	CL	J kgm ²	For rated output and sinusoidal supply, 50 Hz, tolerance +3 dB(A) L_{pA} dB(A)	L_{WA} dB(A)	$n_{max.}$ rpm	$f_{max.}$ Hz	400 V	500 V	690 V
6-pole, 1000 rpm at 50 Hz, 1200 rpm at 60 Hz, temperature class 155 (F), used acc. to temperature class 155 (F), IP23 degree of protection, specially for operation on SINAMICS or SIMOVERT MASTERDRIVES with standard insulation for voltages ≤500 V										
1LL8 315-6PC□□	2.6	10	6.0	70	84	2950/2600 ¹⁾	147/130 ¹⁾			
1LL8 317-6PC□□	2.6	10	7.3	70	84	2950/2600 ¹⁾	147/130 ¹⁾	Yes		
1LL8 355-6PC□□	2.5	10	13	73	88	2500/2200 ¹⁾	125/110 ¹⁾	Yes		
1LL8 357-6PC□□	2.6	10	16	73	88	2500/2200 ¹⁾	125/110 ¹⁾	Yes	Yes	
1LL8 403-6PC□□	2.6	10	21	76	91	2200/1900 ¹⁾	110/95 ¹⁾			
1LL8 405-6PC□□	2.6	10	24	76	91	2200/1900 ¹⁾	110/95 ¹⁾	Yes		
1LL8 407-6PC□□	2.5	10	27	76	91	2200/1900 ¹⁾	110/95 ¹⁾	Yes		
1LL8 453-6PD□□	2.5	7	35	78	93	2100/1800 ¹⁾	105/90 ¹⁾	Yes	Yes	
1LL8 455-6PD□□	2.4	7	39	78	93	2100/1800 ¹⁾	105/90 ¹⁾		Yes	
1LL8 457-6PD□□	2.5	7	44	78	93	2100/1800 ¹⁾	105/90 ¹⁾		Yes	
8-pole, 750 rpm at 50 Hz, 900 rpm at 60 Hz, temperature class 155 (F), used acc. to temperature class 155 (F), IP23 degree of protection, specially for operation on SINAMICS or SIMOVERT MASTERDRIVES with standard insulation for voltages ≤500 V										
1LL8 315-8PC□□	2.4	10	6.0	67	81	2950/2600 ¹⁾	196/173 ¹⁾			
1LL8 317-8PC□□	2.4	10	7.3	67	81	2950/2600 ¹⁾	196/173 ¹⁾			
1LL8 355-8PC□□	2.4	10	13	69	84	2500/2200 ¹⁾	166/146 ¹⁾			
1LL8 357-8PC□□	2.3	10	16	69	84	2500/2200 ¹⁾	166/146 ¹⁾	Yes		
1LL8 403-8PD□□	2.3	7	21	72	87	2200/1900 ¹⁾	146/126 ¹⁾			
1LL8 405-8PD□□	2.4	7	24	72	87	2200/1900 ¹⁾	146/126 ¹⁾			
1LL8 407-8PD□□	2.4	7	27	72	87	2200/1900 ¹⁾	146/126 ¹⁾	Yes		
1LL8 453-8PD□□	2.3	7	35	74	89	2100/1800 ¹⁾	140/120 ¹⁾	Yes		
1LL8 455-8PD□□	2.3	7	39	74	89	2100/1800 ¹⁾	140/120 ¹⁾	Yes	Yes	
1LL8 457-8PD□□	2.3	7	44	74	89	2100/1800 ¹⁾	140/120 ¹⁾	Yes	Yes	

¹⁾ For vertical type of construction IM V1.