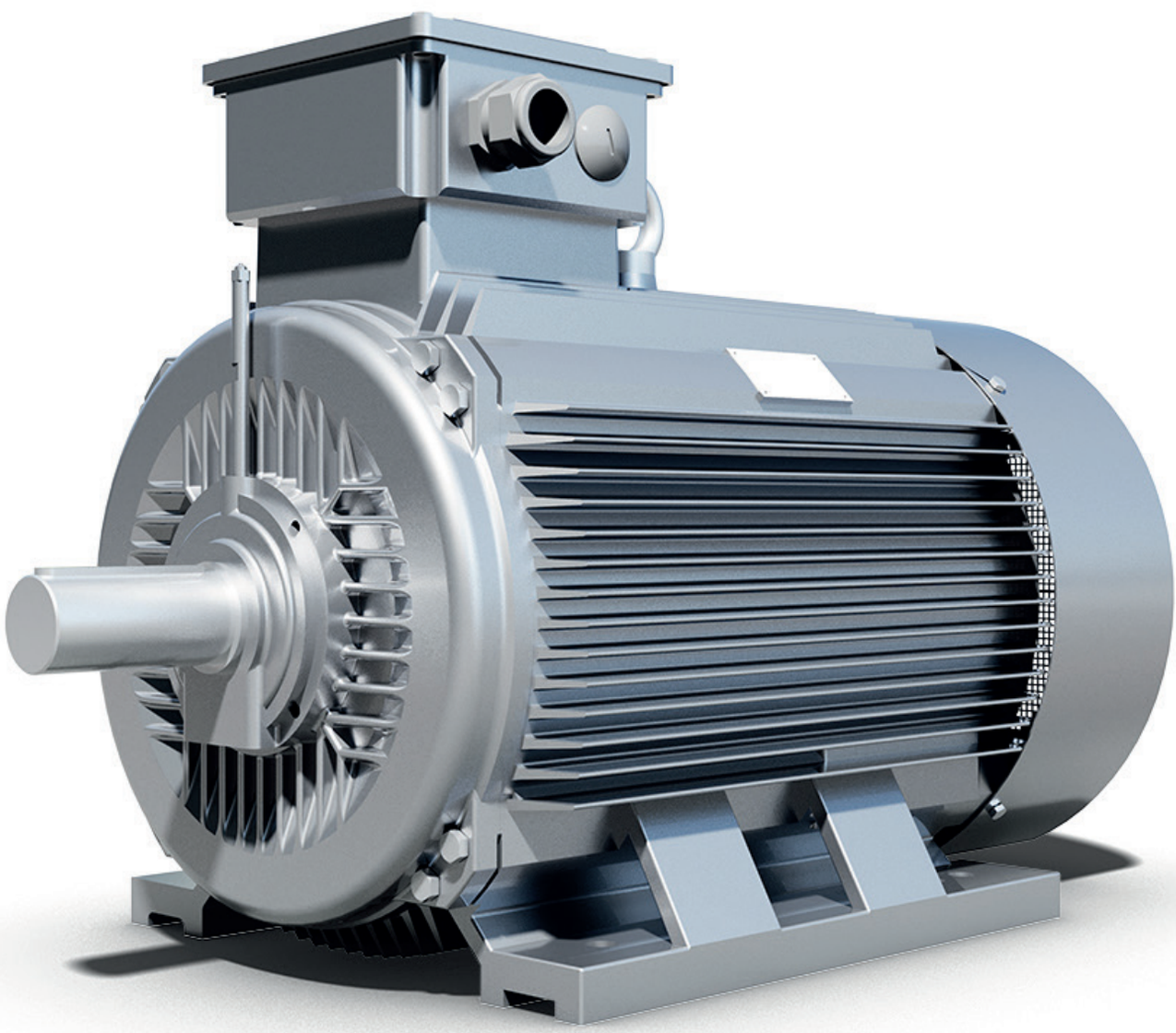
PRODUCT CATALOGUE

THREE-PHASE / ULTRA PREMIUM EFFICIENCY

Permanent Magnet Synchronous Motors



Better Drive, Better Life!

Omecmotors.com

OMEC MOTORS®
Better Drive, Better Life !

3 MANUFACTURING LOCATIONS

>80 COUNTRIES SERVED

>1000 EMPLOYEES WORLDWIDE

GLOBAL MANUFACTURING
LOCAL SUPPORT





CHINA

- Wide product range of IEC & NEMA-Motors.
- Production capabilities up to 12MW.



NETHERLANDS

- European Headquarter.
- Stock of 40.000 IEC-Electric Motors up to 630kW.
- Modification Center.
- 24/7 Service.



MEXICO

- Wide product range of NEMA-Motors.
- Production capabilities up to 750kW.

US

- Americas Hub
- Stock of 6.000 IEC- and NEMA-Electric Motors up to 710kW.



GERMANY

- Production side for special-motors.
- Production capabilities up to 30kW.

UNITED ARAB EMIRATES

- Middle-East Hub
- Stock of 3.000 IEC- & NEMA-Electric Motors up to 315kW.

OMEC: Our Efficiency Drives Your World

For over 80 years, OMEC has been at the forefront of developing and manufacturing cutting-edge electric motors that excel in the most demanding industrial applications.
Our team of R&D engineers brings extensive expertise to design and develop products and solutions for tough environments. We meticulously analyzed industry requirements and environment to allow us to deliver the right products for your specific needs.
At OMEC, we understand that longevity, and the highest efficiency and reliability are crucial for your operations. That's why we guarantee exceptional durability and optimized performance.
Elevate your reliability, performance, and efficiency with OMEC - the paramount of quality, innovation, and reliability.

OMEC ultra high efficiency motors in low, medium and high voltage designs in frames NEMA 56 to 60XX and IEC 56 to 800 are found in all industrial segments and applications including marine and offshore, mining, minerals and metal production, materials handling / craneage, cement, pulp and paper, water and wastewater, air / gas compression, oil, gas and petrochemical.
The high efficiency and highly utilisable torque characteristics of Permanent Magnet (PM) motors give users the opportunity to achieve operating cost and availability improvements, and in many cases can achieve a reduction in installed space and / or weight, particularly for draw-works, extrusion (e.g. plastic, rubber, metals), compression, pumping, crushing and ventilation. PM motors can also lead to opportunities to remove gearboxes and decrease maintenance costs on site.



PM Motor For Textile / Weaving Loom Drive



Line Start PM Motor For Printing / Textile Machine



PM Motor For Draw-Works



Low Speed High Torque Drive (E.g. Extruder / Conveyor)



Industrial General Purpose / T Frame PM Motor



Medium / High Voltage PM Motor

omecmotors.com

Overview

The OMP series ultra-high efficiency permanent magnet low voltage synchronous motors use high-performance rare-earth magnets, coupled with frequency inverter vector control to deliver efficiencies to IE5 and higher in a cost-effective solution. This brings the user advantages such as energy saving, carbon reduction, reduced noise, effective system control, and the potential to improve operating time and reduce maintenance costs by removing some mechanical elements (gearbox, belt-and-pulley) from the drive train.

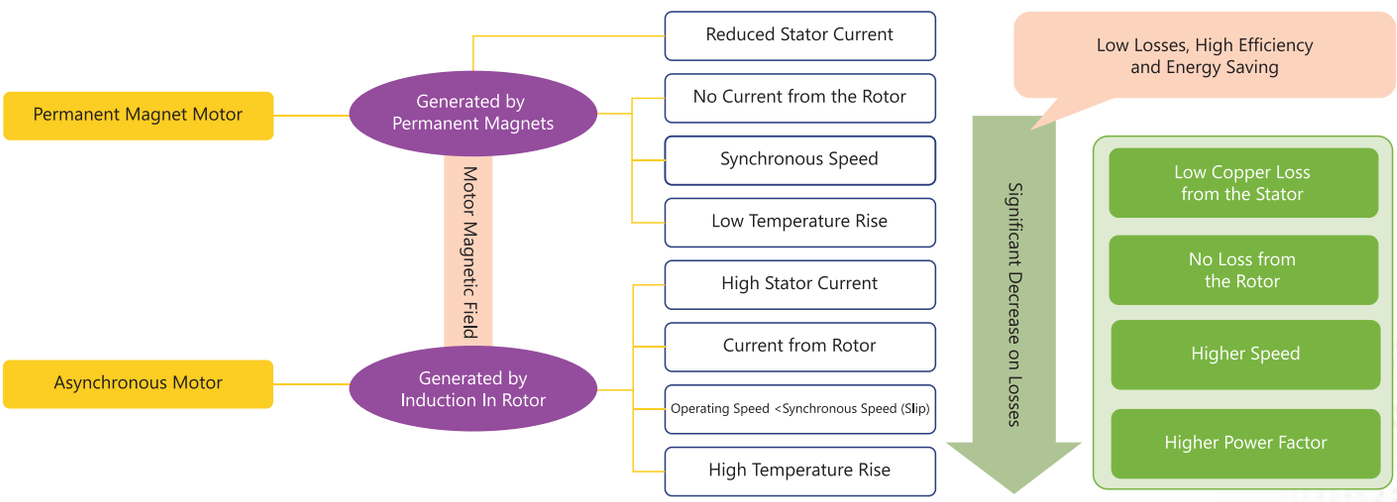


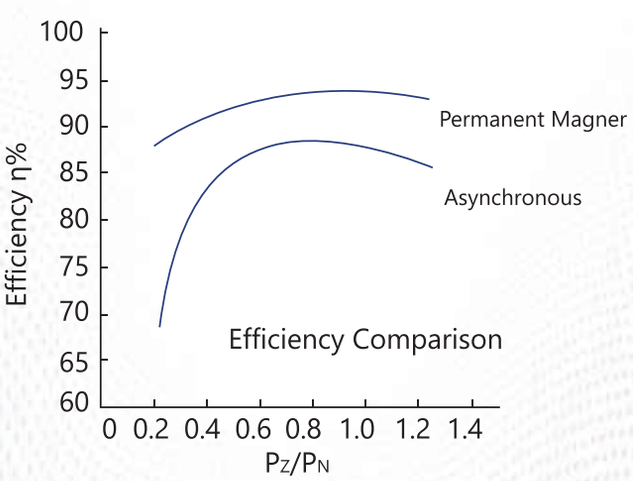
Main Features

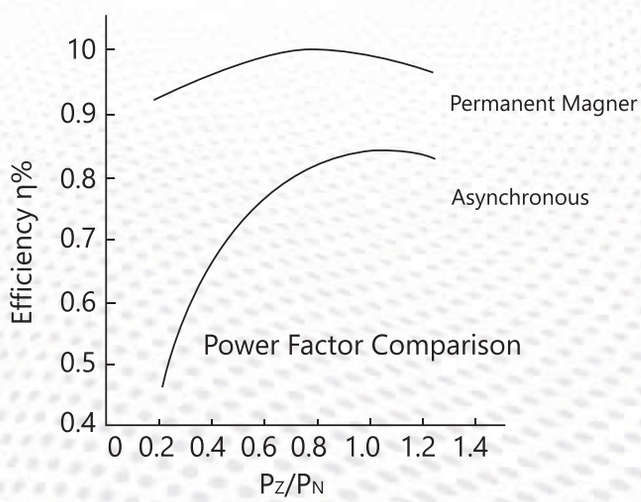
The efficiency conforms to Grade 1 of GB 30253-2013 Energy Efficiency Limit Value and IE5 efficiency of international standard IEC60034-2014.

The basic design is 750~3000rpm with rated power of 1.5kW~450kW, providing service factor of 1.2, which also available on request for rotation speed of 80~10000rpm and self-starting PM motor.

Comparison of PM motor and Asynchronous motor

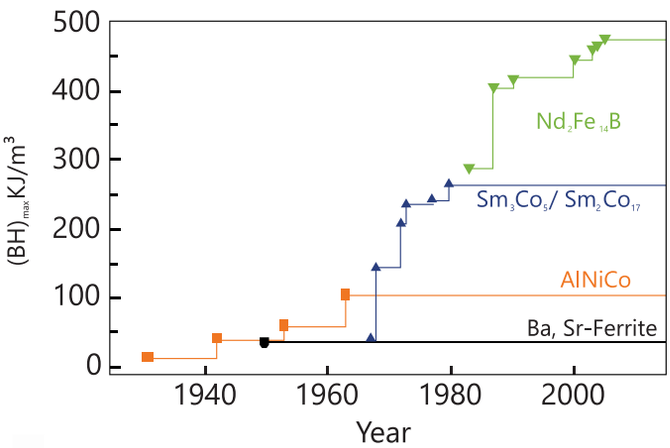


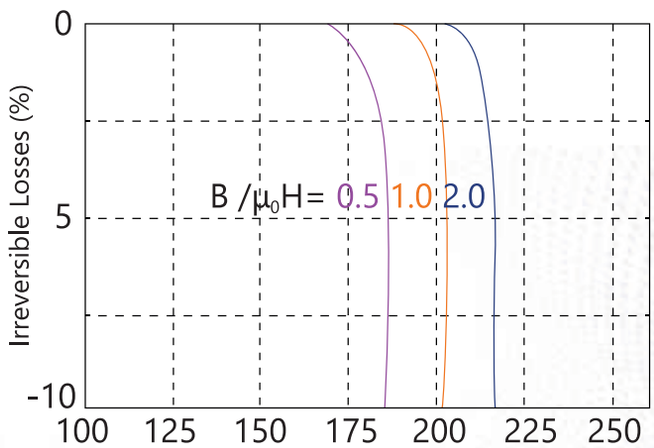


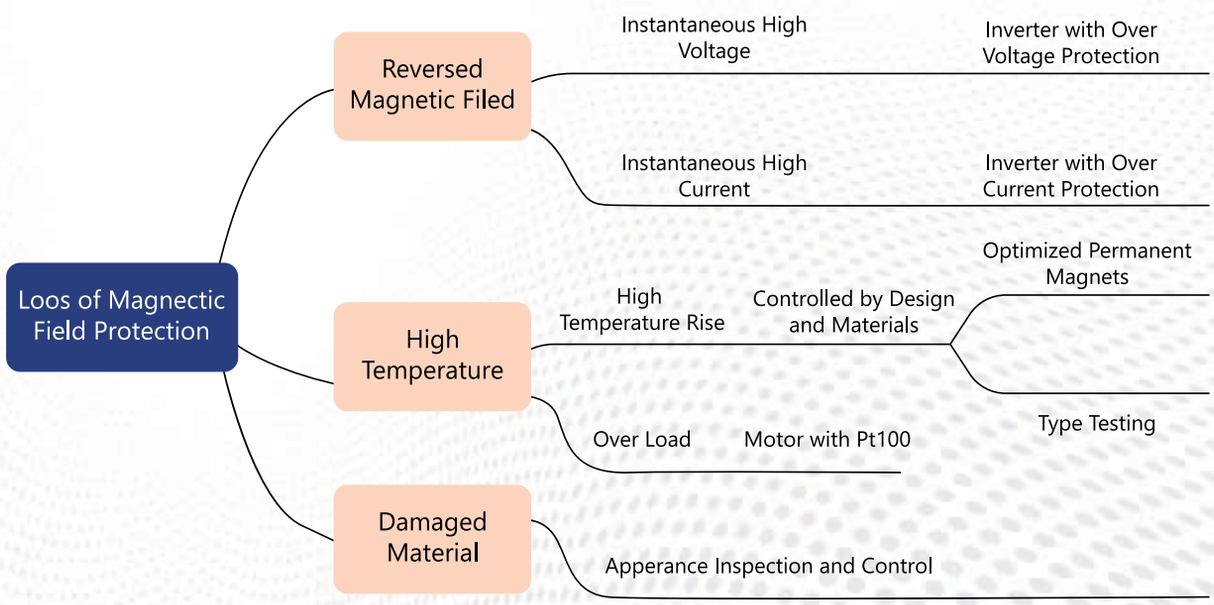


Reliability and stability of PMSM

- The motor utilises high performance NdFeB permanent magnets.
- Magnet material resistant to high temperature is used to ensure the stable operation of OMEC PM motors even when operating in the range of the Service Factor, and / or high altitudes or high ambient temperatures.
- The motor and frequency converter are both fitted with thermal protection devices.







Characteristic	Asynchronous Motor	Permanent Magnet Motor
Efficiency	Low~High	Ultra-High
Power Factor	Low PF with large inrushcurrent – PF compensation may be needed	Highest PF, no need for PF compensation.
Control Characteristics	Poor	Good
Volume	Large	Typically frame reduced by 2 sizes, weight reduction to averagely 60% of equivalent asynchronous motor of same output rating.
Start Performance	Direct-on-line starting, high starting current which has an impact to the electrical grid, requent starts not permitted.	Frequency drive constant torque start, frequent starts are allowed.
Rotator Structure	Simple, squirrel cage	Complex, in-slot or surface fixing of magnetic material.
Total Cost	Low initial purchase cost, but higher electricity usage in operation, so full life cost is higher.	Comparatively higher purchase cost, however lower total life cost due to ultra-high efficiency driven electricity savings. Return of additional investment typically as low as 100 operating days.

- Energy and Cost Saving Examples: A 22kW PM motor can achieve typical savings versus the operation of IE2, IE3 and IE4 motors as illustrated below based on the indicated electricity supply rates per kwh.

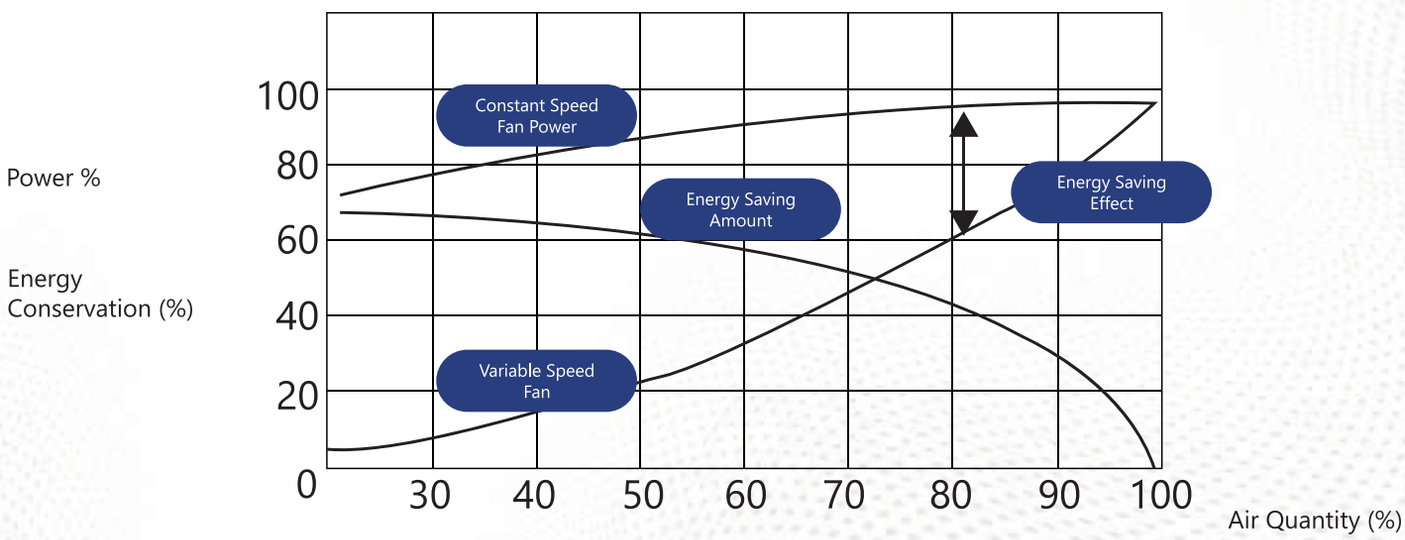
Type	Power	Frequency	Voltage	Current	Efficiency			PF			Saving on electricity for1pc of 22kw PM motor during operation for 100 days(KWH)
					Constant torque speed			Load (%)			
					3000	2100	900	100	50	25	
OMP22-160	22	200	370	38.3	94.4	94	90.3	0.95	0.95	0.95	1899
IE2-180M-2	22	50	380	41.1	91.3	91.3	79.4	0.89	0.89	0.89	
IE3-180M-2	22	50	380	40.5	92.7	91.2	83	0.89	0.89	0.89	873

- The above savings are as a result of simple energy efficiency improvement, but exclude the additional savings which can be achieved by process optimisation through speed control. The below table illustrates the reduction in motor power required with reduced operating speed by frequency converter.

RPM (n%)	Fluid Load (Q%)	Frequency	Static Pressure (%)	Shaft Power (P%)
100	100	50	100	100
90	90	45	81	72.9
80	80	40	64	51.2
70	70	35	49	34.3
60	60	30	36	21.6
50	50	25	25	12.5

- For a typical fan application, the power required to drive the system decreases cubically related to the speed of operation of the fan. Where operating conditions allow a reduction in the volume moved, then reducing the operating speed of the fan by 10% will provide a saving in electricity consumed of approximately 27% compared to a constant speed fan, or if a speed reduction of 20% is applied to the fan, an energy saving approximating 48% can be achieved.
  As can be seen, significant energy savings can be achieved by utilising variable speed control of a fan system.

Obviously, there is significant energy saving for variable air volume control system. See Figure as below.



Main Specifications & Technical Data

Nominal Speed 3000 rpm

IEC Frame Size	Specifications and Model	Rated Power (kW)	Rated Voltage (V)	Rated Current (A)	Rated Frequency (Hz)	Number of Poles	Rated Speed (r/min)	Torque (N.m)	Efficiency (%)	Power Factor	Weight (Kg)	Energy Efficiency Rating	Connection Method	Insulation Class	Duty Cycle	Cooling Method	Protection Rating
80	OMP5-080M1-08P	1.5	400	2.7	200	8	3000	4.8	88.9	0.96	17	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-080M2-08P	2.2	400	3.9	200	8	3000	7.0	90.2	0.96	19	IE5	Y	F	S1	IC411/IC416	IP55
90L	OMP5-090L1-08P	3	400	5.2	200	8	3000	9.6	91.1	0.96	21	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-090L2-08P	4	400	6.9	200	8	3000	12.7	91.8	0.96	23	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-090L3-08P	5.5	400	9.4	200	8	3000	17.5	92.6	0.96	26	IE5	Y	F	S1	IC411/IC416	IP55
112M	OMP5-112M1-08P	7.5	400	12.7	200	8	3000	23.9	93.3	0.96	36	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-112M2-08P	11	400	18.5	200	8	3000	35.0	94.0	0.96	40	IE5	Y	F	S1	IC411/IC416	IP55
132M	OMP5-132M1-08P	15	400	25.1	200	8	3000	47.8	94.5	0.96	60	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-132M2-08P	18.5	400	30.9	200	8	3000	58.9	94.9	0.96	64	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-132M3-08P	22	400	36.6	200	8	3000	70.0	95.1	0.96	80	IE5	Y	F	S1	IC411/IC416	IP55
160L	OMP5-160L1-06P	30	400	49.7	150	6	3000	95.5	95.5	0.96	108	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-160L2-06P	37	400	61.1	150	6	3000	117.8	95.8	0.96	124	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-160L3-06P	45	400	74.2	150	6	3000	143.3	96.0	0.96	131	IE5	Y	F	S1	IC411/IC416	IP55
180L	OMP5-180L0-06P	55	400	90.5	150	6	3000	175.1	96.2	0.96	174	IE5	Y	F	S1	IC411/IC416	IP55
200L	OMP5-200L1-06P	75	400	123.0	150	6	3000	238.8	96.5	0.96	224	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-200L2-06P	90	400	147.5	150	6	3000	286.5	96.6	0.96	245	IE5	Y	F	S1	IC411/IC416	IP55
225M	OMP5-225M0-08P	110	400	179.9	200	8	3000	350.2	96.8	0.96	298	IE5	Y	F	S1	IC411/IC416	IP55
250M	OMP5-250M1-08P	132	400	215.6	200	8	3000	420.2	96.9	0.96	402	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-250M2-08P	160	400	261.1	200	8	3000	509.3	97.0	0.96	423	IE5	Y	F	S1	IC411/IC416	IP55
280M	OMP5-280M1-06P	185	400	301.5	150	6	3000	588.9	97.1	0.96	552	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-280M2-06P	200	400	325.7	150	6	3000	636.7	97.2	0.96	552	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-280M3-06P	220	400	358.2	150	6	3000	700.3	97.2	0.96	580	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-280M4-06P	250	400	407.1	150	6	3000	795.8	97.2	0.96	600	IE5	Y	F	S1	IC411/IC416	IP55
315L	OMP5-315L1-06P	280	400	455.9	150	6	3000	891.3	97.2	0.96	802	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-315L2-06P	315	400	512.9	150	6	3000	1002.8	97.2	0.96	854	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-315L3-06P	355	400	578.0	150	6	3000	1130.1	97.2	0.96	946	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-315L4-06P	400	400	651.3	150	6	3000	1273.3	97.2	0.96	988	IE5	Y	F	S1	IC411/IC416	IP55

Nominal Speed 1500 rpm

IEC Frame Size	Specifications and Model	Rated Power (kW)	Rated Voltage (V)	Rated Current (A)	Rated Frequency (Hz)	Number of Poles	Rated Speed (r/min)	Torque (N.m)	Efficiency (%)	Power Factor	Weight (Kg)	Energy Efficiency Rating	Connection Method	Insulation Class	Duty Cycle	Cooling Method	Protection Rating
80	OMP5-080M1-08P	1.1	400	1.9	100	8	1500	7.0	89.5	0.96	19	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-080M2-08P	1.5	400	2.6	100	8	1500	9.6	90.4	0.96	21	IE5	Y	F	S1	IC411/IC416	IP55
90L	OMP5-090L1-08P	2.2	400	3.8	100	8	1500	14.0	91.4	0.96	25	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-090L2-08P	3	400	5.2	100	8	1500	19.1	92.1	0.96	27	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-090L3-08P	4	400	6.8	100	8	1500	25.5	92.8	0.96	30	IE5	Y	F	S1	IC411/IC416	IP55
112M	OMP5-112M1-08P	5.5	400	9.3	100	8	1500	35.0	93.4	0.96	41	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-112M2-08P	7.5	400	12.6	100	8	1500	47.8	94.0	0.96	45	IE5	Y	F	S1	IC411/IC416	IP55
132M	OMP5-132M1-08P	11	400	18.4	100	8	1500	70.0	94.6	0.96	68	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-132M2-08P	15	400	25.0	100	8	1500	95.5	95.1	0.96	76	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-132M3-08P	18.5	400	30.7	100	8	1500	117.8	95.3	0.96	80	IE5	Y	F	S1	IC411/IC416	IP55
160L	OMP5-160L1-08P	22	400	36.5	100	8	1500	140.1	95.5	0.96	124	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-160L2-08P	30	400	49.5	100	8	1500	191.0	95.9	0.96	150	IE5	Y	F	S1	IC411/IC416	IP55
180L	OMP5-180L1-08P	37	400	60.9	100	8	1500	235.6	96.1	0.96	176	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-180L2-08P	45	400	74.0	100	8	1500	286.5	96.3	0.96	192	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-200L0-06P	55	400	90.2	75	6	1500	350.2	96.5	0.96	245	IE5	Y	F	S1	IC411/IC416	IP55
200L	OMP5-225M0-08P	75	400	122.8	100	8	1500	477.5	96.7	0.96	336	IE5	Y	F	S1	IC411/IC416	IP55
225M	OMP5-250M0-08P	90	400	147.0	100	8	1500	573.0	96.9	0.96	430	IE5	Y	F	S1	IC411/IC416	IP55
250M	OMP5-280M1-06P	110	400	179.5	75	6	1500	700.3	97.0	0.96	540	IE5	Y	F	S1	IC411/IC416	IP55
280M	OMP5-280M2-06P	132	400	215.2	75	6	1500	840.4	97.1	0.96	552	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-280M3-06P	160	400	260.5	75	6	1500	1018.7	97.2	0.96	600	IE5	Y	F	S1	IC411/IC416	IP55
315L	OMP5-315L1-08P	200	400	325.0	100	8	1500	1273.3	97.4	0.96	870	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-315L2-08P	220	400	357.5	100	8	1500	1400.7	97.4	0.96	910	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-315L3-08P	250	400	406.2	100	8	1500	1591.7	97.4	0.96	1014	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-315L4-08P	280	400	455.0	100	8	1500	1782.7	97.4	0.96	1045	IE5	Y	F	S1	IC411/IC416	IP55
355L	OMP5-355L1-08P	315	400	511.9	100	8	1500	2005.5	97.4	0.96	1800	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-355L2-08P	355	400	576.9	100	8	1500	2260.2	97.4	0.96	1890	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-355L3-08P	400	400	650.0	100	8	1500	2546.7	97.4	0.96	1970	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-355L4-08P	450	400	731.2	100	8	1500	2865.0	97.4	0.96	2010	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-355L5-08P	500	400	812.5	100	8	1500	3183.3	97.4	0.96	2100	IE5	Y	F	S1	IC411/IC416	IP55

Nominal Speed 1000 rpm

IEC Frame Size	Specifications and Model	Rated Power (kW)	Rated Voltage (V)	Rated Current (A)	Rated Frequency (Hz)	Number of Poles	Rated Speed (r/min)	Torque (N.m)	Efficiency (%)	Power Factor	Weight (Kg)	Energy Efficiency Rating	Connection Method	Insulation Class	Duty Cycle	Cooling Method	Protection Rating
80M	OMP5-080M1-08P	0.75	400	1.4	66.7	8	1000	7.2	85.7	0.96	18	Ie5	Y	F	S1	IC411/IC416	IP55
	OMP5-080M2-08P	1.1	400	2.0	66.7	8	1000	10.5	87.2	0.96	20	IE5	Y	F	S1	IC411/IC416	IP55
90L	OMP5-090L1-08P	1.5	400	2.7	66.7	8	1000	14.3	88.4	0.96	25	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-090L2-08P	2.2	400	3.9	66.7	8	1000	21.0	89.7	0.96	28	IE5	Y	F	S1	IC411/IC416	IP55
112M	OMP5-112M1-08P	3	400	5.2	66.7	8	1000	28.7	90.6	0.96	32	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-112M2-08P	4	400	6.9	66.7	8	1000	38.2	91.4	0.96	34	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-112M3-08P	5.5	400	9.4	66.7	8	1000	52.5	92.2	0.96	37	IE5	Y	F	S1	IC411/IC416	IP55
132M	OMP5-132M1-08P	7.5	400	12.8	66.7	8	1000	71.6	92.9	0.96	69	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-132M2-08P	11	400	18.6	66.7	8	1000	105.1	93.7	0.96	78	IE5	Y	F	S1	IC411/IC416	IP55
160L	OMP5-160L1-08P	15	400	25.2	66.7	8	1000	143.3	94.3	0.96	135	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-160L2-08P	18.5	400	31.0	66.7	8	1000	176.7	94.6	0.96	149	IE5	Y	F	S1	IC411/IC416	IP55
180L	OMP5-180L1-08P	22	400	36.7	66.7	8	1000	210.1	94.9	0.96	165	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-180L2-08P	30	400	49.8	66.7	8	1000	286.5	95.3	0.96	176	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-180L3-08P	37	400	61.3	66.7	8	1000	353.4	95.6	0.96	206	IE5	Y	F	S1	IC411/IC416	IP55
225M	OMP5-225M1-08P	45	400	74.3	66.7	8	1000	429.8	95.8	0.96	296	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-225M2-08P	55	400	90.7	66.7	8	1000	525.3	96.0	0.96	334	IE5	Y	F	S1	IC411/IC416	IP55
250M	OMP5-250M0-08P	75	400	123.3	66.7	8	1000	716.3	96.3	0.96	430	IE5	Y	F	S1	IC411/IC416	IP55
280M	OMP5-280M1-06P	90	400	147.6	50	6	1000	859.5	96.5	0.96	592	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-280M2-06P	110	400	180.2	50	6	1000	1050.5	96.6	0.96	687	IE5	Y	F	S1	IC411/IC416	IP55
315L	OMP5-315L1-08P	132	400	215.8	66.7	8	1000	1260.6	96.8	0.96	920	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-315L2-08P	160	400	261.3	66.7	8	1000	1528.0	96.9	0.96	1060	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-315L3-08P	185	400	301.9	66.7	8	1000	1766.8	97.0	0.96	1149	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-315L4-08P	200	400	326.3	66.7	8	1000	1910.0	97.0	0.96	1149	IE5	Y	F	S1	IC411/IC416	IP55
355L	OMP5-355L1-08P	220	400	359.0	66.7	8	1000	2101.0	97.0	0.96	1789	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-355L2-08P	250	400	407.9	66.7	8	1000	2387.5	97.0	0.96	1879	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-355L3-08P	280	400	456.9	66.7	8	1000	2674.0	97.0	0.96	1970	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-355L4-08P	315	400	514.0	66.7	8	1000	3008.3	97.0	0.96	2040	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-355L5-08P	355	400	579.2	66.7	8	1000	3390.3	97.0	0.96	2100	Ie5	Y	F	S1	IC411/IC416	IP55

Nominal Speed 700 rpm

IEC Frame Size	Specifications and Model	Rated Power (kW)	Rated Voltage (V)	Rated Current (A)	Rated Frequency (Hz)	Number of Poles	Rated Speed (r/min)	Torque (N.m)	Efficiency (%)	Power Factor	Weight (Kg)	Energy Efficiency Rating	Connection Method	Insulation Class	Duty Cycle	Cooling Method	Protection Rating
80M	OMP5-080M1-08P	0.55	400	1.1	50	8	750	7.0	80.6	0.96	17	Ie5	Y	F	S1	IC411/IC416	IP55
	OMP5-080M2-08P	0.75	400	1.4	50	8	750	9.6	82	0.96	19	IE5	Y	F	S1	IC411/IC416	IP55
90L	OMP5-090L1-08P	1.1	400	2.1	50	8	750	14.0	84	0.96	25	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-090L2-08P	1.5	400	2.8	50	8	750	19.1	85.5	0.96	27	IE5	Y	F	S1	IC411/IC416	IP55
112M	OMP5-112M1-08P	2.2	400	4.0	50	8	750	28.0	87.2	0.96	32	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-112M2-08P	3	400	5.4	50	8	750	38.2	88.4	0.96	35	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-112M3-08P	4	400	7.1	50	8	750	50.9	89.4	0.96	38	IE5	Y	F	S1	IC411/IC416	IP55
132M	OMP5-132M1-08P	5.5	400	9.6	50	8	750	70.0	90.4	0.96	68	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-132M2-08P	7.5	400	13.0	50	8	750	95.5	91.3	0.96	76	IE5	Y	F	S1	IC411/IC416	IP55
160L	OMP5-160L1-08P	11	400	18.9	50	8	750	140.1	92.2	0.96	125	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-160L2-08P	15	400	25.6	50	8	750	191.0	92.9	0.96	151	IE5	Y	F	S1	IC411/IC416	IP55
180L	OMP5-180L1-08P	18.5	400	31.4	50	8	750	235.6	93.3	0.96	168	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-180L2-08P	22	400	37.2	50	8	750	280.1	93.6	0.96	176	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-180L3-08P	30	400	50.5	50	8	750	382.0	94.1	0.96	206	IE5	Y	F	S1	IC411/IC416	IP55
225M	OMP5-225M1-08P	37	400	62.0	50	8	750	471.1	94.4	0.96	285	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-225M2-08P	45	400	75.2	50	8	750	573.0	94.7	0.96	315	IE5	Y	F	S1	IC411/IC416	IP55
250M	OMP5-250M0-08P	55	400	91.7	50	8	750	700.3	94.9	0.96	420	IE5	Y	F	S1	IC411/IC416	IP55
280M	OMP5-280M0-06P	75	400	124.6	37.5	6	750	955.0	95.3	0.96	553	IE5	Y	F	S1	IC411/IC416	IP55
315L	OMP5-315L1-12P	90	400	149.2	75	12	750	1146.0	95.5	0.96	976	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-315L2-12P	110	400	181.9	75	12	750	1400.7	95.7	0.96	998	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-315L3-12P	132	400	217.8	75	12	750	1680.8	95.9	0.96	1088	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-315L4-12P	160	400	263.5	75	12	750	2037.3	96.1	0.96	1177	IE5	Y	F	S1	IC411/IC416	IP55
355L	OMP5-355L1-12P	185	400	304.7	75	12	750	2355.7	96.1	0.96	1800	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-355L2-12P	200	400	329.0	75	12	750	2546.7	96.2	0.96	1820	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-355L3-12P	220	400	361.6	75	12	750	2801.3	96.3	0.96	1845	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-355L4-12P	250	400	410.9	75	12	750	3183.3	96.3	0.96	1900	IE5	Y	F	S1	IC411/IC416	IP55
	OMP5-355L5-12P	280	400	460.2	75	12	750	3565.3	96.3	0.96	1975	IE5	Y	F	S1	IC411/IC416	IP55

Product Application Scenario



Wire drawing machine with permanent magnet direct drive.



Permanent Magnet Fan.



Direct Drive Copper Wire Drawing.



Permanent Magnet Flat Machine.



Permanent Magnet Compact Spinning.



Injection, Extrusion Machine Permanent Magnet (Direct Drive Possible).

Application Case: Direct Drive of Wire Drawing Machine







Wire Diameter	Weight (tons)	Number of Rolls Used	Sanding Machine	Start Time	End Time	Duration	Initial Charge	Consumed Electricity	Power Consumption Per Ton	Output Per Hour	Notes
2.23	3.2	7	Start	23:40	2:40	3 Hrs	13940	349	109.0625	1.070	Asynchronous before modification.
2.23	6	7	Start	8:00	13:25	5.5 Hrs	15467	537	89.5	1.14	Permanent magnet direct drive after modification, removal of reduction gearbox.

Previous Design:
Asynchronous motor + gearbox
Asynchronous motor + pulley

Direct Drive Design:
The Permanent Magnet Direct Drive eliminates the need for a gearbox and pulleys.

Direct Drive Advantages:
Energy-saving data: 8%~15% reduction, depending on the drawing head.
Maintenance-free (can run continuously throughout the year without stopping, no need to change oil or belts).
Reduced noise and vibration, with a soothing roll sound.
Faster response time, synchronous start, reducing wire breaks.
Smaller footprint, with the motor mounted below the reel, reducing space usage by 1/3. Enables one person to manage multiple machines, reducing labor.

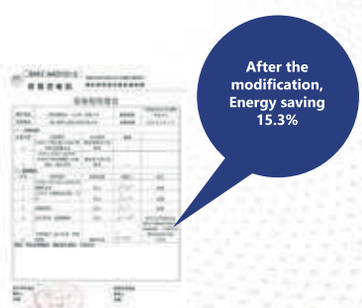
An Example of Transformation of a Fan Application

Electrical Load	Day 1	Day 2	Day 3	Day 4	Day 5	Day 6	Day 7	Day 8	Day 9
Original motor for the #9 dust collector before modification: AC 100HP 75kW-4 poles.	1061	1071	1071	1071	1071	1071	1071	1073	1075
After the modification of the #9 dust collector: Permanent Magnet OMP-250-1500r/min.	928	969	929	948	937	938	944	915	904
Energy Efficiency Rate	13%	10%	13%	11%	13%	12%	12%	15%	16%



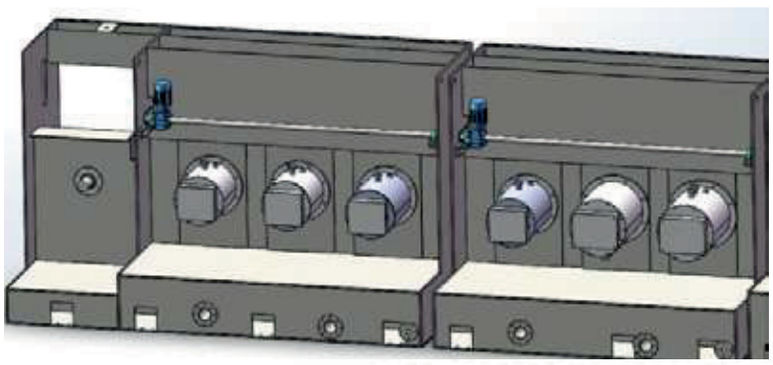






Application of permanent Magnet Motor and Direct Drive in Wire drawing Machine





Having air cooling, water cooling, and oil cooling eliminates the need for a gearbox.

Previous Design:
Asynchronous motor + gearbox
Asynchronous motor + belt

Permanent Magnet Design:
Permanent magnet + first-stage reduction.

Advantages of Permanent Magnet:
Compared to the original asynchronous motor, the permanent magnet motor saves 3~5% in power consumption.

It only has a single-stage reduction, no gearbox, and no oil leakage. Quick response and strong overload capacity.

Example of Upgrade to Mixer / Stirrer in a Reaction Vessel





Jiangxi Ganfeng Lithium Industry Modification: Removal of gearbox, maintenance-free motor, no oil leakage issues, achieving 15% energy-saving effect.

Modification of High pressure Ball Mill

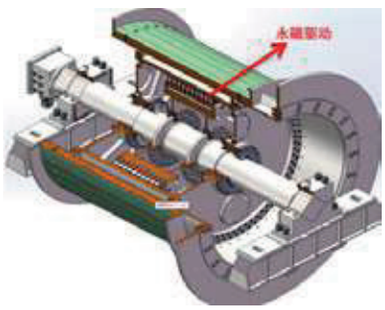




OMP1250-1600kW-106r/min, 10000V applied to a cement plant in Guizhou.

Hoist / Lifting Application Case Stud





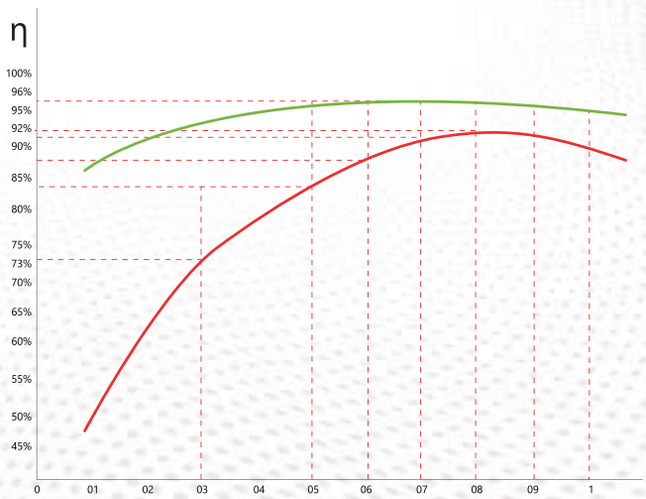


Pevious Elevator:
Motor + Gearbox + Drum

Disadvantages:
The gearbox requires maintenance every six months, needs lubrication station, requires shutdown for inspection.

Occupies a large footprint.

High noise.



Enclosed hoist: The rotor is the motor drum on the outside (800kW, 80r/min):
No gearbox, maintenance-free.

Smaller footprint, only half of the original space used.

Low noise.

220kw Transformation Of Vertical Mill And Fan, With A Power Saving Rate Of 15.3%.







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ULTRA PREMIUM EFFICIENCY

Three-Phase Permanent-Magnet-Synchronous-Motors

CONTACT

WEBSITE

Omecmotors.com

EMAIL

info@omecmotors.com