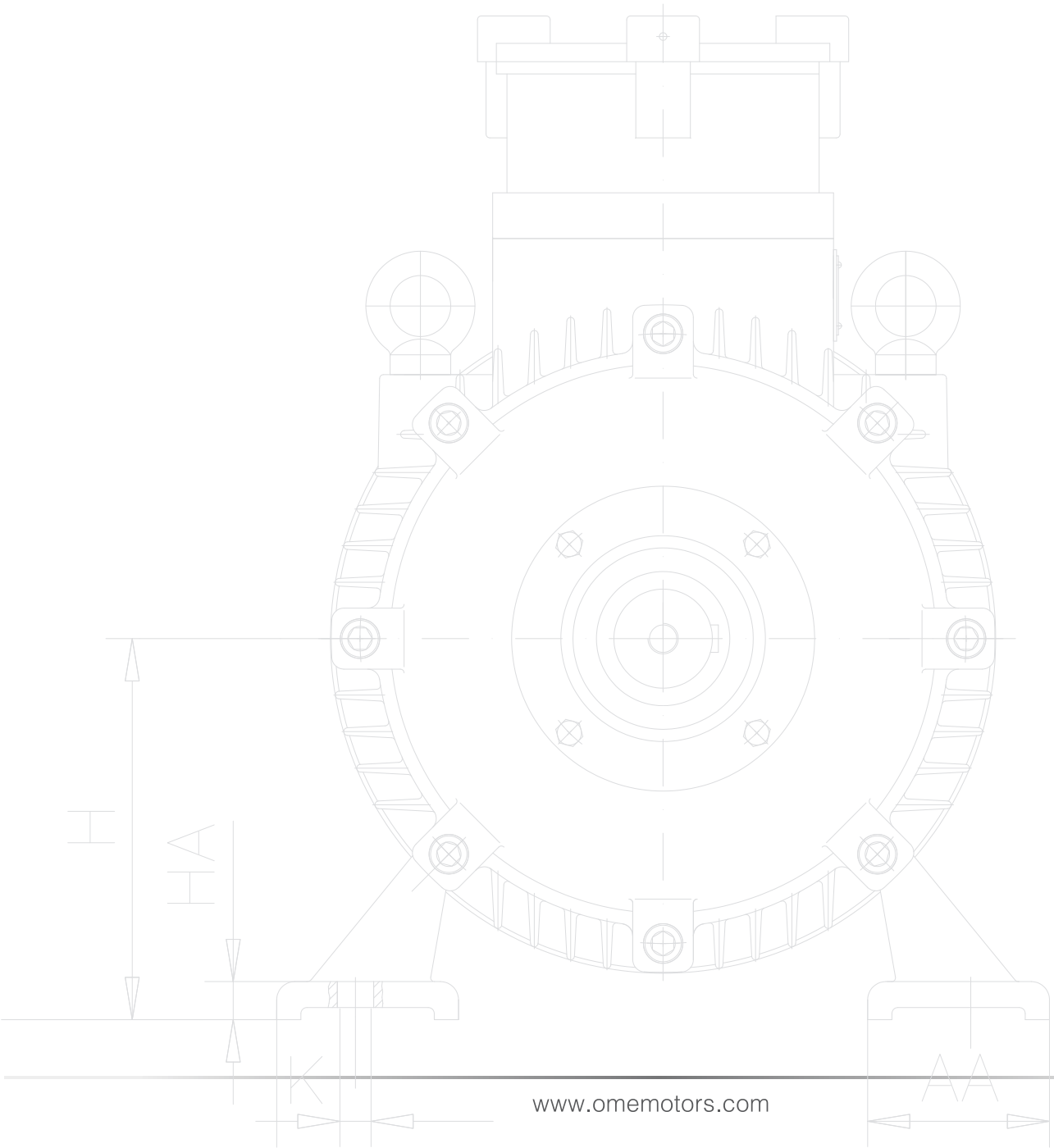
OMVK SERIES

HIGH-VOLTAGE THREE-PHASE INDUCTION ELECTRIC MOTOR

www.omemotors.com

ISO14000 ISO9001

GENERAL INFORMATION



OME MV SERIES

THREE PHASE ELECTRIC MOTOR HIGH VOLTAGE SERIES

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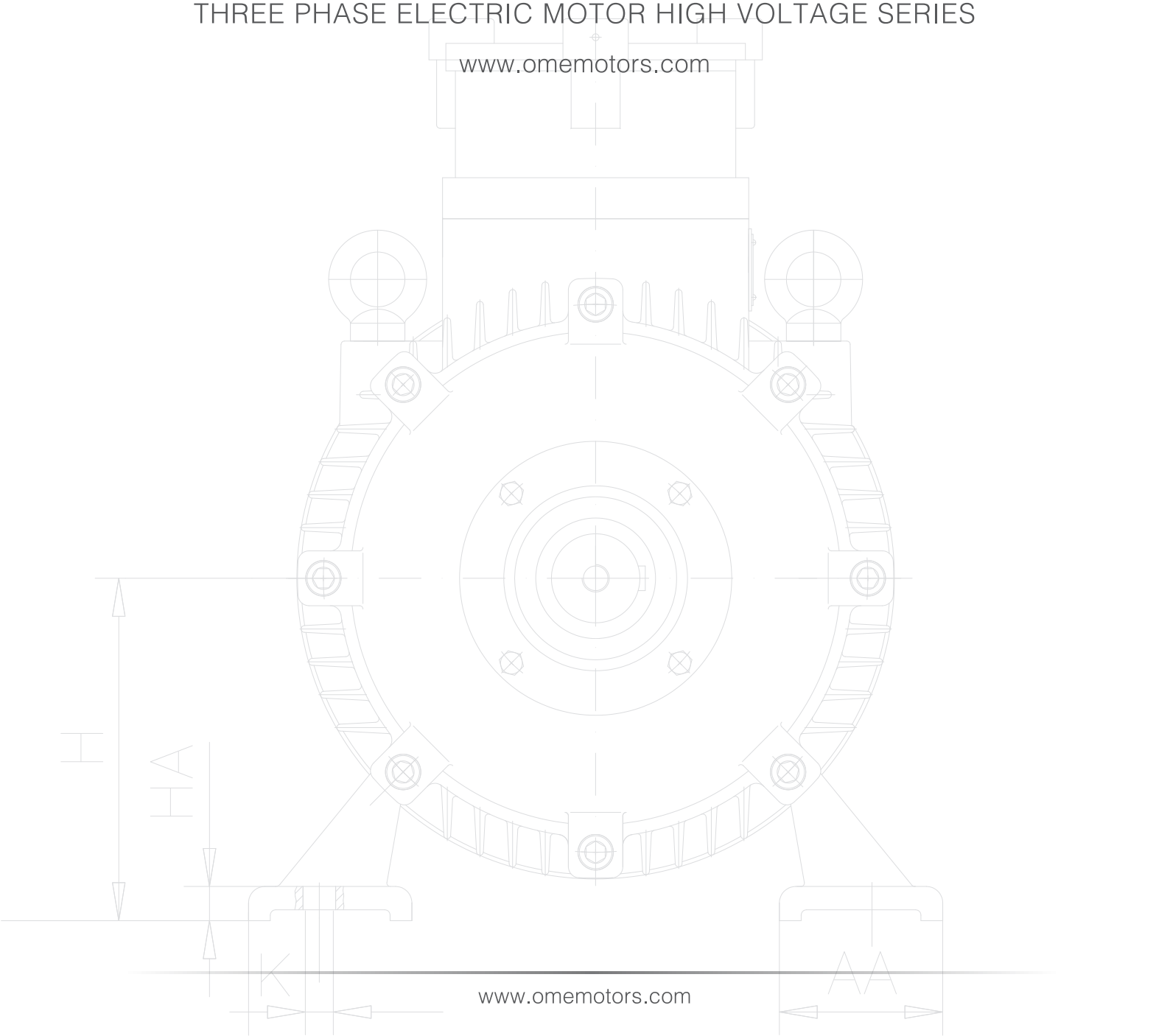

OME Electric Motors and Orsatti Group

OME is a well-established global reality born from the Orsatti family's long experience in the electrical machinery sector and characterized by a history in continuous evolution.

The key points that distinguish the Orsatti Group are in particular:

- Technical experience of over 50 years
- The continuous research for new solutions to increase the performance of our electric motors
- Development of technical solutions in compliance with current standards
- The tailor-made service to customize the motors on customer request
- The wide range of production to meet any market need
- The constant research for suitable solutions to increase the efficiency of our electric motors
- Compliance with the standards required for energy saving and environmental protection

MISSION

Our mission is to be a leading company in the production of electric motors at an international level.

VISION

Our vision is to design and manufacture highly customized motors, meeting the most varied customer requirements, managing to make competitive even the smallest realities.

VALUES

- The high quality of production, sales, service and maintenance;
- Intelligent and low costs logistics;
- Providing motors, services and expertise to save energy and improve customer processes throughout the life cycle of our products and beyond.

OME MV SERIES
THREE PHASE ELECTRIC MOTOR HIGH VOLTAGE SERIES

High Voltage and Medium Voltage Motors: Maximum Efficiency, High Customization Capability.

OME Motors' medium-voltage motors and three-phase asynchronous high-voltage motors are characterized by a high build quality. What differentiates them is the modularity of the cooling system: depending on the model, in fact, high voltage motors and medium voltage motors can be IC 411-416-511-611- IC 81W. In particular the high Voltage motors equipped with the IC 611 air to air cooling system (OMVK model) are built from a steel sheet, welded to the frame, which ensures lightness and at the same time stability.

Characteristics and Operating Conditions of High Voltage and Medium Voltage Motors.
The high voltage and medium voltage electric motors are equipped with a laminated core which, before being mounted in the frame, is compressed and protected, then pressed. These particular construction procedures guarantee the high voltage and medium voltage motors of OME Motors excellent insulating performance, greater mechanical resistance, better resistance to humidity and long life.
The cage rotor is made of aluminum and is equipped with copper bars. Furthermore, the rotor is made with a process of aluminum casting and subsequent welding, two phases necessary to guarantee maximum reliability and perfect balancing.
Depending on the power and speed of the electric motors, or based on the specifications required by the customer, roller or bushing bearings can also be used. The main terminal block is located on the right side of the electric motor but can also be placed on the left side, according to specific needs. Both the inside and the outside of the terminal box are equipped with separate terminals.

At the user's request, the stator winding and the bearings can be equipped with sensors for measuring the temperature, ensuring the operation of the motor in safety and reliability over time.
Finally, high voltage electric motors can also work with a frequency converter, thus improving cost savings throughout the life cycle of the device.

OME Motors OMVK electric motors are highly efficient three-phase electric motors that offer excellent performance and high energy savings. These are self-ventilated motors equipped with IC 611 cooling systems with air-to-air heat exchanger.
The OMVK motors designed and made to measure by OME Motors have a light and compact structure and are ideal for application in various fields of the industrial sector.

The Advantages of High Voltage and Medium Voltage Electric Motors.

Custom designed and manufactured using the best performing and innovative materials, high voltage motors have technical features that can provide numerous advantages, such as:

- Wide possibility of customization, customizable design based on needs, availability of any construction form.
- Extreme lightness, despite its large size.
- Maximum efficiency, consistent performance and reliability over time.
- Easy assembly and maintenance.
- High flexibility of use.
- Low noise and low vibration.
- Compliance with international IEC standards.

Areas of Usage of High Voltage and Medium Voltage Motors.

OME Motors produces medium voltage and high voltage electric motors for safe environments but also for work areas with explosive atmospheres. These devices, in fact, find application in the most disparate sectors, from cement factories to steel mills, from power plants to water purification, treatment and desalination systems, from sugar factories to wind energy generation plants. Furthermore, high voltage and medium voltage motors are ideal for the application and operation of pumps, compressors, boilers, conveyor belts, fans and blowers, mills, crushers and shredders, laminators and equipment for steel plants, turbines and general of all the machinery present in the heavy industry. Finally, these motors can be made with a squirrel cage or with a wound rotor.

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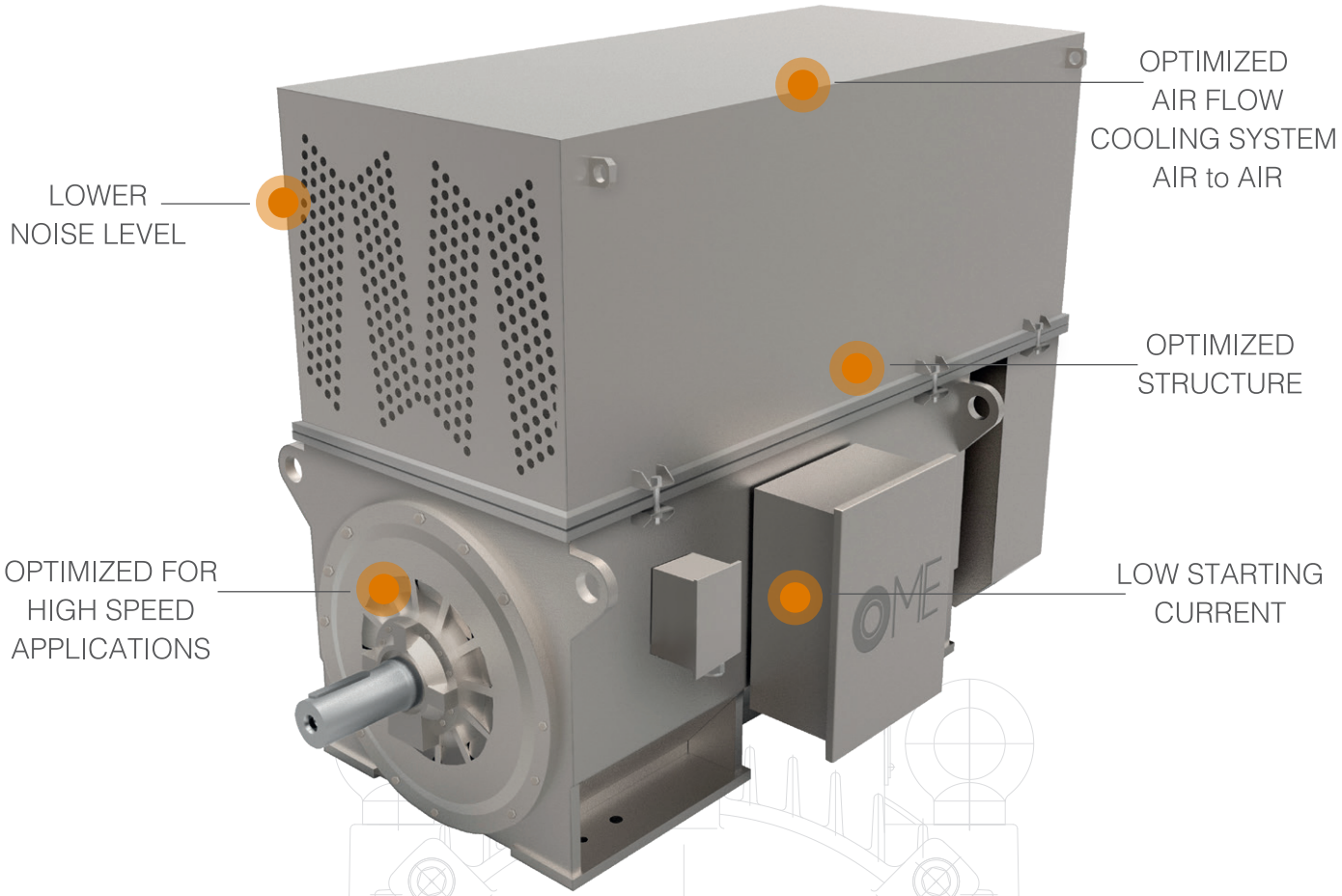
Series OMVK IC611



High Power • Premium Efficiency • Premium Cooling System

OME Motors OMVK electric motors are highly efficient three-phase electric motors that offer excellent performance and high energy savings. These are self-ventilated motors equipped with IC 611 cooling systems with air-to-air heat exchanger.
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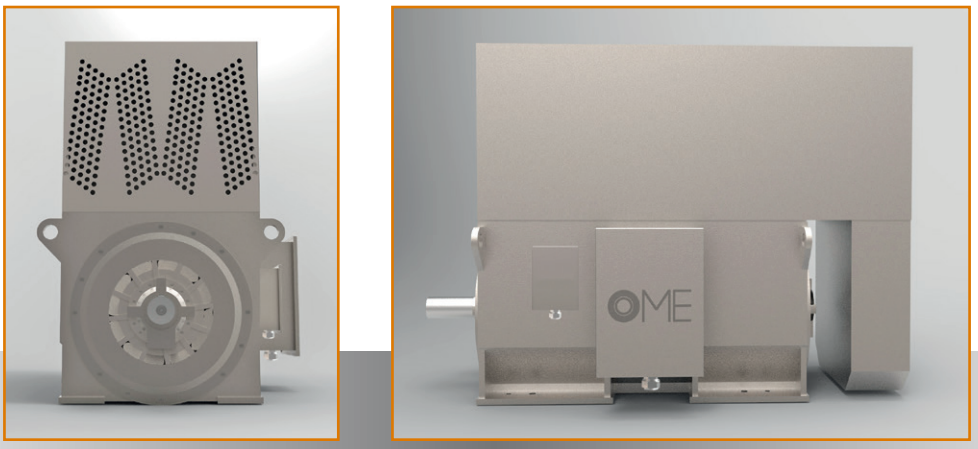


Series OMVK

SERIES HIGH-VOLTAGE THREE-PHASE

INDUCTION ELECTRIC MOTOR IP44, IP54, IP55 IC611 (H355-630)

1. GENERAL DESCRIPTION

Series OMVK High-voltage three phase induction motor (frame size 355-630) are the newest optimized serial products produced by our company, combing the design and long manufacturing experience and steady production of high voltage motors to manufacturing technique of high voltage motors.

These series motors use new technique, material and technology of 1990s with materials chosen exquisitely and the product's excellent workmanship. The motors are engineered with many remarkable features such as high efficiency, energy saving, low noise, low vibration, light weight, reliable performance, easy mounting and maintenance etc.

These series motors conform to IEC60034:1 "Series OMVK HV High-voltage Three Phase Induction Motor Specification (frame size 355-800)" and International IEC Standard. The machining size and tolerance of all parts conform to international standards.
For these series motors, the protection degree on enclosures is IP44, IP54, IP55, cooling form in IC611, and mounting arrangement can be supplied on costumers's requirement.

These series motors can be used to drive various general-purpose machines, such ad compressors, water pumps, cruchers, cutting lathes, conveyors and other mechanical equipments installed in coal mine, mechanical industries petrochemical industries and power plant etc.

2. EXPLANATION OF TYPE DESIGNATION

3. CONSTRUCTION FEATURES

This series motors adopts international fashionable box structure. Some parts such as frame and end-shields are welded with steel sheet, having the merits of lightweight and rigidity. Removing the top cover for cooling, the parts inside the motors can be obsereved and touched for convenience of mounting and maintenance.
Series OMVK motors are the basic series with protection degree IP44, IP54, IP55.

The terminal box has an enclose construction with protection degree IP54 or IP55 and is generally located on the right side of the motors (viewing from DE) and also located on the left side of the motors on costumer's requirement. The entry opening is downward. The earthing terminals are separately supplied both inside and outside of the box.

The stator adopts hoisting, sliding or pressing external pressure assembly constructions. Stator windings are provided with class F insulation materials, applied with vacuum-pressure impregnated (VPI) technique, equipped with magnetic slot wedge and on the ends of the stator windings the fixing and binding measures are supplied reliably. These processes enable the windings to possess excellent insulation property, high mechanical strengh, high moisture-resistant ability and the motors to run safely and reliably.
The motor structure is the squirrel cage type. After high precision dynamically balancing verification, the motors can run smoothly with small vibration. The motors are equipped with a cylindrical shaft extension. Motors with two shaft extensions are also available on customer's requirement.
In accordance with the motor output and speed, two kinds of bearings can be equipped, one is rolling bearing and the other is sleeve bearing. On the rolling bearings, a greasing attachment having the use to drain or replenish the lubrificating gease without stopping the motors is equipped to drain of replenish to periodically maintain the motors.
The sleeve bearings are end-shield spherical roller bearings. Force-feed lubrification of oil or ring self-lubrification so as to be adopted, meanwhile the measures of preventing shaft current are also carried out.

4. SERVICE CONDITIONS

Ambient air temperature: -15°C +40°C
Altitude: up to 1000m
Duty type: S1
Exvironmental conditions: indoor, outdoor, tropical humidity and outdoor tropical humidity

OMVK series motors (6kV)

2P Synchronous speed 3000r/min

TYPE		Output (kw)	Rated Output (A)	Rated Speed (r/min)	Efficiency (%)	Power Factor (Cos Φ)	Pull out torque Rated torque	Locked torque Rated torque	Locked current Rated current	Inertia Moment J (kg.m²)	Weight (kg)
OMVK 355	1-2	220	26,9	2973	92,5	0,85	1,8	0,6	7	22	2600
	2-2	250	30,6	2972	92,6	0,85	1,8	0,6	7	24	2650
	3-2	280	34,2	2970	92,8	0,85	1,8	0,6	7	26	2700
	4-2	315	38,3	2974	93,1	0,85	1,8	0,6	7	27	2800
OMVK 400	1-2	355	42,5	2977	93,4	0,86	1,8	0,6	7	30	3500
	2-2	400	47,8	2976	93,7	0,86	1,8	0,6	7	32	3550
	3-2	450	53,6	2977	94	0,86	1,8	0,6	7	34	3650
	4-2	500	59,4	2977	94,2	0,86	1,8	0,6	7	35	4000
OMVK 450	1-2	560	66,4	2977	94,4	0,86	1,8	0,6	7	40	4400
	2-2	630	73,7	2978	94,6	0,87	1,8	0,6	7	44	4500
	3-2	710	82,9	2977	94,7	0,87	1,8	0,6	7	46	4650
	4-2	800	93,3	2975	94,8	0,87	1,8	0,6	7	48	5000
OMVK 500	1-2	900	104,8	2982	95	0,87	1,8	0,6	7	73,4	6000
	2-2	1000	116,3	2982	95,1	0,87	1,8	0,6	7	85	6200
	3-2	1120	120,1	2981	95,2	0,87	1,8	0,6	7	93	6600
	4-2	1250	145,1	2980	95,3	0,87	1,8	0,6	7	101	7000
OMVK 560	1-2	1400	160,5	2980	95,4	0,88	1,8	0,6	7	106	9500
	2-2	1600	183,2	2979	95,5	0,88	1,8	0,6	7	107	9700
	3-2	1800	205,9	2982	95,6	0,88	1,8	0,6	7	108	10000
OMVK 630	1-2	2000	225,9	2982	95,7	0,88	1,8	0,6	7	110	11700
	2-2	2240	255,7	2982	95,8	0,88	1,8	0,6	7	114	12200
	3-2	2500	285,1	2982	95,9	0,88	1,8	0,6	7	120	12700

4P Synchronous speed 1500r/min

TYPE		Output (kw)	Rated Output (A)	Rated Speed (r/min)	Efficiency (%)	Power Factor (Cos Φ)	Pull out torque Rated torque	Locked torque Rated torque	Locked current Rated current	Inertia Moment J (kg.m²)	Weight (kg)
OMVK 355	1-4	185	22,6	1480	92,8	0,85	1,8	0,7	6,5	68	2700
	2-4	200	24,4	1482	92,9	0,85	1,8	0,7	6,5	78	2800
	3-4	220	26,8	1480	93	0,85	1,8	0,7	6,5	88	2850
	4-4	250	30,4	1480	93,1	0,85	1,8	0,7	6,5	97	2900
OMVK 400	1-4	280	33,3	1485	93,2	0,86	1,8	0,7	6,5	108	2850
	2-4	315	37,8	1485	93,3	0,86	1,8	0,7	6,5	120	3000
	3-4	355	42,5	1485	93,5	0,86	1,8	0,7	6,5	133	3150
	4-4	400	47,8	1485	93,7	0,86	1,8	0,7	6,5	147	3250
	5-4	450	53,6	1485	93,9	0,86	1,8	0,7	6,5	161	3350
OMVK 450	1-4	500	59,5	1484	94	0,86	1,8	0,7	6,5	178	4400
	2-4	560	66,5	1484	94,2	0,86	1,8	0,7	6,5	197	4500
	3-4	630	74,7	1484	94,4	0,86	1,8	0,7	6,5	218	4750
	4-4	710	84,0	1484	94,6	0,86	1,8	0,7	6,5	241	4950
OMVK 500	1-4	800	93,3	1487	94,8	0,87	1,8	0,7	6,5	266	5600
	2-4	900	104,9	1487	94,9	0,87	1,8	0,7	6,5	290	5800
	3-4	1000	116,4	1487	95	0,87	1,8	0,7	6,5	318	6000
	4-4	1120	130,1	1487	95,1	0,87	1,8	0,7	6,5	347	6200
OMVK 560	1-4	1250	143,6	1488	95,2	0,88	1,8	0,6	6,5	379	8500
	2-4	1400	160,6	1487	95,3	0,88	1,8	0,6	6,5	460	8800
	3-4	1600	183,4	1488	95,4	0,88	1,8	0,6	6,5	470	9200
OMVK 630	1-4	1800	206,1	1489	95,5	0,88	1,8	0,6	6,5	498	11600
	2-4	2000	228,8	1488	95,6	0,88	1,8	0,6	6,5	540	12000
	3-4	2240	255,9	1488	95,7	0,88	1,8	0,6	6,5	584	12300

6P Synchronous speed 1000r/min

TYPE		Output (kw)	Rated Output (A)	Rated Speed (r/min)	Efficiency (%)	Power Factor (Cos Φ)	Pull out torque Rated torque	Locked torque Rated torque	Locked current Rated current	Inertia Moment J (kg.m^2)	Weight (kg)
OMVK 400	1-6	185	23,5	991	92,4	0,82	1,8	0,7	6	193	3300
	2-6	200	25,3	990	92,6	0,82	1,8	0,7	6	210	3400
	3-6	220	27,8	990	92,8	0,82	1,8	0,7	6	236	3500
	4-6	250	31,5	989	93	0,82	1,8	0,7	6	262	3600
	5-6	280	35,5	988	93,3	0,82	1,8	0,7	6	291	3700
	6-6	315	39,5	988	93,5	0,82	1,8	0,7	6	324	3800
OMVK 450	2-6	355	43,9	989	93,7	0,83	1,8	0,7	6	361	4200
	3-6	400	49,4	989	93,8	0,83	1,8	0,7	6	401	4300
	4-6	450	55,4	989	94,1	0,83	1,8	0,7	6	440	4500
	5-6	500	61,5	989	94,3	0,83	1,8	0,7	6	687	4600
OMVK 500	1-6	560	68,0	990	94,4	0,84	1,8	0,7	6	540	5900
	2-6	630	76,4	990	94,5	0,84	1,8	0,7	6	599	6100
	3-6	710	85,7	990	94,8	0,84	1,8	0,7	6	665	6300
	4-6	800	96,6	990	94,9	0,84	1,8	0,7	6,5	736	6500
OMVK 560	1-6	900	107,3	991	95	0,85	1,8	0,7	6,5	805	8700
	2-6	1000	119,0	991	95,1	0,85	1,8	0,7	6,5	886	8900
	3-6	1120	133,2	990	95,2	0,85	1,8	0,7	6,5	927	9200
OMVK 630	1-6	1250	146,8	991	95,3	0,86	1,8	0,7	6,5	1068	11400
	2-6	1400	164,4	991	95,4	0,86	1,8	0,7	6,5	1192	11900
	3-6	1600	187,5	991	95,5	0,86	1,8	0,7	6,5	1312	12300

8P Synchronous speed 750r/min

TYPE		Output (kw)	Rated Output (A)	Rated Speed (r/min)	Efficiency (%)	Power Factor (Cos Φ)	Pull out torque Rated torque	Locked torque Rated torque	Locked current Rated current	Inertia Moment J (kg.m^2)	Weight (kg)
OMVK 400	4-8	185	24,7	741	92,5	0,78	1,8	0,8	5,5	406	3500
	5-8	200	26,6	741	92,7	0,78	1,8	0,8	5,5	450	3600
	6-8	220	29,2	741	92,9	0,78	1,8	0,8	5,5	502	3700
OMVK 450	2-8	250	32,7	743	93	0,79	1,8	0,8	5,5	558	4500
	3-8	280	36,6	743	93,2	0,79	1,8	0,8	5,5	622	4600
	4-8	315	41,1	743	93,4	0,79	1,8	0,8	5,5	693	4800
	5-8	355	46,3	743	93,5	0,79	1,8	0,8	5,5	772	5000
OMVK 500	1-8	400	51,3	743	93,7	0,8	1,8	0,8	5,5	853	5700
	2-8	450	57,7	743	93,8	0,8	1,8	0,8	5,5	941	6000
	3-8	500	63,8	743	94,2	0,8	1,8	0,8	5,5	1044	6200
	4-8	560	71,4	743	94,4	0,8	1,8	0,8	5,5	1160	6400
OMVK 560	1-8	630	78,2	743	94,5	0,82	1,8	0,7	6	1221	8300
	2-8	710	88,1	743	94,6	0,82	1,8	0,7	6	1357	8500
	3-8	800	99,1	743	94,7	0,82	1,8	0,7	6	1505	8700
OMVK 630	1-8	900	108,8	744	94,8	0,84	1,8	0,7	6	1650	11100
	2-8	1000	120,7	744	94,9	0,84	1,8	0,7	6	1820	11300
	3-8	1120	135,1	744	95	0,84	1,8	0,7	6	2001	11600
	4-8	1250	150,6	744	95,1	0,84	1,8	0,7	6	2204	12200

10P Synchronous speed 600r/min

TYPE		Output (kw)	Rated Output (A)	Rated Speed (r/min)	Efficiency (%)	Power Factor (Cos Φ)	Pull out torque Rated torque	Locked torque Rated torque	Locked current Rated current	Inertia Moment J (kg.m²)	Weight (kg)
OMVK 450	1-10	185	25,9	594	91,7	0,75	1,8	0,8	5,5	698	4200
	2-10	200	27,9	594	91,9	0,75	1,8	0,8	5,5	775	4300
	3-10	220	30,6	594	92,1	0,75	1,8	0,8	5,5	865	4400
	4-10	250	34,8	594	92,3	0,75	1,8	0,8	5,5	902	4500
	5-10	280	38,8	594	92,5	0,75	1,8	0,8	5,5	1072	4600
OMVK 500	1-10	315	43,0	594	92,8	0,76	1,8	0,8	5,5	1196	5800
	2-10	355	48,3	594	93	0,76	1,8	0,8	5,5	1332	6000
	3-10	400	54,3	594	93,3	0,76	1,8	0,8	5,5	1471	6200
	4-10	450	61,0	594	93,4	0,76	1,8	0,8	5,5	1627	6400
OMVK 560	1-10	500	65,9	594	93,6	0,78	1,8	0,7	6	1710	8000
	2-10	560	73,7	594	93,7	0,78	1,8	0,7	6	1902	8200
	3-10	630	82,9	594	93,8	0,78	1,8	0,7	6	2116	8400
	4-10	710	93,2	594	94	0,78	1,8	0,7	6	2355	8600
OMVK 630	1-10	800	102,2	594	94,2	0,8	1,8	0,7	6	2615	10600
	2-10	900	114,8	594	94,3	0,8	1,8	0,7	6	2800	10800
	3-10	1000	137,4	594	94,4	0,8	1,8	0,7	6	3170	11100
	4-10	1120	140,1	594	94,6	0,8	1,8	0,7	6	3489	11500

12P Synchronous speed 500r/min

TYPE		Output (kw)	Rated Output (A)	Rated Speed (r/min)	Efficiency (%)	Power Factor (Cos Φ)	Pull out torque Rated torque	Locked torque Rated torque	Locked current Rated current	Inertia Moment J (kg.m^2)	Weight (kg)
OMVK 450	4-12	185	27,7	494	91,8	0,7	1,8	0,8	5,5	1487	4600
	5-12	200	29,9	494	92	0,7	1,8	0,8	5,5	1206	4800
OMVK 500	1-12	220	31,9	494	92,2	0,72	1,8	0,8	5,5	1347	5700
	2-12	250	36,1	494	92,5	0,72	1,8	0,8	5,5	1499	5900
	3-12	280	40,4	494	92,7	0,72	1,8	0,8	5,5	1672	6100
	4-12	315	45,4	494	92,8	0,72	1,8	0,8	5,5	1865	6300
OMVK 560	1-12	355	49,6	494	93	0,74	1,8	0,7	5,5	1967	8100
	2-12	400	55,8	494	93,3	0,74	1,8	0,7	5,5	2190	8300
	3-12	450	62,7	494	93,4	0,74	1,8	0,7	5,5	2411	8500
	4-12	500	69,4	494	93,7	0,74	1,8	0,7	5,5	2673	8700
OMVK 630	1-12	560	76,6	494	93,8	0,76	1,8	0,7	5,5	2974	10700
	2-12	630	94,9	494	93,9	0,76	1,8	0,7	5,5	3312	10900
	3-12	710	95,6	494	94	0,76	1,8	0,7	5,5	3688	11300
	4-12	800	107,5	494	94,2	0,76	1,8	0,7	5,5	4098	11700

OMVK series motors (10kV)

2P Synchronous speed 3000r/min

TYPE		Output (kw)	Rated Output (A)	Rated Speed (r/min)	Efficiency (%)	Power Factor (Cos Φ)	Pull out torque Rated torque	Locked torque Rated torque	Locked current Rated current	Inertia Moment J (kg.m²)	Weight (kg)
OMVK 400	1-2	185	13,8	2975	92	0,84	1,8	0,6	6,5	21	2650
	2-2	200	14,9	2975	92,2	0,84	1,8	0,6	6,5	23	2680
	3-2	220	16,4	2975	92,4	0,84	1,8	0,6	6,5	25	2750
	4-2	250	18,6	2975	92,6	0,84	1,8	0,6	6,5	27	2880
OMVK 450	1-2	220	16,4	2978	92,4	0,85	1,8	0,6	6,5	30	250
	2-2	250	18,5	2978	92,6	0,85	1,8	0,6	6,5	31,1	4300
	3-2	280	20,6	2978	92,8	0,85	1,8	0,6	6,5	31,8	4400
	4-2	315	23,1	2978	93,0	0,85	1,8	0,6	6,5	32,5	4450
	5-2	355	25,7	2978	93,3	0,86	1,8	0,6	6,5	34,3	4600
	6-2	400	28,8	2978	93,7	0,86	1,8	0,6	6,5	35,2	4700
	7-2	450	32,3	2978	94,0	0,86	1,8	0,6	6,5	37,2	4800
OMVK 500	1-2	500	35,7	2985	94,2	0,86	1,8	0,6	6,5	55,4	6100
	2-2	560	39,9	2985	94,4	0,86	1,8	0,6	6,5	59,1	6200
	3-2	630	44,8	2985	94,6	0,87	1,8	0,6	6,5	63,2	6500
	4-2	710	50,4	2985	94,7	0,87	1,8	0,6	6,5	68,8	6700
	5-2	800	56,1	2985	94,8	0,87	1,8	0,6	6,5	75,5	7000
OMVK 560	1-2	900	63,0	2984	94,8	0,87	1,8	0,6	6,5	78,4	9500
	2-2	1000	69,9	2984	94,9	0,87	1,8	0,6	6,5	90	9700
	3-2	1120	78,2	2984	95,0	0,87	1,8	0,6	6,5	97	10000
OMVK 630	2-2	1250	87,1	2984	95,3	0,87	1,8	0,6	6,5	98	11400
	3-2	1400	97,3	2984	95,4	0,87	1,8	0,6	6,5	99	11700
	4-2	1600	109,0	2984	95,5	0,88	1,8	0,6	6,5	100	12200

4P Synchronous speed 1500r/min

TYPE		Output (kw)	Rated Output (A)	Rated Speed (r/min)	Efficiency (%)	Power Factor (Cos Φ)	Pull out torque Rated torque	Locked torque Rated torque	Locked current Rated current	Inertia Moment J (kg.m²)	Weight (kg)
OMVK 400	1-4	185	13,7	1485	92	0,85	1,8	0,7	7	76	2800
	2-4	200	14,7	1485	92,2	0,85	1,8	0,7	7	81	2850
	3-4	220	16,2	1485	92,3	0,85	1,8	0,7	7	89	2900
	4-4	250	18,4	1485	92,5	0,85	1,8	0,7	7	95	2950
OMVK 450	1-4	220	15,0	1485	92,4	0,83	1,8	0,6	7	78	4300
	2-4	250	15,7	1485	92,6	0,83	1,8	0,6	7	87	4400
	3-4	280	16,4	1485	92,8	0,83	1,8	0,6	7	97	4500
	4-4	315	18,5	1485	93	0,83	1,8	0,6	7	107	4600
	5-4	355	20,7	1485	93,3	0,86	1,8	0,6	7	119	4700
	6-4	400	23,1	1485	93,5	0,86	1,8	0,6	7	132	4850
	7-4	450	25,6	1485	93,8	0,86	1,8	0,6	7	147	5000
OMVK 500	1-4	500	28,8	1488	94	0,86	1,8	0,6	7	165	5200
	2-4	560	32,2	1488	94,2	0,86	1,8	0,6	7	182	5400
	3-4	630	35,8	1488	94,4	0,86	1,8	0,6	7	201	5600
	4-4	710	40,1	1488	94,6	0,86	1,8	0,6	7	220	5800
	5-4	800	45,0	1488	94,8	0,87	1,8	0,6	7	242	6000
OMVK 560	1-4	900	50,6	1488	94,9	0,87	1,8	0,6	7	270	8500
	2-4	1000	56,3	1488	95	0,87	1,8	0,6	7	292	8800
	3-4	1120	63,1	1488	95,1	0,87	1,8	0,6	7	320	9200
OMVK 630	1-4	1250	87,4	1488	95,2	0,87	1,8	0,6	7	350	11400
	2-4	1400	97,8	1488	95,3	0,87	1,8	0,6	7	382	11600
	3-4	1600	110,3	1488	92,4	0,88	1,8	0,6	7	423	12000

6P Synchronous speed 1000r/min

TYPE		Output (kw)	Rated Output (A)	Rated Speed (r/min)	Efficiency (%)	Power Factor (Cos Φ)	Pull out torque Rated torque	Locked torque Rated torque	Locked current Rated current	Inertia Moment J (kg.m^2)	Weight (kg)
OMVK 450	4-6	220	17,0	990	92	0,8	1,8	0,7	6	210	4300
	5-6	250	19,2	990	92,2	0,8	1,8	0,7	6	235	4400
	6-6	280	21,0	990	92,5	0,8	1,8	0,7	6	260	4500
	7-6	315	24,0	990	92,8	0,82	1,8	0,7	6	290	4600
OMVK 500	1-6	355	26,6	990	93	0,83	1,8	0,7	6	326	4800
	2-6	400	29,9	991	93,3	0,83	1,8	0,7	6	362	6100
	3-6	450	33,5	991	93,5	0,83	1,8	0,7	6	400	6300
	4-6	500	37,2	991	93,7	0,83	1,8	0,7	6	440	6500
	5-6	560	41,1	991	93,8	0,84	1,8	0,7	6	485	6600
OMVK 560	2-6	630	63,1	991	94,4	0,84	1,8	0,7	6	540	8500
	3-6	710	70,1	991	94,6	0,84	1,8	0,7	6	599	8700
	4-6	800	78,4	991	94,7	0,84	1,8	0,7	6	665	8900
	5-6	900	78,4	991	94,9	0,85	1,8	0,7	6	736	9200
OMVK 630	1-6	1000	71,8	991	95,1	0,85	1,8	0,6	6	805	11100
	2-6	1120	80,4	991	95,2	0,85	1,8	0,6	6	886	11400
	3-6	1250	88,6	991	95,3	0,86	1,8	0,6	6	970	11900

8P Synchronous speed 750r/min

TYPE		Output (kw)	Rated Output (A)	Rated Speed (r/min)	Efficiency (%)	Power Factor (Cos Φ)	Pull out torque Rated torque	Locked torque Rated torque	Locked current Rated current	Inertia Moment J (kg.m^2)	Weight (kg)
OMVK 500	1-8	220	18,7	742	92	0,74	1,8	0,7	6	426	5400
	2-8	250	21,3	742	92,2	0,74	1,8	0,7	6	476	5600
	3-8	280	23,7	742	92,5	0,74	1,8	0,7	6	530	5800
	4-8	315	25,5	742	92,8	0,77	1,8	0,7	6	588	6000
	5-8	355	28,9	742	93,1	0,77	1,8	0,7	6	656	6200
	6-8	400	31,8	742	93,2	0,78	1,8	0,7	6	730	6400
OMVK 560	1-8	450	34,8	742	93,4	0,78	1,8	0,7	6	810	8000
	2-8	500	38,7	742	93,8	0,79	1,8	0,7	6	890	8100
	3-8	560	43,3	742	93,9	0,79	1,8	0,7	6	988	8300
	4-8	630	47,4	742	94,4	0,82	1,8	0,7	6	1098	8500
OMVK 630	1-8	710	53,5	742	94,6	0,82	1,8	0,7	6	1221	8700
	2-8	800	60,1	742	94,7	0,82	1,8	0,7	6	1357	11100
	3-8	900	67,5	742	94,8	0,82	1,8	0,7	6	1505	11300

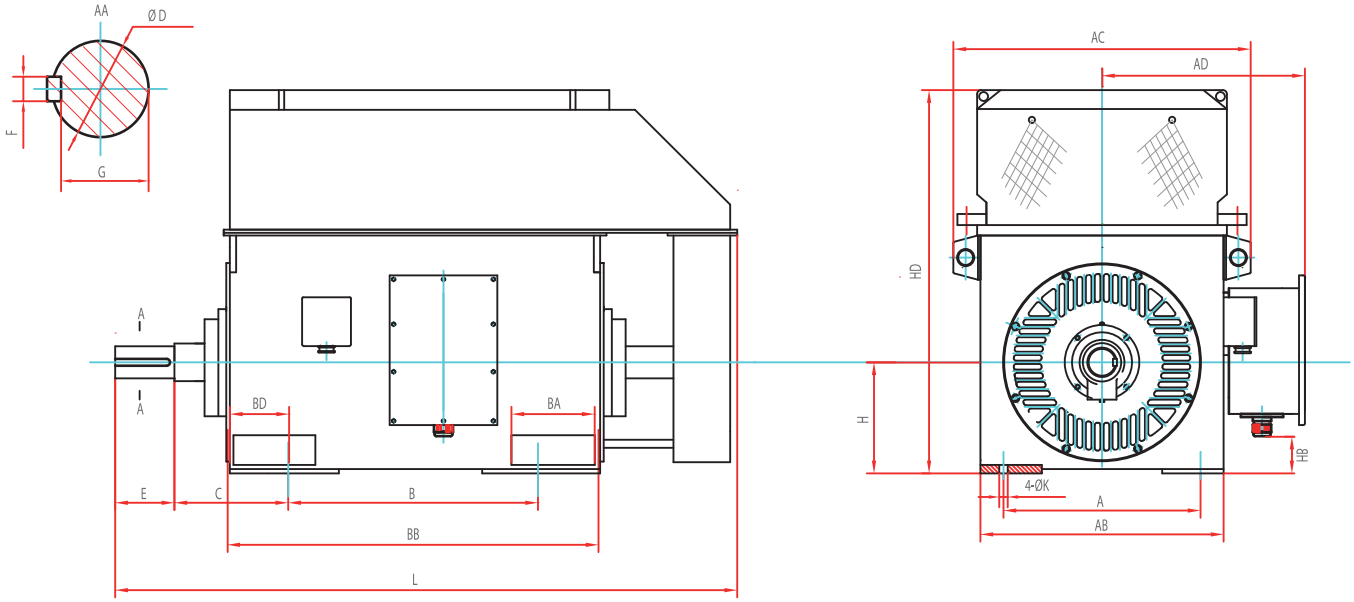
10P Synchronous speed 600r/min

TYPE		Output (kw)	Rated Output (A)	Rated Speed (r/min)	Efficiency (%)	Power Factor (Cos Φ)	Pull out torque Rated torque	Locked torque Rated torque	Locked current Rated current	Inertia Moment J (kg.m^2)	Weight (kg)
OMVK 500	3-10	220	19	594	91,9	0,72	1,8	0,7	5,5	698	5600
	4-10	250	21,6	594	92,1	0,72	1,8	0,7	5,5	775	5800
	5-10	280	23,9	594	92,4	0,74	1,8	0,7	5,5	865	6000
OMVK 560	1-10	315	26,9	594	92,6	0,74	1,8	0,7	6	1014	8000
	2-10	355	29,8	594	92,8	0,75	1,8	0,7	6	1131	8100
	3-10	400	33,5	594	93	0,75	1,8	0,7	6	1261	8200
	4-10	450	36,6	594	93,2	0,76	1,8	0,7	6	1403	8400
	5-10	500	40,6	594	93,4	0,77	1,8	0,7	6	1544	8600
OMVK 630	1-10	560	44,8	594	93,5	0,78	1,8	0,7	6	1710	10600
	2-10	630	50,3	594	93,7	0,78	1,8	0,7	6	1902	10800
	3-10	710	56,6	594	93,9	0,78	1,8	0,7	6	2116	11100
	4-10	800	61,9	594	94,3	0,8	1,8	0,7	6	2355	11500

12P	Synchronous speed 500r/min										
TYPE		Output (kw)	Rated Output (A)	Rated Speed (r/min)	Efficiency (%)	Power Factor (Cos Φ)	Pull out torque Rated torque	Locked torque Rated torque	Locked current Rated current	Inertia Moment J (kg.m^2)	Weight (kg)
OMVK 560	1-12	220	19,4	495	91,8	0,72	1,8	0,7	6	1135	8100
	2-12	250	22	495	92	0,72	1,8	0,7	6	1210	8200
	3-12	280	24,6	495	92,1	0,72	1,8	0,7	6	1418	8300
	4-12	315	27,3	495	92,3	0,72	1,8	0,7	6	1580	8500
	5-12	355	30,5	495	92,5	0,73	1,8	0,7	6	1763	8700
OMVK 630	1-12	400	34,5	495	92,7	0,7	1,8	0,7	6	1967	10700
	2-12	450	38,8	495	92,9	0,7	1,8	0,7	6	2190	10900
	3-12	500	42,9	495	93,2	0,7	1,8	0,7	6	2411	11300
	4-12	560	47,3	495	93,5	0,7	1,8	0,7	6	2672	11700

6. CONSTRUCTION AND MOUNTING AND OVERALL DIMENSIONS

Mounting and overall dimensions of series OMVK (6 kV; 10 kV) HV three phase induction motors (frame size 355-630) (see table)

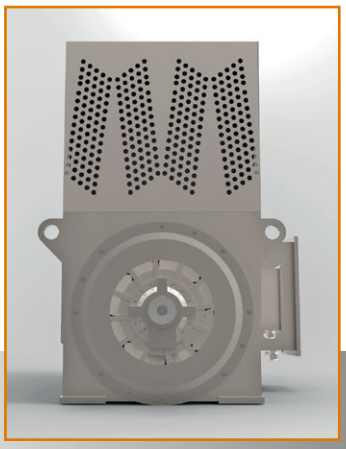


Mounting and overall dimensions (6 kV; 10 kV) frame size 355-630

Frame size \ Voltage / Dimension code	6,10			6	10	6	10	6	10	6	10	6,10				
	Mounting dimension													Overall dimension		
	A	B	C	D		E		F		G		H	K	AA	AB	AC
355	630	900	315 (315)	100 (80)	—	210 (170)	—	28 (22)	—	90 (71)	—	355	28	208	800	1020
400	710	1000	335 (375)	110 (90)	—	210 (170)	—	28 (25)	—	100 (81)	—	400	35		900	1120
450	800	1120	355 (400)	130 120 (100)	110 (90)	250 210 (210)	210 210 (170)	32 32 (28)	28 28 (25)	119 109 (90)	100 100 (81)	450	35		980	1180
500	900	1250	475 (560)	475 (560)	130 120 (100)	250 250 (210)	250 210 (210)	36 32 (28)	32 32 (28)	128 119 (00)	119 109 (90)	500	42		1120	1320
560	100	1400	500 (560)	160 150 (130)	160 150 (130)	300 250 (250)	300 250 (250)	40 36 (32)	40 36 (32)	147 138 (119)	147 138 (119)	560	42	210	1220	1460
630	1120	1600	530 (560)	180 170 (140)	180 170 (140)	300 300 (250)	300 300 (250)	45 40 (36)	45 40 (36)	165 157 (128)	165 157 (128)	630	48		1260	1500

Frame size \ Voltage / Dimension code	6,10				6	10	6	10	6	10	6,10	
	Overall dimension											
	BA	BB	BD	HA	HD				AG		AD		HB		L	
					1	2	3	4							1,2,3	4
355	570	1360	210	26	760	1060	1600	1420	595	—	755	—	90	—	1790 (1750)	2070 (2030)
400	600	1500	249 (277)	35	850	1180	1870	1260	645	—	800	—	130	—	1920 (1880)	2250 (2220)
450	620	1620	262 (229) / 262 (229	40	950	1320	1930	1660	685	760	840	990	200	140	2050 2000 (2000)	2260 2210 (1460)
500	660	1730	355 (370)		1050	1510	2080	1860	755	830	900	1060	320	240	2200 (2350)	2600 (2650)
560	720	1860	360 (345)		1180	1760	2330	2200	805	880	960	1110	348	290 (280)	2450 (2650)	2760 2740 (2840)
630	670	2000	260 (590)		—	1920	2850	2250	825	975	980	1135	530	480	2800 (2750)	3300 (3200)

Remarks: 1.The motors with output 2000kw and obove have its auxiliary terminal box on the left of the motor
2.For some motor with the rolling bearing. it can be supplied with self-lubricated system.
3.The dimension in bracket is for 2-poles motors, and that with underline for 4-poles motors.
If there is only a double digits, the one without bracket is the dimension for motors beyond 2-poles.
4.For the dimensions in diagonal, the upper one is theta of OMV and OMVKS series of the motors and below one OMVK series motors.
5.The dimension (229)' is 6k1/. (301) is 10kV.



Series OMVK

SERIES HIGH-VOLTAGE THREE-PHASE

INDUCTION ELECTRIC MOTOR IC611 - IP44, IP54, IP55 (H710-800)

1. GENERAL DESCRIPTION

Series OMVK High-voltage three phase induction motors (frame size 710/800) are the serial products developed and manufactured, combined with the design and manufacture experience of long-term and stable producing high voltage three phase induction motors, on the basis of the international advanced manufacturing techniques.

These series motors are designed with the optimized design technique of computer. Adopting the new material and technology and being of excellent workmanship, these series motors have many remarkable feature such as compact construction, lightweight, high output, high efficiency, low nosie, small vibration, safe operation and easy maintenance etc. These series of motors conform to IEC60034:1-2004 Techincal Requirement for the Fundamental Series Three-phase Large Asynchronus Motors and international standard IEC34. The machine dimensions and tolerances of all parts conform to the corresponding international standards. For these series of motors, the protection degree on enclosures is IP44, IP54, IP55, cooling form is IC611, and mounting arrangement is IMB3. The motors with other corresponding protection degree, cooling form and mounting arrangement can also be supplied on customer's requirement.

Rated voltage: 6 kV, 10 kV Power range: 355-7100 kW Shaft center height: 710, 800 min
Synchronous speed: 3000, 1500, 1000, 750, 600, 500, 429, 375, 333, 300 r/min

Based on these series of motors, outdoor type, tropical humidity type, tropical humidity outdoor type, indoor Medium-chemical corrosion location and outdoor strong-chemical corrosion locations, outdoor medium-chemical corrosion location and outdoor strong-chemical corrosion location three phase induction motors have been modified. The performance index and mounting and overall dimensions are the same with those basic series.

2. EXPLANATION OF TYPE DESIGNATION

3. CONSTRUCTION FEATURES

These series motors adopted box structure popular worldwide, and frame, endshield etc. Are welded with steel plate. Endshield sphere sleeve bearings are used with the merits of high load capacity and easy overhaul and assembling.

These motors have light weight and good rigidity. Observation, installation and maintenance can be done easily after taking coolers down.

Stator windings, Class F insulation, are wound with two-glasses-fiberd film-ape flat copper wire. The whole windings are vacuum-pressure impregnated to make them possess higher electrical performance, mechanical strength, insulating property, moisture resistance and thermo-stability.

The material of rotor bars is copper, reliable welding technology is used between bars and rings and reliable measures have been taken to prevent the bar from rupture. After high precision balancing verification, the motors can run smoothly with small vibration.

High-voltage terminal boxes are enclosed structure with a large terminal compartment within which positions of cable head are left. The terminal box is located on the right side of the motors (viewing from the drive end). For the motor output 2000kW and above, a secondary terminal box is equipped at one side of the primary terminal box with neutral point connection of stator three phase windings and differential protection of motors.

According to consumer requirements, motor can be equipped with a bearing temperature detector to detect bearing temperature and also with a stator winding temperature detector and an anti-condensation heating device.

4. SERVICE CONDITION

Rated voltage: 5 kV or 10 kW
Rated frequency: 50 Hz
Ambient air temperature: -15°C +40°C
Altitude: Not exceeding 1000 mm
Duty type: S1
Environmental conditions: indoor, outdoor, tropical humidity, outdoor tropical humidity, indoor medium-chemical corrosion locations, indoor strong-chemical corrosion, outdoor medium-chemical corrosion locations, outdoor strong-chemical corrosion.

At the opertion site, the average highest relative humidity at the most humid month is 90%, and the average lowest temperature at the same month can not exceed 25°C.

These series motors can be used to drive different kinds of general-purpose machines, such as compressors, water pumps, blowers and other mechanical equipments installed in coal mines, mechanical, petrochemical industries and power plants etc. They can be used as drivers.

5. STARTING REQUIREMENT

Adopting advanced technology to calculate starting temperature rise and stress of squirrel cage door, these series of motors should be protected from early damage because of overweight starting load. The following requirements shall be when the drivers are water pumps, blowers etc.
For user's electric network, a voltage shall be assured not less than 85% rated voltage applied to the motor terminals during starting period.
The flywheel moment GD2 of driven equipment (convert into motor speed) shall be not more then the value driving from the following formula.

$$GD^2=5.36\ [P^{0.95}/(\ \frac{n}{1000}\ )^{2.4}]\ -0.018\ [P^{1.5}/(\ \frac{n}{1000}\ )^{1.8}]$$

In the formula:
GD2 - Flywheel moment of load, Kg/m2 ;
P - Rated power of motor, kW;
n - Rated speed of motor r/min

The motor shall be shutdown gradually between two starting and the extra testing shall be carried out after shutdown for one (1) hour and above.
If the flywheel (GD2) of rotating parts of the driven equipment is greater than the value deriving from the formula above, or more frequent starting, or starting with heavy load, please contact and consult with O.M.E Srl for special design to assure the motor starting reliably.

OMVK series motors

2P Synchronous speed 3000r/min

TYPE		Output (kw)	Rated Output (A)	Rated Speed (r/min)	Efficiency (%)	Power Factor (Cos Φ)	Pull out torque Rated torque	Locked torque Rated torque	Locked current Rated current	Noise dB (A)	Fly wheel torque ($T.m^2$)	Weight (T)
OMVK 710	1-2	2800	314,9	2985	96	0,89	1,8	0,6	7	120	0,7	14,25
	2-2	3150	353,8	2985	96,1	0,89	1,8	0,6	7	120	0,8	15,75
	3-2	3550	398,8	2985	96,2	0,89	1,8	0,6	7	120	0,9	16,15
	4-2	4000	448,9	2985	96,3	0,89	1,8	0,6	7	120	1,6	16,75
OMVK 800	1-2	4500	505	2985	96,4	0,89	1,8	0,6	7	120	1,7	20
	2-2	5000	554,1	2985	96,5	0,89	1,8	0,6	7	120	1,85	22
	3-2	5600	620,6	2985	96,6	0,89	1,8	0,6	7		2,1	23

4P Synchronous speed 1500r/min

TYPE		Output (kw)	Rated Output (A)	Rated Speed (r/min)	Efficiency (%)	Power Factor (Cos Φ)	Pull out torque Rated torque	Locked torque Rated torque	Locked current Rated current	Noise dB (A)	Fly wheel torque ($T.m^2$)	Weight (T)
OMVK 710	1-4	2500	288	1485	96,1	0,86	1,8	0,6	6,5	115	0,8	14,35
	2-4	2800	322,6	1485	96,2	0,87	1,8	0,6	6,5	115	0,9	15,85
	3-4	3150	362,5	1485	96,3	0,87	1,8	0,6	6,5	115	1	16,25
	4-4	3550	408,6	1485	96,3	0,87	1,8	0,6	6,5	115	1,1	16,85
OMVK 800	1-4	4000	459,9	1485	96,4	0,87	1,8	0,6	6,5	115	2,1	21
	2-4	4500	517,4	1485	96,4	0,87	1,8	0,6	6,5	115	2,2	23
	3-4	5000	567,7	1485	96,5	0,88	1,8	0,6	6,5	115	2,3	24

6P Synchronous speed 1000r/min

TYPE		Output (kw)	Rated Output (A)	Rated Speed (r/min)	Efficiency (%)	Power Factor (Cos Φ)	Pull out torque Rated torque	Locked torque Rated torque	Locked current Rated current	Noise dB (A)	Fly wheel torque (T.m²)	Weight (T)
OMVK 710	1-6	1800	210,7	995	95,8	0,85	1,8	0,6	6,5	110	0,9	14,45
	2-6	2000	233,8	995	95,9	0,85	1,8	0,6	6,5	110	1	14,62
	3-6	2240	261,6	995	96	0,85	1,8	0,6	6,5	112	1,1	14,9
	4-6	2500	291,7	995	96,1	0,85	1,8	0,6	6,5	112	1,2	15,15
OMVK 800	1-6	2800	326,7	995	96,1	0,86	1,8	0,6	6,5	112	1,8	20
	2-6	3150	367,1	995	96,2	0,86	1,8	0,6	6,5	112	1,9	21
	3-6	3550	413,8	995	96,2	0,86	1,8	0,6	6,5	112	2	23
	4-6	4000	465,7	995	96,3	0,86	1,8	0,6	6,5	112	2,1	24

8P Synchronous speed 750r/min

TYPE		Output (kw)	Rated Output (A)	Rated Speed (r/min)	Efficiency (%)	Power Factor (Cos Φ)	Pull out torque Rated torque	Locked torque Rated torque	Locked current Rated current	Noise dB (A)	Fly wheel torque (T.m²)	Weight (T)
OMVK 710	1-8	1400	166,8	745	95,2	0,84	1,8	0,6	6,5	107	1,2	14,45
	2-8	1600	190,5	745	95,3	0,84	1,8	0,6	6,5	107	1,4	14,65
	3-8	1800	214	745	95,4	0,84	1,8	0,6	6,5	109	1,6	14,9
OMVK 800	1-8	2000	237,6	745	95,5	0,85	1,8	0,6	6,5	109	2,2	18,8
	2-8	2240	265,8	745	95,6	0,85	1,8	0,6	6,5	109	2,5	19,2
	3-8	2500	296,4	745	95,7	0,85	1,8	0,6	6,5	109	3,1	19,8
	4-8	2800	331,6	745	95,8	0,85	1,8	0,6	6,5	109	3,4	20,8

10P Synchronous speed 600r/min

TYPE		Output (kw)	Rated Output (A)	Rated Speed (r/min)	Efficiency (%)	Power Factor (Cos Φ)	Pull out torque Rated torque	Locked torque Rated torque	Locked current Rated current	Noise dB (A)	Fly wheel torque ($T.m^2$)	Weight (T)
OMVK 710	1-10	1250	153,2	598	94,8	0,83	1,8	0,6	6	107	1,2	14,45
	2-10	1400	171,4	598	94,9	0,83	1,8	0,6	6	107	1,4	14,65
	3-10	1600	195,7	598	95	0,83	1,8	0,6	6	107	1,6	14,9
OMVK 800	1-10	1800	219,9	598	95,1	0,83	1,8	0,6	6	107	2,2	18,8
	2-10	2000	244,1	598	95,2	0,83	1,8	0,6	6	107	2,5	19,2
	3-10	2240	273,1	598	95,3	0,83	1,8	0,6	6	109	3,1	19,8

12P Synchronous speed 500r/min

TYPE		Output (kw)	Rated Output (A)	Rated Speed (r/min)	Efficiency (%)	Power Factor (Cos Φ)	Pull out torque Rated torque	Locked torque Rated torque	Locked current Rated current	Noise dB (A)	Fly wheel torque ($T.m^2$)	Weight (T)
OMVK 710	1-12	900	115,2	497	94,5	0,79	1,8	0,6	6	105	1,56	14,45
	2-12	1000	127,8	497	94,6	0,79	1,8	0,6	6	105	1,64	14,65
	3-12	1120	143	497	94,7	0,79	1,8	0,6	6	107	1,68	14,9
OMVK 800	1-12	1250	159,4	497	94,7	0,79	1,8	0,6	6	107	2,3	16,9
	2-12	1400	178,2	497	94,8	0,79	1,8	0,6	6	107	2,42	17,1
	3-12	1600	203,7	497	94,9	0,79	1,8	0,6	6	107	2,56	17,3
	4-12	1800	228,9	497	95	0,79	1,8	0,6	6	107	2,68	17,65

14P Synchronous speed 429r/min

TYPE		Output (kw)	Rated Output (A)	Rated Speed (r/min)	Efficiency (%)	Power Factor (Cos Φ)	Pull out torque Rated torque	Locked torque Rated torque	Locked current Rated current	Noise dB (A)	Fly wheel torque (T.m²)	Weight (T)
OMVK 710	1-14	630	88	425	93,4	0,75	1,8	0,6	6	105	1,32	13,8
	2-14	710	97,3	425	93,6	0,75	1,8	0,6	6	105	1,48	14,20
	3-14	800	109,4	425	93,8	0,75	1,8	0,6	6	105	1,56	14,45
	4-14	900	121,4	425	93,9	0,76	1,8	0,6	6	105	1,64	14,65
OMVK 800	1-14	1000	134,7	425	94	0,76	1,8	0,6	6	105	1,68	18,5
	2-14	1120	150,7	425	94,1	0,76	1,8	0,6	6	107	2,3	19,2
	3-14	1250	168	425	94,2	0,76	1,8	0,6	6	107	2,42	19,9
	4-14	1400	188	425	94,3	0,76	1,8	0,6	6	107	2,56	20,7

16P Synchronous speed 375r/min

TYPE		Output (kw)	Rated Output (A)	Rated Speed (r/min)	Efficiency (%)	Power Factor (Cos Φ)	Pull out torque Rated torque	Locked torque Rated torque	Locked current Rated current	Noise dB (A)	Fly wheel torque (T.m²)	Weight (T)
OMVK 710	1-16	500	76,8	372	92,8	0,73	1,8	0,6	6	105	1,37	14,1
	2-16	560	85,2	372	92,9	0,73	1,8	0,6	6	105	1,48	14,2
	3-16	630	89,3	372	93	0,73	1,8	0,6	6	105	1,56	14,45
	4-16	710	100,5	372	93,2	0,73	1,8	0,6	6	105	1,64	14,65
OMVK 800	1-16	800	113,1	372	93,3	0,73	1,8	0,6	6	105	1,68	19,21
	2-16	900	127,2	372	93,3	0,73	1,8	0,6	6	105	2,3	19,96
	3-16	1000	139,2	372	93,3	0,73	1,8	0,6	6	105	2,42	20,71
	4-16	1120	151,2	372	93,4	0,73	1,8	0,6	6	105	2,53	21,52

18P Synchronous speed 333r/min

TYPE		Output (kw)	Rated Output (A)	Rated Speed (r/min)	Efficiency (%)	Power Factor (Cos Φ)	Pull out torque Rated torque	Locked torque Rated torque	Locked current Rated current	Noise dB (A)	Fly wheel torque (T.m²)	Weight (T)
OMVK 710	1-18	450	68,5	331	92,9	0,68	1,8	0,6	6	102	1,48	14,2
	2-18	500	76,2	331	92,9	0,68	1,8	0,6	6	102	1,56	14,45
	3-18	560	85,3	331	92,9	0,68	1,8	0,6	6	105	1,64	14,65
	1-18	630	95,8	331	93,1	0,7	1,8	0,6	6	105	1,68	19,26
OMVK 800	2-18	710	104,8	331	93,1	0,7	1,8	0,6	6	105	2,3	19,99
	3-18	800	118	331	93,2	0,7	1,8	0,6	6	105	2,42	20,52
	4-18	900	132,6	331	93,3	0,7	1,8	0,6	6	105	2,56	21,74

20P Synchronous speed 300r/min

TYPE		Output (kw)	Rated Output (A)	Rated Speed (r/min)	Efficiency (%)	Power Factor (Cos Φ)	Pull out torque Rated torque	Locked torque Rated torque	Locked current Rated current	Noise dB (A)	Fly wheel torque (T.m²)	Weight (T)
OMVK 710	1-20	400	62	298	92,6	0,67	1,8	0,6	6	102	1,48	14,2
	2-20	450	69,7	298	92,7	0,67	1,8	0,6	6	102	1,56	14,45
	3-20	500	77,5	298	92,7	0,67	1,8	0,6	6	102	1,64	14,65
	4-20	560	86,8	298	92,7	0,67	1,8	0,6	6	105	1,68	14,9
OMVK 800	1-20	630	97,5	298	928	0,67	1,8	0,6	6	105	2,30	19,26
	2-20	710	108,1	298	92,9	0,68	1,8	0,6	6	105	2,42	19,99
	3-20	800	121,7	298	93	0,68	1,8	0,6	6	105	2,56	20,52
	4-20	900	136,8	298	931	0,68	1,8	0,6	6	105	2,68	21,74

OMVK series motors (10kV)

2P Synchronous speed 3000r/min

TYPE		Output (kw)	Rated Output (A)	Rated Speed (r/min)	Efficiency (%)	Power Factor (Cos Φ)	Pull out torque Rated torque	Locked torque Rated torque	Locked current Rated current	Noise dB (A)	Fly wheel torque (T.m²)	Weight (T)
OMVK 710	1-2	1800	113,6	2985	95,6	0,89	1,8	0,6	7	120	0,5	14,35
	2-2	2000	126,1	2985	95,7	0,89	1,8	0,6	7	120	0,6	15,85
	3-2	2240	150,1	2985	95,8	0,89	1,8	0,6	7	120	70	16,25
	4-2	2500	167,3	2985	95,9	0,89	1,8	0,6	7	120	0,8	16,85
OMVK 800	1-2	2800	187,1	2985	96	0,89	1,8	0,6	7	120	0,9	21
	2-2	3150	210,2	2985	96,1	0,89	1,8	0,6	7	120	1,9	23
	3-2	3550	234	2985	96,2	0,89	1,8	0,6	7	120	2	24
	4-2	4000	263,3	2985	96,3	0,89	1,8	0,6	7	120	2,1	24,7

4P Synchronous speed 1500r/min

TYPE		Output (kw)	Rated Output (A)	Rated Speed (r/min)	Efficiency (%)	Power Factor (Cos Φ)	Pull out torque Rated torque	Locked torque Rated torque	Locked current Rated current	Noise dB (A)	Fly wheel torque (T.m²)	Weight (T)
OMVK 710	1-4	1800	119,3	1485	95,8	0,86	1,8	0,6	6,5	115	0,7	14
	2-4	2000	132,3	1485	95,9	0,86	1,8	0,6	6,5	115	0,75	14,15
	3-4	2240	157,7	1485	96	0,86	1,8	0,6	6,5	115	0,8	14,35
	4-4	2500	175,7	1485	96,1	0,86	1,8	0,6	6,5	115	0,9	15,85
OMVK 800	1-4	2800	196,4	1485	96,2	0,87	1,8	0,6	6,5	115	1	16,25
	2-4	3150	220,7	1485	96,2	0,87	1,8	0,6	6,5	115	1,1	16,85
	3-4	3550	245,7	1485	96,3	0,87	1,8	0,6	6,5	115	2,1	21
	4-4	4000	276,5	1485	96,3	0,87	1,8	0,6	6,5	115	2,2	23

6P Synchronous speed 1000r/min

TYPE		Output (kw)	Rated Output (A)	Rated Speed (r/min)	Efficiency (%)	Power Factor (Cos Φ)	Pull out torque Rated torque	Locked torque Rated torque	Locked current Rated current	Noise dB (A)	Fly wheel torque ($T.m^2$)	Weight (T)
OMVK 710	1-6	2000	144,2	995	95,5	0,84	1,8	0,6	6,5	110	1,1	14,9
	2-6	2240	161,4	995	95,6	0,84	1,8	0,6	6,5	112	1,2	15,15
	3-6	2500	180,1	995	96,7	0,84	1,8	0,6	6,5	112	1,8	20
OMVK 800	1-6	2800	201,3	995	95,8	0,84	1,8	0,6	6,5	112	1,9	21
	2-6	3150	226,5	995	95,9	0,84	1,8	0,6	6,5	112	2	23
	3-6	3550	254,7	995	96	0,84	1,8	0,6	6,5	112	2,1	24

8P Synchronous speed 750r/min

TYPE		Output (kw)	Rated Output (A)	Rated Speed (r/min)	Efficiency (%)	Power Factor (Cos Φ)	Pull out torque Rated torque	Locked torque Rated torque	Locked current Rated current	Noise dB (A)	Fly wheel torque ($T.m^2$)	Weight (T)
OMVK 710	1-8	1400	102,8	748	94,9	0,82	1,8	0,6	6,5	107	1,4	14,65
	2-8	1600	117,4	748	95	0,82	1,8	0,6	6,5	107	1,6	14,9
	3-8	1800	131,9	748	95,1	0,82	1,8	0,6	6,5	107	2,2	18,8
OMVK 800	1-8	2000	146,4	748	95,2	0,83	1,8	0,6	6,5	107	2,5	19,2
	2-8	2240	163,8	748	95,3	0,83	1,8	0,6	6,5	109	3,1	19,8
	3-8	2500	182,7	748	95,4	0,83	1,8	0,6	6,5	109	3,4	20,8

10P Synchronous speed 600r/min

TYPE		Output (kw)	Rated Output (A)	Rated Speed (r/min)	Efficiency (%)	Power Factor (Cos Φ)	Pull out torque Rated torque	Locked torque Rated torque	Locked current Rated current	Noise dB (A)	Fly wheel torque ($T.m^2$)	Weight (T)
OMVK 710	1-10	1250	93,2	598	94,6	0,8	1,8	0,6	6	107	1,4	14,45
	2-10	1400	104,3	598	94,7	0,8	1,8	0,6	6	107	1,6	14,65
	3-10	1600	119,1	598	94,8	0,8	1,8	0,6	6	107	2,2	14,9
OMVK 800	1-10	1800	133,8	598	94,9	0,81	1,8	0,6	6	107	2,5	18,8
	2-10	2000	148,5	598	95	0,81	1,8	0,6	6	107	3,1	19,2
	3-10	2240	164,7	598	95,1	0,81	1,8	0,6	6	107	3,3	19,8

12P Synchronous speed 500r/min

TYPE		Output (kw)	Rated Output (A)	Rated Speed (r/min)	Efficiency (%)	Power Factor (Cos Φ)	Pull out torque Rated torque	Locked torque Rated torque	Locked current Rated current	Noise dB (A)	Fly wheel torque ($T.m^2$)	Weight (T)
OMVK 710	1-12	900	70,2	497	93,9	0,77	1,8	0,6	6	105	1,64	14,65
	2-12	1000	77,9	497	94	0,77	1,8	0,6	6	105	1,68	14,9
	3-12	1120	87,2	497	94,1	0,77	1,8	0,6	6	107	2,3	16,9
OMVK 800	1-12	1250	97,2	497	94,2	0,79	1,8	0,6	6	107	2,42	17,1
	2-12	1400	108,7	497	94,3	0,79	1,8	0,6	6	107	2,56	17,3
	3-12	1600	124,1	497	94,4	0,79	1,8	0,6	6	107	2,68	17,65

14P Synchronous speed 429r/min

TYPE		Output (kw)	Rated Output (A)	Rated Speed (r/min)	Efficiency (%)	Power Factor (Cos Φ)	Pull out torque Rated torque	Locked torque Rated torque	Locked current Rated current	Noise dB (A)	Fly wheel torque (T.m²)	Weight (T)
OMVK 710	1-14	630	51,9	425	93,4	0,75	1,8	0,6	6	105	1,48	14,2
	2-14	710	58,5	425	93,5	0,75	1,8	0,6	6	105	1,56	14,45
	3-14	800	65,8	425	93,6	0,75	1,8	0,6	6	105	1,64	14,65
	4-14	900	73,9	425	93,7	0,75	1,8	0,6	6	105	1,68	14,9
OMVK 800	1-14	100	82,1	425	93,8	0,75	1,8	0,6	6	105	2,3	16,9
	2-14	1120	91,8	425	93,9	0,75	1,8	0,6	6	107	2,42	17,1
	3-14	1250	102,4	425	94	0,75	1,8	0,6	6	107	2,56	17,3
	4-14	1400	111,6	425	94,1	0,77	1,8	0,6	6	107	2,68	17,65

16P Synchronous speed 375r/min

TYPE		Output (kw)	Rated Output (A)	Rated Speed (r/min)	Efficiency (%)	Power Factor (Cos Φ)	Pull out torque Rated torque	Locked torque Rated torque	Locked current Rated current	Noise dB (A)	Fly wheel torque (T.m²)	Weight (T)
OMVK 710	1-16	450	41,7	372	92,8	0,78	1,8	0,6	6	105	1,48	14,2
	2-16	500	45,8	372	92,9	0,78	1,8	0,6	6	105	1,48	14,45
	3-16	560	48,4	372	93	0,78	1,8	0,6	6	105	1,56	14,65
	4-16	630	54,4	372	93,2	0,78	1,8	0,6	6	105	1,64	14,9
OMVK 800	1-16	710	61,3	372	93,3	0,79	1,8	0,6	6	105	1,68	16,9
	2-16	800	68	372	93,3	0,79	1,8	0,6	6	105	2,3	17,1
	3-16	900	76,5	372	93,3	0,79	1,8	0,6	6	105	2,42	17,3
	4-16	1000	84,9	372	93,4	0,79	1,8	0,6	6	105	2,56	17,65

18P Synchronous speed 333r/min

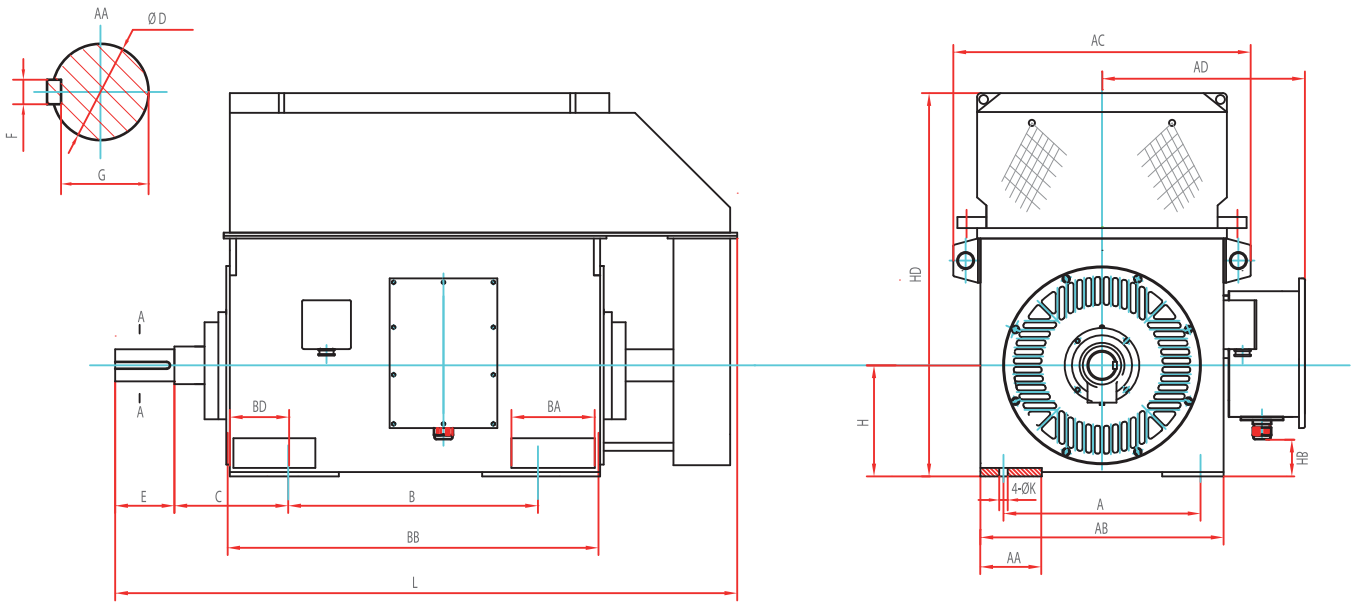
TYPE		Output (kw)	Rated Output (A)	Rated Speed (r/min)	Efficiency (%)	Power Factor (Cos Φ)	Pull out torque Rated torque	Locked torque Rated torque	Locked current Rated current	Noise dB (A)	Fly wheel torque (T.m²)	Weight (T)
OMVK 710	1-18	400	37,2	331	92,6	0,67	1,8	0,6	6	102	1,48	14,2
	2-18	450	41,9	331	92,6	0,67	1,8	0,6	6	102	1,56	14,45
	3-18	500	45,8	331	92,7	0,67	1,8	0,6	6	105	1,64	14,65
	4-18	560	51,3	331	92,7	0,67	1,8	0,6	6	105	1,68	14,9
OMVK 800	1-18	630	57,7	331	92,7	0,68	1,8	0,6	6	105	2,3	16,9
	2-18	710	65	331	92,8	0,68	1,8	0,6	6	105	2,42	17,1
	3-18	800	71,1	331	92,8	0,7	1,8	0,6	6	105	2,56	17,3
	4-18	900	79,9	331	92,8	0,7	1,8	0,6	6	105	2,68	17,65

20P Synchronous speed 300r/min

TYPE		Output (kw)	Rated Output (A)	Rated Speed (r/min)	Efficiency (%)	Power Factor (Cos Φ)	Pull out torque Rated torque	Locked torque Rated torque	Locked current Rated current	Noise dB (A)	Fly wheel torque (T.m²)	Weight (T)
OMVK 710	1-20	355	35,7	298	92,5	0,62	1,8	0,6	6	102	1,48	14,2
	2-20	400	37,8	298	92,5	0,66	1,8	0,6	6	102	1,56	14,45
	3-20	450	41,9	298	92,5	0,67	1,8	0,6	6	102	1,64	14,65
	4-20	500	46,5	298	92,6	0,67	1,8	0,6	6	102	1,68	14,9
OMVK 800	1-20	6560	52,1	298	92,6	0,67	1,8	0,6	6	105	2,3	16,9
	2-20	630	57,8	298	92,6	0,68	1,8	0,6	6	105	2,42	17,1
	3-20	710	65	298	92,7	0,68	1,8	0,6	6	105	2,56	17,3
	4-20	800	73,2	298	92,8	0,68	1,8	0,6	6	105	2,68	17,65

6. CONSTRUCTION AND MOUNTING AND OVERALL DIMENSIONS

Mounting and overall dimensions of series OMVK (6 kV; 10 kV) HV three phase induction motors (frame size 355-630) (see table)



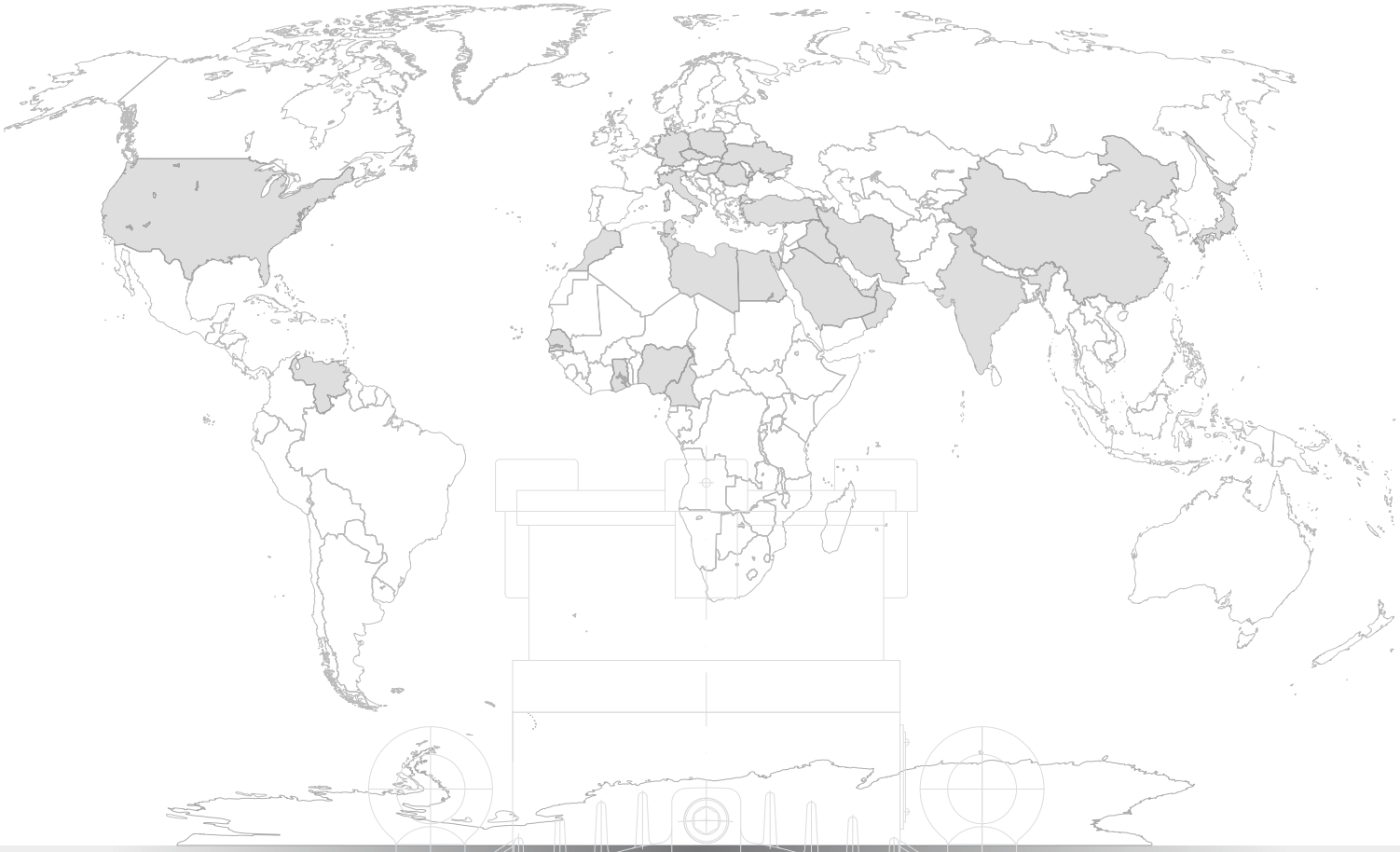
Mounting and overall dimensions (6 kV; 10 kV) frame size 710-800

Frame size \ Dimension code	Voltage	Mounting dimension									Overall dimension											
		A	B	C	D	E	F	G	H	K	AA	AB	AC	BA	BD	HD			AG	AD	HB	L	
																2	3	4				2,3	4
710	6,10	1400	1800 (1600)	530	200 (160)	350 (250)	45 (40)	185 (147)	710	56	230	1600	1840	850 (700)	245 (200)	2220	2340	2650	2650	1370	463	3200	3600
	6 | 10																						
	6 | 10																						
	6 | 10																						
	6 | 10																						
800	6,10	1600	2000 (1800)	530	220 (180)	350 (300)	50 (45)	203 (165)	780	56	270	1800	2080	700	150	2600	2800	2800	1500	1400	300	3420	3820
	6 | 10																						
	6 | 10																						
	6 | 10																						

Remarks: 1 - If the motors of 2 poles ore 4 poles. They have the same overall dimensions; If the cooling system is of IC611 and IC616 (OM), the overall dimension for 2 poles motors is the same with that of 2 (Y series with top hood).
2 - For the motors with output more than 2000 kW, the auxiliary terminal box is on the left of the motors.
3 - the dimensions in bracket are those of 2 poles.
4 - Some motors with rolling bearing can be supplied with self-lubrificating system on request.

CATALOGUE

Medium High Voltage Series Electric Motor



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