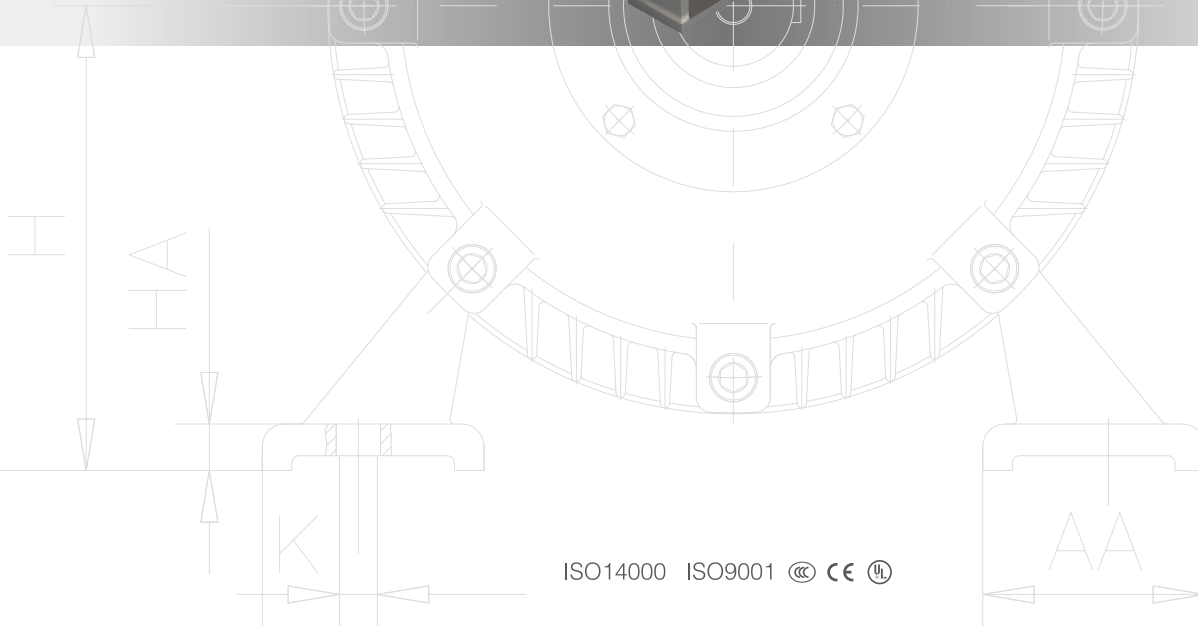
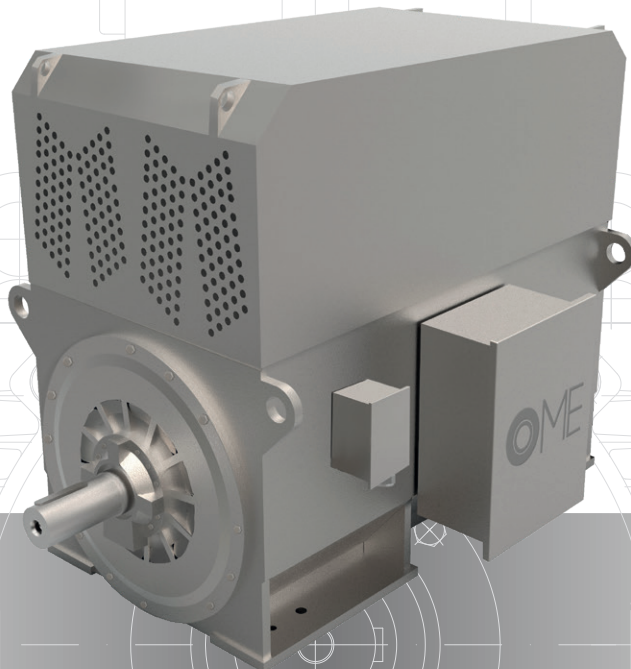




OMVKS SERIES

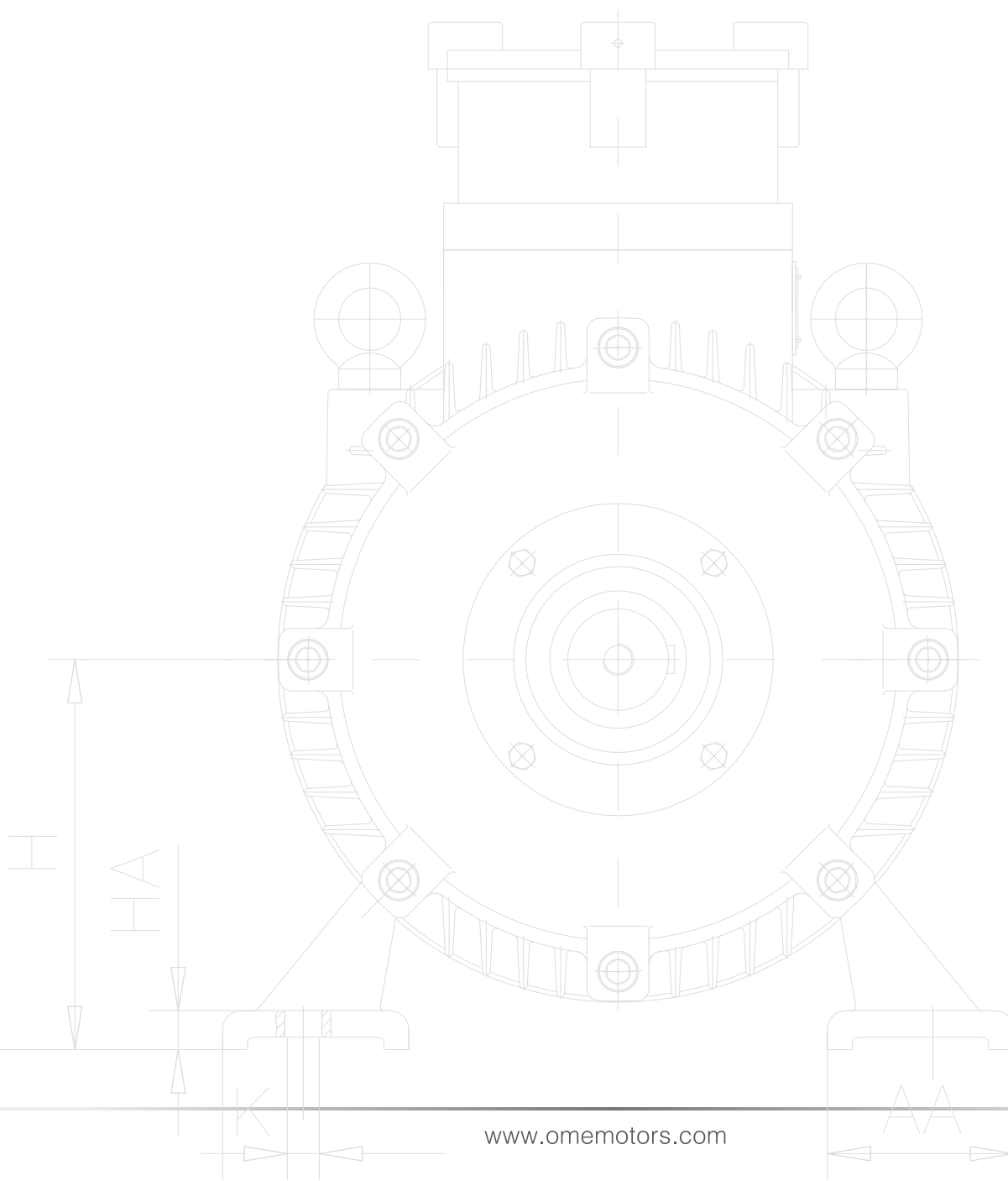
HIGH-VOLTAGE THREE-PHASE INDUCTION ELECTRIC MOTOR

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GENERAL INFORMATION

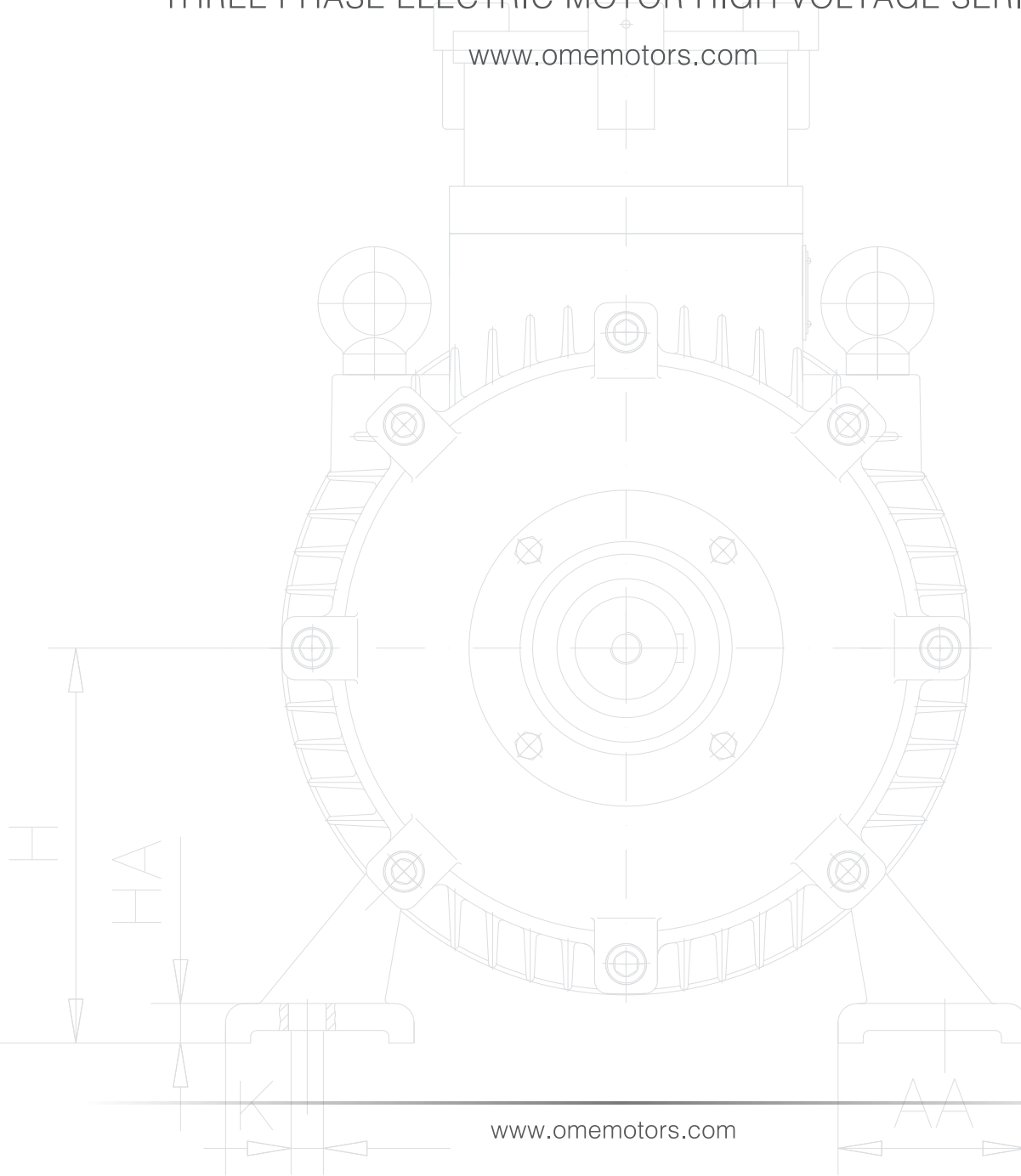
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OME MV SERIES
THREE PHASE ELECTRIC MOTOR HIGH VOLTAGE SERIES

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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.

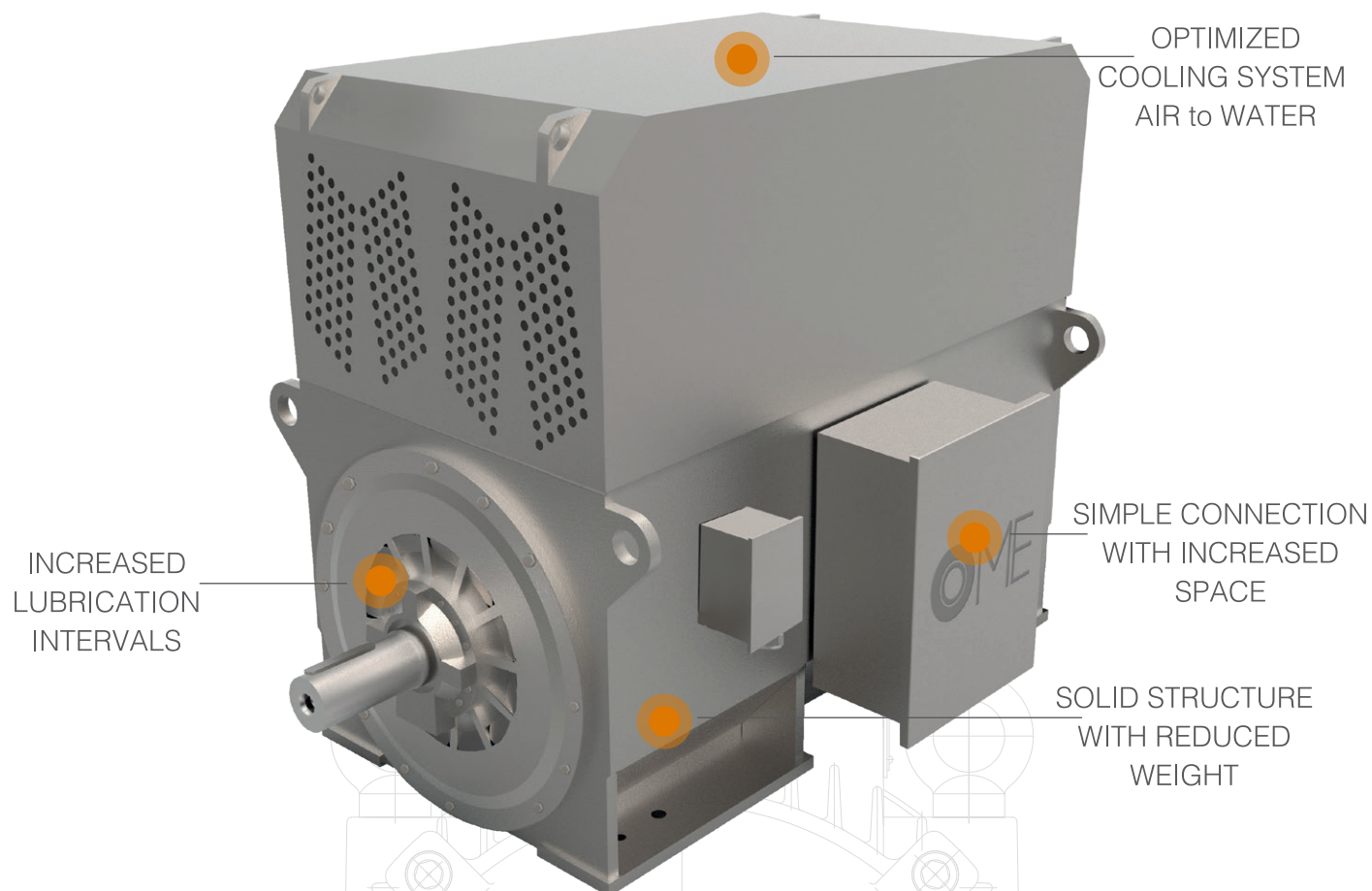
Areas of Usage of High Voltage and Medium Voltage Motors.

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.

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.

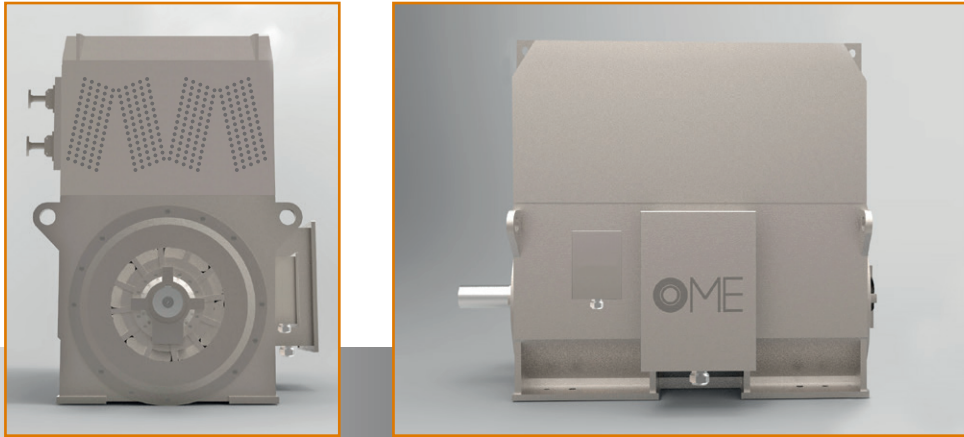
The OMVK motors designed and made to measure by OME Motors have a light and compact structure and are ideal for application in various fields of the industrial sector.

Series OMVKS IC81W



High Power • Premium Efficiency • Ultra Cooling System

- The OMVKS series motors by Ome Motors are self-ventilated three-phase motors equipped with IC 81W cooling systems with air-water exchanger. These are highly efficient devices, with a light and compact structure that can successfully adapt to the most diverse work situations, offering high performance.



Series OMVKS

SERIES HIGH-VOLTAGE THREE-PHASE

INDUCTION ELECTRIC MOTOR IP44, IP54, IP55 IC81W (H355-630)

1. GENERAL DESCRIPTION

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

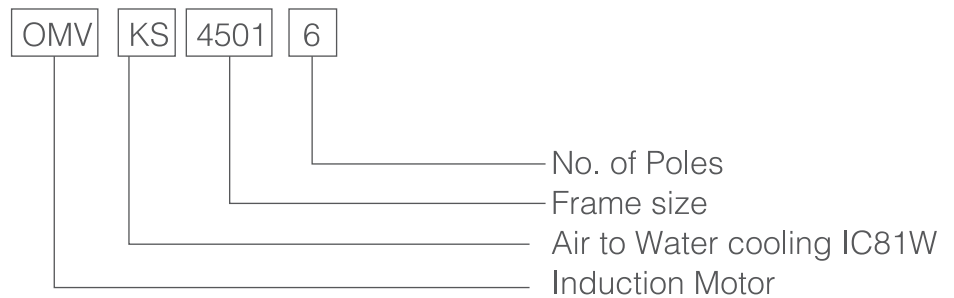
These series motors use new technique, material and technology of 1990s with materials chosen exquisitely and the product's excellent workmanship. The motors are engineered with many remarkable features such as high efficiency, energy saving, low noise, low vibration, light weight, reliable performance,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

These series motors conform to IEC60034:1 "Series OMVKS 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 IC81W, and mounting arrangement can be supplied on costumers's requirement.

These series motors can be used to drive various general-purpose machines, such as compressors, water pumps, crushers, 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 observed and touched for convenience of mounting and maintenance.

Series OMK motors are the basic series with protection degree IP44, IP54, IP55.

The terminal box has an enclosed 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 customer'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 strength, 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 lubricating grease without stopping the motors is equipped to drain or replenish to periodically maintain the motors.

The sleeve bearings are end-shield spherical roller bearings. Force-feed lubrication of oil or ring self-lubrication 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

Environmental conditions: indoor, outdoor, tropical humidity and outdoor tropical humidity

5. TECHNICAL DATA

• OMKVS series motors (6kV) - Table 1

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.m ²)	Weight (kg)
OMVKS 355	1-2	220	26,5	2967	92,8	0,84	1,8	0,6	7	22	2200
	2-2	250	30,1	2968	92,9	0,84	1,8	0,6	7	24	2250
	3-2	280	33,7	2970	93,1	0,85	1,8	0,6	7	26	2400
	4-2	315	37,7	2970	93,4	0,85	1,8	0,6	7	27	2500
	5-2	355	42,4	2973	93,7	0,86	1,8	0,6	7	27,5	2600
	6-2	400	47,6	2973	94,1	0,86	1,8	0,6	7	28	2700
OMVKS 400	1-2	450	53,3	2975	94,4	0,86	1,8	0,6	7	32	3400
	2-2	500	58,5	2976	94,6	0,87	1,8	0,6	7	33	3500
	3-2	560	65,4	2977	94,7	0,87	1,8	0,6	7	34	3600
	4-2	630	73,4	2978	94,9	0,87	1,8	0,6	7	35	3700
OMVKS 450	1-2	710	82,7	2977	95	0,87	1,8	0,6	7	42	4100
	2-2	800	92,9	2976	95,2	0,87	1,8	0,6	7	44	4200
	3-2	900	104,5	2974	95,3	0,87	1,8	0,6	7	46	4300
	4-2	1000	114,6	2977	95,4	0,88	1,8	0,6	7	48	4400
OMVKS 500	1-2	1120	128,2	2980	95,5	0,88	1,8	0,6	7	90	5900
	2-2	1250	142,9	2980	95,6	0,88	1,8	0,6	7	100	6100
	3-2	1400	159,9	2980	95,7	0,88	1,8	0,6	7	101	6300
	4-2	1600	182,6	2979	95,8	0,88	1,8	0,6	7	102	6700
OMVKS 560	1-2	1800	205,2	2980	95,9	0,88	1,8	0,6	7	106	8500
	2-2	2000	227,8	2982	96	0,88	1,8	0,6	7	107	8700
	3-2	2240	254,8	2981	96,1	0,88	1,8	0,6	7	108	9000
OMVKS 630	1-2	2500	280,9	2982	96,2	0,89	1,8	0,6	7	118	9900
	2-2	2800	314,4	2982	96,3	0,89	1,8	0,6	7	123	10300
	3-2	3150	353,7	2983	96,3	0,89	1,8	0,6	7	130	10800

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.m ²)	Weight (kg)
OMVKS 355	1-4	185	22,5	1480	93,1	0,84	1,8	0,8	6,5	56	2050
	2-4	200	24,3	1480	93,2	0,84	1,8	0,8	6,5	68	2080
	3-4	220	26,7	1480	93,3	0,85	1,8	0,8	6,5	28	2100
	4-4	250	30,3	1480	93,4	0,85	1,8	0,8	6,5	88	2200
	5-4	280	33,5	1480	93,5	0,86	1,8	0,8	6,5	97	2300
	6-4	315	37,7	1480	93,6	0,86	1,8	0,8	6,5	108	2400
OMVKS 400	1-4	355	42,3	1482	93,8	0,86	1,8	0,8	6,5	120	2800
	2-4	400	47,6	1482	94,0	0,86	1,8	0,8	6,5	133	2900
	3-4	450	53,5	1482	94,2	0,86	1,8	0,8	6,5	147	3000
	4-4	600	58,6	1482	94,3	0,87	1,8	0,8	6,5	161	3200
	5-4	560	65,5	1482	94,5	0,87	1,8	0,8	6,5	178	3400
OMVKS 450	1-4	630	73,5	1482	94,8	0,87	1,8	0,8	6,5	197	3700
	2-4	710	83,6	1482	95,0	0,87	1,8	0,8	6,5	218	3800
	3-4	800	93,0	1482	95,1	0,87	1,8	0,8	6,5	241	4000
	4-4	900	104,6	1482	95,2	0,87	1,8	0,8	6,5	266	4200
OMVKS 500	1-4	1000	116,0	1482	95,3	0,88	1,8	0,7	6,5	290	5200
	2-4	1120	128,5	1488	95,4	0,88	1,8	0,7	6,5	318	5400
	3-4	1250	143,0	1488	95,5	0,88	1,8	0,7	6,5	347	5700
	4-4	1400	160,0	1488	95,6	0,88	1,8	0,7	6,5	380	6000
OMVKS 560	1-4	1600	182,8	1488	95,7	0,89	1,8	0,6	6,5	420	8000
	2-4	1800	205,5	1487	95,8	0,89	1,8	0,6	6,5	460	8300
	3-4	2000	228,0	1488	95,9	0,89	1,8	0,6	6,5	498	8700
OMVKS 630	1-4	2240	255,1	1487	96,0	0,89	1,8	0,6	6,5	540	10600
	2-4	2500	281,3	1488	96,1	0,89	1,8	0,6	6,5	584	10900
	3-4	2800	314,7	1488	96,2	0,89	1,8	0,6	6,5	631	11200

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)
OMVKS 355	3-6	185	23,8	988	92,6	92,6	1,8	0,8	6	160	2200
	4-6	200	25,7	988	92,8	92,8	1,8	0,8	6	190	2300
	5-6	220	27,8	988	92,9	92,9	1,8	0,8	6	210	2400
	6-6	250	31,4	988	93,3	93,3	1,8	0,8	6	236	2500
OMVKS 400	2-6	280	34,7	988	93,5	93,5	1,8	0,8	6	262	2800
	3-6	315	39,0	988	93,7	93,7	1,8	0,8	6	291	2900
	4-6	355	43,8	988	93,9	93,9	1,8	0,8	6	324	3100
	5-6	400	49,3	988	94,0	94,0	1,8	0,8	6	361	3300
OMVKS 450	1-6	450	54,7	988	94,3	94,3	1,8	0,8	6	401	3800
	2-6	500	59,9	988	94,5	94,5	1,8	0,8	6	440	4000
	3-6	560	66,9	988	94,7	94,7	1,8	0,8	6	487	4200
	4-6	630	75,2	988	97,8	97,8	1,8	0,8	6	540	4400
OMVKS 500	1-6	710	84,6	990	95,0	95,0	1,8	0,7	6	599	4800
	2-6	800	95,2	990	95,1	95,1	1,8	0,7	6	665	5000
	3-6	900	107,0	990	95,2	95,2	1,8	0,7	6	736	5400
	4-6	1000	118,8	990	95,3	95,3	1,8	0,7	6	805	5800
OMVKS 560	1-6	1120	131,4	990	95,4	95,4	1,8	0,7	6,5	886	9100
	2-6	1250	146,5	990	95,5	95,5	1,8	0,7	6,5	972	9300
	3-6	1400	163,9	990	95,6	95,6	1,8	0,7	6,5	1068	9600
OMVKS 630	1-6	1600	187,1	991	95,7	95,7	1,8	0,7	6,5	1192	9800
	2-6	1800	210,2	991	95,8	95,8	1,8	0,7	6,5	1312	10500
	3-6	2000	233,3	991	95,9	95,9	1,8	0,7	6,5	1428	11000

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)
OMVKS 400	1-8	185	25,2	741	92,6	0,77	1,8	0,8	5,5	383	3080
	2-8	200	26,7	741	92,8	0,78	1,8	0,8	5,5	401	3150
	3-8	220	29,2	741	92,9	0,78	1,8	0,8	5,5	424	3100
	4-8	250	32,7	741	93,0	0,79	1,8	0,8	5,5	477	3200
	5-8	280	36,6	741	93,2	0,79	1,8	0,8	5,5	529	3400
OMVKS 450	1-8	315	40,6	741	93,4	0,8	1,8	0,8	5,5	588	4100
	2-8	355	45,7	743	93,5	0,8	1,8	0,8	5,5	656	4300
	3-8	400	51,3	743	93,7	0,8	1,8	0,8	5,5	731	4500
	4-8	450	57,7	743	93,8	0,81	1,8	0,8	5,5	813	4800
OMVKS 500	1-8	500	63,0	743	94,3	0,81	1,8	0,8	5,5	894	5000
	2-8	560	69,6	742	94,4	0,82	1,8	0,8	5,5	988	5200
	3-8	630	78,2	742	94,5	0,82	1,8	0,8	5,5	1098	5400
	4-8	710	88,0	742	94,6	0,82	1,8	0,8	5,5	1222	5600
OMVKS 560	1-8	800	96,8	743	94,7	0,84	1,8	0,7	6	1357	8700
	2-8	900	109,8	743	94,8	0,84	1,8	0,7	6	1505	8900
	3-8	1000	120,7	743	94,9	0,84	1,8	0,7	6	1650	9100
OMVKS 630	1-8	1120	135,1	744	95,0	0,84	1,8	0,7	6	2870	10000
	2-8	1250	150,6	744	95,1	0,84	1,8	0,7	6	3170	10500
	3-8	1400	168,5	744	95,2	0,84	1,8	0,7	6	3489	11000
	4-8	1600	192,3	744	95,3	0,84	1,8	0,7	6	3850	11500

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)
OMVKS 400	4-10	185	25,4	594	91,7	0,75	1,8	0,8	5,5	529	3300
	5-10	200	26,9	594	91,9	0,75	1,8	0,8	5,5	551	3460
OMVKS 450	1-10	220	29,9	594	92,1	0,77	1,8	0,8	5,5	729	3700
	2-10	250	33,4	594	92,3	0,78	1,8	0,8	5,5	820	3900
	3-10	280	37,3	594	92,5	0,78	1,8	0,8	5,5	910	4100
	4-10	315	41,4	594	92,6	0,79	1,8	0,8	5,5	1014	4300
	5-10	355	46,6	594	92,8	0,79	1,8	0,8	5,5	1131	4500
	6-10	400	51,6	594	93,3	0,8	1,8	0,8	5,5	1261	4900
OMVKS 500	1-10	400	51,6	594	93,3	0,8	1,8	0,8	5,5	1261	4900
	2-10	450	58,0	594	93,4	0,8	1,8	0,8	5,5	1404	5100
	3-10	500	64,3	594	93,6	0,8	1,8	0,8	5,5	1544	5300
	4-10	560	71,9	594	93,7	0,8	1,8	0,8	5,5	1711	5500
	5-10	630	80,8	594	93,8	0,8	1,8	0,8	5,5	2191	5700
OMVKS 560	1-10	710	88,6	593	94,0	0,82	1,8	0,7	6	2116	8600
	2-10	800	99,7	593	94,2	0,82	1,8	0,7	6	2355	8800
	3-10	900	112,0	593	94,3	0,82	1,8	0,7	6	2615	9000
OMVKS 630	1-10	1000	124,3	594	94,4	0,82	1,8	0,7	6	2870	9800
	2-10	1120	138,9	594	94,6	0,82	1,8	0,7	6	3170	10300
	3-10	1250	154,7	594	94,8	0,82	1,8	0,7	6	3489	10800
	4-10	1400	173,1	594	94,9	0,82	1,8	0,7	6	3850	11300

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)
OMVKS 450	2-12	185	26,1	494	90,9	0,72	1,8	0,8	5,5	997	3950
	3-12	200	28,2	494	91,1	0,72	1,8	0,8	5,5	1078	4100
	4-12	220	31,7	494	91,4	0,73	1,8	0,8	5,5	1135	4300
	5-12	250	35,9	494	91,7	0,73	1,8	0,8	5,5	1277	4500
OMVKS 500	1-12	280	39,3	494	92,7	0,74	1,8	0,8	5,5	1418	5100
	2-12	315	43,6	494	92,8	0,75	1,8	0,8	5,5	1580	5300
	3-12	355	49,0	494	93,0	0,75	1,8	0,8	5,5	1764	5500
	4-12	400	55,0	494	93,3	0,75	1,8	0,8	5,5	1967	5700
	5-12	450	61,8	494	93,4	0,75	1,8	0,8	5,5	2156	5900
OMVKS 560	1-12	500	65,0	495	93,7	0,79	1,8	0,7	6	2411	8700
	2-12	560	72,7	495	93,8	0,79	1,8	0,7	6	2673	8900
	3-12	630	81,7	495	93,9	0,79	1,8	0,7	6	2974	9100
OMVKS 630	1-12	710	92,0	495	94,0	0,79	1,8	0,7	6	3312	1000
	2-12	800	103,5	495	94,2	0,79	1,8	0,7	6	3688	10500
	3-12	900	116,3	495	94,3	0,79	1,8	0,7	6	4098	11000
	4-12	1000	129,0	495	94,4	0,79	1,8	0,7	6	4502	11500

• OMKVS series motors (10kV) - Table 2

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.m ²)	Weight (kg)
OMVKS 400	1-2	220	16,0	2975	92,2	0,86	1,8	0,6	7	28,8	2300
	2-2	250	18,1	2975	92,8	0,86	1,8	0,6	7	29,6	2480
	3-2	280	20,1	2975	93,3	0,86	1,8	0,6	7	30,1	2500
	4-2	315	22,6	2975	93,5	0,86	1,8	0,6	7	31,5	2500
OMVKS 450	2-2	250	18,2	2978	92,3	0,86	1,8	0,6	7	31,1	3700
	3-2	280	20,2	2978	93,0	0,86	1,8	0,6	7	31,8	3850
	4-2	315	22,65	2978	93,4	0,87	1,8	0,6	7	32,5	3900
	5-2	355	25,1	2978	93,8	0,87	1,8	0,6	7	34,3	4000
	6-2	400	28,2	2978	94,1	0,87	1,8	0,6	7	35,1	4100
	7-2	450	32,0	2978	94,3	0,87	1,8	0,6	7	37,2	4200
	8-2	500	32,15	2978	94,4	0,87	1,8	0,6	7	41,2	4300
	9-2	560	39,4	2978	94,5	0,87	1,8	0,6	7	45,2	4400
	10-2	630	44,2	2978	94,6	0,87	1,8	0,6	7	50,1	4600
OMVKS 500	1-2	710	49,2	2985	94,7	0,88	1,8	0,6	7	50,1	6100
	2-2	800	55,3	2985	94,8	0,88	1,8	0,6	7	68,8	6200
	3-2	900	62,2	2985	94,9	0,88	1,8	0,6	7	75,5	6500
	4-2	1000	69,1	2985	95,0	0,88	1,8	0,6	7	78,4	6600
	5-2	1120	77,2	2985	95,2	0,88	1,8	0,6	7	90	6900
OMVKS 560	1-2	1250	85,0	2984	95,4	0,89	1,8	0,6	7	98	8500
	2-2	1400	95,1	2984	95,5	0,89	1,8	0,6	7	99	8700
	3-2	1600	108,6	2984	95,6	0,89	1,8	0,6	7	100	9000
OMVKS 630	1-2	1800	120,6	2984	95,7	0,9	1,8	0,6	7	460	9900
	2-2	2000	133,9	2984	95,8	0,9	1,8	0,6	7	498	10300
	3-2	2240	149,7	2984	96,0	0,9	1,8	0,6	7	540	10800

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.m ²)	Weight (kg)
OMVKS 400	1-4	220	16,3	1485	92,8	0,84	1,8	0,7	7	68	2550
	2-4	250	18,5	1485	93,1	0,84	1,8	0,7	7	88	2680
	3-4	280	20,4	1485	93,2	0,85	1,8	0,7	7	97	2750
	4-4	315	22,8	1485	93,7	0,85	1,8	0,7	7	108	2800
OMVKS 450	1-4	220	16,3	1485	92,5	0,85	1,8	0,7	7	78	3800
	2-4	250	18,4	1485	92,7	0,85	1,8	0,7	7	87	3900
	3-4	280	20,6	1485	92,9	0,85	1,8	0,7	7	97	4000
	4-4	315	23,2	1485	93,1	0,85	1,8	0,7	7	107	4100
	5-4	355	25,6	1485	93,3	0,86	1,8	0,7	7	119	4200
	6-4	400	28,8	1485	93,5	0,86	1,8	0,7	7	132	4300
	7-4	450	32,2	1485	93,9	0,86	1,8	0,7	7	147	4400
	8-4	500	35,7	1485	94,0	0,86	1,8	0,7	7	161	4500
	9-4	560	40,0	1485	94,2	0,86	1,8	0,7	7	178	4600
	10-4	630	44,8	1485	94,4	0,86	1,8	0,7	7	196	4800
OMVKS 500	1-4	710	49,6	1488	95,0	0,87	1,8	0,7	7	217	5400
	2-4	800	55,9	1488	95,1	0,87	1,8	0,7	7	240	5500
	3-4	900	62,1	1488	95,2	0,88	1,8	0,7	7	265	5600
	4-4	1000	69,8	1488	95,3	0,88	1,8	0,7	7	289	5700
	5-4	1120	77,1	1488	95,4	0,88	1,8	0,7	7	317	5900
OMVKS 560	1-4	1250	84,9	1488	95,5	0,89	1,8	0,7	7	347	8000
	2-4	1400	94,9	1488	95,7	0,89	1,8	0,7	7	379	8300
	3-4	1600	108,3	1488	95,8	0,89	1,8	0,7	7	421	8700
OMVKS 630	1-4	1800	121,8	1488	95,9	0,89	1,8	0,6	7	460	10600
	2-4	2000	135,2	1488	96,0	0,89	1,8	0,6	7	498	10900
	3-4	2240	151,2	1488	96,1	0,89	1,8	0,6	7	540	11900

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)
OMVKS 450	3-6	200	15,7	990	91,0	0,81	1,8	0,7	6	195	3850
	4-6	220	17,0	990	92,2	0,82	1,8	0,7	6	210	3900
	5-6	250	19,3	990	92,4	0,82	1,8	0,7	6	236	4000
	6-6	280	21,4	990	92,6	0,82	1,8	0,7	6	261	4100
	7-6	315	23,6	990	92,8	0,82	1,8	0,7	6	291	4200
	8-6	355	26,6	990	93,1	0,83	1,8	0,7	6	324	4300
	9-6	400	30,0	990	93,3	0,83	1,8	0,7	6	361	4400
	10-6	450	33,5	990	93,5	0,83	1,8	0,7	6	400	4500
OMVKS 500	1-6	500	37,1	991	93,9	0,83	1,8	0,7	6	440	5200
	2-6	560	40,9	991	94,1	0,84	1,8	0,7	6	486	5400
	3-6	630	45,9	991	94,4	0,84	1,8	0,7	6	539	5600
	4-6	710	51,6	991	94,6	0,84	1,8	0,7	6	599	5800
	5-6	800	58,1	991	94,7	0,84	1,8	0,7	6	664	6000
OMVKS 560	1-6	900	64,4	991	94,9	0,85	1,8	0,7	6	735	8900
	2-6	1000	71,4	991	95,1	0,85	1,8	0,7	6	805	9100
	3-6	1120	79,8	991	95,3	0,85	1,8	0,7	6	886	9300
	4-6	1250	88,0	991	95,4	0,86	1,8	0,7	6	972	9600
OMVKS 630	1-6	1400	98,3	991	95,7	0,86	1,8	0,6	6	1068	10800
	2-6	1600	112,2	991	95,8	0,86	1,8	0,6	6	1192	11200
	3-6	1800	126,0	991	95,9	0,86	1,8	0,6	6	1312	12100

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)
OMVKS 450	8-8	220	18,7	742	92,2	0,77	1,8	0,7	6	423	4800
	9-8	250	21,2	742	92,4	0,77	1,8	0,7	6	476	4900
	10-8	280	23,7	742	92,6	0,77	1,8	0,7	6	528	5100
OMVKS 500	1-8	315	25,5	742	92,8	0,77	1,8	0,7	6	588	6350
	2-8	355	28,6	742	93,1	0,77	1,8	0,7	6	656	6500
	3-8	400	31,8	742	93,2	0,78	1,8	0,7	6	730	6700
	4-8	450	35,7	742	93,4	0,78	1,8	0,7	6	812	6800
	5-8	500	40,0	742	93,8	0,79	1,8	0,7	6	893	6900
	6-8	560	43,6	742	93,9	0,79	1,8	0,7	6	989	7060
OMVKS 560	1-8	630	47,0	742	94,4	0,82	1,8	0,7	6	1403	8500
	2-8	710	52,8	742	94,6	0,82	1,8	0,7	6	1544	8700
	3-8	800	59,5	742	94,7	0,82	1,8	0,7	6	1710	8900
	4-8	900	66,8	742	94,8	0,82	1,8	0,7	6	1902	9100
OMVKS 630	1-8	1000	73,3	742	95,0	0,83	1,8	0,7	6	1650	10500
	2-8	1120	81,9	742	95,2	0,86	1,8	0,7	6	1820	11000
	3-8	1250	91,3	742	95,3	0,86	1,8	0,7	6	2001	11500

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)
OMVKS 500	1-10	220	18,8	594	91,9	0,74	1,8	0,7	5,5	740	6350
	2-10	250	21,4	594	92,2	0,74	1,8	0,7	5,5	820	6500
	3-10	280	23,7	594	92,4	0,74	1,8	0,7	5,5	910	6600
	4-10	315	25,6	594	92,6	0,74	1,8	0,7	5,5	1014	6700
	5-10	355	29,5	594	92,8	0,75	1,8	0,7	5,5	1131	6860
	6-10	400	33,1	594	93,0	0,75	1,8	0,7	5,5	1261	7060
OMVKS 560	1-10	450	36,2	594	93,2	0,77	1,8	0,7	6	1403	8200
	2-10	500	40,2	594	93,4	0,77	1,8	0,7	6	1544	8400
	3-10	560	44,4	594	93,5	0,78	1,8	0,7	6	1710	8600
	4-10	630	49,8	594	93,7	0,78	1,8	0,7	6	1902	8800
	5-10	710	56,0	594	93,9	0,78	1,8	0,7	6	2117	9000
OMVKS 630	1-10	800	61,3	594	94,3	0,82	1,8	0,7	6	2355	10000
	2-10	9800	68,8	594	94,5	0,82	1,8	0,7	6	2614	10500
	3-10	1000	76,3	594	94,6	0,82	1,8	0,7	6	2870	11000
	4-10	1120	85,4	594	94,7	0,82	1,8	0,7	6	3170	11500

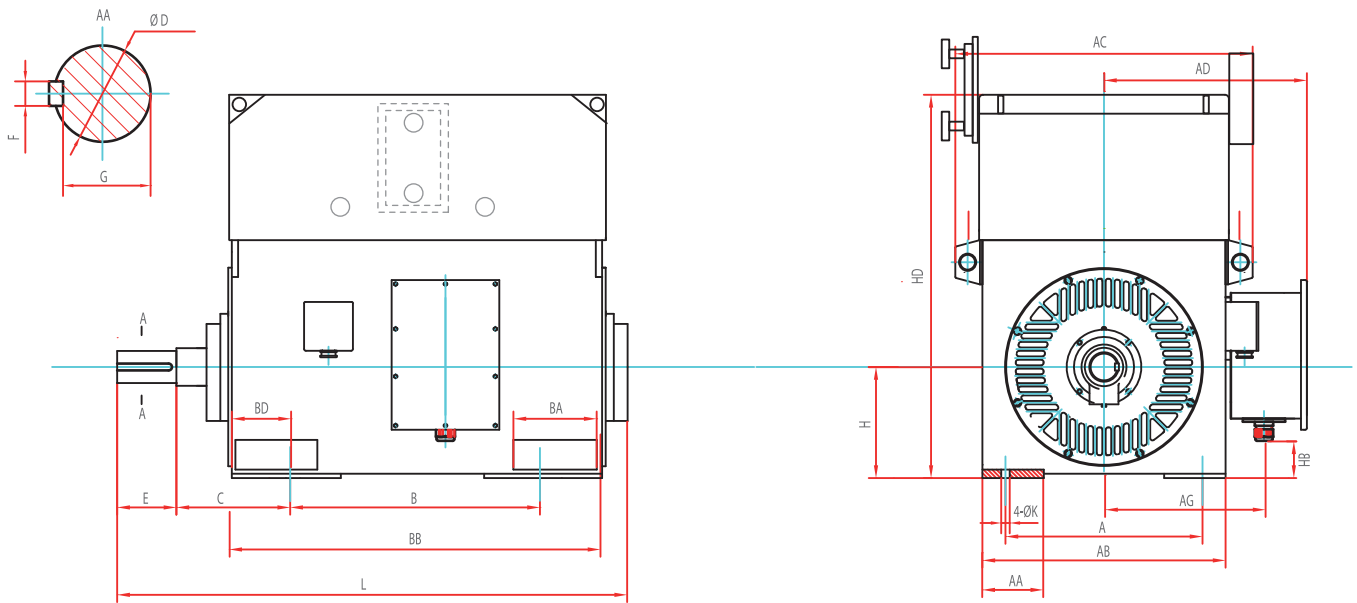
12P

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)
OMVKS 450	4-12	220	19,0	495	91,2	0,73	1,8	0,7	6	1135	8000
	5-12	250	21,5	495	91,6	0,73	1,8	0,7	6	1210	8100
	6-12	280	24,1	495	92,0	0,73	1,8	0,7	6	1418	8200
OMVKS 500	1-12	315	27,0	495	92,3	0,73	1,8	0,7	6	1580	300
	2-12	355	30,4	495	92,5	0,73	1,8	0,7	6	1763	8500
	3-12	400	34,2	495	95,7	0,73	1,8	0,7	6	1967	8700
	4-12	450	38,4	495	92,9	0,73	1,8	0,7	6	2190	8900
	5-12	500	42,5	495	93,2	0,73	1,8	0,7	6	2411	9100
OMVKS 560	1-12	560	46,8	495	93,5	0,74	1,8	0,7	6	2672	10700
	2-12	630	52,5	495	93,7	0,74	1,8	0,7	6	2974	11160
	3-12	710	59,0	495	93,7	0,74	1,8	0,7	6	3313	11560
	4-12	800	66,2	495	94,3	0,74	1,8	0,7	6	3688	11930

6. CONSTRUCTION AND MOUNTING AND OVERALL DIMENSIONS

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

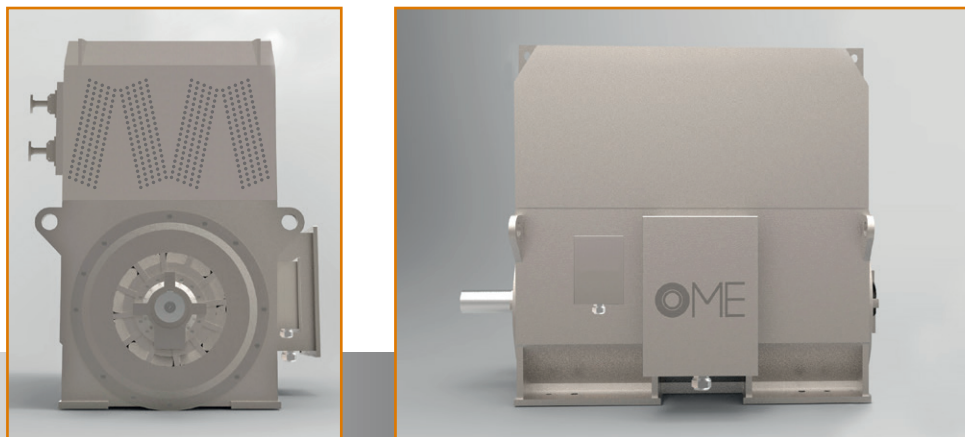


• Mounting and overall dimensions (6 kV; 10 kV) frame size 355-630

Frame size	Voltage	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
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 (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 above 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 OMVKS

SERIES HIGH-VOLTAGE THREE-PHASE

INDUCTION ELECTRIC MOTOR IC81W - IP44, IP54, IP55 (H710-800)

1. GENERAL DESCRIPTION

Series OMVKS 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 noise, small vibration, safe operation and easy maintenance etc. These series of motors conform to IEC60034:1-2004 Technical Requirement for the Fundamental Series Three-phase Large Asynchronous 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 IC81W, 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 mm
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 kV

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 operation 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 motor, 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 than the value deriving from the following formula.

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

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.

• OMKS 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	Noise dB (A)	Fly wheel torque (T.m ²)	Weight (T)
OMVKS 710	1-2	3550	394,1	2985	96,3	0,89	1,8	0,6	7	107	0,6	14,3
	2-2	4000	443,7	2985	96,4	0,89	1,8	0,6	7	107	0,7	14,6
	3-2	4500	498,6	2985	96,5	0,89	1,8	0,6	7	107	0,8	14,9
OMVKS 800	1-2	5000	553,1	2985	96,6	0,89	1,8	0,6	7	107	0,9	18,3
	2-2	5600	619,2	2985	96,7	0,89	1,8	0,6	7	107	1,8	20
	3-2	6300	695,2	2985	96,8	0,89	1,8	0,6	7	107	1,9	21
	4-2	7100	755,8	2985	96,9	0,89	1,8	0,6	7	107	2	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)
OMVKS 710	1-4	3150	357,7	1485	96,3	0,87	1,8	0,6	6,5	106	0,8	14,35
	2-4	3550	403,1	1485	96,3	0,87	1,8	0,6	6,5	106	0,9	15,85
	3-4	4000	453,7	1485	96,4	0,87	1,8	0,6	6,5	106	1	16,25
	4-4	4500	510,4	1485	96,4	0,87	1,8	0,6	6,5	106	1,1	16,85
OMVKS 800	1-4	5000	566,6	1485	96,5	0,88	1,8	0,6	6,5	106	2,1	21
	2-4	5600	634,6	1485	96,5	0,88	1,8	0,6	6,5	106	2,2	23
	3-4	6300	713,1	1485	96,6	0,88	1,8	0,6	6,5	106	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.m ²)	Weight (T)
OMVKS 710	1-6	2240	261,1	995	96	0,86	1,8	0,6	6,5	106	0,9	14,45
	2-6	2500	291,1	995	96,1	0,86	1,8	0,6	6,5	106	1	14,62
	3-6	2800	326	995	96,1	0,86	1,8	0,6	6,5	106	1,1	14,9
	4-6	3150	366,4	995	96,2	0,86	1,8	0,6	6,5	106	1,2	15,15
OMVKS 800	1-6	3550	412,9	995	96,2	0,86	1,8	0,6	6,5	106	1,8	20
	2-6	4000	464,8	995	96,3	0,86	1,8	0,6	6,5	106	1,9	21
	3-6	4500	522,8	995	98,3	0,86	1,8	0,6	6,5	106	2	23
	4-6	5000	580,3	995	98,4	0,87	1,8	0,6	6,5	106	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)
OMVKS 710	1-8	1800	213,6	748	95,4	0,85	1,8	0,6	6,5	102	1,2	14,45
	2-8	2000	237,1	748	95,5	0,85	1,8	0,6	6,5	102	1,4	14,65
	3-8	2240	265,3	748	95,6	0,85	1,8	0,6	6,5	102	1,6	14,9
OMVKS 800	1-8	2500	295,7	748	95,7	0,85	1,8	0,6	6,5	104	2,2	18,8
	2-8	2800	330,9	748	95,8	0,85	1,8	0,6	6,5	104	2,5	19,2
	3-8	3150	372,2	748	95,8	0,85	1,8	0,6	6,5	104	3,1	19,8
	4-8	3550	419,1	748	95,9	0,85	1,8	0,6	6,5	104	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)
OMVKS 710	1-10	1600	195,3	598	95	0,83	1,8	0,6	6	102	1,2	14,45
	2-10	1800	219,4	598	95,1	0,83	1,8	0,6	6	102	1,4	14,65
	3-10	2000	243,6	598	95,2	0,83	1,8	0,6	6	102	1,6	14,9
OMVKS 800	1-10	2240	272,5	598	95,3	0,83	1,8	0,6	6	102	2,2	18,8
	2-10	2500	303,8	598	95,4	0,83	1,8	0,6	6	104	2,5	19,2
	3-10	2800	339,9	598	95,5	0,83	1,8	0,6	6	104	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)
OMVKS 710	1-12	1120	144,4	497	94,5	0,79	1,8	0,6	6	102	1,56	14,45
	2-12	1250	160,9	497	94,6	0,79	1,8	0,6	6	102	1,64	14,65
	3-12	1400	177,8	497	94,7	0,8	1,8	0,6	6	102	1,68	14,9
OMVKS 800	1-12	1600	203,2	497	94,7	0,8	1,8	0,6	6	102	2,3	16,9
	2-12	1800	228,4	497	94,8	0,8	1,8	0,6	6	102	2,42	17,1
	3-12	2000	253,5	497	94,9	0,8	1,8	0,6	6	102	2,56	17,3
	4-12	2240	283,6	497	95	0,8	1,8	0,6	6	102	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.m ²)	Weight (T)
OMVKS 710	1-14	800	109,2	425	94	0,75	1,8	0,6	6	100	1,48	14,2
	2-14	900	121,1	425	94,1	0,76	1,8	0,6	6	100	1,56	14,45
	3-14	1000	134,4	425	94,2	0,76	1,8	0,6	6	100	1,64	14,65
	4-14	1120	150,4	425	94,3	0,76	1,8	0,6	6	102	1,68	14,9
OMVKS 800	1-14	1250	167,7	425	94,4	0,76	1,8	0,6	6	102	2,3	16,9
	2-14	1400	187,6	425	94,5	0,76	1,8	0,6	6	102	2,42	17,1
	3-14	1600	214,1	425	94,6	0,76	1,8	0,6	6	102	2,56	17,3
	4-14	1800	234,5	425	94,7	0,76	1,8	0,6	6	102	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.m ²)	Weight (T)
OMVKS 710	1-16	630	89,2	372	93,1	0,73	1,8	0,6	6	100	1,48	14,2
	2-16	710	100,3	372	93,3	0,73	1,8	0,6	6	100	1,56	14,45
	3-16	800	112,9	372	93,4	0,73	1,8	0,6	6	100	1,64	14,65
	4-16	900	126,9	372	93,5	0,73	1,8	0,6	6	100	1,68	14,9
OMVKS 800	1-16	1000	138,9	372	93,6	0,74	1,8	0,6	6	100	2,3	16,9
	2-16	1120	155,4	372	93,7	0,74	1,8	0,6	6	102	2,42	17,1
	3-16	1250	173,3	372	93,8	0,74	1,8	0,6	6	102	2,56	17,3
	4-16	1400	193,9	372	93,9	0,74	1,8	0,6	6	102	2,68	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.m ²)	Weight (T)
OMVKS 710	1-18	500	76,1	331	93	0,68	1,8	0,6	6	98	1,48	14,2
	2-18	560	85,2	331	93	0,68	1,8	0,6	6	100	1,56	14,45
	3-18	630	93	331	93,1	0,7	1,8	0,6	6	100	1,64	14,65
	4-18	710	104,6	331	93,3	0,7	1,8	0,6	6	100	1,68	14,9
OMVKS 800	1-18	800	117,7	331	93,4	0,7	1,8	0,6	6	100	2,3	16,9
	2-18	900	132,3	331	93,5	0,7	1,8	0,6	6	100	2,42	17,1
	3-18	1000	142,9	331	93,5	0,72	1,8	0,6	6	100	2,56	17,3
	4-18	1120	159,9	331	93,6	0,72	1,8	0,6	6	102	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.m ²)	Weight (T)
OMVKS 710	1-20	450	69,5	298	93	0,67	1,8	0,6	6	98	1,48	14,2
	2-20	500	77,2	298	93	0,67	1,8	0,6	6	98	1,56	14,45
	3-20	560	86,5	298	93	0,67	1,8	0,6	6	100	1,64	14,65
	4-20	630	97,3	298	93	0,67	1,8	0,6	6	100	1,68	14,9
OMVKS 800	1-20	710	107,9	298	93,1	0,68	1,8	0,6	6	100	2,3	16,9
	2-20	800	121,5	298	93,2	0,68	1,8	0,6	6	100	2,42	17,1
	3-20	900	136,5	298	93,3	0,68	1,8	0,6	6	100	2,56	17,3
	4-20	1000	151,7	298	93,3	0,68	1,8	0,6	6	100	2,68	17,65

• OMV 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.m ²)	Weight (T)
OMVKS 710	1-2	2500	171,4	2985	95,9	0,89	1,8	0,6	7	107	0,6	14,3
	2-2	2800	191,6	2985	96	0,89	1,8	0,6	7	107	0,7	14,6
	3-2	3150	215,5	2985	96,1	0,89	1,8	0,6	7	107	0,8	14,9
	4-2	3550	242,6	2985	96,2	0,89	1,8	0,6	7	107	0,9	15,3
OMVKS 800	1-2	4000	273,1	2985	96,3	0,89	1,8	0,6	7	107	1,8	20
	2-2	4500	306,9	2985	96,4	0,89	1,8	0,6	7	107	1,9	21
	3-2	5000	341	2985	96,5	0,89	1,8	0,6	7	107	2	23
	4-2	5600	381,5	2985	96,6	0,89	1,8	0,6	7	107	2,1	24

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)
OMVKS 710	1-4	2500	175,2	1485	95,8	0,86	1,8	0,6	6,5	106	0,8	14,35
	2-4	2800	196	1485	95,9	0,86	1,8	0,6	6,5	106	0,9	15,85
	3-4	3150	220,3	1485	96	0,86	1,8	0,6	6,5	106	1	16,25
	4-4	3550	245,1	1485	96,1	0,86	1,8	0,6	6,5	106	1,1	16,85
OMVKS 800	1-4	4000	275,9	1485	96,2	0,87	1,8	0,6	6,5	106	2,1	21
	2-4	4500	310,4	1485	96,3	0,87	1,8	0,6	6,5	106	2,2	23
	3-4	5000	344,6	1485	96,4	0,87	1,8	0,6	6,5	106	2,3	24
	4-4	5600	385,9	1485	96,5	0,87	1,8	0,6	6,5	106	2,5	24,5

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)
OMVKS 710	1-6	2000	143,9	995	95,5	0,84	1,8	0,6	6,5	106	0,9	14,45
	2-6	2240	161	995	95,6	0,84	1,8	0,6	6,5	106	1	14,65
	3-6	2500	179,6	995	96,7	0,84	1,8	0,6	6,5	106	1,1	14,9
OMVKS 800	1-6	2800	200,9	995	95,8	0,84	1,8	0,6	6,5	106	1,8	20
	2-6	3150	225,8	995	95,9	0,84	1,8	0,6	6,5	106	1,9	21
	3-6	3550	254,2	995	96	0,84	1,8	0,6	6,5	106	2	23

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)
OMVKS 710	1-8	1400	102,6	748	94,9	0,82	1,8	0,6	6,5	102	1,2	14,45
	2-8	1600	117,2	748	95	0,82	1,8	0,6	6,5	102	1,4	14,65
	3-8	1800	131,7	748	95,1	0,82	1,8	0,6	6,5	102	1,6	14,9
OMVKS 800	1-8	2000	146,1	748	95,2	0,83	1,8	0,6	6,5	102	2,2	18,8
	2-8	2240	163,5	748	95,3	0,83	1,8	0,6	6,5	104	2,5	19,2
	3-8	2500	182,3	748	95,4	0,83	1,8	0,6	6,5	104	3,1	19,8
	4-8	2800	203,9	748	95,5	0,83	1,8	0,6	6,5	104	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)
OMVKS 710	1-10	1250	93	598	94,6	0,82	1,8	0,6	6	102	1,2	14,45
	2-10	1400	104,1	598	94,7	0,82	1,8	0,6	6	102	1,4	14,65
	3-10	1600	118,8	598	94,8	0,82	1,8	0,6	6	102	1,6	14,9
OMVKS 800	1-10	1800	133,5	598	94,9	0,82	1,8	0,6	6	102	2,2	18,8
	2-10	2000	148,2	598	95	0,82	1,8	0,6	6	102	2,5	19,2
	3-10	2240	166	598	95,1	0,82	1,8	0,6	6	104	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)
OMVKS 710	1-12	900	70	497	93,9	0,8	1,8	0,6	6	100	1,56	14,45
	2-12	1000	77,7	497	94	0,8	1,8	0,6	6	100	1,64	14,65
	3-12	1120	87	497	94,1	0,8	1,8	0,6	6	102	1,68	14,9
OMVKS 800	1-12	1250	97	497	94,2	0,81	1,8	0,6	6	102	2,3	16,9
	2-12	1400	108,5	497	94,3	0,81	1,8	0,6	6	102	2,42	17,1
	3-12	1600	123,9	497	94,4	0,81	1,8	0,6	6	102	2,56	17,3

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.m ²)	Weight (T)
OMVKS 710	1-14	630	51,9	425	93,6	0,75	1,8	0,6	6	100	1,35	13,8
	2-14	710	58,3	425	93,7	0,75	1,8	0,6	6	100	1,48	14,2
	3-14	800	65,7	425	93,8	0,75	1,8	0,6	6	100	1,56	14,45
	4-14	900	73,8	425	94,9	0,75	1,8	0,6	6	100	1,64	14,65
OMVKS 800	1-14	1000	81,9	425	94,0	0,75	1,8	0,6	6	100	1,68	14,9
	2-14	1120	91,6	425	94,1	0,75	1,8	0,6	6	102	2,3	16,9
	3-14	1250	102,1	425	94,2	0,75	1,8	0,6	6	102	2,42	17,10

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.m ²)	Weight (T)
OMVKS 710	1-16	450	41,5	372	94,4	0,78	1,8	0,6	6	100	1,25	14,2
	2-16	500	45,4	372	94,5	0,78	1,8	0,6	6	100	1,36	14,45
	3-16	560	48,3	372	94,6	0,78	1,8	0,6	6	100	1,48	14,65
	4-16	630	54,3	372	94,7	0,78	1,8	0,6	6	100	1,56	14,9
OMVKS 800	1-16	710	61,2	372	94,8	0,79	1,8	0,6	6	100	1,64	16,9
	2-16	800	67,9	372	94,9	0,79	1,8	0,6	6	100	1,68	17,1
	3-16	900	76,3	372	95,0	0,79	1,8	0,6	6	100	2,3	17,3
	4-16	1000	84,7	372	95,1	0,79	1,8	0,6	6	100	2,42	17,65

18P Synchronous speed 333r/min

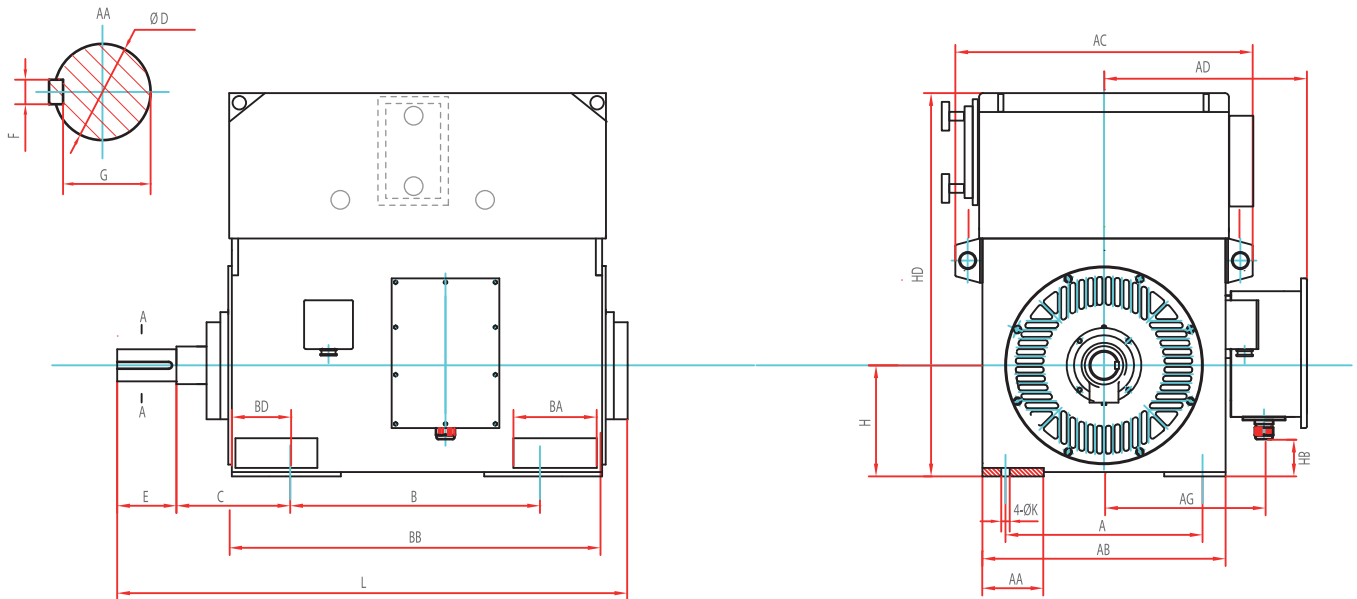
TYPE		Output (kw)	Rated Output (A)	Rated Speed (r/min)	Efficiency (%)	Power Factor (Cos Φ)	Pull out torque Rated torque	Locked torque Rated torque	Locked current Rated current	Noise dB (A)	Fly wheel torque (T.m ²)	Weight (T)
OMVKS 710	1-18	450	41,8	331	92,8	0,67	1,8	0,6	6	98	1,48	14,2
	2-18	500	45,7	331	92,9	0,68	1,8	0,6	6	98	1,56	14,45
	3-18	560	51,2	331	92,9	0,68	1,8	0,6	6	100	1,64	14,65
	4-18	630	57,6	331	92,9	0,68	1,8	0,6	6	100	1,68	14,9
OMVKS 800	1-18	710	64,8	331	93,0	0,68	1,8	0,6	6	100	2,3	16,9
	2-18	800	70,9	331	93,3	0,7	1,8	0,6	6	100	2,42	17,1
	3-18	900	79,7	331	93,1	0,7	1,8	0,6	6	100	2,56	17,3
	4-18	1000	88,5	331	93,2	0,7	1,8	0,6	6	100	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.m ²)	Weight (T)
OMVKS 710	1-20	400	37,7	298	92,8	0,67	1,8	0,6	6	98	1,48	14,2
	2-20	450	41,8	298	92,8	0,67	1,8	0,6	6	98	1,56	14,45
	3-20	500	46,4	298	92,8	0,67	1,8	0,6	6	98	1,64	14,65
	4-20	560	52,0	298	92,8	0,67	1,8	0,6	6	100	1,68	14,9
OMVKS 800	1-20	630	57,6	298	92,8	0,67	1,8	0,6	6	100	2,3	16,9
	2-20	710	64,9	298	92,9	0,68	1,8	0,6	6	100	2,42	17,1
	3-20	800	73,0	298	93,0	0,68	1,8	0,6	6	100	2,56	17,3
	4-20	900	82,1	298	93,1	0,68	1,8	0,6	6	100	2,68	17,65

6. CONSTRUCTION AND MOUNTING AND OVERALL DIMENSIONS

Mounting and overall dimensions of series OMVKS (6 kV; 10 kV) HV three phase induction motors (frame size 710-800) (see table)



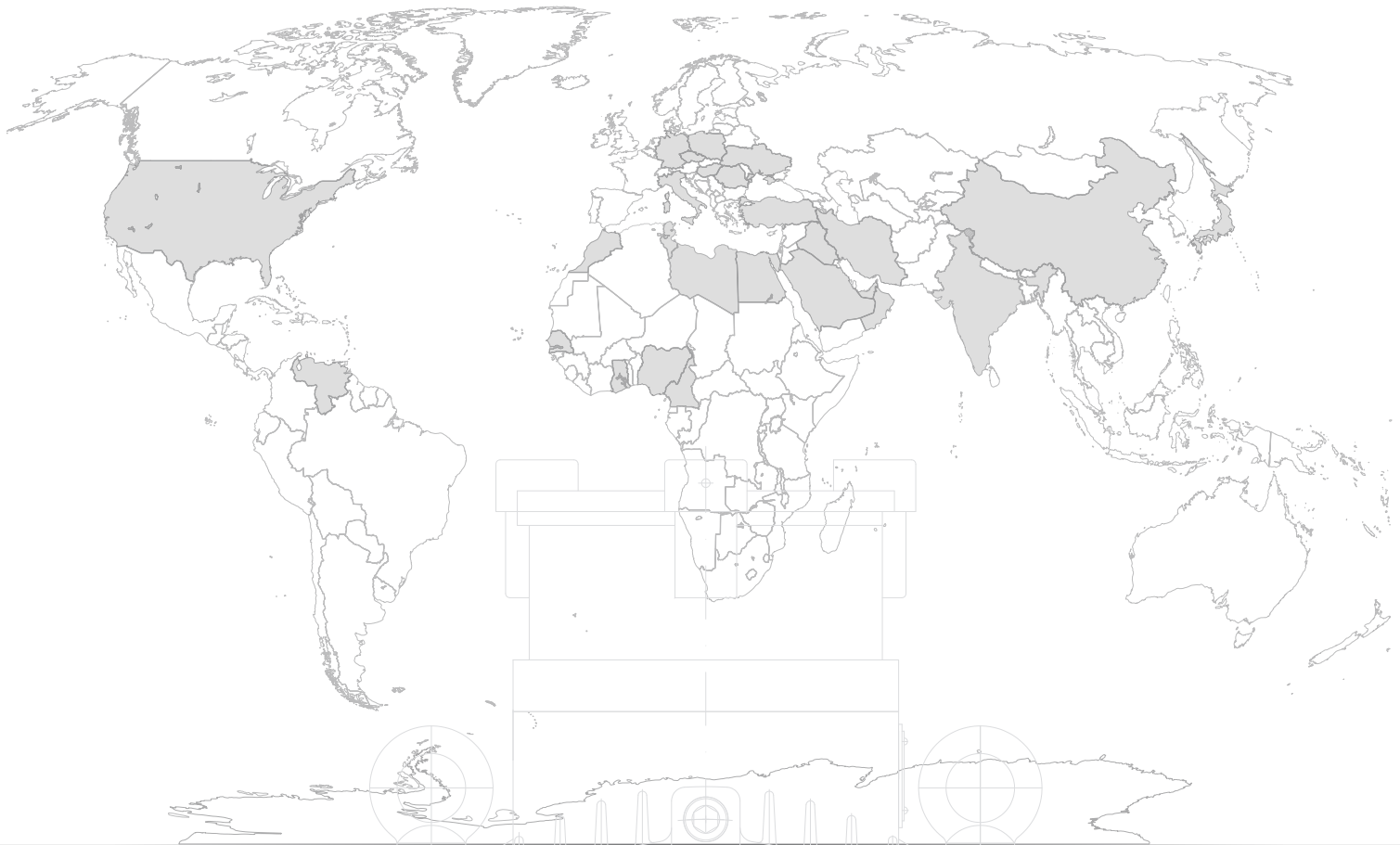
• Mounting and overall dimensions (6 kV; 10 kV) frame size 710-800

Frame size	Voltage	6,10			6 10	6 10	6 10	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	BA	BD	HD			AG	AD	HB	L		
																2	3	4				2,3	4	
710	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		
800	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		

Remarks: 1 - If the motors of 2 poles are 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-lubricating system on request.

CATALOGUE

Medium High Voltage Series Electric Motor



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