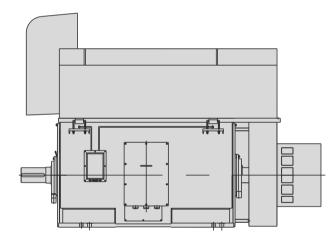
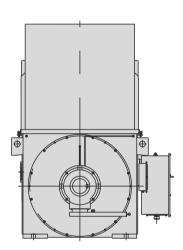


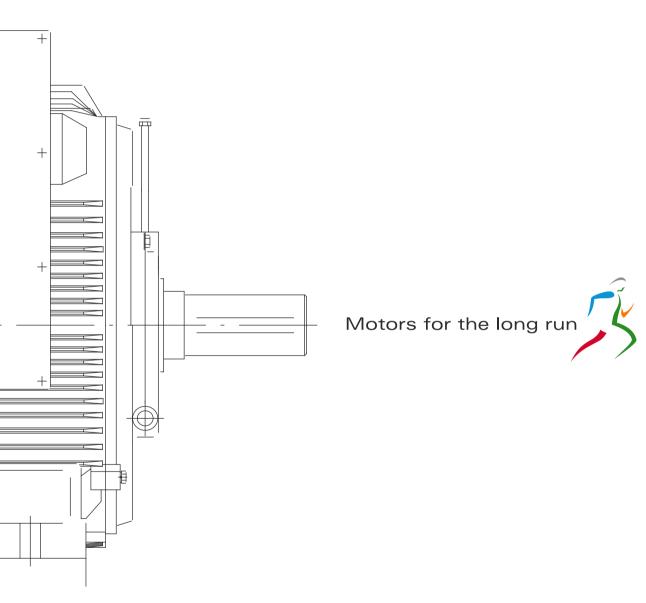
# High Voltage Motors













**HCM** 

Series (IP54 6kV/10kV) High Voltage and High-Efficiency Three Phase Asynchronous Motor

HDP

Series (IP23 6kV/10kV) High Voltage and High-Efficiency Three Phase Asynchronous Motor

HAA

Series (IP54 6kV/10kV) High Voltage and High-Efficiency Three Phase Asynchronous Motor



Large High-Efficiency Three Phase Asynchronous Motor

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		(H710-1000)
		Mounting Dimensions for Installation Outline Dimensions for Installation

## OVERVIEW

Marathon Motors stem from U.S.A with almost one-hundred manufacture history, which is a world famous motor brand of Regal Beloit Corporation. Relying on continuous innovation, Marathon Motors become the world leader in the motor industry with their perfect performance, reliable quality, high efficiency and energy reservation.

Marathon Motors are designed by advanced calculation program combining with perfect Quality Assurance System. The designing value and actual data are highly match each other (for instance, the calculation of electromagnetic, intension calculation and rotor critical speed etc.). All the above ensure the product performance can meet the customer's demand.

Marathon Motors are made of high quality cast iron or steel plate. With optimized construction design, they can ensure the requirement of structure rigidity and intensity.

Cold-rolled lamination steel is used in stator core and rotor core with good insulation on surface, low loss, which ensures the higher efficiency.

High quality mica tape as insulation material with VPI (Vacuum Pressure Impregnation) combines the perfect insulation system which makes the insulation completely and without clearance. High rigidity of the winding end can endure high switching and reversing intensity. F class insulation makes the motor with higher heat stability and longer life.

In general, we make copper bar rotor and end ring as the construction of the squirrel cage. They are jointed by silver brazing to prevent fatigue failure, and lower the loss and improve the efficiency as well.

The rotor balancing technology includes static balance, dynamic balance, overall balance in operating. All Marathon Motors match the vibration requirement of international standard. The motor vibration can be controlled in a lower level by finite element analysis.

The design of bearing and motor construction focuses on motor type, force on the motor, speed, lubricate type, including rolling bearing and sleeve bearing, designing of oil sea and lubricant etc. It has the advantage of credible performance and easy maintenance. Bearing. Regreasing can be done during running.

Perfect primer ensures the motors with good appearance and the motors are durable. We can also use special corrosion protection coating..

Quality: We have experienced employees to make sure the quality management system, e.g. visual inspection, inspection during manufacturing and so on. We make sure that every process can be in professional control and managing for the production quality. Our perfect after-sales service team and excellent engineering team is a strong back for our product.

Routine test and type test according with the international standard to ensure the quality of the products.



#### **Product Range:**

HCM cast iron frame IP54 2/4/6/8 Pole, output 185 $^{\sim}$ 1800kW, frame size 355 $^{\sim}$ 560

HAA steel fabricated frame  $\,$  P54 2/4/6/8/10/12/14/16 Pole, output  $220\!\sim\!9000 kW$ , frame size 355  $\sim\!1000$ 

HDP open-type steel fabricated frame  $\,$  IP54 2/4/6/8/10/12 Pole, output 220  $\sim$  10000kW, frame size 355  $\sim$  1000  $\,$ 

#### **Basic:**

Protection class: IP54 IP23 Cooling method: IC01 IC411 IC611 Mounting type: B3 Duty: S1

#### **Ambient:**

Temperature range: -20°C  $\sim$ 40°C

Ambient humidity: 90% less than relative humidity

Altitude: less than 1000m above sea level

Ambient condition: no causticity gas, no dust, no heavy metal pollution, no flame, no salt crystallization

Supply power: voltage variable  $\pm 5\%$ , frequency variable:  $\pm 2\%$ , combine voltage and frequency variable:  $\pm 5\%$ 

Starting method: direct start at full voltage, or start by no less than 85% full voltage.

#### Information for ordering:

Please specify the motor rated output, synchronous speed, voltage, frequency, mounting type, rotation (seeing from shaft extension). If any special requirement, for example, non-standard output, non-standard voltage, non-standard frequency, non-standard mounting dimension, non-standard altitude, special ambient, high locked rotor torque, second shaft, water cooling, vertical mounting, very big axial force ect. Please specify when in enquiry or directly consult with Hwada.

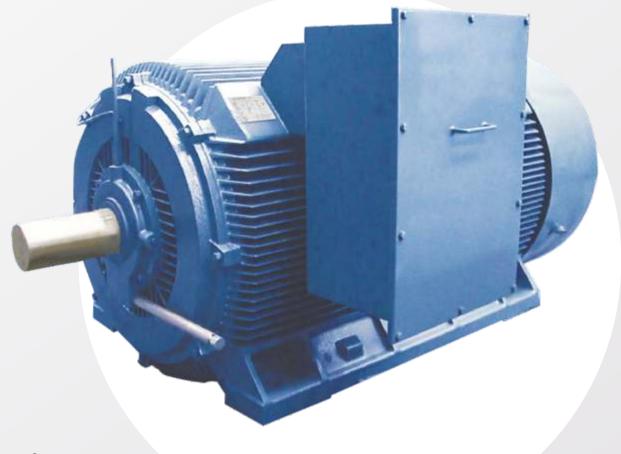
The following as options or customers' request:

- Space heater
- Heat protector
- Vibration detector
- Special mounting dimension and shaft dimension
- Low vibration and low noise
- Bearing thermometer PT100
- Winding thermometer PT100
- Special painting
- Others





HCM Series High Voltage and High-Efficiency Three Phase Asynchronous Motor



#### HCM 6kV Technical Data of HCM 6kV High Voltage and High-Efficiency Three Phase Asynchronous Motor

							Current			Torque		Moment	
Motor Type		ted wer	Rated Speed	Efficiency	Power Factor	Full Load	Locked Rotor	Locked Rotor	Fu <b>ll</b> Load	Locked Rotor	Pull Out	of inertia (J)	Appro: Weigh
	kW	(HP)	RPM	%	%	A	Α	%FLC	kg-m	%FLT	%FLT	kg-m²	kg
HCM3551-2	185	250	2980	94.1	84.0	22.5	157.7	700	60	70	200	2.6	1900
HCM3552-2	200	270	2980	94.3	84.0	24.3	170.1	700	65	70	200	2.8	2000
HCM3553-2	220	295	2980	94.4	84.0	26.7	186.9	700	72	70	200	3.0	2100
HCM3553-2	250	335	2980	94.6	84.0	30.3	211.9	700	82	70	200	3.3	2200
HCM3555-2	280	375	2980	94.7	86.0	33.1	231.6	700	92	70	200	3.5	2350
HCM3551-4	185	250	1485	94.3	84.0	22.5	146.1	650	121	80	200	6.0	1900
HCM3552-4	200	270	1485	94.3	84.0	24.3	157.9	650	131	80	200	7.0	2000
HCM3553-4	220	295	1485	94.5	84.0	26.7	173.4	650	144	80	200	8.0	2100
HCM3554-4	250	335	1485	94.6	84.0	30.3	196.8	650	164	80	200	9.0	2200
HCM3555-4	280	375	1485	94.7	84.0	33.9	220.2	650	184	80	200	10	2300
HCM3551-6	160	215	985	93.6	80.0	20.6	123.4	600	158	80	200	9.0	2200
HCM3552-6	185	250	985	93.8	80.0	23.7	142.3	600	183	80	200	10	2300
HCM3553-6	200	270	985	94.0	80.0	25.6	153.6	600	198	80	200	11	2400
HCM4001-2	315	420	2980	94.7	86.0	37.2	260.5	700	103	70	200	5.0	2900
HCM4002-2	355	475	2980	94.8	86.0	41.9	293.3	700	116	70	200	5.5	3000
HCM4003-2	400	535	2980	95.2	86.0	47.0	329.1	700	131	70	200	6.0	3100
HCM4004-2	450	605	2980	95.4	86.0	52.8	369.5	700	147	70	200	7.0	3200
HCM4001-4	315	420	1485	94.9	85.0	37.6	244.3	650	207	80	200	11	3000
HCM4002-4	355	475	1485	95.0	85.0	42.3	275.0	650	233	80	200	12	3100
HCM4003-4	400	535	1485	95.1	85.0	47.6	309.5	650	262	80	200	13	3200
HCM4004-4	450	605	1485	95.3	85.0	53.5	347.5	650	295	80	200	14	3300
HCM4001-6	220	295	988	94.3	82.0	27.4	164.3	600	217	80	200	14	2900
HCM4002-6	250	335	988	94.5	82.0	31.0	186.3	600	247	80	200	16	3000
HCM4003-6	280	375	988	94.7	82.0	34.7	208.2	600	276	80	200	18	3200
HCM4004-6	315	420	988	94.9	82.0	39.0	233.7	600	311	80	200	20	3400
HCM4001-8	160	215	738	93.4	76.0	21.7	119.3	550	211	80	200	15	3000
HCM4002-8	185	250	738	93.5	76.0	25.1	137.8	550	244	80	200	16	3100
HCM4003-8	200	270	738	93.7	77.0	26.7	146.7	550	264	80	200	18	3200
HCM4004-8	220	295	738	93.9	77.0	29.3	161.0	550	290	80	200	20	3300
HCM4501-2	500	670	2982	95.6	87.0	57.8	404.9	700	163	70	200	11	3500
HCM4502-2	560	750	2982	95.7	87.0	64.7	453.1	700	183	70	200	12	3600
HCM4503-2	630	845	2982	95.8	87.0	72.7	509.2	700	206	70	200	13	3700
HCM4504-2	710	950	2982	95.9	87.0	81.9	573.2	700	232	70	200	14	3850
HCM4501-4	500	670	1485	95.4	86.0	58.6	381.2	650	328	80	200	22	3600
HCM4502-4	560		1485	95.6	86.0	65.5	426.0	650	367	80	200	24	3700
HCM4503-4	630		1485	95.8	86.0	73.6	478.3	650	413	80	200	26	3800

#### HCM 6kV Technical Data of HCM 6kV High Voltage and High-Efficiency Three Phase Asynchronous Motor

						Current			Torque		Moment	
Motor Type	Rated Power	Rated Speed	Efficiency	Power Factor	Full Load	Locked Rotor	Locked Rotor	Fu <b>ll</b> Load	Locked Rotor	Pu <b>ll</b> Out	of inertia (J)	Appro Weigh
	kW (HP)	RPM	%	%	Α	А	%FLC	kg-m	%FLT	%FLT	kg-m²	kg
HCM4504-4	710 950	1485	96.0	86.0	82.8	537.9	650	466	80	200	28	3950
HCM4501-6	355 475	988	95.1	83.0	43.3	259.7	600	350	80	200	28	3500
HCM4502-6	400 535	988	95.1	83.0	48.8	292.6	600	395	80	200	30	3600
HCM4503-6	450 605	988	95.4	83.0	54.7	328.1	600	444	80	200	32	3700
HCM4504-6	500 670	988	95.6	83.0	60.6	363.8	600	493	80	200	34	3820
HCM4501-8	250 335	740	94.1	78.0	32.8	180.3	550	329	80	200	28	3500
HCM4502-8	280 375	740	94.3	78.0	36.6	201.5	550	369	80	200	30	3600
HCM4503-8	315 420	740	94.5	78.0	41.1	226.2	550	415	80	200	32	3700
HCM4504-8	355 475	740	94.7	78.0	46.2	254.4	550	467	80	200	34	3820
HCM5001-2	800 1070	2982	96.1	88.0	91.0	637.2	700	261	70	200	17	5780
HCM5002-2	900 1205	2982	96.2	88.0	102.3	716.1	700	294	70	200	19	6050
HCM5003-2	1000 1340	2982	96.3	88.0	113.6	794.9	700	327	70	200	21	6320
HCM5004-2	1120 1500	2982	96.4	88.0	127.0	889.3	700	366	70	200	23	6600
HCM5001-4	800 1070	1488	96.0	86.0	93.2	606.1	650	524	80	200	41	5820
HCM5002-4	900 1210	1488	96.1	86.0	104.8	681.1	650	589	80	200	44	6100
HCM5003-4	1000 1340	1488	96.2	86.0	116.3	756.0	650	655	80	200	47	6280
HCM5004-4	1120 1500	1488	96.3	86.0	130.1	845.9	650	733	80	200	50	6420
HCM5001-6	560 750	990	95.7	83.0	67.8	407.1	600	551	80	200	54	5610
HCM5002-6	630 845	990	95.8	83.0	76.2	457.5	600	620	80	200	58	5790
HCM5003-6	710 950	990	96.0	83.0	85.7	514.5	600	699	80	200	62	6010
HCM5004-6	800 1070	990	96.0	83.0	96.6	579.7	600	787	80	200	66	6230
HCM5001-8	400 535	742	94.9	79.0	51.3	282.4	550	525	80	200	54	5250
HCM5002-8	450 605	742	95.0	79.0	57.7	317.3	550	591	80	200	58	5490
HCM5003-8	500 670	742	95.4	80.0	63.0	346.7	550	657	80	200	62	5750
HCM5004-8	560 750	742	95.5	80.0	70.5	387.9	550	735	80	200	66	6020
HCM5601-4	1250 1680	1488	96.4	87.0	143.4	932.2	650	819	70	200	70	8020
HCM5602-4	1400 1880	1488	96.4	87.0	160.6	1044.1	650	917	70	200	74	8390
HCM5603-4	1600 2140	1488	96.5	87.0	183.4	1192.0	650	1048	70	200	78	8750
HCM5604-4	1800 2410	1488	96.6	87.0	206.1	1339.6	650	1179	70	200	82	9100
HCM5601-6	900 1210	990	96.1	84.0	107.3	643.7	600	886	70	200	94	7650
HCM5602-6	1000 1340	990	96.2	84.0	119.1	714.5	600	984	70	200	102	7950
HCM5603-6	1120 1500	990	96.3	84.0	133.2	799.4	600	1102	70	200	110	8250
ICM5604-6	1250 1680	990	96.4	84.0	148.5	891.3	600	1230	70	200	118	8550
HCM5601-8	630 845	745	95.6	81.0	78.3	430.6	550	824	70	200	96	7000
HCM5602-8	710 950	745	95.6	81.0	88.2	485.3	550	929	70	200	105	7350
HCM5603-8	800 1070	745	95.7	81.0	99.3	546.2	550	1046	70	200	110	7700
HCM5604-8	900 1210	745	95.8	81.0	111.6	613.8	550	1177	70	200	116	8100



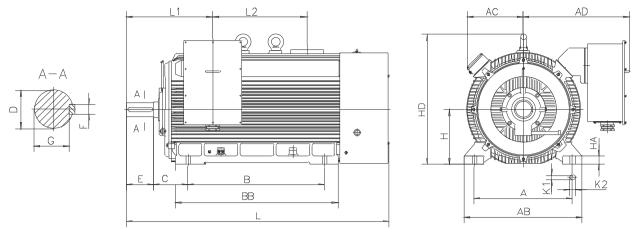
#### HCM 10kV Technical Data of HCM 10kV High Voltage and High-Efficiency Three Phase Asynchronous Motor

									Torque				
	Det		Deted		Dowor		Current			Torque		Moment	A
Motor Type	Rat Pov		Rated Speed	Efficiency	Power Factor	Full Load	Locked Rotor	Locked Rotor	Fu <b>ll</b> Load	Locked Rotor	Pull Out	of inertia (J)	Appro: Weigh
	kW	(HP)	RPM	%	%	А	А	%FLC	kg-m	%FLT	%FLT	kg-m²	kg
HCM4001-2	220	295	2980	94.2	84	16.1	112.4	700	72	70	200	5.0	2900
HCM4002-2	250	335	2980	94.4	84	18.2	127.4	700	82	70	200	5.5	3000
HCM4003-2	280	375	2980	94.6	85	20.1	140.7	700	92	70	200	6.0	3100
HCM4004-2	315	420	2980	94.8	85	22.6	158.0	700	103	70	200	7.0	3200
HCM4001-4	220	295	1482	94.0	84	16.1	104.6	650	145	80	200	11	3000
HCM4002-4	250	335	1482	94.1	84	18.3	118.7	650	164	80	200	12	3100
HCM4003-4	280	375	1482	94.2	84	20.4	132.8	650	184	80	200	13	3200
HCM4004-4	315	420	1482	94.4	84	22.9	149.1	650	207	80	200	14	3300
HCM4501-2	355	475	2982	95.0	86	25.1	175.6	700	116	70	200	11	3500
HCM4502-2	400	535	2982	95.2	86	28.2	197.5	700	131	70	200	12	3600
HCM4503-2	450	605	2982	95.4	86	31.7	221.7	700	147	70	200	13	3700
HCM4504-2	500	670	2982	95.5	86	35.1	246.0	700	163	70	200	14	3850
HCM4501-4	355	475	1485	94.6	85	25.5	165.7	650	233	80	200	20	3500
HCM4502-4	400	535	1485	94.7	85	28.7	186.5	650	262	80	200	22	3600
HCM4503-4	450	605	1485	95.1	85	32.1	208.9	650	295	80	200	24	3700
HCM4504-4	500	670	1485	95.1	86	35.3	229.4	650	328	80	200	26	3800
HCM4505-4	560	750	1485	95.3	86	39.5	256.4	650	367	80	200	28	3950
HCM4501-6	220	295	985	93.6	82	16.5	99.3	600	218	80	200	26	3400
HCM4502-6	250	335	985	93.8	82	18.8	112.6	600	247	80	200	28	3500
HCM4503-6	280	375	985	94.0	82	21.0	125.8	600	277	80	200	30	3600
HCM4504-6	315	420	985	94.2	82	23.5	141.3	600	312	80	200	32	3700
HCM4505-6	355	475	985	94.4	82	26.5	158.9	600	351	80	200	34	3820
HCM4501-8	220	295	740	93.6	78	17.4	95.7	550	290	80	200	30	3600
HCM4502-8	250	335	740	93.8	78	19.7	108.5	550	329	80	200	32	3700
HCM4503-8	280	375	740	94.0	78	22.0	121.3	550	369	80	200	34	3820
HCM5001-2	560	750	2985	95.6	87	38.9	272.1	700	183	70	200	15	5500
HCM5002-2	630	845	2985	95.6	87	43.7	306.1	700	206	70	200	17	5780
HCM5003-2	710	950	2985	95.7	87	49.2	344.6	700	232	70	200	19	6050
HCM5004-2	800	1070	2985	95.8	88	54.8	383.5	700	261	70	200	21	6320
HCM5005-2	900	1210	1210	95.9	88	61.6	431.0	700	294	70	200	23	6600
HCM5001-4	630	845	845	95.5	86	44.3	287.9	650	413	80	200	41	5820
HCM5002-4	710	950	950	96.0	86	49.7	322.7	650	465	80	200	44	6100
HCM5003-4	800	1070	1070	96.0	87	55.3	359.5	650	524	80	200	47	6280
HCM5004-4	900	1210	1210	96.1	87	62.2	404.0	650	589	80	200	50	6420
HCM5001-6	400	535	535	94.6	83	29.4	176.5	600	396	80	200	50	5450
HCM5002-6	450	605	605	94.7	83	33.1	198.3	600	444	80	200	54	5610
HCM5003-6	500	670	670	95.1	83	36.6	219.4	600	493	80	200	58	5790

#### HCM 10kV Technical Data of HCM 10kV High Voltage and High-Efficiency Three Phase Asynchronous Motor

recinical Data	ornen	I TOKV	ingii voita	ge ana mgn	Lincicity	initee i nuse	Asyncinon						
	Rat	ted	Rated	Efficiency	Power		Current			Torque		- Moment of inertia	Approx
Motor Type	Ροι	wer	Speed		Factor	Fu <b>ll</b> Load	Locked Rotor	Locked Rotor	Fu <b>ll</b> Load	Locked Rotor	Pull Out	(J)	Weight
	kW	(HP)	RPM	%	%	Α	А	%FLC	kg-m	%FLT	%FLT	kg-m²	kg
HCM5004-6	560	750	990	95.2	83	40.9	245.5	600	551	80	200	62	6010
HCM5005-6	630	845	990	95.5	83	45.9	275.3	600	620	80	200	66	6230
HCM5001-8	315	420	742	94.2	78	24.8	136.1	550	414	80	200	54	5250
HCM5002-8	355	475	742	94.4	78	27.8	153.1	550	466	80	200	58	5490
HCM5003-8	400	535	742	94.5	79	30.9	170.1	550	525	80	200	62	5750
HCM5004-8	450	605	742	94.6	79	34.8	191.2	550	591	80	200	66	6020
HCM5601-4	1000	1340	1488	96.2	86	69.8	453.6	650	655	70	200	70	8020
HCM5602-4	1120	1500	1488	96.3	86	78.1	507.5	650	733	70	200	74	8390
HCM5603-4	1250	1680	1488	96.4	87	86.1	559.3	650	819	70	200	78	8750
HCM5604-4	1400	1880	1488	96.5	87	96.3	625.8	650	917	70	200	82	9100
HCM5601-6	710	950	992	95.6	83	51.7	310.0	600	697	70	200	87	7400
HCM5602-6	800	1070	992	95.7	83	58.2	348.9	600	786	70	200	94	7650
HCM5603-6	900	1210	992	95.9	84	64.5	387.0	600	884	70	200	102	7950
HCM5604-6	1000	1340	992	96.0	84	71.6	429.6	600	982	70	200	110	8250
HCM5605-6	1120	1500	992	96.2	84	80.0	480.1	600	1100	70	200	118	8550
HCM5601-8	500	670	745	95.0	80	38.0	208.9	550	654	70	200	88	6650
HCM5602-8	560	750	745	95.1	80	42.5	233.7	550	733	70	200	96	7000
HCM5603-8	630	845	745	95.5	81	47.0	258.6	550	824	70	200	105	7350
HCM5604-8	710	950	745	95.6	81	52.9	291.2	550	929	70	200	110	7700
HCM5605-8	800	1070	745	95.7	81	59.6	327.7	550	1046	70	200	116	8100

HCM HCM Series High Voltage and High-Efficiency Three Phase Asynchronous Motor



#### **Mounting Dimensions for Installation**

Frame					Mou	inting Dim	ensions (n	n <b>m</b> )			
Size	Poles	А	В	С	D	E	F	G	н	K1	K2
355	2	630±1.4	900±1.4	254±4	75 <sup>+0.035</sup> +0.013	140±0.5	20 _0.052	67.5 _0.2	355 <sup>0</sup> -1	28 <sup>+0.52</sup> <sub>0</sub>	35
355	4~6	630±1.4	900±1.4	254±4	100 <sup>+0.035</sup> +0.013	210±0.57	28 0 -0.052	90 0 -0.2	355 <sup>0</sup> -1	28 <sup>+0.52</sup> 0	35
400	2	710±1.75	1000±1.75	280±4	85 +0.035 +0.013	170±0.5	22 0 _0.052	76 0 _0.2	400 <sup>0</sup> -1	35 +0.62 0	42
400	4~8	710±1.75	1000±1.75	280±4	110 +0.035 +0.013	210±0.57	28 0 -0.052	100 0 _0.2	400 <sup>0</sup> -1	35 <sup>+0.62</sup> 0	42
450	2	800±1.75	1120±1.75	280±4	95 +0.035 +0.013	170±0.5	25 0 -0.052	86 0 -0.2	450 <sup>0</sup> -1	35 +0.62 0	42
450	4	800±1.75	1120±1.75	280±4	120 +0.035 +0.013	210±0.57	32 0 -0.062	109 0 -0.2	450 <sup>0</sup> -1	35 +0.62 0	42
450	6~8	800±1.75	1120±1.75	280±4	130 <sup>+0.04</sup> +0.015	250±0.57	32 0 -0.062	119 <sup>0</sup> -0.2	450 <sup>0</sup> -1	35 +0.62 0	42
500	2	900±2.1	1250±2.1	315±4	110 +0.035 +0.013	210±0.57	28 0 -0.052	100 0 _0.2	500 <sup>0</sup> -1	42 +0.62 0	52
500	4	900±2.1	1250±2.1	315±4	130 +0.04 +0.015	250±0.57	32 0 -0.062	119 <sup>0</sup> -0.2	500 <sup>0</sup> -1	42 +0.62 0	52
500	6~8	900±2.1	1250±2.1	315±4	140 <sup>+0.04</sup> +0.015	250±0.57	36 0 -0.062	128 0 -0.3	500 <sup>0</sup> -1	42 +0.62 0	52
560	4	1000±2.1	1400±2.1	355±4	150 +0.04 +0.015	250±0.57	36 0 -0.062	138 0 -0.3	560 <sup>0</sup> -1	42 <sup>+0.62</sup> 0	52
560	6~8	1000±2.1	1400±2.1	355±4	160 +0.04 +0.015	300±0.65	40 0 -0.062	147 0 -0.3	560 0 -1	42 <sup>+0.62</sup> 0	52

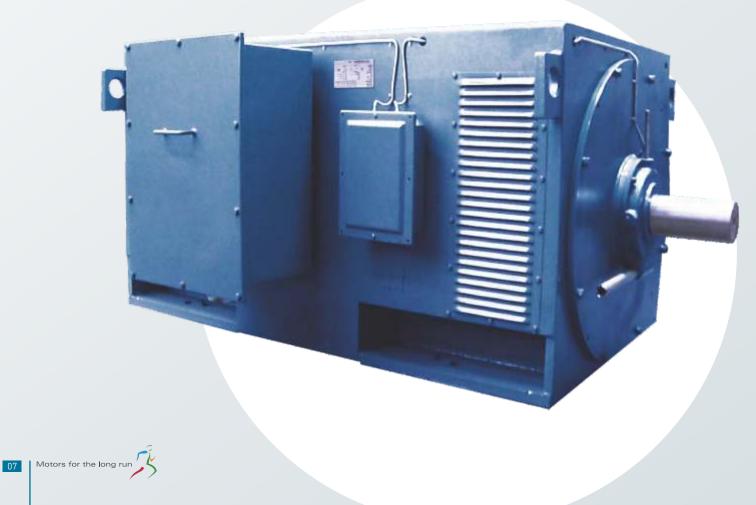
#### **Outline Dimensions for Installation**

Frame		Outline Dimensions (mm)												
Size	Poles	AC	AD	AB	BB	HA	HD	L1	L2	L				
355	2	445	775	790	1110	50	830	515	680	1720				
355	4~6	445	775	790	1110	50	830	585	680	1825				
400	2	480	900	870	1200	50	960	585	720	1850				
400	4~8	480	900	870	1200	50	960	635	720	2010				
450	2	490	925	950	1340	56	1085	650	785	2080				
450	4	490	925	950	1340	56	1085	690	785	2170				
450	6~8	490	925	950	1340	56	1085	730	785	2210				
500	2	520	980	1080	1490	65	1200	825	865	2500				
500	4~8	520	980	1080	1490	65	1200	719	865	2400				
560	4	610	1030	1170	1680	76	1480	812	970	2650				
560	6~8	610	1030	1170	1680	76	1480	862	970	2700				





HDP Series High Voltage and High-Efficiency Three Phase Asynchronous Motor



#### HDP 6kV Technical Data of HDP 6kV High Voltage and High-Efficiency Three Phase Asynchronous Motor

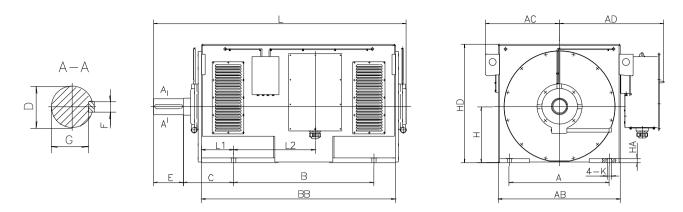
							Current			Torque		Moment	
Motor Type	Rat Pov		Rated Speed	Efficiency	Power Factor	Full Load	Locked Rotor	Locked Rotor	Full Load	Locked Rotor	Pu <b>ll</b> Out	of inertia (J)	Approx Weigh
	kW	(HP)	RPM	%	%	А	А	%FLC	kg-m	%FLT	%FLT	kg-m <sup>2</sup>	kg
HDP3551-2	220	295	2975	93.6	86	26.3	184.1	700	72	60	180	3.0	2020
HDP3552-2	250	335	2975	93.9	86	29.8	208.5	700	82	60	180	3.2	2200
HDP3553-2	280	375	2975	94.2	86	33.3	232.8	700	92	60	180	3.3	2370
HDP3554-2	315	420	2975	94.5	86	37.3	261.1	700	103	60	180	3.5	2480
HDP3555-2	355	475	2975	94.8	86	41.9	293.3	700	116	60	180	3.8	2700
HDP3556-2	400	535	2975	95.2	86	47.0	329.1	700	131	60	180	4.0	2850
HDP3551-4	185	250	1485	93.5	85	22.4	145.6	650	121	80	180	4.7	1560
HDP3552-4	200	270	1485	93.7	85	24.2	157.1	650	131	80	180	4.7	1650
HDP3553-4	220	295	1485	94.0	85	26.5	172.2	650	144	80	180	4.8	1780
HDP3554-4	250	335	1485	94.3	85	30.0	195.1	650	164	80	180	5.0	1900
HDP3555-4	280	375	1485	94.5	86	33.2	215.5	650	184	80	180	5.7	2070
HDP3556-4	315	420	1485	94.8	86	37.2	241.7	650	207	80	180	6.7	2320
HDP3553-6	185	250	985	93.7	82	23.2	139.0	600	183	80	180	9.3	1860
HDP3554-6	200	270	985	94.0	82	25.0	149.8	600	198	80	180	9.3	1980
HDP3555-6	220	295	985	94.2	82	27.4	164.4	600	218	80	180	9.5	2070
HDP3556-6	250	335	985	94.4	82	31.1	186.5	600	247	80	180	10.0	2190
HDP4001-2	450	605	2980	95.4	86	52.8	369.5	700	147	60	180	5.0	2630
HDP4002-2	500	670	2980	95.6	87	57.8	404.9	700	164	60	180	5.0	2750
HDP4003-2	560	750	2980	95.7	87	64.7	453.1	700	183	60	180	5.2	2880
HDP4004-2	630	845	2980	95.8	87	72.7	509.2	700	206	60	180	5.5	3020
HDP4001-4	355		1485	95.0	86	41.8	271.8	650	233	80	180	12.0	2250
HDP4002-4	400	535	1485	95.1	86	47.1	305.9	650	262	80	180	13.0	2320
HDP4003-4	450	605	1485	95.3	86	52.8	343.4	650	295	80	180	14.0	2450
HDP4004-4	500	670	1485	95.4	87	58.0	376.8	650	328	80	180	15.0	2530
HDP4005-4	560		1485	95.6	87	64.8	421.1	650	367	80	180	17.0	2630
HDP4002-6	280	375	985	94.5	83	34.4	206.1	600	277	80	180	16.0	2810
HDP4003-6	315	420	985	94.8	83	38.5	231.1	600	312	80	180	17.0	2980
HDP4004-6	355		985	95.1	83	43.3	259.7	600	351	80	180	18.0	3170
HDP4005-6	400		985	95.1	83	48.8	292.6	600	396	80	180	20.0	3320
HDP4003-8	220	295	740	93.7	78	29.0	159.3	550	290	80	180	20.0	2780
HDP4004-8		335	740	93.9	79	32.4	178.4	550	329	80	180	20.0	3130
HDP4005-8	230		740	93.9	79	36.2	199.3	550	369	80	180	21.0	3410
HDP4501-2	710	950	2980	95.9	87	81.9	573.2	700	232	60	180	11.0	3360
HDP4502-2		1070	2980	95.9 96.1	87	92.1	644.5	700	262	60	180	11.0	3510
HDP4503-2		1070	2980	96.1	87	103.5	724.3	700	202	60	180	12.0	3600
				96.2 96.3		136.3							
HDP4504-2		1610 945	2980		88 		953.8	700	392	60 °0	180	14.0	3780
HDP4501-4	630		1485	95.8	87	72.7 01.0	472.8	650	413	80	180	17.0	3390
HDP4502-4 HDP4503-4	710 800		1485	96.0 96.0	87	81.8	531.7	650	466	80	180	19.0	3490

#### HDP 6kV Technical Data of HDP 6kV High Voltage and High-Efficiency Three Phase Asynchronous Motor

							Current			Torque			
Motor Type	Rate Pow		Rated Speed	Efficiency	Power Factor	Full Load	Locked Rotor	Locked Rotor	Fu <b>ll</b> Load	Locked Rotor	Pu <b>ll</b> Out	Moment of inertia (J)	Approx Weight
	kW	(HP)	RPM	%	%	A	А	%FLC	kg-m	%FLT	%FLT	kg-m <sup>2</sup>	kg
HDP4504-4	900 <sup>-</sup>	1210	1485	96.1	87	103.6	673.3	650	591	80	180	22.0	3750
HDP4501-6	450	605	990	95.4	84	54.0	324.2	600	443	80	180	25	3170
HDP4502-6	500	670	990	95.6	85	59.2	355.3	600	492	80	180	26	3500
HDP4503-6	560	750	990	95.7	85	66.2	397.5	600	551	80	180	28	3750
HDP4504-6	630	845	990	95.8	85	74.4	446.7	600	620	80	180	30	3920
HDP4501-8	315	420	740	94.4	80	40.1	220.8	550	415	80	180	27	3130
HDP4502-8	355	475	740	94.7	80	45.1	248.0	550	467	80	180	29	3350
HDP4503-8	400	535	740	94.9	80	50.7	278.8	550	527	80	180	31	3430
HDP4504-8	450	605	740	95.0	81	56.3	309.5	550	593	80	180	33	3650
HDP4501-10	220	295	590	93.0	77	29.6	162.6	550	363	80	180	27	2930
HDP4502-10	250	335	590	93.2	78	33.1	182.0	550	413	80	180	29	3130
HDP4503-10	280	375	590	93.4	78	37.0	203.4	550	462	80	180	31	3210
HDP4504-10	315	420	590	93.6	79	41.0	225.5	550	520	80	180	33	3290
HDP4505-10	355	475	590	94.2	79	45.9	252.5	550	586	80	180	35	3430
HDP4504-12	220	295	490	92.4	73	31.4	172.6	550	438	80	180	38	3540
HDP4505-12	250	335	490	92.7	73	35.5	195.5	550	497	80	180	40	3720
HDP5001-2	1120	1500	2980	96.4	88	127.0	889.3	700	366	60	180	15	5690
HDP5002-2	1250		2980	96.5	88	141.6	991.5	700	409	60	180	16	5940
HDP5003-2	1400		2980	96.6	88	158.5	1109.3	700	458	60	180	17	6190
HDP5004-2	1600 2		2980	96.7	88	180.9	1266.5	700	523	60	180	19	6450
HDP5001-4	1000		1485	96.2	87	115.0	747.3	650	656	70	180	26	5000
HDP5002-4	1120		1485	96.3	88	127.2	826.7	650	735	70	180	29	5250
HDP5003-4	1250		1485	96.4	88	141.8	921.6	650	820	70	180	32	5500
HDP5004-4	1400		1485	96.4	88	158.8	1032.2	650	919	70	180	34	5750
HDP5001-6		950	990	96.0	85	83.7	502.4	600	699	70	180	39	4520
HDP5002-6		930 1070	990	96.0	85	94.3	566.0	600	787	70	180	42	4630
	900												4030
HDP5003-6			990	96.1	85	106.0	636.1	600	886	70	180	45	
HDP5004-6	1000		990	96.2	85	117.7	706.1	600	984	70	180	47	4920
HDP5001-8		670	740	95.4	81	62.3	342.5	550	658	80	180	43	4310
HDP5002-8		750	740	95.5	82	68.8	378.5	550	737	80	180	46	4570
HDP5003-8		845	740	95.6	82	77.3	425.3	550	830	80	180	50	4910
HDP5004-8		950	740	95.6	82	87.2	479.3	550	935	80	180	53	5190
HDP5001-10		535	590	94.6	80	50.9	279.7	550	661	80	180	50	4140
HDP5002-10		605	590	94.6	80	57.2	314.7	550	743	80	180	54	4290
HDP5003-10		670	590	94.8	80	63.4	348.9	550	826	80	180	58	4480
HDP5004-10	560	750	590	94.9	80	71.0	390.4	550	925	80	180	63	4650
HDP5005-10	630	845	590	95.0	80	79.8	438.7	550	1041	80	180	66	4830
HDP5001-12	280	375	490	93.9	74	38.8	213.3	550	557	80	180	47	4250
HDP5002-12	315	420	490	94.1	75	42.9	236.2	550	626	80	180	51	4420
HDP5003-12	355	475	490	94.3	75	48.3	265.7	550	706	80	180	55	4590
HDP5004-12	400	535	490	94.6	75	54.3	298.4	550	796	80	180	60	4870

#### HDP 6kV Technical Data of HDP 6kV High Voltage and High-Efficiency Three Phase Asynchronous Motor

						Current			Torque			
Motor Type	Rated Power	Rated Speed	Efficiency	Power Factor	Full Load	Locked Rotor	Locked Rotor	Full Load	Locked Rotor	Pu <b>ll</b> Out	Moment of inertia (J)	Approx Weight
	kW (HP)	RPM	%	%	A	A	%FLC	kg-m	%FLT	%FLT	kg-m <sup>2</sup>	kg
HDP5005-12	450 605	490	94.6	75	61.0	335.7	550	895	80	180	67	5060
HDP5601-2	1800 2410	2980	96.7	88	203.5	1424.8	700	589	60	180	35	7250
HDP5602-2	2000 2680	2980	96.8	88	225.9	1581.5	700	654	60	180	40	7700
HDP5603-2	2240 3000	2980	96.9	88	252.8	1769.5	700	733	60	180	47	8200
HDP5601-4	1600 2140	1485	96.5	89	179.3	1165.2	650	1050	60	180	52	6050
HDP5602-4	1800 2410	1485	96.6	89	201.5	1309.5	650	1181	60	180	55	6350
HDP5603-4	2000 2680	1485	96.7	89	223.6	1453.5	650	1312	60	180	60	6500
HDP5601-6	1120 1500	991	96.3	86	130.1	845.9	650	1101	70	180	63	6030
HDP5602-6	1250 1680	991	96.4	86	145.1	943.1	650	1229	70	180	70	6280
HDP5603-6	1400 1880	991	96.4	86	162.5	1056.3	650	1377	70	180	74	6440
HDP5601-8	800 1070	740	95.7	84	95.8	574.6	600	1054	70	180	80	5920
HDP5602-8	900 1210	740	95.8	84	107.6	645.7	600	1185	70	180	88	6180
HDP5603-8	1000 1340	740	95.9	84	119.5	716.7	600	1317	70	180	94	6440
HDP5601-10	710 950	590	95.1	82	87.6	525.7	600	1173	70	180	97	6280
HDP5602-10	800 1070	590	95.3	82	98.5	591.1	600	1321	70	180	103	6670
HDP5603-10	900 1210	590	95.4	82	110.7	664.3	600	1487	70	180	112	7060
HDP5601-12	500 670	490	94.9	79	64.2	385.1	600	994	70	180	94	5790
HDP5602-12	560 750	490	95.0	79	71.8	430.8	600	1114	70	180	105	6040
HDP5603-12	630 845	490	95.1	79	80.7	484.2	600	1253	70	180	111	6290
HDP6301-2	2500 3350	2982	96.9	89	279.0	1952.7	700	817	60	180	65	8800
HDP6302-2	2800 3750	2982	97.0	89	312.1	2184.7	700	915	60	180	72	9100
HDP6303-2	3150 4220	2982	97.0	89	351.1	2457.8	700	1029	60	180	80	9400
HDP6301-4	2240 3000	1492	96.8	89	250.2	1626.3	650	1463	60	180	107	7550
HDP6302-4	2500 3350	1492	96.9	89	279.0	1813.2	650	1633	60	180	113	7910
HDP6303-4	2800 3750	1492	96.9	89	312.4	2030.8	650	1828	60	180	113	8300
		993	96.5			1205.9	650	1570	70	180	120	7400
HDP6301-6	1600 2140			86	185.5							
HDP6302-6	1800 2410	994	96.6	86	208.5	1355.2	650	1765	70	180	132	8100
HDP6303-6	2000 2680	994 	96.7	86 	122.6	1504.2 801.0	650	1961	70	180	140	8100
HDP6301-8	1120 1500	744	96.0	84 	133.6	801.9	600	1467	70	180	134	7780 8100
HDP6302-8	1250 1680	744	96.0	84	149.2	895.0	600	1637	70	180	140	8100
HDP6303-8	1400 1880	744	96.1	84	166.9	1001.3	600	1834	70	180	152	8380
HDP6304-8	1600 2140	744	96.2	84	190.5	1143.2	600	2096	70	180	162	8660
HDP6301-10	1000 1340	594	95.5	82	122.9	737.3	600	1641	70	180	148	7800
HDP6302-10	1120 1500	594	95.6	82	137.5	824.9	600	1837	70	180	157	8150
HDP6303-10	1250 1680	594	95.8	82	153.1	918.7	600	2051	70	180	171	8430
HDP6304-10	1400 1880	594	95.9	82	171.3	1027.9	600	2297	70	180	186	8760
HDP6301-12	710 950	494	95.1	79	90.9	545.6	600	1401	70	180	168	7730
HDP6302-12	800 1070	494	95.3	79	102.3	613.5	600	1578	70	180	179	8050
HDP6303-12	900 1210	494	95.4	79	114.9	689.5	600	1775	70	180	195	8320
HDP6304-12	1000 1340	494	95.5	79	127.5	765.3	600	1973	70	180	208	859



#### **Mounting Dimensions for Installation**

Frame	Poles				Mounting	Dimensions	s (mm)			
Size	roles	А	В	с	D	E	F	G	н	K1
355	2	630±1.75	900±1.75	315±4	80 <sup>+0.030</sup> +0.011	170±0.5	0 22 -0.052	71 _0.2	355 <sub>-1</sub>	28 <sup>+0.52</sup>
355	4~6	630±1.75	900±1.75	315±4	100 +0.035 +0.013	210±0.5	28 _0 _0.052	90 _0.2	355 <sup>0</sup> -1	28 <sup>+0.52</sup>
400	2	710±1.75	$1000 \pm 1.75$	375±4	90 +0.035 +0.013	170±0.5	25 _0 _0.052	81 <u>0</u> _0.2	400 <u>0</u> -1	35 +0.62 0
400	4~8	710±1.75	1000±1.75	335±4	$110 \begin{array}{c} +0.035 \\ +0.013 \end{array}$	210±0.57	28_0 _0.052	100 _0.2	400 <u>0</u>	35 +0.62 0
450	2	800±1.75	1120±1.75	400±4	$100 \begin{array}{c} +0.035 \\ +0.013 \end{array}$	210±0.57	28_0 _0.052	90 _0.2	450 _1	35 <sup>+0.62</sup>
450	4	$800 \pm 1.75$	$1120 \pm 1.75$	355±4	120 +0.035 +0.013	210±0.57	32 _0.062	109 _0.2	450 0 _1	35 <sup>+0.62</sup>
450	6~12	800±1.75	1120±1.75	355±4	$130 \begin{array}{c} +0.040 \\ +0.015 \end{array}$	250±0.57	32 _0.062	119 _0.2	450 0 _1	35 <sup>+0.62</sup>
500	2	900±2.1	1250±2.1	560±4	110 $^{+0.035}_{+0.013}$	210±0.57	28 _0.052	100 _0.2	500 <u>0</u> -1	42 <sup>+0.62</sup>
500	4	900±2.1	1250±2.1	475±4	130 <sup>+0.04</sup> +0.015	250±0.57	32 _0.062	119 _0.2	500 <u>0</u> -1	42 <sup>+0.62</sup>
500	6~10	900±2.1	1250±2.1	475±4	140 +0.04 +0.015	$250{\pm}0.57$	36 _0.062	128 _0	500 <u>0</u>	42 <sup>+0.62</sup>
560	2	$1000\!\pm\!2.1$	$1400{\pm}2.1$	560±4	$130 \begin{array}{c} +0.04 \\ +0.015 \end{array}$	$250{\pm}0.57$	32 _0.062	119 _0.2	560 _1	42 <sup>+0.62</sup>
560	4	$1000\!\pm\!2.1$	$1400\!\pm\!2.1$	$500\pm4$	$150 \begin{array}{c} +0.04 \\ +0.015 \end{array}$	$250\!\pm\!0.57$	36 _0.062	138 _0.3	560 _0 _1	42 <sup>+0.62</sup>
560	6~12	$1000\!\pm\!2.1$	$1400\!\pm\!2.1$	500±4	$160 \begin{array}{c} +0.04 \\ +0.015 \end{array}$	$300\!\pm\!0.65$	40 _0.062	147 _0.3	560 _1	42 <sup>+0.62</sup> 0
630	2	1120±2.1	1600±2.1	560±4	$140 \begin{array}{c} +0.04 \\ +0.015 \end{array}$	250±0.57	36 _0.062	128 _0.3	630 _1	48 <sup>+0.62</sup> 0
630	4	$1120 \pm 2.1$	1600±2.1	530±4	$170 \begin{array}{c} +0.04 \\ +0.015 \end{array}$	300±0.65	40 <sub>-0.062</sub>	157 _0.3	630 _1	48 <sup>+0.62</sup>
630	6~12	1120±2.1	1600±2.1	530±4	$180 \begin{array}{c} +0.04 \\ +0.015 \end{array}$	300±0.65	45 _0.062	165 _0_	630 <u>0</u>	48 <sup>+0.62</sup>

#### **Outline Dimensions for Installation**

Frame	Poles		Outline Dimensions (mm)												
Size		AC	AD	AB	BB	HA	HD	L1	L2	L					
355	2	500	760	780	1350	25	760	189	561	1725					
355	4~6	500	760	780	1400	25	760	189	617	1815					
400	2	570	900	888	1450	30	850	249	606	1830					
400	4~6	570	900	888	1510	30	850	209	626	2000					
450	2	599	926	980	1530	40	960	255	515	1910					
450	4	599	926	980	1638	32	960	242	657	2055					
450	6~12	599	926	980	1638	32	960	242	657	2105					
500	2	660	1115	1112	1720	50	1790	330	990	2370					
500	4	660	1000	1112	1720	35	1065	310	669	2200					
500	6~12	660	1000	1112	1720	35	1065	310	669	2200					
560	2	740	1200	1216	1940	55	1920	270	1120	2650					
560	4	740	1050	1216	1938	45	1185	320	815	2475					
560	6~12	740	1050	1216	1938	45	1185	320	815	2525					
630	2	850	1350	1396	2100	55	2200	265	1320	2950					
630	4~12	825	1150	1396	2080	50	1307	365	685	2677					



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#### HDP 10kV Technical Data of HDP 10kV High Voltage and High-Efficiency Three Phase Asynchronous Motor

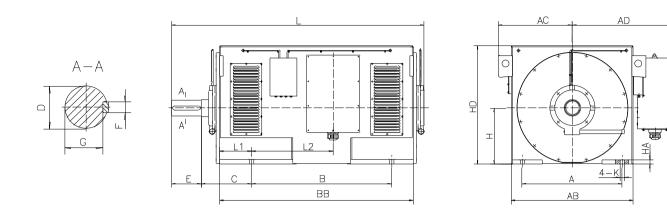
							Current			Torque		Moment	
Motor Type		ted wer	Rated Speed	Efficiency	Power Factor	Full Load	Locked Rotor	Locked Rotor	Fu <b>ll</b> Load	Locked Rotor	Pull Out	of inertia (J)	Approx Weight
	kW	(HP)	RPM	%	%	А	А	%FLC	kg-m	%FLT	%FLT	kg-m <sup>2</sup>	kg
HDP4001-2	220	295	2980	93.7	85	15.9	119.6	750	72	60	180	5.8	2440
HDP4002-2	250	335	2980	94.0	85	18.1	135.5	750	82	60	180	6.0	2560
HDP4003-2	280	375	2980	94.2	85	20.2	151.4	750	92	60	180	5.0	2680
HDP4004-2	315	420	2980	94.4	85	22.7	170.0	750	103	60	180	5.5	2810
HDP400A-4	185	250	1480	92.9	83	13.9	97.0	700	122	70	180	5.5	2480
HDP400B-4	200	270	1480	93.2	83	14.9	104.5	700	132	70	180	8.2	2550
HDP4001-4	220	295	1480	93.5	83	16.4	114.6	700	145	70	180	8.2	2640
HDP4002-4	250	335	1480	93.9	83	18.5	129.6	700	165	70	180	8.5	2750
HDP4003-4	280	375	1480	94.1	83	20.7	144.9	700	184	70	180	8.8	2870
HDP4004-4	315	420	1480	94.3	83	23.2	162.7	700	207	70	180	9.2	3000
HDP4501-2	355	475	2980	95.0	87	24.8	173.6	700	116	60	180	10.6	3340
HDP4502-2	400	535	2980	95.2	87	27.9	195.2	700	131	60	180	11.0	3420
HDP4503-2	450	605	2980	95.4	87	31.3	219.1	700	147	60	180	11.0	3500
HDP4504-2	500	670	2980	95.5	87	34.7	243.2	700	164	60	180	11.5	3600
HDP4505-2	560	750	2980	95.6	87	38.9	272.1	700	183	60	180	12.0	3800
HDP4506-2	630	845	2980	95.6	87	43.7	306.1	700	206	60	180	12.6	4030
HDP4501-4	355	475	1485	94.6	86	25.2	176.4	700	233	70	180	15.0	2850
HDP4502-4	400	535	1485	94.7	86	28.4	198.5	700	262	70	180	15.0	2950
HDP4503-4	450	605	1485	95.1	86	31.8	222.4	700	295	70	180	16.0	3100
HDP4504-4	500	670	1485	95.1	86	35.3	247.1	700	328	70	180	17.0	3250
HDP4505-4	560	750	1485	95.3	86	39.5	276.2	700	367	70	180	18.1	3400
HDP4506-4	630	845	1485	95.5	86	44.3	310.0	700	413	70	180	19.3	3590
HDP4503-6	315	420	990	93.8	82	23.6	141.9	600	310	70	180	22.0	3270
HDP4504-6	355	475	990	94.4	83	26.2	157.0	600	349	70	180	22.7	3400
HDP4505-6	400	535	990	94.6	83	29.4	176.5	600	394	70	180	24.3	3530
HDP4506-6	450	605	990	94.7	83	33.1	198.3	600	443	70	180	25.1	3680
HDP5001-2	710	950	2980	95.7	88	48.7	340.7	700	232	60	180	16.0	5400
HDP5002-2	800	1070	2980	95.8	88	54.8	383.5	700	262	60	180	17.0	5590
HDP5003-2		1210	2980	95.9	88	61.6	431.0	700	294	60	180	18.0	5780
HDP5004-2		1340	2980	96.0	88	68.3	478.4	700	327	60	180	19.0	5980
HDP5005-2		1500	2980	96.1	88	76.5	535.3	700	366	60	180	20.0	6200

#### HDP 10kV Technical Data of HDP 10kV High Voltage and High-Efficiency Three Phase Asynchronous Motor

							Current			Torque		Moment	
Motor Type	Rate Pow		Rated Speed	Efficiency	Power Factor	Fu <b>ll</b> Load	Locked Rotor	Locked Rotor	Full Load	Locked Rotor	Pull Out	of inertia (J)	Approx Weight
	kW	(HP)	RPM	%	%	А	A	%FLC	kg-m	%FLT	%FLT	kg-m²	kg
HDP5001-4	710	950	1485	96.0	87	49.1	343.6	700	466	70	180	28.0	4530
HDP5002-4	800	1070	1485	96.0	87	55.3	387.1	700	525	70	180	28.6	4660
HDP5003-4	900	1210	1485	96.1	88	61.4	430.1	700	591	70	180	30.0	4820
HDP5004-4	1000	1340	1485	96.2	88	68.2	477.4	700	656	70	180	32.0	5110
HDP5005-4	1120	1500	1485	96.3	88	76.3	534.1	700	735	70	180	33.8	5400
HDP5001-6	500	670	995	95.1	83	36.6	219.4	600	490	70	180	40.0	4460
HDP5002-6	560	750	995	95.2	84	40.4	242.6	600	548	70	180	43.0	4630
HDP5003-6	630	845	995	95.5	84	45.3	272.1	600	617	70	180	46.0	4770
HDP5004-6	710	950	995	95.6	84	51.0	306.3	600	695	70	180	49.0	5000
HDP5005-6	800	1070	995	95.7	84	57.5	344.7	600	784	70	180	52.5	5400
HDP500B-8	280	375	740	94.0	77	22.3	134.0	600	369	70	180	39.0	4050
HDP5001-8	315	420	740	94.2	77	25.1	150.4	600	415	70	180	43.0	4150
HDP5002-8	355	475	740	94.4	77	28.2	169.2	600	467	70	180	45.0	4470
HDP5003-8	400	535	740	94.6	78	31.3	187.8	600	527	70	180	45.0	4560
HDP5004-8	450	605	740	94.6	78	35.2	211.3	600	593	70	180	50.0	4850
HDP5005-8	500	670	740	95.0	79	38.5	230.8	600	658	70	180	53.0	4970
HDP5006-8	560	750	740	95.1	79	43.0	258.2	600	737	70	180	57.0	5120
HDP5002-10	250	335	595	93.6	74	20.8	114.6	550	409	70	180	49.0	4100
HDP5003-10	280	375	595	93.8	74	23.3	128.1	550	459	70	180	49.5	4240
HDP5004-10	315	420	595	94.0	74	26.1	143.8	550	516	70	180	50.0	4400
HDP5005-10	355	475	595	94.2	75	29.0	159.6	550	581	70	180	52.0	4620
HDP5006-10	400	535	595	94.3	75	32.7	179.6	550	655	70	180	53.5	4850
HDP5601-2	1250	1680	2980	96.3	89	84.2	589.4	700	409	60	180	23.0	6900
HDP5602-2	1400	1880	2980	96.4	89	94.2	659.5	700	458	60	180	25.0	7200
HDP5603-2	1600	2140	2980	96.4	89	107.7	753.7	700	523	60	180	27.0	7500
HDP5601-4	1250	1680	1485	96.4	89	84.1	588.8	700	820	70	180	46.0	5900
HDP5602-4	1400	1880	1485	96.5	89	94.1	658.8	700	919	70	180	54.0	6200
HDP5603-4	1600	2140	1485	96.6	89	107.4	752.1	700	1050	70	180	59.0	6500
HDP5601-6	900	1210	990	95.9	85	63.7	382.5	600	886	70	180	73.0	5700
HDP5602-6	1000	1340	990	96.0	85	70.8	424.5	600	984	70	180	75.0	5930
HDP5603-6	1120	1500	990	96.2	85	79.1	474.5	600	1102	70	180	78.0	6180
HDP5604-6	1250	1680	990	96.3	86	87.1	522.9	600	1230	70	180	81.5	6430
HDP5601-8	630	845	740	95.5	82	46.4	278.7	600	830	70	180	83.0	5570

#### HDP 10kV Technical Data of HDP 10kV High Voltage and High-Efficiency Three Phase Asynchronous Motor

							Current			Torque		Moment	
Motor Type		ted wer	Rated Speed	Efficiency	Power Factor	Full Load	Locked Rotor	Locked Rotor	Full Load	Locked Rotor	Pu <b>ll</b> Out	of inertia (J)	Approx Weight
	kW	(HP)	RPM	%	%	A	A	%FLC	kg-m	%FLT	%FLT	kg-m²	kg
HDP5602-8	710	950	740	95.6	82	52.3	313.8	600	935	70	180	88.0	5820
HDP5603-8	800	1070	740	95.7	82	58.9	353.2	600	1054	70	180	93.5	6080
HDP5604-8	900	1210	740	95.8	82	66.1	396.9	600	1185	70	180	99.0	6350
HDP5601-10	450	605	590	94.5	77	35.7	214.2	600	743	70	180	98.0	5540
HDP5602-10	500	670	590	94.6	77	39.6	237.8	600	826	70	180	102.0	5870
HDP5603-10	560	750	590	94.7	78	43.8	262.6	600	925	70	180	104.0	6280
HDP5604-10	630	845	590	94.9	78	49.1	294.8	600	1041	70	180	109.0	6680
HDP5605-10	710	950	590	95.1	78	55.3	331.6	600	1173	70	180	118.0	7050
HDP5601-12	315	420	490	93.7	73	26.6	159.5	600	626	70	180	95.0	5580
HDP5602-12	355	475	490	93.9	73	29.9	179.4	600	706	70	180	104.0	5790
HDP5603-12	400	535	490	94.1	73	33.6	201.7	600	796	70	180	110.0	6040
HDP5604-12	450	605	490	94.2	73	37.8	226.7	600	895	70	180	121.0	6280
HDP5605-12	500	670	490	94.5	73	41.8	251.1	600	994	70	180	126.0	6530
HDP6301-2	1800	2410	2982	96.5	90	119.7	837.6	700	588	60	180	65.0	8800
HDP6302-2	2000	2680	2982	96.6	90	132.8	929.7	700	654	60	180	72.0	9200
HDP6303-2	2240	3000	2982	96.8	90	148.5	1039.2	700	732	60	180	80.0	9600
HDP6301-4	1800	2410	1492	96.7	89	120.8	845.3	700	1176	60	180	95.0	7580
HDP6302-4	2000	2680	1493	96.8	89	134.0	938.2	700	1305	60	180	100.0	7950
HDP6303-4	2240	3000	1493	96.9	89	150.0	1049.7	700	1462	60	180	110.0	8330
HDP6301-6	1400	1880	995	96.5	86	97.4	584.4	600	1371	60	180	128.0	7420
HDP6302-6	1600	2140	995	96.6	86	111.2	667.2	600	1567	60	180	141.0	7780
HDP6303-6	1800	2410	995	96.6	86	125.1	750.6	600	1763	60	180	157.0	8100
HDP6301-8	1000	1340	744	96.0	83	72.5	434.8	600	1310	70	180	147.0	7800
HDP6302-8	1120	1500	744	96.1	83	81.1	486.4	600	1467	70	180	167.0	8100
HDP6303-8	1250	1680	745	96.2	83	90.4	542.3	600	1635	70	180	182.0	8400
HDP6301-10	800	1070	594	95.4	80	60.5	363.1	600	1312	70	180	174.0	7800
HDP6302-10	900	1210	593	95.6	80	67.9	407.7	600	1479	70	180	183.0	8120
HDP6303-10	1000	1340	593	95.6	80	75.5	453.0	600	1643	70	180	199.0	8420
HDP6304-10	1120	1500	593	95.7	80	84.5	506.8	600	1841	70	180	210.0	8780
HDP6301-12	560	750	492	94.7	74	46.1	276.8	600	1109	70	180	172.0	7730
HDP6302-12	630	845	493	94.9	74	51.8	310.8	600	1245	70	180	188.0	8050
HDP6303-12	710	950	493	95.1	74	58.3	349.5	600	1403	70	180	202.0	8320
HDP6304-12	800	1070	492	95.3	74	65.5	393.0	600	1585	70	180	213.0	8650



#### **Mounting Dimensions for Installation**

Frame	Poles			Λ	Aounting Di	mensions (	mm)			
Size	10163	А	В	с	D	E	F	G	н	K1
400	2	710±1.75	$1000 \pm 1.75$	375±4	80 <sup>+0.030</sup> +0.011	170±0.5	0 22 _0.052	71 _ <sub>-0.2</sub>	400 <sup>0</sup> -1	35 <sup>+0.62</sup>
400	4~8	710±1.75	1000±1.75	335±4	110 <sup>+0.035</sup> +0.013	210±0.57	28 _0.052	100 0 _0.2	400 0 -1	35 <sup>+0.62</sup> 0
450	2	800±1.75	1120±1.75	400±4	90 +0.035 +0.013	170±0.57	25 0 -0.052	81 0 -0.2	450 0 -1	35 <sup>+0.62</sup> 0
450	4~8	800±1.75	1120±1.75	355±4	110 <sup>+0.035</sup> +0.013	210±0.57	28 0 -0.062	100 0 _0.2	450 0 -1	35 <sup>+0.62</sup> 0
500	2	900±2.1	1250±2.1	560±4	100 <sup>+0.035</sup> +0.013	210±0.57	28 _0 _0.052	90 0 -0.2	500 <sup>0</sup> -1	42 <sup>+0.62</sup> 0
500	4	900±2.1	1250±2.1	475±4	120 <sup>+0.040</sup> +0.015	210±0.57	32 _0.062	109 _0.2	500 <sup>0</sup> -1	42 <sup>+0.62</sup> 0
500	6~10	900±2.1	1250±2.1	475±4	130 <sup>+0.040</sup> +0.015	250±0.57	32 _0.062	119 _0.3	500 <sup>0</sup> -1	42 <sup>+0.62</sup> 0
560	2	1000±2.1	$1400\!\pm\!2.1$	560±4	130 <sup>+0.04</sup> +0.015	250±0.57	32 _0.052	119 _0.2	560 0 -1	42 <sup>+0.62</sup> 0
560	4	1000±2.1	$1400\!\pm\!2.1$	500±4	150 <sup>+0.04</sup> +0.015	250±0.57	36 _0.062	138 _0.3	560 <sup>0</sup> -1	42 <sup>+0.62</sup> 0
560	6~12	1000±2.1	$1400\!\pm\!2.1$	500±4	160 <sup>+0.04</sup> +0.015	300±0.65	40 _0.062	147 _0.3	560 <sup>0</sup> -1	42 <sup>+0.62</sup> 0
630	2	1120±2.1	1600±2.1	560±4	140 <sup>+0.04</sup> +0.015	250±0.57	36 _0.062	128 _0	630	48 <sup>+0.62</sup> 0
630	4	1120±2.1	1600±2.1	530±4	170 <sup>+0.04</sup> +0.015	300±0.65	40 _0.062	157 _0.3	630	48 <sup>+0.62</sup> 0
630	6~12	1120±2.1	1600±2.1	530±4	180 <sup>+0.04</sup> +0.015	300±0.65	45 _0.062	165 _0.3	630 0 -1	48 <sup>+0.62</sup> 0

#### **Outline Dimensions for Installation**

Frame	Poles				Outline Di	mensions (I	mm)			
Size	i oles	AC	AD	AB	BB	HA	HD	L1	L2	L
400	2	570	900	900	1450	30	850	249	606	1830
400	4~6	570	900	900	1510	30	850	209	626	2000
450	2	600	926	980	1530	40	960	255	515	1910
450	4~8	600	926	980	1638	32	960	242	657	2055
500	2	660	1115	1112	1720	50	1790	330	990	2370
500	4	660	1000	1112	1720	35	1065	310	669	2160
500	6~12	660	1000	1112	1720	35	1065	310	669	2200
560	2	740	1200	1216	1940	55	1920	270	1120	2650
560	4	740	1050	1216	1938	45	1185	320	815	2475
560	6~12	740	1050	1216	1938	45	1185	320	815	2525
630	2	850	1350	1396	2100	55	2200	265	1320	2950
630	4~12	825	1150	1396	2080	50	1307	365	685	2677



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HAA Series High Voltage and High-Efficiency Three Phase Asynchronous Motor



#### HAA 6kV Technical Data of HAA 6kV High Voltage and High-Efficiency Three Phase Asynchronous Motor

						Current			Torque			
Motor Type	Rated Power	Rated Speed	Efficiency	Power Factor	Full Load	Locked Rotor	Locked Rotor	Full Load	Locked Rotor	Pull Out	Moment of inertia (J)	Approx
	kW (HP)	RPM	%	%	А	A	%FLC	kg-m	%FLT	%FLT	kg-m <sup>2</sup>	kg
HAA3551-2	220 295	2975	94.0	85	26.5	185.5	700	72	60	180	3.5	2500
HAA3552-2	250 335	2975	94.2	85	30.0	210.3	700	82	60	180	3.8	2580
HAA3553-2	280 375	2975	94.4	85	33.6	235.1	700	92	60	180	4.0	2670
HAA3554-2	315 420	2975	94.6	85	37.7	263.9	700	103	60	180	4.3	2880
HAA3551-4	185 250	1485	93.8	85	22.3	145.1	650	121	70	180	4.7	2150
HAA3552-4	200 270	1480	94.0	85	24.1	156.6	650	132	70	180	4.8	2210
HAA3553-4	220 295	1480	94.2	85	26.4	171.9	650	145	70	180	5.0	2300
HAA3554-4	250 335	1480	94.4	85	30.0	194.9	650	165	70	180	5.7	2390
HAA355A-6	185 250	985	93.9	82	23.1	138.7	600	183	70	180	9.3	2280
HAA355B-6	200 270	985	94.1	82	24.9	149.7	600	198	70	180	9.5	2380
HAA4002-2	355 475	2980	94.8	86	41.9	293.3	700	116	60	180	5.2	2740
HAA4003-2	400 535	2980	95.2	86	47.0	329.1	700	131	60	180	5.5	3000
HAA4004-2	450 605	2980	95.4	86	52.8	369.5	700	147	60	180	5.8	3230
HAA4005-2	500 670	2980	95.6	86	58.5	409.6	700	164	60	180	6.2	3490
HAA4002-4	280 375	1485	94.2	86	33.3	216.2	650	184	70	180	12.0	3090
HAA4003-4	315 420	1485	94.6	86	37.3	242.2	650	207	70	180	12.0	3190
HAA4004-4	355 475	1485	95.0	86	41.8	271.8	650	233	70	180	13.0	3290
HAA4005-4	400 535	1485	95.1	86	47.1	305.9	650	262	70	180	14.0	3400
HAA4006-4	450 605	1485	95.3	86	52.8	343.4	650	295	70	180	16.0	3510
HAA4001-6	185 250	990	93.4	82	23.2	139.5	600	182	70	180	13.0	2880
HAA4002-6	200 270	990	93.6	82	25.1	150.5	600	197	70	180	14.0	2980
HAA4003-6	220 295	990	93.8	82	27.5	165.1	600	217	70	180	15.0	3100
HAA4004-6	250 335	990	94.0	82	31.2	187.3	600	246	70	180	16.0	3220
HAA4005-6	280 375	990	94.3	82	34.8	209.1	600	276	70	180	16.0	3350
HAA4006-6	315 420	990	94.5	82	39.1	234.7	600	310	70	180	17.0	3500
HAA4003-8	185 250	740	93.5	78	24.4	134.3	550	244	80	180	20.0	3230
HAA4004-8	200 270	740	93.7	78	26.3	144.8	550	263	80	180	20.0	3400
HAA4005-8	220 295	740	93.9	78	28.9	159.0	550	290	80	180	21.0	3560
HAA4502-2	560 750	2980	95.7	86	65.5	458.3	700	183	60	180	9.0	4250
HAA4503-2	630 845	2980	95.8	87	72.7	509.2	700	206	60	180	11.0	4400
HAA4504-2	710 950	2980	96.0	87	81.8	572.6	700	232	60	180	13.0	4500
HAA4505-2	800 1070	2980	96.0	87	92.2	645.2	700	262	60	180	15.0	4660
HAA4502-4	500 670	1485	95.4	86	58.6	381.2	650	328	70	180	16.0	3800
HAA4503-4	560 750	1485	95.6	86	65.5	426.0	650	367	70	180	17.0	3890
HAA4504-4	630 845	1485	95.8	86	73.6	478.3	650	413	70	180	19.0	4030
HAA4505-4	710 950	1485	96.0	86	82.8	537.9	650	466	70	180	20.0	4140
HAA4502-6	355 475	985	95.1	83	43.3	259.7	600	351	70	180	24.0	4210
HAA4503-6	400 535	985	95.1	83	48.8	292.6	600	396	70	180	25.0	4310
HAA4504-6	450 605	985	95.4	83	54.7	328.1	600	445	70	180	26.0	4540
HAA4505-6	500 670	985	95.6	83	60.6	363.8	600	495	70	180	28.0	4680

#### HAA 6kV Technical Data of HAA 6kV High Voltage and High-Efficiency Three Phase Asynchronous Motor

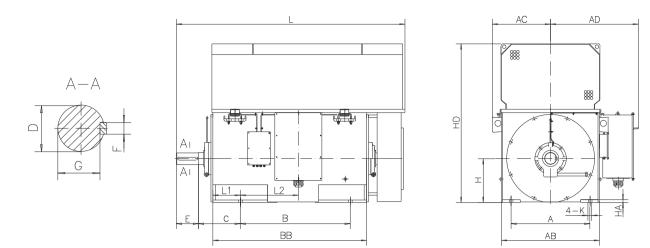
						Current			Torque			
Motor Type	Rated Power	Rated Speed	Efficiency	Power Factor	Full Load	Locked	Locked Rotor	Fu <b>ll</b> Load	Locked	Pull Out	Moment of inertia (J)	Approx Weight
	kW (HP)	RPM	%	%	A	A	%FLC	kg-m	%FLT	%FLT	kg-m <sup>2</sup>	kg
HAA4502-8	250 335	740	94.0	79	32.4	178.2	550	329	80	180	25.0	4110
HAA4503-8	280 375	740	94.2	79	36.2	199.1	550	369	80	180	27.0	4350
HAA4504-8	315 420	740	94.4	79	40.6	223.6	550	415	80	180	29.0	4610
HAA4505-8	355 475	740	94.7	79	45.7	251.1	550	467	80	180	31.0	4850
HAA4501-10	185 250	585	92.7	75	25.6	140.8	550	308	80	180	25.0	3980
HAA4502-10	200 270	585	92.9	75	27.6	151.9	550	333	80	180	27.0	4120
HAA4503-10	220 295	585	93.1	75	30.3	166.8	550	366	80	180	29.0	4260
HAA4504-10	250 335	585	93.3	75	34.4	189.1	550	416	80	180	31.0	4440
HAA4505-10	280 375	585	93.5	75	38.4	211.3	550	466	80	180	25.0	4620
HAA4504-12	185 250	490	92.8	70	27.4	150.7	550	368	80	180	40.0	4280
HAA4505-12	200 270	490	93.0	70	29.6	162.6	550	398	80	180	42.0	4430
HAA5001-2	900 1210	2980	96.2	87	103.5	724.3	700	294	60	180	17.0	6600
HAA5002-2	1000 1340	2980	96.3	87	114.9	804.0	700	327	60	180	19.0	6850
HAA5003-2	1120 1500	2980	96.4	87	128.5	899.5	700	366	60	180	21.0	7150
HAA5004-2	1250 1680	2980	96.5	87	143.3	1002.9	700	409	60	180	23.0	7400
HAA5001-4	800 1070	1485	96.0	87	92.2	599.1	650	525	70	180	29.0	5340
HAA5002-4	900 1210	1485	96.1	87	103.6	673.3	650	591	70	180	32.0	5500
HAA5003-4	1000 1340	1485	96.2	87	115.0	747.3	650	656	70	180	34.0	5850
HAA5004-4	1120 1500	1485	96.3	87	128.6	836.2	650	735	70	180	37.0	6120
HAA5001-6	560 750	990	95.7	84	67.0	402.2	600	551	70	180	42.0	5100
HAA5002-6	630 845	990	95.8	84	75.3	452.0	600	620	70	180	45.0	5200
HAA5003-6	710 950	990	96.0	84	84.7	508.3	600	699	70	180	47.0	5340
HAA5004-6	800 1070	990	96.0	84	95.5	572.8	600	787	70	180	50.0	5490
HAA5001-8	400 535	740	94.9	80	50.7	278.8	550	527	80	180	46.0	4970
HAA5002-8	450 605	740	95.0	80	57.0	313.4	550	593	80	180	50.0	5140
HAA5003-8	500 670	740	95.4	80	63.0	346.7	550	658	80	180	53.0	5330
HAA5004-8	560 750	740	95.5	80	70.5	387.9	550	737	80	180	57.0	5520
HAA5001-10	315 420	585	94.0	76	42.4	233.4	550	525	80	180	54.0	5000
HAA5002-10	355 475	585	94.2	76	47.7	262.4	550	591	80	180	58.0	5140
HAA5003-10	400 535	585	94.6	76	53.5	294.5	550	666	80	180	63.0	5320
HAA5004-10	450 605	585	94.6	76	60.2	331.3	550	750	80	180	66.0	5480
HAA5004-10	220 295	490	93.5	70	31.4	173.0	550	438	80	180	51.0	5030
HAA5001-12 HAA5002-12	250 335	490	93.7	72	31.4	175.0	550	430	80	180	55.0	5200
HAA5002-12	280 375	490	93.9	72	39.9	219.2	550	557	80	180	60.0	5410
HAA5003-12 HAA5004-12	315 420	490	93.9	72	44.7	219.2	550	626	80	180	67.0	5630
HAA5601-2	1400 1880	2980	94.1	88	158.5	1109.3	700	458	60	180	39.0	8860
							700			180		9060
HAA5602-2	1600 2140 1800 2410	2980	96.7 96.7	88 88	180.9 203 5	1266.5 1424.8	700	523 589	60	180	44.0 51.0	9060
HAA5603-2		2980			203.5				60		51.0	
HAA5601-4	1250 1680	1485 1485	96.4	88	141.8	921.6	650	820	60	180	55.0	7500

#### HAA 6kV Technical Data of HAA 6kV High Voltage and High-Efficiency Three Phase Asynchronous Motor

						Current			Torque		Moment	
Motor Type	Rated Power	Rated Speed	Efficiency	Power Factor	Full Load	Locked Rotor	Locked Rotor	Fu <b>ll</b> Load	Locked Rotor	Pull Out	of inertia (J)	Approx Weight
	kW (HP)	RPM	%	%	А	A	%FLC	kg-m	%FLT	%FLT	kg-m <sup>2</sup>	kg
HAA5603-4	1600 2140	1485	96.5	88	181.3	1178.5	650	1050	60	180	65.0	7730
HAA5601-6	900 1210	990	96.1	85	106.0	689.2	650	886	70	180	74.0	7050
HAA5602-6	1000 1340	990	96.2	85	117.7	764.9	650	984	70	180	79.0	7250
HAA5603-6	1120 1500	990	96.3	85	131.7	855.8	650	1102	70	180	85.0	7450
HAA5601-8	630 845	740	95.6	82	77.3	464.0	600	830	70	180	88.0	7300
HAA5602-8	710 950	740	95.6	82	87.2	522.9	600	935	70	180	94.0	7525
HAA5603-8	800 1070	740	95.7	82	98.1	588.6	600	1054	70	180	100.0	7750
HAA5601-10	500 670	590	94.8	78	65.1	390.4	600	826	70	180	103.0	6900
HAA5602-10	560 750	590	94.9	78	72.8	436.8	600	925	70	180	112.0	7075
HAA5603-10	630 845	590	95.0	78	81.8	490.9	600	1041	70	180	120.0	7270
HAA5604-10	710 950	590	95.1	78	92.1	552.6	600	1173	70	180	129.0	7500
HAA5601-12	355 475	490	94.3	74	49.0	293.7	600	706	70	180	111.0	6920
HAA5602-12	400 535	490	94.6	74	55.0	329.9	600	796	70	180	121.0	7100
HAA5603-12	450 605	490	94.6	74	61.9	371.1	600	895	70	180	132.0	7290
HAA5604-12	500 670	490	94.9	74	68.5	411.1	600	994	70	180	145.0	7480
HAA6301-2	2000 2680	2982	96.8	88	225.9	1581.5	700	654	60	180	70.0	9550
HAA6302-2	2240 3000	2982	96.9	88	252.8	1769.5	700	732	60	180	78.0	10100
HAA6303-2	2500 3350	2982	96.9	88	282.1	1974.8	700	817	60	180	85.0	10600
HAA6301-4	1800 2410	1485	96.6	88	203.8	1324.4	650	1181	60	180	126.0	9400
HAA6302-4	2000 2680	1485	96.7	88	226.2	1470.1	650	1312	60	180	140.0	9800
HAA6303-4	2240 3000	1485	96.8	88	253.0	1644.8	650	1470	60	180	156.0	10300
HAA6301-6	1250 1680	990	96.4	86	145.1	943.1	650	1230	70	180	140.0	9600
HAA6302-6	1400 1880	990	96.4	86	162.5	1056.3	650	1378	70	180	151.0	10100
HAA6303-6	1600 2140	990	96.5	86	185.5	1205.9	650	1575	70	180	164.0	10500
HAA6301-8	900 1210	740	95.7	84	107.7	646.4	600	1185	70	180	152.0	9140
HAA6302-8	1000 1340	740	95.8	84	119.6	717.5	600	1317	70	180	163.0	9410
HAA6303-8	1120 1500	740	95.9	84	133.8	802.7	600	1475	70	180	175.0	9910
HAA6304-8	1250 1680	740	96.0	84	149.2	895.0	600	1646	70	180	188.0	10300
HAA6301-10	800 1070	590	95.3	80	101.0	605.8	600	1321	70	180	171.0	8710
HAA6302-10	900 1210	590	95.4	80	113.5	680.9	600	1487	70	180	186.0	9310
HAA6303-10	1000 1340	590	95.5	80	126.0	755.7	600	1652	70	180	202.0	9710
HAA6304-10	1120 1500	590	95.6	80	140.9	845.5	600	1850	70	180	219.0	10100
HAA6301-12	560 750	490	95.0	76	74.6	447.8	600	1114	70	180	208.0	9490
HAA6302-12	630 845	490	95.1	76	83.9	503.3	600	1253	70	180	222.0	9690
HAA6303-12	710 950	490	95.1	76	94.5	567.2	600	1412	70	180	238.0	9910
HAA6304-12	800 1070	490	95.3	76	106.3	637.7	600	1591	70	180	255.0	10250

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#### HAA 6kV HAA 6kV High Voltage and High-Efficiency Three Phase Asynchronous Motor



#### **Mounting Dimensions for Installation**

Frame					Mounting Di	mensions (	mm)			
Size	Poles	А	В	с	D	E	F	G	Н	K1
355	2	630±1.75	900±1.75	315±4	80 <sup>+0.030</sup> +0.011	170±0.5	0 22 <u>-0.052</u>	71 _0.2	$355_{-1}^{0}$	28 <sup>+0.62</sup>
355	4~6	630±1.75	900±1.75	315±4	100 <sup>+0.035</sup> +0.013	210±0.5	0 28 <sub>-0.052</sub>	90 _0.2	355 _0 _1	28 <sup>+0.62</sup>
400	2	710±1.75	$1000 \pm 1.75$	375±4	90 <sup>+0.035</sup> +0.013	170±0.5	25 _0.052	81 _0.2	400 _0 _1	35 <sup>+0.62</sup>
400	4~8	710±1.75	$1000 \pm 1.75$	335±4	110 $^{+0.035}_{+0.013}$	210±0.57	0 28 <sub>-0.052</sub>	100 _0.2	400 _0 _1	35 <sup>+0.62</sup>
450	2	800±1.75	$1120 \pm 1.75$	400±4	$100 \begin{array}{c} +0.035 \\ +0.013 \end{array}$	210±0.57	0 28 <sub>-0.052</sub>	90 _ <sub>0.2</sub>	450 _1	35 <sup>+0.62</sup>
450	4	800±1.75	1120±1.75	355±4	$120 \begin{array}{c} +0.035 \\ +0.013 \end{array}$	210±0.57	32 <u>_0.062</u>	109 _0.2	450 _0 _1	35 <sup>+0.62</sup>
450	6~12	800±1.75	$1120 \pm 1.75$	$355{\pm}4$	130 $^{+0.040}_{+0.015}$	$250{\pm}0.57$	32 <sub>-0.062</sub>	00 1190.2	450 _1	35 <sup>+0.62</sup>
500	2	900±2.1	1250±2.1	560±4	110 $^{+0.035}_{+0.013}$	210±0.57	28 _0.052	100 _0.2	500 _1	42 <sup>+0.62</sup>
500	4	900±2.1	1250±2.1	475±4	130 <sup>+0.04</sup> +0.015	$250{\pm}0.57$	32 <u>_0.062</u>	119 _0.2	500 _0 _1	42 <sup>+0.62</sup>
500	6~10	900±2.1	1250±2.1	475±4	$140 \begin{array}{c} +0.04 \\ +0.015 \end{array}$	$250{\pm}0.57$	36 <sub>-0.062</sub>	128 _0.3	500 _0 _1	42 <sup>+0.62</sup>
560	2	$1000\!\pm\!2.1$	$1400\!\pm\!2.1$	560±4	130 $^{+0.04}_{+0.015}$	$250{\pm}0.57$	0 32 <sub>-0.062</sub>	00 1190.2	560 _1	42 <sup>+0.62</sup>
560	4	$1000\!\pm\!2.1$	$1400 {\pm} 2.1$	500±4	150 $^{+0.04}_{+0.015}$	$250{\pm}0.57$	36 <sub>-0.062</sub>	138 _0.3	560 _1	42 <sup>+0.62</sup>
560	6~12	1000±2.1	1400±2.1	500±4	$160 \begin{array}{c} +0.04 \\ +0.015 \end{array}$	300±0.65	40 <sub>-0.062</sub>	147 _0.3	560 _0 _1	42 <sup>+0.62</sup>
630	2	1120±2.1	1600±2.1	560±4	$140 \begin{array}{c} +0.04 \\ +0.015 \end{array}$	$250{\pm}0.57$	36 <sub>-0.062</sub>	128 _0.3	630 _1	48 <sup>+0.62</sup>
630	4	$1120 {\pm} 2.1$	1600±2.1	530±4	$170 \begin{array}{c} +0.04 \\ +0.015 \end{array}$	$300\!\pm\!0.65$	40 _0.062	157 _0.3	630 _1	48 <sup>+0.62</sup>
630	6~12	1120±2.1	1600±2.1	530±4	$180 \begin{array}{c} +0.04 \\ +0.015 \end{array}$	$300\!\pm\!0.65$	45 <sub>-0.062</sub>	165 _0.3	630 _1	48 <sup>+0.62</sup>

#### **Outline Dimensions for Installation**

Frame	Poles				Outline D	imensions	(mm)			
Size	i oles	AC	AD	AB	BB	HA	HD	L1	L2	L
355	2	495	760	780	1350	25	1400	189	515	2100
355	4~6	495	760	780	1400	25	1300	200	530	2100
400	2	560	900	908	1450	36	1455	249	606	2200
400	4~6	560	900	900	1510	30	1455	209	626	2241
450	2	600	926	980	1530	40	1650	287	538	2270
450	4	600	926	980	1638	32	1650	242	577	2325
450	4~12	600	926	980	1638	32	1650	242	577	2430
500	2	660	1115	1112	1720	50	2200	330	990	2920
500	4	660	1000	1112	1720	35	1805	310	669	2572
500	6~12	660	1000	1112	1720	35	1805	310	669	2572
560	2	740	1200	1216	1940	55	2500	270	1120	3400
560	4	740	1050	1216	1938	45	2120	320	755	2840
560	6~12	740	1050	1216	1938	45	2120	320	755	2890
630	2	850	1350	1396	2080	55	2900	265	1320	3430
630	4~12	825	1150	1396	2120	50	2155	365	685	3044

#### HAA 10kV Technical Data of HAA 10kV High Voltage and High-Efficiency Three Phase Asynchronous Motor

							Current			Torque		Moment	
Motor Type	Rate Pow		Rated Speed	Efficiency	Power Factor	Fu <b>ll</b> Load	Locked Rotor	Locked Rotor	Fu <b>ll</b> Load	Locked Rotor	Pull Out	of inertia (J)	Approx Weight
	kW	(HP)	RPM	%	%	А	A	%FLC	kg-m	%FLT	%FLT	kg-m²	kg
HAA4001-2	200	270	2975	93.0	85	14.6	109.6	750	66	60	180	4.8	2995
HAA4002-2	220	295	2975	93.2	85	16.0	120.3	750	72	60	180	5.1	2995
HAA4003-2	250	335	2975	93.4	85	18.2	136.4	750	82	60	180	5.5	3100
HAA4001-4	200	270	1485	93.1	83	14.9	104.6	700	131	70	180	8.5	2950
HAA4002-4	220	295	1485	93.4	83	16.4	114.7	700	144	70	180	8.8	3035
HAA4003-4	250	335	1485	93.6	83	18.6	130.1	700	164	70	180	9.2	3130
HAA4501-2	280	375	2975	94.3	87	19.7	137.9	700	92	60	180	10.6	3500
HAA4502-2	315	420	2975	94.7	87	22.1	154.5	700	103	60	180	11.0	3565
HAA4503-2	355	475	2980	95.0	87	24.8	173.6	700	116	60	180	11.3	3670
HAA4504-2	400	535	2980	95.2	87	27.9	195.2	700	131	60	180	11.8	3760
HAA4505-2	450	605	2980	95.4	87	31.3	219.1	700	147	60	180	12.0	3850
HAA4506-2	500	670	2980	95.5	87	34.7	243.2	700	164	60	180	12.6	3960
HAA4501-4	280	375	1485	94.0	86	20.0	140.0	700	184	70	180	13.6	3435
HAA4502-4	315	420	1485	94.3	86	22.4	157.0	700	207	70	180	14.5	3495
HAA4503-4	355	475	1485	94.6	86	25.2	176.4	700	233	70	180	15.0	3615
HAA4504-4	400	535	1485	94.7	86	28.4	198.5	700	262	70	180	16.0	3660
HAA4505-4	450	605	1485	95.1	86	31.8	222.4	700	295	70	180	17.0	3740
HAA4506-4	500	670	1485	95.1	86	35.3	247.1	700	328	70	180	18.1	3880
HAA4503-6	250	335	980	93.6	82	18.8	112.8	600	249	70	180	22.0	4990
HAA4504-6	280	375	980	93.9	82	21.0	126.0	600	278	70	180	22.7	5140
HAA4505-6	315	420	980	94.2	82	23.5	141.3	600	313	70	180	24.3	5300
HAA4506-6	355	475	980	94.4	82	26.5	158.9	600	353	70	180	25.1	5520
HAA4501-8	200	270	745	93.0	75	16.6	91.1	550	262	70	180	31.0	4960
HAA4502-8		295	745	93.3	75	18.2	99.8	550	288	70	180	32.0	5080
HAA5001-2		750	2980	95.7	88	38.4	268.7	700	183	60	180	20.0	4880
HAA5002-2	630	845	2980	95.8	88	43.1	302.0	700	206	60	180	21.0	4990
HAA5003-2		950	2980	95.9	88	48.6	340.0	700	232	60	180	22.0	5120
HAA5004-2		1070	2980	96.1	88	54.6	382.3	700	262	60	180	23.0	5280
HAA5005-2		1210	2980	96.2	88	61.4	429.7	700	294	60	180	24.0	5420
HAA5001-4		750	1485	95.6	87	38.9	272.1	700	367	70	180	24.0	5180
HAA5002-4		845	1485	95.8	87	43.6	305.5	700	413	70	180	28.6	5430
	710	950	1485		87	49.1		700	466	70	180	30.0	5690
HAA5003-4 HAA5004-4		1070	1485	96.0 96.0	87	55.3	343.6 387.1	700	525	70	180	31.2	5940
HAA5004-4		1210	1485	96.0 96.1	87 87	62.2	435.1	700	525 591	70	180	32.5	6240
									392	70	180		
HAA5001-6	400	535 605	995	95.1	84 	28.9	210.7	650		70		40.0	5010
HAA5002-6	450	605	995	95.4	84	32.4	210.7	650	441	70	180	43.0	5160 6250
HAA5003-6		670	995	95.6	84 	35.9	233.7	650	490 549		180	46.0	6350
HAA5004-6	560	750	995	95.7	84	40.2	261.4	650	548	70	180	49.0	5540
HAA5005-6	630	845	995	95.8	84	45.2	293.8	650	617	70 70	180	51.0	5750

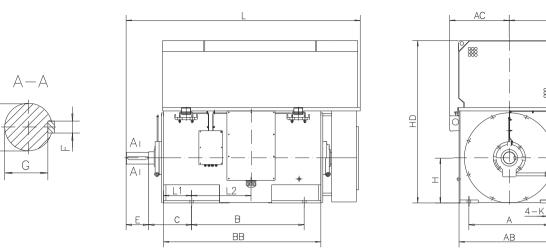
## HAA 10kV Technical Data of HAA 10kV High Voltage and High Efficiency Three Phase Asynchronous Motor

							Current			Torque		Moment	
Motor Type	Rate Powe		Rated Speed	Efficiency	Power Factor	Fu <b>ll</b> Load	Locked Rotor	Locked Rotor	Fu <b>ll</b> Load	Locked Rotor	Pu <b>ll</b> Out	Moment of inertia (J)	Approx Weight
	kW	(HP)	RPM	%	%	А	А	%FLC	kg-m	%FLT	%FLT	kg-m <sup>2</sup>	kg
HAA5002-8	280	375	745	94.2	77	22.3	133.7	600	366	70	180	41.0	5250
HAA5003-8	315	420	745	94.5	78	24.7	148.0	600	412	70	180	43.0	5420
HAA5004-8	355	475	745	94.7	78	27.7	166.5	600	464	70	180	45.0	5570
HAA5005-8	400	535	745	94.9	79	30.8	184.8	600	523	70	180	47.0	5720
HAA5006-8	450	605	745	95.0	79	34.6	207.7	600	589	70	180	50.0	5880
HAA5007-8	500	670	745	95.4	79	38.3	229.8	600	654	70	180	52.0	6040
HAA5003-10	220	295	595	93.2	74	18.4	101.3	550	360	70	180	48.0	4910
HAA5004-10	250	335	595	93.5	74	20.9	114.7	550	409	70	180	50.0	4990
HAA5005-10	280	375	595	93.8	75	23.0	126.4	550	459	70	180	52.0	5130
HAA5006-10	315	420	595	94.0	75	25.8	141.9	550	516	70	180	54.0	5290
HAA5601-2	1000 1	1340	2980	96.3	89	67.4	471.6	700	327	60	180	39.0	8860
HAA5602-2	1120 1	1500	2980	96.4	89	75.4	527.6	700	366	60	180	44.0	9060
HAA5603-2	1250 1	1680	2980	96.5	89	84.0	588.2	700	409	60	180	51.0	9280
HAA5601-4	1000 1	1340	1490	96.2	87	69.0	448.4	650	654	60	180	40.0	8610
HAA5602-4	1120 1	1500	1490	96.3	87	77.2	501.7	650	733	60	180	46.0	9010
HAA5603-4	1250 1	1680	1490	96.4	87	86.1	559.3	650	818	60	180	54.0	9510
HAA5604-4	1400 1	880	1490	96.4	87	96.4	626.5	650	916	60	180	59.0	9900
HAA5601-6	710	950	995	96.0	85	50.2	326.5	650	695	70	180	70.0	8260
HAA5602-6	800 1	1070	995	96.0	85	56.6	367.9	650	784	70	180	73.0	8780
HAA5603-6	900 1	1210	995	96.1	85	63.6	413.5	650	881	70	180	75.0	9330
HAA5604-6	1000 1	1340	995	96.2	85	70.6	459.0	650	979	70	180	78.0	9820
HAA5601-8	500	670	745	95.4	80	37.8	227.0	600	654	70	180	81.0	7720
HAA5602-8	560	750	745	95.5	80	42.3	253.9	600	733	70	180	83.0	8160
HAA5603-8	630	845	745	95.6	81	47.0	281.8	600	824	70	180	88.0	8640
HAA5604-8	710	950	745	95.6	81	52.9	317.6	600	929	70	180	93.5	9160
HAA5601-10	355	475	595	94.2	77	28.3	155.4	550	581	70	180	89.0	7240
HAA5602-10	400	535	595	94.6	77	31.7	174.4	550	655	70	180	91.0	7590
HAA5603-10	450	605	595	94.6	77	35.7	196.2	550	737	70	180	95.0	7980
HAA5604-10	500	670	595	94.8	78	39.0	214.7	550	819	70	180	99.0	8350
HAA5605-10	560	750	595	94.9	78	43.7	240.2	550	917	70	180	101.0	8750
HAA5601-12	250	335	495	93.4	73	21.2	116.4	550	492	70	180	95.0	6690

#### HAA 10kV Technical Data of HAA 10kV High Voltage and High-Efficiency Three Phase Asynchronous Motor

							Current			Torque		Moment	
Motor Type	Rat Pov		Rated Speed	Efficiency	Power Factor	Fu <b>ll</b> Load	Locked Rotor	Locked Rotor	Fu <b>ll</b> Load	Locked Rotor	Pu <b>ll</b> Out	of inertia (J)	Approx Weight
	kW	(HP)	RPM	%	%	А	А	%FLC	kg-m	%FLT	%FLT	kg-m²	kg
HAA5602-12	280	375	495	93.7	73	23.6	130.0	550	551	70	180	99.0	6940
HAA5603-12	315	420	495	94.0	73	26.5	145.8	550	620	70	180	103.0	7300
HAA5604-12	355	475	495	94.3	73	29.8	163.8	550	699	70	180	107.0	7580
HAA5605-12	400	535	495	94.6	73	33.4	183.9	550	787	70	180	110.0	7860
HAA6301-2	1400	1880	2982	96.6	89	94.0	658.1	700	458	60	180	65.0	9560
HAA6302-2	1600	2140	2982	96.7	89	107.3	751.4	700	523	60	180	70.0	9950
HAA6303-2	1800	2410	2982	96.7	88	122.1	854.9	700	588	60	180	78.0	10380
HAA6304-2	2000	2680	2982	96.8	89	134.0	938.2	700	654	60	180	85.0	10820
HAA6301-4	1400	1880	1490	96.4	88	95.3	619.3	650	916	60	180	87.0	9700
HAA6302-4	1600	2140	1492	96.5	88	108.8	707.1	650	1045	60	180	91.0	9900
HAA6303-4	1800	2410	1492	96.6	88	122.3	794.7	650	1176	60	180	95.0	10100
HAA6304-4	2000	2680	1492	96.7	88	135.7	882.0	650	1306	60	180	99.0	10300
HAA6301-6	1120	1500	995	96.3	86	78.1	468.5	600	1097	60	180	127.0	9400
HAA6302-6	1250	1680	995	96.4	86	87.1	522.3	600	1224	60	180	139.0	9900
HAA6303-6	1400	1880	995	96.4	86	97.5	585.0	600	1371	60	180	149.0	10400
HAA6304-6	1600	2140	995	96.5	86	111.3	667.9	600	1567	60	180	157.0	10900
HAA630A-8	710	950	742	95.6	83	51.7	310.0	600	932	70	180	135.0	8800
HAA6301-8	800	1070	742	95.7	83	58.2	348.9	600	1051	70	180	142.0	9020
HAA6302-8	900	1210	742	95.8	83	65.4	392.1	600	1182	70	180	150.0	9350
HAA6303-8	1000	1340	742	95.9	83	72.5	435.2	600	1313	70	180	158.0	9700
HAA6304-8	1120	1500	742	96.0	83	81.2	486.9	600	1471	70	180	168.0	10500
HAA6301-10	630	845	595	95.0	79	48.5	290.8	600	1032	70	180	165.0	8700
HAA6302-10	710	950	595	95.1	79	54.6	327.4	600	1163	70	180	174.0	9000
HAA6303-10	800	1070	595	95.3	79	61.4	368.1	600	1310	70	180	183.0	9320
HAA6304-10	900	1210	595	95.4	79	68.9	413.7	600	1474	70	180	199.0	9720
HAA6305-10	1000	1340	595	95.5	79	76.5	459.2	600	1638	70	180	210.0	10150
HAA6301-12	450	605	495	94.6	74	37.1	222.7	600	886	70	180	158.0	9220
HAA6302-12	500	670	495	94.9	74	41.1	246.6	600	984	70	180	172.0	9500
HAA6303-12	560	750	495	95.0	74	46.0	276.0	600	1102	70	180	188.0	9720
HAA6304-12	630	845	495	95.1	74	51.7	310.1	600	1240	70	180	202.0	9920
HAA6305-12	710	950	495	95.1	74	58.3	349.5	600	1398	70	180	213.0	10150

#### HAA 10kV HAA 10kV High Voltage and High-Efficiency Three Phase Asynchronous Motor



#### **Mounting Dimensions for Installation**

 $\square$ 

Frame	Poles				Mounting	Dimension	s (mm)			
Size	i oles	А	В	C	D	E	F	G	н	K1
400	2	710±1.75	$1000 \pm 1.75$	375±4	80 <sup>+0.030</sup> +0.011	170±0.5	22 _0.052	71 0 _0.2	400 <sup>0</sup> <sub>-1</sub>	35 <sup>+0.62</sup> 0
400	4~8	710±1.75	1000±1.75	335±4	110 +0.035 +0.013	210±0.57	28 0 -0.052	100 0 -0.2	400 0 -1	35 +0.62 0
450	2	800±1.75	1120±1.75	400±4	90 +0.035 +0.013	170±0.57	25 0 -0.052	81 0 -0.2	450 <sup>0</sup> -1	35 +0.62 0
450	4~8	800±1.75	1120±1.75	355±4	110 +0.035 +0.013	210±0.57	28 0 -0.062	100 0 -0.2	450 <sup>0</sup> -1	35 +0.62 0
500	2	900±2.1	1250±2.1	560±4	100 <sup>+0.035</sup> +0.013	210±0.57	28 _0 _0.052	90 0 -0.2	500 <sup>0</sup> -1	42 <sup>+0.62</sup> 0
500	4	900±2.1	1250±2.1	475±4	120 <sup>+0.040</sup> +0.015	210±0.57	32 0 -0.062	109 0 _0.2	500 <sup>0</sup> -1	42 <sup>+0.62</sup> 0
500	6~12	900±2.1	1250±2.1	475±4	130 <sup>+0.040</sup> +0.015	250±0.57	32 _0.062	119 0 -0.3	500 <sup>0</sup> -1	42 <sup>+0.62</sup> 0
560	2	1000±2.1	1400±2.1	560±4	130 <sup>+0.04</sup> +0.015	250±0.57	32 _0.052	119 _0.2	560 0 -1	42 <sup>+0.62</sup> 0
560	4	1000±2.1	1400±2.1	500±4	150 <sup>+0.04</sup> +0.015	250±0.57	36 _0.062	138 _0 _0.3	560 <sup>0</sup> -1	42 <sup>+0.62</sup> 0
560	6~12	1000±2.1	1400±2.1	500±4	160 <sup>+0.04</sup> +0.015	300±0.65	40 _0.062	147 _0.3	560 0 -1	42 <sup>+0.62</sup> 0
630	2	1120±2.1	1600±2.1	560±4	140 <sup>+0.04</sup> +0.015	250±0.57	36 _0.062	128 _0	630 0 -1	48 <sup>+0.62</sup> 0
630	4	1120±2.1	1600±2.1	530±4	170 <sup>+0.04</sup> +0.015	300±0.65	40 _0.062	157 _0.3	630 0 -1	48 <sup>+0.62</sup> 0
630	6~12	1120±2.1	1600±2.1	530±4	180 <sup>+0.04</sup> +0.015	300±0.65	45 _0.062	165 _0	630 _1	48 <sup>+0.62</sup> 0

#### **Outline Dimensions for Installation**

Frame	Poles				Outline D	Dimensions	(mm)			
Size	, ones	AC	AD	AB	BB	НА	HD	L1	L2	L
400	2	560	900	908	1450	36	1455	249	606	2200
400	4~6	560	900	900	1510	30	1455	209	626	2241
450	2	605	934	1000	1530	40	1650	250	515	2175
450	4~8	600	926	980	1638	32	1650	242	577	2325
500	2									
500	4	660	1000	1112	1720	35	1805	310	669	2532
500	6~12	660	1000	1112	1720	35	1805	310	669	2572
560	2									
560	4	740	1050	1216	1938	45	2120	320	755	2840
560	6~12	740	1050	1216	1938	45	2120	320	755	2890
630	2									
630	4~12	825	1150	1396	2120	50	2155	365	685	3044

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AD

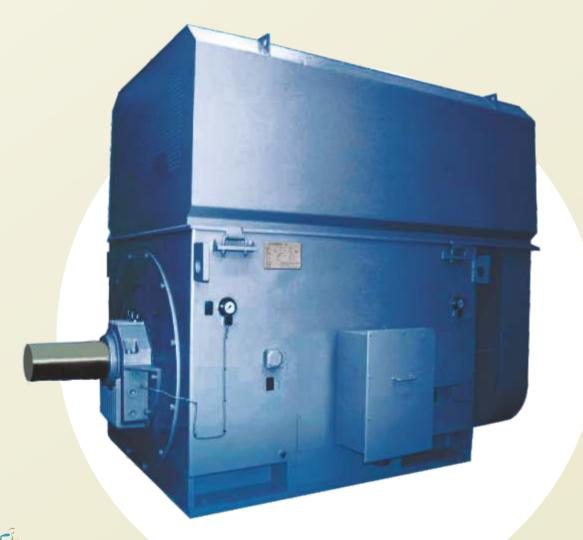
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### Large High-Efficiency Three Phase Asynchronous Motor





#### HDP 6kV Technical Data of HDP 6kV Large High-Efficiency Three Phase Asynchronous Motor

							Current			Torque		
Motor Type		ted wer	Rated Speed	Efficiency	Power Factor	Full Load	Locked Rotor	Locked Rotor	Fu <b>ll</b> Load	Locked Rotor	Pull Out	Approx Weight
	kW	(HP)	RPM	%	%	A	A	%FLC	kg-m	%FLT	%FLT	kg
HDP710-1-4	3150	4200	1490	97.0	87.0	359.2	2335	650	2060	50	180	13500
HDP710-2-4	3550	4760	1490	97.0	87.0	404.8	2631	650	2322	50	180	13800
HDP710-3-4	4000	5330	1490	97.1	87.0	455.6	2962	650	2616	50	180	14000
HDP710-4-4	4500	6000	1490	97.1	87.0	512.6	3332	650	2943	50	180	14200
HDP710-5-4	5000	6670	1490	97.2	88.0	562.5	3656	650	3270	50	180	14500
HDP710-4	5600	7470	1490	97.2	88.0	630.0	4095	650	3663	50	180	15000
HDP800-1-4	5000	6670	1490	97.2	88.0	562.5	3656	650	3270	50	180	16000
HDP800-2-4	5600	7470	1490	97.2	88.0	630.0	4095	650	3663	50	180	16500
HDP800-3-4	6300	8400	1490	97.3	88.0	708.0	4602	650	4120	50	180	17000
HDP800-4-4	7100	9470	1490	97.3	88.0	797.9	5187	650	4644	50	180	17500
HDP800-5-4	8000	10700	1490	97.3 97.4	88.0	898.2	5838	650	5232	50	180	18000
HDP900-1-4									4644			
	7100 8000	9470	1490	97.3	88.0	797.9 899.1	5187 5844	650		50	180	23500
HDP900-2-4 HDP900-3-4	9000	10700	1490	97.3	88.0			650	5232	50	180	25000
		12000	1490	97.5	88.0	1009.4	6561	650	5886	50	180	27000
HDP710-1-6	2240	3000	994	96.7	86.0	259.2	1685	650	2196	60	180	13000
HDP710-2-6	2500	3330	994	96.8	86.0	289.0	1878	650	2451	60	180	13200
HDP710-3-6	2800	3730	994	96.9	86.0	323.3	2102	650	2745	60	180	13400
HDP710-4-6	3150	4200	994	96.9	86.0	363.7	2364	650	3088	60	180	13600
HDP710-5-6	3550	4760	994	96.9	86.0	409.9	2665	650	3480	60	180	13800
HDP710-6	4000	5330	994	97.0	86.0	461.4	2999	650	3921	60	180	14000
HDP800-1-6	3550	4760	994	96.9	86.0	409.9	2665	650	3480	60	180	16000
HDP800-2-6	4000	5330	994	97.0	86.0	461.4	2999	650	3921	60	180	16500
HDP800-3-6	4500	6000	994	97.0	86.0	519.1	3374	650	4412	60	180	17200
HDP800-4-6	5000	6670	994	97.1	86.0	576.2	3745	650	4902	60	180	17800
HDP800-5-6	5600	7470	994	97.1	87.0	637.9	4146	650	5490	60	180	18200
HDP800-6	6300	8400	994	97.2	87.0	716.9	4660	650	6176	60	180	18500
HDP900-1-6	5600	7470	994	97.1	87.0	637.9	4146	650	5490	60	180	23400
HDP900-2-6	6300	8400	994	97.2	87.0	716.9	4660	650	6176	60	180	25000
HDP900-3-6	7100	9470	994	97.3	87.0	807.1	5246	650	6961	60	180	26500
HDP1000-1-6	8000	10700	994	97.3	87.0	909.4	5911	650	7843	60	180	28000
HDP1000-2-6	9000	12000	994	97.4	87.0	1022.0	6643	650	8823	60	180	29500
HDP1000-3-6	10000	13330	994	97.5	87.0	1134.4	7374	650	9804	60	180	31500
HDP710-1-8	1800	2400	740	96.2	85.0	211.8	1377	650	2370	60	180	13200
HDP710-2-8	2000	2670	740	96.3	85.0	235.1	1528	650	2634	60	180	13400
HDP710-3-8	2240	3000	740	96.4	85.0	263.1	1710	650	2950	60	180	13400
HDP710-3-8	2500	3330	740	96.5	85.0	203.1	1906	650	3292	60	180	13800
HDP710-4-8	2800	3730	740	96.6	85.0	328.1	2133	650	3687	60	180	14000
HDP710-5-8							1906					
	2500	3330	740	96.5	85.0	293.3		650	3292	60	180	15500
HDP800-2-8	2800	3730	740	96.6	85.0	328.1	2133	650	3687	60	180	16200
HDP800-3-8	3150	4200	740	96.6	85.0	369.2	2400	650	4148	60	180	17000
HDP800-4-8	3550	4760	740	96.7	86.0	410.8	2670	650	4675	60	180	17600
HDP800-5-8	4000	5330	740	96.8	86.0	462.4	3005	650	5268	60	180	18200
HDP800-8	4500	6000	740	96.9	86.0	519.6	3378	650	5926	60	180	19000
HDP900-1-8	4000	5330	740	96.8	86.0	462.4	3005	650	5268	60	180	23300
HDP900-2-8	4500	6000	740	96.9	86.0	519.6	3378	650	5926	60	180	24800
HDP900-3-8	5000	6670	740	96.9	86.0	577.4	3753	650	6584	60	180	26300
HDP1000-1-8	5600	7470	740	96.9	86.0	646.6	4203	650	7375	60	180	27000
HDP1000-2-8	6300	8400	740	97.0	86.0	726.7	4724	650	8296	60	180	28500
HDP1000-3-8	7100	9470	740	97.1	86.0	818.2	5318	650	9350	60	180	30000
HDP1000-4-8	8000	10700	740	97.2	86.0	920.9	5986	650	10535	60	180	31500

## HDP 6kV Technical Data of HDP 6kV Large High-Efficiency Three Phase Asynchronous Motor

							Current			Torque		
Motor Type		ted wer	Rated Speed	Efficiency	Power Factor	Full Load	Locked Rotor	Locked Rotor	Fu <b>ll</b> Load	Locked Rotor	Pull Out	Approx Weight
	kW	(HP)	RPM	%	%	A	A	%FLC	kg-m	%FLT	%FLT	kg
HDP710-1-10	1600	2130	595	95.9	83.0	193.4	1161	600	2620	60	180	13000
HDP710-2-10	1800	2400	595	96.0	83.0	217.4	1304	600	2948	60	180	13200
HDP710-3-10	2000	2670	595	96.1	83.0	241.3	1448	600	3276	60	180	13400
HDP710-4-10	2240	3000	595	96.2	83.0	270.0	1620	600	3669	60	180	13700
HDP710-5-10	2500	3330	595	96.3	83.0	301.0	1806	600	4094	60	180	14000
HDP800-1-10	2240	3000	595	96.2	83.0	270.0	1620	600	3669	60	180	15000
HDP800-2-10	2500	3330	595	96.3	83.0	301.0	1806	600	4094	60	180	15800
HDP800-3-10	2800	3730	595	96.4	83.0	336.7	2020	600	4586	60	180	16600
HDP800-4-10	3150	4200	595	96.4	84.0	374.3	2246	600	5159	60	180	17500
HDP800-5-10	3550	4760	595	96.5	84.0	421.4	2529	600	5814	60	180	19000
HDP900-1-10	3150	4200	595	96.4	84.0	374.3	2246	600	5159	60	180	23300
HDP900-2-10	3550	4760	595	96.5	84.0	421.4	2529	600	5814	60	180	24600
HDP900-3-10	4000	5330	595	96.6	84.0	474.4	2846	600	6551	60	180	25900
HDP900-4-10	4500	6000	595	96.6	84.0	533.7	3202	600	7370	60	180	27000
HDP900-4-10 HDP1000-1-10	5000	6670	595	96.7	84.0	592.3	3554	600	8189	60	180	27000
HDP1000-1-10 HDP1000-2-10	5600	7470	595	96.7	84.0	663.4	3980	600	9172	60	180	27300
HDP1000-2-10	6300								10318	60		30000
		8400	595	96.8	84.0	745.6	4473	600			180	
HDP1000-4-10	7100	9470	595	96.8	84.0	840.2	5041	600	11628	60	180	31500
HDP710-1-12	1120	1500	495	95.5	79.0	142.9	857	600	2205	60	180	12000
HDP710-2-12	1250	1670	495	95.6	79.0	159.3	956	600	2461	60	180	12300
HDP710-3-12	1400	1870	495	95.7	79.0	178.2	1069	600	2756	60	180	12500
HDP710-4-12	1600	2130	495	95.7	80.0	201.1	1207	600	3150	60	180	12800
HDP710-5-12	1800	2400	495	95.8	80.0	226.0	1356	600	3544	60	180	13100
HDP800-1-12	1600	2130	495	95.7	80.0	201.1	1207	600	3150	60	180	15000
HDP800-2-12	1800	2400	495	95.8	80.0	226.0	1356	600	3544	60	180	15500
HDP800-3-12	2000	2670	495	95.9	80.0	250.9	1505	600	3937	60	180	16000
HDP800-4-12	2240	3000	495	96.0	80.0	280.7	1684	600	4410	60	180	16500
HDP800-4-12	2500	3330	495	96.1	81.0	309.1	1854	600	4922	60	180	17000
HDP800-12	2800	3730	495	96.2	81.0	345.8	2075	600	5512	60	180	18000
HDP900-1-12	2500	3330	495	96.1	81.0	309.1	1854	600	4922	60	180	24000
HDP900-2-12	2800	3730	495	96.2	81.0	345.8	2075	600	5512	60	180	25500
HDP900-3-12	3150	4200	495	96.6	81.0	387.4	2324	600	6201	60	180	27000
HDP1000-1-12	3550	4760	495	96.4	81.0	437.5	2625	600	6989	60	180	27200
HDP1000-2-12	4000	5330	495	96.4	81.0	492.9	2958	600	7875	60	180	28700
HDP1000-3-12	4500	6000	495	96.4	81.0	554.6	3327	600	8859	60	180	29800
HDP1000-4-12	5000	6670	495	96.5	81.0	615.5	3693	600	9843	60	180	31000
HDP710-1-16	630	840	370	94.4	73.0	88.0	528	600	1659	60	180	11500
HDP710-2-16	710	950	370	94.5	73.0	99.0	594	600	1870	60	180	12000
HDP710-3-16	800	1070	370	94.6	73.0	111.5	669	600	2107	60	180	12500
HDP710-4-16	900	1200	370	94.7	73.0	125.3	752	600	2370	60	180	13000
HDP710-4-16	1000	1330	370	94.8	74.0	137.2	823	600	2634	60	180	13500
HDP710-16	1120	1490	370	94.9	74.0	153.5	921	600	2950	60	180	14000
HDP800-1-16	1000	1330	370	94.8	74.0	133.5	823	600	2634	60	180	14800
HDP800-2-16	1120	1490	370	94.9	74.0	153.5	921	600	2950	60	180	15500
HDP800-3-16	1250	1670	370	95.0	74.0	171.1	1027	600	3292	60	180	16200
HDP800-3-16	1400	1870	370	95.0	74.0	171.1	1149	600	3687	60	180	16200
HDP800-4-16	1600	2130	370	95.1	75.0	215.9	1295	600	4214	60	180	17700
HDP800-16	1800	2400	370	95.2	75.0	242.6	1456	600	4741	60	180	18400
HDP900-1-16	1600	2130	370	95.1	75.0	215.9	1295	600	4214	60	180	24200
HDP900-2-16	1800	2400	370	95.2	75.0	242.6	1456	600	4741	60	180	25500
HDP900-3-16	2000	2670	370	95.3	75.0	269.3	1616	600	5268	60	180	26800
HDP1000-1-16	2240	3000	370	95.4	75.0	301.3	1808	600	5900	60	180	28000
HDP1000-2-16	2500	3330	370	95.5	75.0	335.9	2015	600	6584	60	180	29500
HDP1000-3-16	2800	3730	370	95.6	75.0	375.8	2255	600	7375	60	180	31000

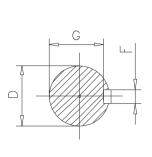
#### HDP 10kV Technical Data of HDP 10kV Large High-Efficiency Three Phase Asynchronous Motor

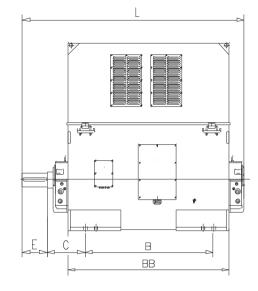
							Current			Torque		
Motor Type		ted wer	Rated Speed	Efficiency	Power Factor	Full Load	Locked Rotor	Locked Rotor	Full Load	Locked Rotor	Pull Out	Approx Weight
	kW	(HP)	RPM	%	%	A	A	%FLC	kg-m	%FLT	%FLT	kg
HDP710-6-4	2500	3330	1488	96.9	86.0	173.2	1126	650	1637	60	180	11500
HDP710-7-4	2800	3730	1488	96.9	86.0	194.0	1261	650	1834	60	180	12000
HDP710-8-4	3150	4200	1488	96.9	86.0	218.2	1419	650	2063	60	180	12500
HDP710-9-4	3500	4760	1488	96.9	86.0	242.5	1576	650	2292	60	180	13000
HDP710-4	4000	5330	1488	96.9	87.0	273.9	1781	650	2620	60	180	13500
HDP710-4	4500	6000	1488	96.9	87.0	308.2	2003	650	2947	60	180	14000
HDP800-6-4	4000	5330	1488	96.9	87.0	273.9	1781	650	2620	60	180	14100
HDP800-7-4	4500	6000	1488	96.9	87.0	308.2	2003	650	2947	60	180	14500
HDP800-8-4	5000	6670	1488	97.0	87.0	342.1	2224	650	3274	60	180	15000
HDP800-9-4	5600	7470	1488	97.0	87.0	383.1	2490	650	3667	60	180	15500
HDP800-4	6300	8400	1488	97.1	87.0	430.6	2799	650	4126	60	180	16000
HDP800-4	7100	9470	1488	97.2	87.0	484.8	3151	650	4650	60	180	16500
HDP900-6-4	6300	8400	1488	97.1	87.0	430.6	2799	650	4126	60	180	16600
HDP900-7-4	7100	9470	1488	97.2	87.0	484.8	3151	650	4650	60	180	17600
HDP900-8-4	8000	10700	1488	97.3	87.0	545.6	3547	650	5239	60	180	18500
HDP1000-6-4	9000	12000	1488	97.3	87.0	613.9	3990	650	5894	60	180	19500
HDP1000-7-4	10000	13330	1488	97.4	87.0	681.4	4429	650	6549	60	180	20500
HDP710-6-6	2000	2670	993	96.6	84.0	142.3	925	650	1963	60	180	11800
HDP710-7-6	2240	3000	993	96.6	84.0	159.4	1036	650	2198	60	180	12300
HDP710-8-6	2500	3330	993	96.6	84.0	177.9	1156	650	2453	60	180	12800
HDP710-9-6	2800	3730	993	96.7	84.0	199.0	1294	650	2748	60	180	13300
HDP710-6	3150	4200	993	96.7	84.0	223.9	1455	650	3091	60	180	13800
HDP800-6-6	2800	3730	993	96.7	84.0	199.0	1294	650	2748	60	180	14000
HDP800-7-6	3150	4200	993	96.7	84.0	223.9	1455	650	3091	60	180	14800
HDP800-8-6	3500	4760	993	96.8	84.0	248.5	1615	650	3435	60	180	14500
HDP800-9-6		5330	993			248.5						15200
	4000			96.9	84.0		1844	650	3925	60	180	
HDP800-6	4500	6000	993	96.9	86.0	311.8	2027	650	4416	60	180	16000
HDP900-6-6	4000	5330	993	96.9	84.0	283.7	1844	650	3925	60	180	16200
HDP900-7-6	4500	6000	993	96.9	86.0	311.8	2027	650	4416	60	180	17000
HDP900-8-6	5000	6670	993	96.9	86.0	346.4	2252	650	4907	60	180	18000
HDP900-9-6	5600	7470	993	96.9	86.0	388.0	2522	650	5496	60	180	19000
HDP1000-6-6	6300	8400	993	97.0	86.0	436.0	2834	650	6183	60	180	19200
HDP1000-7-6	7100	9470	993	97.1	86.0	490.9	3191	650	6968	60	180	20000
HDP1000-8-6	8000	10700	993	97.2	86.0	552.6	3592	650	7851	60	180	20800
HDP710-6-8	1600	2130	740	96.2	83.0	115.7	752	650	2107	60	180	11800
HDP710-7-8	1800	2400	740	96.2	83.0	130.2	846	650	2370	60	180	12300
HDP710-8-8	2000	2670	740	96.2	83.0	144.6	940	650	2634	60	180	12800
HDP710-9-8	2240	3000	740	96.2	83.0	162.0	1053	650	2950	60	180	13300
HDP710-8	2500	3330	740	96.3	83.0	180.6	1174	650	3292	60	180	13800
HDP710-8	2800	3730	740	96.4	83.0	202.0	1313	650	3687	60	180	14300
HDP800-6-8	2500	3330	740		83.0			650	3292	60	180	14300
				96.3		180.6	1174					
HDP800-7-8	2800	3730	740	96.4	83.0	202.0	1313	650	3687	60	180	14800
HDP800-8-8	3150	4200	740	96.4	84.0	224.6	1460	650	4148	60	180	15300
HDP800-9-8	3550	4760	740	96.5	84.0	252.9	1644	650	4675	60	180	15800
HDP900-6-8	3150	4200	740	96.4	84.0	224.6	1460	650	4148	60	180	16500
HDP900-7-8	3550	4760	740	96.5	84.0	252.9	1644	650	4675	60	180	17500
IDP1000-6-8	4000	5330	740	96.6	84.0	284.6	1850	650	5268	60	180	18000
IDP1000-7-8	4500	6000	740	96.7	84.0	319.9	2079	650	5926	60	180	19000
IDP1000-8-8	5000	6670	740	96.8	84.0	355.0	2308	650	6584	60	180	20000

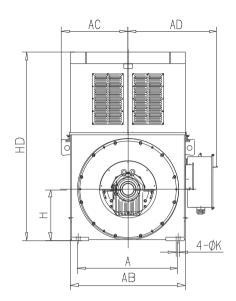
#### HDP 10kV Technical Data of HDP 10kV Large High-Efficiency Three Phase Asynchronous Motor

							Current			Torque		
Motor Type		ted wer	Rated Speed	Efficiency	Power Factor	Full Load	Locked Rotor	Locked Rotor	Fu <b>ll</b> Load	Locked Rotor	Pull Out	Approx Weight
	kW	(HP)	RPM	%	%	A	A	%FLC	kg-m	%FLT	%FLT	kg
HDP710-6-10	1250	1670	595	95.7	81.0	93.1	559	600	2047	60	180	11000
HDP710-7-10	1400	1870	595	95.7	81.0	104.3	626	600	2293	60	180	11500
HDP710-8-10	1600	2130	595	95.7	81.0	119.2	715	600	2620	60	180	12000
HDP710-9-10	1800	2400	595	95.8	81.0	133.9	804	600	2948	60	180	12500
HDP710-10	2000	2670	595	95.9	81.0	148.7	892	600	3276	60	180	13000
HDP800-6-10	1800	2400	595	95.8	81.0	133.9	804	600	2948	60	180	13500
HDP800-7-10	2000	2670	595	95.9	81.0	148.7	892	600	3276	60	180	14000
HDP800-8-10	2240	3000	595	96.0	81.0	166.3	998	600	3669	60	180	14500
HDP800-9-10	2500	3330	595	96.0	82.0	183.4	1100	600	4094	60	180	15000
HDP800-10	2800	3730	595	96.1	82.0	205.2	1231	600	4586	60	180	15800
HDP900-6-10	2500	3330	595	96.0	82.0	183.4	1100	600	4094	60	180	17000
HDP900-7-10	2300	3730	595		82.0	205.2	1231	600	4094	60	180	18300
				96.1								
HDP1000-6-10	3150	4200	595	96.2	83.0	227.8	1367	600	5159	60	180	19300
HDP1000-7-10	3550	4760	595	96.3	83.0	256.4	1539	600	5814	60	180	20300
HDP710-6-12	900	1200	495	95.3	76.0	71.7	430	600	1772	60	180	11200
HDP710-7-12	1000	1330	495	95.3	76.0	79.7	478	600	1969	60	180	11700
HDP710-8-12	1120	1490	495	95.3	76.0	89.3	536	600	2205	60	180	12200
HDP710-9-12	1250	1670	495	95.3	78.0	97.1	583	600	2461	60	180	12700
HDP710-12	1400	1870	495	95.4	78.0	108.6	652	600	2756	60	180	13200
HDP800-6-12	1250	1670	495	95.3	78.0	97.1	583	600	2461	60	180	13500
HDP800-7-12	1400	1870	495	95.4	78.0	108.6	652	600	2756	60	180	14000
HDP800-8-12	1600	2130	495	95.5	78.0	124.0	744	600	3150	60	180	14500
HDP800-9-12	1800	2400	495	95.6	79.0	137.6	826	600	3544	60	180	15000
HDP800-12	2000	2670	495	95.6	79.0	152.9	917	600	3937	60	180	15000
HDP900-6-12	1800	2400	495	95.6	79.0	137.6	826	600	3544	60	180	15500
HDP900-7-12	2000	2670	495	95.6	79.0	152.9	917	600	3937	60	180	16300
HDP900-8-12	2240	3000	495	95.7	79.0	171.1	1026	600	4410	60	180	17000
HDP1000-6-12	2500	3330	495	95.8	80.0	188.3	1130	600	4922	60	180	17500
HDP1000-7-12	2800	3730	495	95.9	80.0	210.7	1264	600	5512	60	180	18000
HDP1000-8-12	3150	4200	495	96.0	80.0	236.8	1421	600	6201	60	180	19000
HDP1000-9-12	3550	4760	495	96.0	80.0	266.9	1601	600	6989	60	180	20200
HDP710-6-16	500	660	370	94.3	72.0	42.5	276	650	1317	60	180	10800
HDP710-7-16	560	750	370	94.3	72.0	47.6	309	650	1475	60	180	11300
HDP710-8-16	630	840	370	94.5	72.0	53.5	347	650	1659	60	180	11700
HDP710-9-16	710	950	370	94.6	72.0	60.2	391	650	1870	60	180	11100
HDP710-16	800	1070	370	94.6	73.0	66.9	435	650	2107	60	180	11600
HDP710-16	900	1200	370	94.7	73.0	75.2	489	650	2370	60	180	12100
HDP800-6-16	800	1070	370	94.6	73.0	66.9	435	650	2107	60	180	12800
HDP800-7-16	900	1200	370	94.7	73.0	75.2	489	650	2370	60	180	12400
HDP800-8-16	1000	1330	370	94.8	73.0	83.4	542	650	2634	60	180	13000
HDP800-9-16	1120	1490	370	94.9	73.0	93.3	607	650	2950	60	180	13600
HDP800-16	1250	1670	370	95.0	73.0	104.1	676	650	3292	60	180	14200
HDP800-16	1400	1870	370	95.1	73.0	116.4	757	650	3687	60	180	15000
HDP900-6-16	1250	1670	370	95.0	73.0	104.1	676	650	3292	60	180	15500
HDP900-7-16	1400	1870	370	95.1	73.0	116.4	757	650	3687	60	180	16300
HDP900-8-16	1600	2130	370	95.1	73.0	133.1	865	650	4214	60	180	17100
HDP1000-6-16	1800	2400	370	95.2	74.0	147.5	959	650	4741	60	180	18200
HDP1000-7-16	2000	2670	370	95.3	74.0	163.7	1064	650	5268	60	180	19000
HDP1000-8-16	2240	3000	370	95.4	74.0	183.2	1191	650	5900	60	180	19800
HDP1000-9-16	2500	3330	370	95.5	74.0	204.2	1328	650	6584	60	180	20600









#### **Mounting Dimensions for Installation**

Frame	Poles				Mounting D	imensions	(mm)			
Size	I Oles	А	В	С	D	E	F	G	н	К
710	4~16	1400±2.8	1800±2.8	530±4	+0.046 200 <sub>+0.017</sub>	350±0.65	0 45 <sub>-0.062</sub>	0 185 <sub>-0.3</sub>	710 0 -1	+0.62 56 <sub>0</sub>
800	4~16	1600±2.8	2000±2.8	530±4	+0.046 220 <sub>+0.017</sub>	350±0.65	0 50 -0.062	0 231 <sub>-0.3</sub>	800 0 -1	+0.62 56 <sub>0</sub>
900	4~16	1800±3.5	2240±3.5	600±4	+0.046 250 <sub>+0.017</sub>	410±0.77	0 56 <sub>-0.074</sub>	0 230 <sub>-0.3</sub>	900 0 -1	+0.62 66 <sub>0</sub>
1000	4~16	2000±3.5	2500±3.5	600±4	280 <sup>+0.052</sup> +0.020	470±0.77	63 0 -0.074	260 <sup>0</sup> -0.3	0 1000 <sub>-1</sub>	+0.62 66 0

#### **Outline Dimensions for Installation**

Frame	Poles			Outline Din	nensions (mn	ו)		BEA	RING
Size	i oles	AC	AD	AB	BB	HD	L	DE	NDE
710	4 6~16	930	1350	1600	2265	2650	3150	18-180B 18-200B	18-180BJ 18-200BJ
800	4 6~16	1028	1562	1800	2300	2900	3220	18-200B 22-225B	18-200BJ 22-225BJ
900	4 6~16	1140	1690	2000	2600	3200	3600	18-200B 22-250B	18-200BJ 22-250BJ
1000	4 6~16	1280	1820	2300	2900	3400	4100	22-250B 28-280B	22-250BJ 28-280BJ

#### HAA 6kV Technical Data of HAA 6kV Large High-Efficiency Three Phase Asynchronous Motor

							Current			Torque		
Motor Type		ted wer	Rated Speed	Efficiency	Power Factor	Fu <b>ll</b> Load	Locked Rotor	Locked Rotor	Fu <b>ll</b> Load	Locked Rotor	Pull Out	Appro> Weigh
	kW	(HP)	RPM	%	%	А	A	%FLC	kg-m	%FLT	%FLT	kg
HAA710-1-4	2800	3730	1490	96.9	87.0	319.6	2077	650	1831	50	180	12800
HAA710-2-4	3150	4200	1490	97.0	87.0	359.2	2335	650	2060	50	180	13300
HAA710-3-4	3550	4760	1490	97.0	87.0	404.8	2631	650	2322	50	180	13800
HAA710-4-4	4000	5330	1490	97.1	87.0	455.6	2962	650	2616	50	180	14300
HAA710-5-4	4500	6000	1490	97.1	88.0	506.8	3294	650	2943	50	180	14800
HAA710-4	5000	6670	1490	97.2	88.0	562.5	3656	650	3270	50	180	15300
HAA800-1-4	4500	6000	1490	97.1	88.0	506.8	3294	650	2943	50	180	16000
HAA800-2-4	5000	6670	1490	97.2	88.0	562.5	3656	650	3270	50	180	16600
HAA800-3-4	5600	7470	1490	97.2	88.0	630.0	4095	650	3663	50	180	17200
HAA800-4-4	6300	8400	1490	97.3	88.0	708.0	4602	650	4120	50	180	17800
HAA800-5-4	7100	9470	1490	97.3	88.0	797.9	5187	650	4644	50	180	18600
HAA900-1-4	6300	8400	1490	97.3	88.0	708.0	4602	650	4120	50	180	21000
HAA900-2-4	7100	9470	1490	97.3	88.0	797.9	5187	650	4644	50	180	22000
HAA900-3-4	8000	10700	1490	97.4	88.0	898.2	5838	650	5232	50	180	23000
HAA710-1-6	2000	2670	994	96.7	86.0	231.4	1504	650	1961	60	180	12500
HAA710-2-6	2240	3000	994	96.7	86.0	259.2	1685	650	2196	60	180	12800
HAA710-3-6	2500	3330	994	96.8	86.0	289.0	1878	650	2451	60	180	13200
HAA710-4-6	2800	3730	994	96.9	86.0	323.3	2102	650	2745	60	180	13600
HAA710-5-6	3150	4200	994	96.9	86.0	363.7	2364	650	3088	60	180	14000
HAA710-6	3550	4760	994	96.9	86.0	409.9	2665	650	3480	60	180	14500
HAA800-1-6	3150	4200	994	96.9	86.0	363.7	2364	650	3088	60	180	15200
HAA800-2-6	3550	4760	994	96.9	86.0	409.9	2665	650	3480	60	180	16000
HAA800-3-6	4000	5330	994	97.0	86.0	461.4	2999	650	3921	60	180	16800
HAA800-4-6	4500	6000	994	97.0	86.0	519.1	3374	650	4412	60	180	17600
HAA800-5-6	5000	6670	994	97.1	87.0	569.6	3702	650	4902	60	180	18200
HAA800-5-0	5600	7470	994	97.1	87.0	637.9	4146	650	5490	60	180	19000
HAA900-1-6	5000	6670	994	97.1	87.0	569.6	3702	650	4902	60	180	22500
HAA900-2-6	5600	7470	994	97.1	87.0	637.9	4146	650	5490	60	180	23500
HAA900-3-6	6300	8400	994	97.2	87.0	716.9	4660	650	6176	60	180	25000
HAA1000-1-6	7100	9470	994	97.3	87.0	807.1	5246	650	6961	60	180	31000
HAA1000-2-6	8000	10700	994	97.3	87.0	909.4	5911	650	7843	60	180	33000
HAA1000-3-6	9000	12000	994	97.4	87.0	1022.0	6643	650	8823	60	180	35000
HAA710-1-8	1600	2130	740	96.2	85.0	188.3	1224	650	2107	60	180	12800
HAA710-2-8	1800	2400	740	96.2	85.0	211.8	1377	650	2370	60	180	13300
HAA710-3-8	2000	2670	740	96.3	85.0	235.1	1528	650	2634	60	180	13800
HAA710-4-8	2240	3000	740	96.4	85.0	263.1	1710	650	2950	60	180	14300
HAA710-5-8	2500	3330	740	96.5	85.0	293.3	1906	650	3292	60	180	14800
HAA800-1-8	2240	3000	740	96.4	85.0	263.1	1710	650	2950	60	180	16000
HAA800-2-8	2500	3330	740	96.5	85.0	293.3	1906	650	3292	60	180	16800
HAA800-3-8	2800	3730	740	96.6	85.0	328.1	2133	650	3687	60	180	17600
HAA800-4-8	3150	4200	740	96.6	86.0	364.9	2372	650	4148	60	180	18400
HAA800-4-8	3550	4760	740	96.7	86.0	410.8	2670	650	4675	60	180	19200
HAA800-4-8	4000	5330	740	96.8	86.0	462.4	3005	650	5268	60	180	20000
HAA900-1-8	3550	4760	740	96.7	86.0	410.8	2670	650	4675	60	180	22000
HAA900-2-8	4000	5330	740	96.8	86.0	462.4	3005	650	5268	60	180	23200
HAA900-3-8	4500	6000	740	96.9	86.0	519.6	3378	650	5926	60	180	24400
HAA1000-1-8	5000	6670	740	96.9	86.0	577.4	3753	650	6584	60	180	32000
HAA1000-2-8	5600	7470	740	96.9	86.0	646.6	4203	650	7375	60	180	33000
HAA1000-3-8	6300	8400	740	97.0	86.0	726.7	4724	650	8296	60	180	34000
HAA1000-4-8	7100	9470	740	97.1	86.0	818.2	5318	650	9350	60	180	35000



#### HAA 6kV Technical Data of HAA 6kV Large High-Efficiency Three Phase Asynchronous Motor

							Current			Torque		
Motor Type		ted wer	Rated Speed	Efficiency	Power Factor	Fu <b>ll</b> Load	Locked Rotor	Locked Rotor	Full Load	Locked Rotor	Pull Out	Approx Weight
	kW	(HP)	RPM	%	%	А	Α	%FLC	kg-m	%FLT	%FLT	kg
HAA710-1-10	1400	1870	595	95.9	83.0	169.3	1016	600	2293	60	180	12800
HAA710-2-10	1600	2130	595	95.9	83.0	193.4	1161	600	2620	60	180	12200
HAA710-3-10	1800	2400	595	96.0	83.0	217.4	1304	600	2948	60	180	12600
HAA710-4-10	2000	2670	595	96.1	83.0	241.3	1448	600	3276	60	180	13000
HAA710-5-10	2240	3000	595	96.2	83.0	270.0	1620	600	3669	60	180	13400
HAA800-1-10	2000	2670	595	96.1	83.0	241.3	1448	600	3276	60	180	16200
HAA800-2-10	2240	3000	595	96.2	83.0	270.0	1620	600	3669	60	180	16800
HAA800-3-10	2500	3330	595	96.3	83.0	301.0	1806	600	4094	60	180	17400
HAA800-4-10	2800	3730	595	96.4	84.0	332.7	1996	600	4586	60	180	18000
HAA800-5-10	3150	4200	595	96.4	84.0	374.3	2246	600	5159	60	180	18800
HAA900-1-10	2800	3730	595	96.4	84.0	332.7	1996	600	4586	60	180	22500
HAA900-2-10	3150	4200	595	96.4	84.0	374.3	2246	600	5159	60	180	23200
HAA900-3-10	3550	4760	595	96.5	84.0	421.4	2529	600	5814	60	180	23900
HAA900-4-10	4000	5330	595	96.6	84.0	474.4	2846	600	6551	60	180	24600
HAA1000-1-10	4500	6000	595	96.6	84.0	533.7	3202	600	7370	60	180	31500
HAA1000-2-10	5000	6670	595	96.0 96.7	84.0	592.3	3554	600	8189	60	180	31500
				96.7	84.0	663.4	3980	600	9172			33500
HAA1000-3-10	5600	7470	595							60	180	
HAA1000-4-10	6300	8400	595	96.8	84.0	745.6	4473	600	10318	60	180	34500
HAA710-1-12	1000	1330	495	95.5	79.0	127.5	765	600	1969	60	180	11200
HAA710-2-12	1120	1500	495	95.5	79.0	142.9	857	600	2205	60	180	11600
HAA710-3-12	1250	1670	495	95.6	79.0	159.3	956	600	2461	60	180	12000
HAA710-4-12	1400	1870	495	95.7	80.0	176.0	1056	600	2756	60	180	12400
HAA710-5-12	1600	2130	495	95.7	80.0	201.1	1207	600	3150	60	180	12800
HAA800-1-12	1400	1870	495	95.7	80.0	176.0	1056	600	2756	60	180	15800
HAA800-2-12	1600	2130	495	95.7	80.0	201.1	1207	600	3150	60	180	16300
HAA800-3-12	1800	2400	495	95.8	80.0	226.0	1356	600	3544	60	180	16800
HAA800-4-12	2000	2670	495	95.9	80.0	250.9	1505	600	3937	60	180	17300
HAA800-5-12	2240	3000	495	96.0	81.0	277.2	1663	600	4410	60	180	17800
HAA800-12	2500	3330	495	96.1	81.0	309.1	1854	600	4922	60	180	18300
HAA900-1-12	2240	3000	495	96.0	81.0	277.2	1663	600	4410	60	180	22500
HAA900-2-12	2500	3330	495	96.1	81.0	309.1	1854	600	4922	60	180	23500
HAA900-3-12	2800	3730	495	96.2	81.0	345.8	2075	600	5512	60	180	24500
HAA1000-1-12	3150	4200	495	96.3	81.0	388.6	2332	600	6201	60	180	30800
HAA1000-2-12	3550	4760	495	96.4	81.0	437.5	2625	600	6989	60	180	31800
HAA1000-3-12	4000	5330	495	96.4	81.0	492.9	2958	600	7875	60	180	33000
HAA1000-4-12	4500	6000	495	96.4	81.0	554.6	3327	600	8859	60	180	34500
HAA710-1-16	560	750	370	94.3	73.0	78.3	470	600	1475	60	180	11800
HAA710-2-16	630	840	370	94.4	73.0	88.0	528	600	1659	60	180	12300
HAA710-3-16	710	950	370	94.5	73.0	99.0	594	600	1870	60	180	12800
HAA710-4-16	800	1070	370	94.6	73.0	111.5	669	600	2107	60	180	13300
HAA710-5-16	900	1200	370	94.7	74.0	123.6	742	600	2370	60	180	13800
HAA710-16	1000	1330	370	94.8	74.0	137.2	823	600	2634	60	180	14300
HAA800-1-16	900	1200	370	94.7	74.0	123.6	742	600	2370	60	180	15000
HAA800-2-16	1000	1330	370	94.8	74.0	137.2	823	600	2634	60	180	16000
HAA800-3-16	1120	1490	370	94.9	74.0	153.5	921	600	2950	60	180	17000
HAA800-4-16	1250	1670	370	95.0	74.0	171.1	1027	600	3292	60	180	18000
HAA800-5-16	1400	1870	370	95.1	75.0	188.9	1133	600	3687	60	180	19000
HAA800-16	1600	2130	370	95.1	75.0	215.9	1295	600	4214	60	180	20000
HAA900-1-16	1400	1870	370	95.1	75.0	188.9	1133	600	3687	60	180	20000
HAA900-1-10	1600	2130	370	95.1	75.0	215.9	1295	600	4214	60	180	21500
HAA900-3-16	1800	2400	370	95.2	75.0	242.6	1456	600	4741 5268	60	180	23500
HAA1000-1-16	2000	2670	370	95.3	75.0	269.3	1616	600	5268	60	180	30500
HAA1000-2-16	2240	3000	370	95.4	75.0	301.3	1808	600	5900	60	180	31500
HAA1000-3-16	2500	3330	370	95.5	75.0	335.9	2015	600	6584	60	180	32500

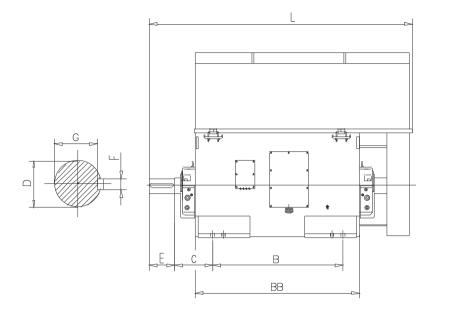
#### HAA 10kV Technical Data of HAA 10kV Large High-Efficiency Three Phase Asynchronous Motor

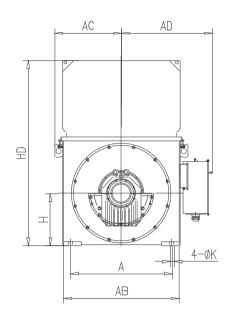
							Current			Torque		
Motor Type		ted wer	Rated Speed	Efficiency	Power Factor	Fu <b>ll</b> Load	Locked Rotor	Locked Rotor	Fu <b>ll</b> Load	Locked Rotor	Pu <b>ll</b> Out	Approx Weight
	kW	(HP)	RPM	%	%	A	A	%FLC	kg-m	%FLT	%FLT	kg
HAA710-6-4	2240	3000	1488	96.9	96.0	139.0	904	650	1467	60	180	11500
HAA710-7-4	2500	3330	1488	96.9	96.0	155.2	1009	650	1637	60	180	12000
HAA710-8-4	2800	3730	1488	96.9	86.0	194.0	1261	650	1834	60	180	12500
HAA710-9-4	3150	4200	1488	96.9	86.0	218.2	1419	650	2063	60	180	13000
HAA710-4	3500	4760	1488	96.9	87.0	239.7	1558	650	2292	60	180	13500
HAA710-4	4000	5330	1488	96.9	87.0	273.9	1781	650	2620	60	180	14000
HAA800-6-4	3500	4760	1488	96.9	87.0	239.7	1558	650	2292	60	180	15200
HAA800-7-4	4000	5330	1488	96.9	87.0	273.9	1781	650	2620	60	180	15700
HAA800-8-4	4500	6000	1488	96.9	87.0	308.2	2003	650	2947	60	180	16200
HAA800-9-4	5000	6670	1488	97.0	87.0	342.1	2224	650	3274	60	180	16700
HAA800-4	5600	7470	1488	97.0	87.0	383.1	2490	650	3667	60	180	17200
HAA800-4	6300	8400	1488	97.1	87.0	430.6	2799	650	4126	60	180	17700
HAA900-6-4	5600	7470	1488	97.0	87.0	383.1	2490	650	3667	60	180	17800
HAA900-7-4	6300	8400	1488	97.1	87.0	430.6	2799	650	4126	60	180	18300
HAA900-8-4	7100	9470	1488	97.2	87.0	484.8	3151	650	4650	60	180	18800
HAA1000-6-4	8000	10700	1488	97.3	87.0	545.6	3547	650	5239	60	180	19300
HAA1000-7-4	9000	12000	1488	97.3	87.0	613.9	3990	650	5894	60	180	19300
HAA710-6-6	1800	2400	993	96.6	84.0	128.1	832	650	1766	60	180	11200
HAA710-7-6	2000	2400	993	96.6	84.0	142.3	925	650	1963	60	180	11700
HAA710-7-6	2000	3000	993								180	12400
	2500	3330	993	96.6	84.0	159.4	1036	650	2198 2453	60 60	180	12400
HAA710-9-6				96.6	84.0	177.9	1156	650				
HAA710-6	2800	3730	993	96.7	84.0	199.0	1294	650	2748	60	180	13300
HAA800-6-6	2500	3330	993	96.6	84.0	177.9	1156	650	2453	60	180	13400
HAA800-7-6	2800	3730	993	96.7	84.0	199.0	1294	650	2748	60	180	13900
HAA800-8-6	3150	4200	993	96.7	84.0	223.9	1455	650	3091	60	180	14400
HAA800-9-6	3500	4760	993	96.8	84.0	248.5	1615	650	3435	60	180	14900
HAA800-6	4000	5330	993	96.9	86.0	277.1	1801	650	3925	60	180	15400
HAA900-6-6	3500	4760	993	96.8	84.0	248.5	1615	650	3435	60	180	18000
HAA900-7-6	4000	5330	993	96.9	86.0	277.1	1801	650	3925	60	180	19000
HAA900-8-6	4500	6000	993	96.9	86.0	311.8	2027	650	4416	60	180	20000
HAA900-9-6	5000	6670	993	96.9	86.0	346.4	2252	650	4907	60	180	21000
HAA1000-6-6	5600	7470	993	96.9	86.0	388.0	2522	650	5496	60	180	26500
HAA1000-7-6	6300	8400	993	97.0	86.0	436.0	2834	650	6183	60	180	28000
HAA1000-8-6	7100	9470	993	97.1	86.0	490.9	3191	650	6968	60	180	29500
HAA710-6-8	1400	1870	740	96.2	83.0	101.2	658	650	1844	60	180	12400
HAA710-7-8	1600	2130	740	96.2	83.0	115.7	752	650	2107	60	180	12800
HAA710-8-8	1800	2400	740	96.2	83.0	130.2	846	650	2370	60	180	13200
HAA710-9-8	2000	2670	740	96.2	83.0	144.6	940	650	2634	60	180	13600
HAA710-8	2240	3000	740	96.2	83.0	162.0	1053	650	2950	60	180	14000
HAA710-8	2500	3330	740	96.3	83.0	180.6	1174	650	3292	60	180	14500
HAA800-6-8	2240	3000	740	96.2	83.0	162.0	1053	650	2950	60	180	14800
HAA800-7-8	2500	3330	740	96.3	83.0	180.6	1174	650	3292	60	180	15300
HAA800-8-8	2800	3730	740	96.4	84.0	199.6	1298	650	3687	60	180	15800
HAA800-9-8	3150	4200	740	96.4	84.0	224.6	1460	650	4148	60	180	16500
HAA900-6-8	2800	3730	740	96.4	84.0	199.6	1298	650	3687	60	180	17000
HAA900-7-8	3150	4200	740	96.4	84.0	224.6	1460	650	4148	60	180	18500
HAA1000-6-8	3550	4760	740	96.5	84.0	252.9	1644	650	4675	60	180	20000
HAA1000-7-8	4000	5330	740	96.6	84.0	284.6	1850	650	5268	60	180	21000
HAA1000-8-8	4500	6000	740	96.7	84.0	319.9	2079	650	5926	60	180	22000



#### HAA 10kV Technical Data of HAA 10kV Large High-Efficiency Three Phase Asynchronous Motor

Motor Type	Rated Power		Rated Speed	Efficiency	Power Factor	Current			Torque			
						Full Lockec Load Rotor		Locked Rotor	Fu <b>ll</b> Load	Locked Rotor	Pull Out	Approx Weight
	kW	(HP)	RPM	%	%		А	%FLC	kg-m	%FLT	%FLT	kg
HAA710-1-10	1120	1500	595	95.7	83.0	135.7	814	600	1834	60	180	12200
HAA710-2-10	1250	1670	595	95.7	83.0	151.4	909	600	2047	60	180	12600
HAA710-3-10	1400	1870	595	95.7	83.0	169.6	1018	600	2293	60	180	13000
HAA710-4-10	1600	2130	595	95.7	83.0	193.8	1163	600	2620	60	180	13400
HAA710-10	1800	2400	595	95.8	83.0	217.8	1307	600	2948	60	180	13800
HAA800-1-10	1600	2130	595	95.7	83.0	193.8	1163	600	2620	60	180	15000
HAA800-2-10	1800	2400	595	95.8	83.0	217.8	1307	600	2948	60	180	15800
HAA800-3-10	2000	2670	595	95.9	83.0	241.8	1451	600	3276	60	180	16600
HAA800-4-10	2240	3000	595	96.0	84.0	267.3	1604	600	3669	60	180	17400
HAA800-10	2500	3330	595	96.0	84.0	298.3	1790	600	4094	60	180	18200
HAA900-1-10	2240	3000	595	96.0	84.0	267.3	1604	600	3669	60	180	21200
HAA900-2-10	2500	3330	595	96.0	84.0	298.3	1790	600	4094	60	180	22800
HAA900-3-10	2800	3730	595	96.1	84.0	333.8	2003	600	4586	60	180	24000
HAA900-4-10	3150	4200	595	96.2	84.0	375.1	2251	600	5159	60	180	25200
HAA1000-1-10	3550	4760	595	96.3	84.0	422.3	2534	600	5814	60	180	25500
HAA1000-2-10	4000	5330	595	96.4	84.0	475.3	2852	600	6551	60	180	26500
HAA1000-3-10	4500	6000	595	96.4	84.0	534.8	3209	600	7370	60	180	28000
HAA1000-4-10	5000	6670	595	96.5	84.0	593.6	3561	600	8189	60	180	29500
HAA710-1-12	900	1200	495	95.3	79.0	115.0	690	600	1772	60	180	11600
HAA710-1-12	1000	1330	495	95.3	79.0	127.8	767	600	1969	60	180	12000
HAA710-2-12	1120	1500	495	95.3	79.0	143.2	859	600	2205	60	180	12000
HAA710-4-12	1250	1670	495	95.3	80.0	157.8	947	600	2461	60	180	12800
HAA710-12	1400	1870	495	95.4	80.0	176.5	1059	600	2756	60	180	13200
HAA800-1-12	1250	1670	495	95.3	80.0	157.8	947	600	2461	60	180	15000
HAA800-2-12	1400	1870	495	95.4	80.0	176.5	1059	600	2756	60	180	15500
HAA800-3-12	1600	2130	495	95.5	80.0	201.5	1209	600	3150	60	180	16000
HAA800-4-12	1800	2400	495	95.6	80.0	226.5	1359	600	3544	60	180	16500
HAA800-12	2000	2670	495	95.6	81.0	248.5	1491	600	3937	60	180	17000
HAA800-12	2240	3000	495	95.7	81.0	278.1	1668	600	4410	60	180	17500
HAA900-1-12	2000	2670	495	95.6	81.0	248.5	1491	600	3937	60	180	19800
HAA900-2-12	2240	3000	495	95.7	81.0	278.1	1668	600	4410	60	180	20600
HAA900-3-12	2500	3330	495	95.8	81.0	310.0	1860	600	4922	60	180	21400
HAA1000-1-12	2800	3730	495	95.9	81.0	346.9	2081	600	5512	60	180	22200
HAA1000-2-12	3150	4200	495	96.0	81.0	389.8	2339	600	6201	60	180	23000
HAA1000-3-12	3550	4760	495	96.0	81.0	439.3	2636	600	6989	60	180	23800
HAA1000-4-12	4000	5330	495	96.1	81.0	494.5	2967	600	7875	60	180	26000
HAA710-1-16	500	665	370	94.3	73.0	69.9	419	600	1317	60	180	12800
HAA710-2-16	560	750	370	94.4	73.0	78.2	469	600	1475	60	180	13200
HAA710-3-16	630	840	370	94.5	73.0	87.9	527	600	1659	60	180	13600
HAA710-4-16	710	950	370	94.6	73.0	98.9	594	600	1870	60	180	14000
HAA710-16	800	1070	370	94.6	74.0	110.0	660	600	2107	60	180	14400
HAA710-16	900	1200	370	94.7	74.0	123.6	742	600	2370	60	180	14800
HAA800-1-16	800	1070	370	94.6	74.0	110.0	660	600	2107	60	180	15400
HAA800-2-16	900	1200	370	94.7	74.0	123.6	742	600	2370	60	180	16000
HAA800-3-16	1000	1330	370	94.8	74.0	137.2	823	600	2634	60	180	16600
HAA800-4-16	1120	1490	370	94.9	74.0	153.5	921	600	2950	60	180	17200
HAA800-16	1250	1670	370	95.0	75.0	168.8	1013	600	3292	60	180	17800
HAA800-16	1400	1870	370	95.1	75.0	188.9	1133	600	3687	60	180	18400
HAA900-1-16	1250	1670	370	95.0	75.0	168.8	1013	600	3292	60	180	19000
HAA900-2-16	1400	1870	370	95.1	75.0	188.9	1133	600	3687	60	180	20000
HAA900-3-16	1600	2130	370	95.1	75.0	215.9	1295	600	4214	60	180	21000
HAA1000-1-16	1800	2400	370	95.2	75.0	242.6	1456	600	4741	60	180	22000
HAA1000-2-16	2000	2400	370	95.3	75.0	269.3	1616	600	5268	60	180	22000
	2000	3000	370	95.4	75.0	301.3	1808	600	5900	60	180	23000





#### **Mounting Dimensions for Installation**

Frame Size	Poles	Mounting Dimensions (mm)									
		А	В	C	D	E	F	G	н	К	
710	4~16	1400±2.8	1800±2.8	530±4	+0.046 200 +0.017	350±0.65	0 45 <sub>-0.062</sub>	0 185 <sub>-0.3</sub>	0 710 _1	+0.62 56 0	
800	4~16	1600±2.8	2000±2.8	530±4	+0.046 220 <sub>+0.017</sub>	350±0.65	0 50_0.062	0 231 <sub>-0.3</sub>	0 800 <sub>-1</sub>	+0.62 56 0	
900	4~16	1800±3.5	2240±3.5	600±4	+0.046 250 <sub>+</sub> 0.017	410±0.77	0 56 <u>-0.07</u> 4	0 230 <u>-0.3</u>	0 900 -1	+0.62 66 0	
1000	4~16	2000±3.5	2500±3.5	600±4	+0.052 280 <sub>+0.020</sub>	470±0.77	0 63 <sub>-0.074</sub>	0 260 <sub>-0.3</sub>	0 1000 <sub>-1</sub>	+0.62 66 0	

#### **Outline Dimensions for Installation**

Frame	Poles	Outline Dimensions (mm)							BEARING	
Size		AC	AD	AB	BB	HD	L	DE	NDE	
710	4 6~16	930	1350	1600	2265	2650	3600	18-180B 18-200B	18-180BJ 18-200BJ	
800	4 6~16	1028	1562	1800	2300	2900	3800	18-200B 22-225B	18-200BJ 22-225BJ	
900	4 6~16	1140	1690	2000	2600	3200	4200	18-200B 22-250B	18-200BJ 22-250BJ	
1000	4 6~16	1280	1820	2300	2900	3400	4600	22-250B 28-280B	22-250BJ 28-280BJ	