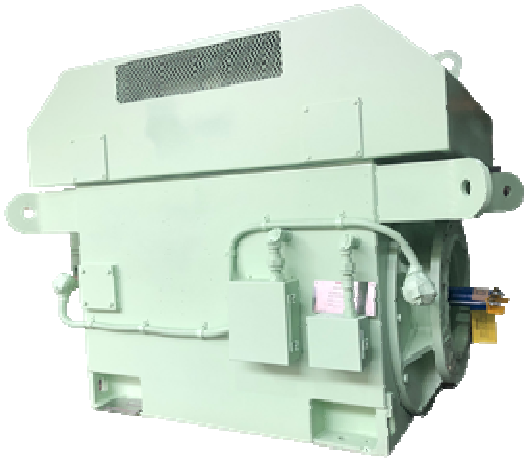
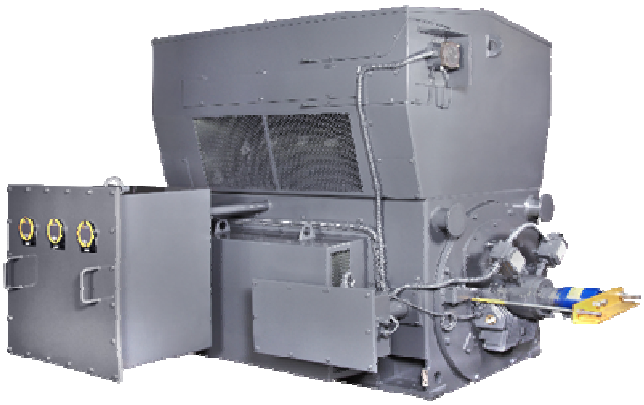
半密型ODP, WPI, WPII及水冷式馬達

MODEL : ASZK, AMZK, ANZK, AEZW

STANDARD 3-PHASE INDUCTION MOTORS
MEDIUM VOLTAGE (3000V/50Hz) SQUIRREL CAGE
FRAME NO. (SZ & EZ) 355B ~ 710E





DWG NO.
3A057H495E
REV. 05

SPECIFICATION TABLE

STANDARD 3-PHASE INDUCTION MOTORS
MEDIUM VOLTAGE SQUIRREL CAGE

MODEL
ASZK,AMZK,ANZK,AEZW
3000V
50Hz

	ITEM	STANDARD SPECIFICATION
RATING	KIND OF MOTOR	SQUIRREL-CAGE INDUCTION MOTOR (SCIM)
	DESIGN STANDARD	IEC
	VOLTAGE	3000V
	FREQUENCY	50Hz
	FRAME NO. (SZ & WZ)	355B ~ 710E
	OUTPUT RANGE	450 ~ 10000HP (340 ~ 7500kW) 50Hz
	R.P.M. (SYN.)	3000 ~ 750R.P.M. (2 ~ 8 POLE) 50Hz
	TIME DUTY	CONTINUOUS, S.F. 1.0 (S1, MCR)
	PROTECTION ENCLOSURE	IP23: ASZK (DRIP PROOF), AMZK (WP Ⅰ) IP24: ANZK (WPⅡ); IP54: AEZW (TEWAC)
	COOLING METHOD	ASZK,AMZK,ANZK: SELF VENTILATED, INTERIOR COOLING (IC 01) AEZW: SELF VENTILATED, AIR / WATER COOLER (IC81W)
	MOUNTING	HORIZONTAL FOOT MOUNTING (IM 1001, F-1)
APPLICATION	POWER CONDITIONS	VOLTAGE ±10%, FREQUENCY ±5% AND 10% MAX. OF COMBINED VOLTAGE AND FREQUENCY WITH FREQUENCY NOT TO EXCEED 5%
	ENVIRONMENT CONDITIONS	DP, WP Ⅰ: INDOOR; WPⅡ, TEWAC : OUTDOOR, NON-HAZARDOUS AMBIENT TEMPERATURE : -18 ~ 40℃ (OIL SUMP HEATER IS NOT TECO'S SCOPE) WATER INLET TEMPERATURE : 5~30℃ , (DERATING IS REQUIRED FOR TEPERATURE HIGHTER THAN 30 ℃) RELATIVE HUMIDITY : LESS THAN 95%RH (NON-CONDENSATION) ALTITUDE : LESS THAN 1,000 METERS
	OPERATING CONDITIONS	SUITABLE FOR FLUID DUTY ONLY
	ALLOWABLE LOAD WK2	AS DWG NO. 3A057H498E 60% SQUARE LOAD CURVE
	DRIVE METHOD	DIRECT CONNECTION WITH FLEXIBLE COUPLING. THE ROTOR IS BALANCED WITH A HALF KEY IF POSSIBLE WHICH MUST BE NOTED WHEN SELECTING AND BALANCING THE COUPLING.
	DIRECTION OF ROTATION	UNI-DIRECTIONAL FOR ALL 2P, 4P FRAME NO. 560 & ABOVE; OTHERS ARE BI-DIRECTIONAL CCW WHEN VIEWED FROM DRIVE END
	METHOD OF STARTING	STANDARD FOR FULL VOLTAGE DIRECT ON LINE REDUCED VOLTAGE START 80% OF FULL VOLTAGE IS OPTIONAL
	STARTING CAPABILITY	2 COLD ; 1 HOT FOR FULL VOLTAGE DIRECT ON LINE NUMBER OF STARTS: 6 TIMES PER DAY, 1000 TIMES PER YEAR, 5000 TIMES PER LIFE. OTHER THAN THESE, PLEASE CONTACT WITH FACTORY

PERFORMANCE	TEST PROCEDURE	IEC 60034, IEEE 112
	TYPICAL PERFORMANCE	AS DWG NO. 3A057H498E, VALUES IN TABLE IS NOMINAL NEMA DESIGN B
	TEMPERATURE RISE	STATOR COIL : (ACCORDING TO NEMA MG1-2003) S.F. 1.0 80℃ BY RESISTANCE METHOD ● RECOMMEND TEMPERATURE SETTINGS : ALARM 140℃ ; TRIP 155℃ BEARINGS : SLEEVE BEARINGS : 53℃ AT RATED LOAD ANTI-FRICTION BEARINGS : 55℃ AT RATED LOAD ● RECOMMEND TEMPERATURE SETTINGS : ALARM 95℃ ; TRIP 100℃
	NOISE	SOUND PRESSURE LEVEL MEASURED AT 1 METER DISTANCE & NO-LOAD CONDITION PER IEEE 85 METHOD (TOLERANCE ±3dBA). BELOW 95dBA FOR STANDARD MACHINES. BELOW 85dBA FOR LOW NOISE MACHINES. (WHEN SPECIFIED)
	VIBRATION	MEASURED ON FULLY ASSEMBLED MACHINES AND MOUNTED ON RIGID FOUNDATIONS AT NO-LOAD CONDITION. STANDARD MACHINE : BELOW 2.8 mm/s (R.M.S.) ON BEARING HOUSING. (GRADE R) BELOW 50 μm (PEAK-TO-PEAK) ON SHAFT RELATIVE. LOW VIBRATION MACHINE : (WHEN SPECIFIED) BELOW 1.8 mm/s (R.M.S.) ON BEARING HOUSING. (GRADE S) BELOW 38 μm (PEAK-TO-PEAK) ON SHAFT RELATIVE.
	OVER SPEED	TWO MIN., 120% OF SYN. R.P.M. FOR RATED 1501R.P.M. & ABOVE, 125% OF SYN. R.P.M. FOR RATED 1500R.P.M. & BELOW

PERFORMANCE DATA

3-PHASE SQUIRREL CAGE INDUCTION MOTORS
MEDIUM VOLTAGE SQUIRREL CAGE

MODEL
ASZK,AMZK,ANZK,AEZW
3000V
50Hz

ODP,WPI,WPII,BS,DESIGN-B,CLASS F INS,CLASS B TEMP,40℃ AMBIENT,S.F.1.0

2P 3000V 50Hz

TYPICAL PERFORMANCE

OUTPUT		FULL LOAD	FRAME NO.	EFFICIENCY			POWER FACTOR			CURRENT			TORQUE			ROTOR	Max. Load	APPROX. WEIGHT (1)	APPROX. WEIGHT (2)
HP	(kW)	RPM	(SZ) (EZ)	FULL LOAD %	3/4 LOAD %	1/2 LOAD %	FULL LOAD %	3/4 LOAD %	1/2 LOAD %	Rated A	Starting %	Starting A	Rated KG-M	Starting %FLT	Max. %FLT	GD^2 KG-M^2	GD^2 KG-M^2	KGS	KGS
800	600	2969	355C-85R	95.0	94.9	94.3	88.5	86.9	81.8	137	561	766	196	70	220	20	147	2300	2750
900	670	2965	355C-85R	94.8	94.7	94.1	88.5	87.5	83.5	154	498	767	221	60	210	20	162	2300	2750
1000	750	2965	355D-85R	95.1	95.0	94.4	88.7	87.6	83.4	170	516	878	245	70	200	21	177	2400	2850
1250	930	2962	355D-85R	95.0	94.9	94.3	88.9	88.3	85.0	212	487	1035	307	60	210	23	211	2500	2950
1500	1120	2959	355E-85R	95.1	95.0	94.4	89.5	89.4	86.9	253	468	1184	369	60	200	26	243	2850	3300
1750	1320	2966	355E-85R	95.4	95.3	94.7	90.1	89.1	85.3	292	586	1713	429	80	220	30	270	3000	3450
2000	1500	2973	400D-85R	95.8	95.7	95.1	89.5	88.8	85.4	335	536	1795	489	70	200	44	295	3700	4150
2250	1680	2973	400D-85R	95.8	95.7	95.1	89.6	88.9	85.8	376	533	2006	551	70	200	46	320	3800	4250
2500	1850	2975	400D-85R	96.0	95.9	95.3	89.6	88.8	85.5	417	550	2295	611	70	210	49	342	3800	4250
3000	2240	2977	400E-95U	96.3	96.2	95.6	89.8	88.5	84.3	498	632	3148	733	90	230	56	382	4300	4750
3500	2650	2976	450D-110V	96.2	96.1	95.5	90.2	89.5	86.5	579	540	3127	856	70	200	76	416	5000	5600
4000	3000	2976	450D-110V	96.4	96.3	95.7	91.0	90.3	87.5	655	580	3797	978	80	220	86	445	5300	5900
4500	3360	2978	450E-110V	96.5	96.4	95.8	91.0	89.9	86.3	736	653	4804	1099	90	250	94	468	5800	6400
5000	3750	2975	500D-125V	96.2	96.1	95.5	89.9	89.6	87.0	830	497	4125	1223	70	210	121	488	6500	7100
5500	4100	2976	500E-125V	96.4	96.3	95.7	91.0	90.9	88.8	900	527	4744	1345	80	200	137	501	7250	7850
6000	4500	2976	500E-125V	96.5	96.4	95.8	91.9	91.9	90.4	971	540	5245	1467	80	200	153	511	8250	8850
6500	4850	2984	560D-125V	96.6	96.5	95.9	90.5	90.2	87.7	1067	560	5978	1585	70	200	201	512	8900	9600
7000	5200	2985	560D-125V	96.7	96.6	96.0	91.3	90.6	87.9	1138	637	7251	1706	80	220	221	513	9300	10000
7500	5600	2986	630E-140V	97.2	97.1	96.5	92.7	92.7	91.3	1195	595	7110	1828	60	220	346	510	15150	15850
8000	6000	2988	630E-140V	97.2	97.1	96.5	93.0	92.5	90.5	1271	692	8792	1948	70	250	364	502	15650	16350

NOTES：

1. Test standard：IEC 60034-2-1 or IEEE112.
2. Tolerance：IEC 60034-1 or NEMA MG1.
3. Data presented in rating lists are typical values. Guaranteed values on request.
   Legally binding performance and specification data is given to the end user once each order is confirmed.
4. Approx. weight (1) : ASZK,AMZK,ANZK
5. Approx. weight (2) : AEZW
6. This performance data is only for sinepower, not suitable for PWM power source.
7. The voltage and frequency combinations not included in performance data are quoted case by case.

ODP,WPI,WPII,BS,DESIGN-B,CLASS F INS,CLASS B TEMP,40℃ AMBIENT,S.F.1.0

4P 3000V 50Hz

TYPICAL PERFORMANCE

OUTPUT		FULL	FRAME	EFFICIENCY			POWER FACTOR			CURRENT			TORQUE			ROTOR	Max. Load	APPROX. WEIGHT (1)	APPROX. WEIGHT (2)
HP	(kW)	LOAD RPM	NO. (SZ) (EZ)	FULL LOAD %	3/4 LOAD %	1/2 LOAD %	FULL LOAD %	3/4 LOAD %	1/2 LOAD %	Rated A	Starting %	Starting A	Rated KG-M	Starting %FLT	Max. %FLT	GD^2 $KG\text{-}M^2$	GD^2 $KG\text{-}M^2$	KGS	KGS
800	600	1481	355C-110R	95.0	94.9	94.0	83.4	80.3	72.5	145	550	797	393	70	210	37	1163	2350	2800
900	670	1480	355C-110R	94.8	94.7	93.8	82.7	79.4	71.3	165	534	880	442	70	200	37	1289	2350	2800
1000	750	1481	355D-110R	95.1	95.0	94.1	84.1	81.1	73.5	180	580	1041	491	80	220	45	1407	2600	3050
1250	930	1481	355E-110R	95.5	95.4	94.5	85.7	83.3	77.0	219	602	1320	614	80	220	57	1695	3000	3450
1500	1120	1485	400C-125R	95.8	95.7	94.8	85.3	82.8	75.9	264	610	1608	735	70	220	76	1955	3450	3900
1750	1320	1485	400D-125R	95.9	95.8	94.9	85.8	83.4	76.8	305	628	1918	857	70	230	88	2213	3800	4250
2000	1500	1483	450B-140R	95.6	95.5	94.6	86.3	84.5	78.6	348	518	1803	981	70	220	111	2466	4200	4800
2250	1680	1484	450B-140R	95.8	95.7	94.8	86.7	84.8	79.1	389	537	2088	1103	70	200	122	2696	4400	5000
2500	1850	1484	450C-140R	96.1	96.0	95.1	87.6	86.1	81.0	426	549	2341	1226	70	200	133	2920	4800	5400
3000	2240	1482	450D-140R	96.1	96.0	95.1	88.1	87.4	83.6	509	507	2579	1473	60	210	145	3351	5300	5900
3500	2650	1486	500B-160V	96.4	96.3	95.4	87.3	86.2	81.9	597	517	3087	1714	60	210	235	3708	6300	6900
4000	3000	1487	500C-160V	96.4	96.3	95.4	87.2	85.8	80.9	683	539	3682	1957	70	200	263	4050	6700	7300
4500	3360	1488	500D-160V	96.6	96.5	95.6	87.5	85.4	79.6	764	628	4800	2200	80	230	313	4361	7550	8150
5000	3750	1488	560B-180V	96.7	96.6	95.7	88.4	87.8	84.4	840	549	4610	2445	60	220	405	4651	8400	9100
5500	4100	1488	560C-180V	96.8	96.7	95.8	88.9	88.5	85.6	918	549	5037	2689	60	210	462	4915	9200	9900
6000	4500	1489	560D-180V	96.9	96.8	95.9	88.6	87.2	82.8	1003	645	6472	2932	70	220	489	5144	10100	10800
6500	4850	1490	630C-200V	97.0	96.9	96.0	90.3	89.6	86.4	1065	567	6041	3174	50	210	736	5349	11250	11950
7000	5200	1490	630C-200V	97.1	97.0	96.1	90.5	89.9	86.9	1144	566	6473	3418	50	210	777	5541	11650	12350
7500	5600	1491	630C-200V	97.1	97.0	96.1	90.5	89.6	86.3	1225	589	7217	3660	60	220	830	5700	12150	12850
8000	6000	1491	630C-200V	97.1	97.0	96.1	90.8	90.0	86.9	1303	599	7803	3904	60	220	883	5850	12500	13200
9000	6700	1491	630D-200V	97.2	97.1	96.2	91.1	90.4	87.5	1459	605	8828	4392	60	220	987	6089	13750	14450
10000	7500	1489	710C-220V	97.0	96.9	96.0	92.6	92.3	90.4	1598	576	9207	4887	50	230	1393	6281	18800	19600

NOTES：

1. Test standard：IEC 60034-2-1 or IEEE112.
2. Tolerance：IEC 60034-1 or NEMA MG1.
3. Data presented in rating lists are typical values. Guaranteed values on request.
   Legally binding performance and specification data is given to the end user once each order is confirmed.
4. Approx. weight (1) : ASZK,AMZK,ANZK
5. Approx. weight (2) : AEZW
6. This performance data is only for sinepower, not suitable for PWM power source.
7. The voltage and frequency combinations not included in performance data are quoted case by case.

ODP,WPI,WPII,BS,DESIGN-B,CLASS F INS,CLASS B TEMP,40°C AMBIENT,S.F.1.0

6P 3000V 50Hz

TYPICAL PERFORMANCE

OUTPUT		FULL	FRAME	EFFICIENCY			POWER FACTOR			CURRENT			TORQUE			ROTOR	Max. Load	APPROX. WEIGHT (1)	APPROX. WEIGHT (2)
HP	(kW)	LOAD RPM	NO. (SZ) (EZ)	FULL LOAD %	3/4 LOAD %	1/2 LOAD %	FULL LOAD %	3/4 LOAD %	1/2 LOAD %	Rated A	Starting %	Starting A	Rated KG-M	Starting %FLT	Max. %FLT	GD^2 $KG\text{-}M^2$	GD^2 $KG\text{-}M^2$	KGS	KGS
600	450	986	355C-110R	94.3	94.2	93.1	85.4	82.9	75.8	107	559	598	443	80	210	55	3303	2500	3050
700	520	988	355D-110R	94.6	94.5	93.4	84.3	81.0	72.4	126	607	765	516	90	230	60	3769	2700	3250
800	600	987	355D-110R	94.7	94.6	93.5	85.0	82.0	74.1	143	601	858	590	90	220	67	4252	2850	3400
900	670	988	400B-125R	94.7	94.6	93.5	85.2	82.3	74.7	160	589	943	663	70	210	91	4704	3100	3650
1000	750	988	400C-125R	95.0	94.9	93.8	86.7	84.6	78.5	174	580	1011	736	70	210	106	5157	3400	3950
1250	930	989	400D-125R	95.2	95.1	94.0	86.3	83.7	76.6	218	647	1413	920	90	230	129	6238	3750	4300
1500	1120	988	450B-140R	95.2	95.1	94.0	84.4	80.9	72.6	268	610	1635	1105	80	230	157	7305	4200	4850
1750	1320	989	450C-140R	95.5	95.4	94.3	85.1	81.6	73.4	309	661	2043	1287	90	250	192	8296	4800	5450
2000	1500	989	450D-140R	95.5	95.4	94.3	84.7	81.1	72.5	355	678	2407	1471	100	250	208	9268	5100	5750
2250	1680	989	450D-140R	95.6	95.5	94.4	85.4	81.9	73.6	396	700	2770	1655	110	250	240	10208	5250	5900
2500	1850	988	500B-160R	95.7	95.6	94.5	83.8	80.8	73.1	448	550	2462	1841	70	210	314	11145	6150	6800
3000	2240	988	500C-180R	96.0	95.9	94.8	85.1	83.1	77.0	527	517	2726	2209	70	210	366	12882	6750	7400
3500	2650	990	500D-180R	96.1	96.0	94.9	84.3	80.9	72.8	620	620	3846	2572	90	230	442	14440	7500	8150
4000	3000	990	560C-180R	96.4	96.3	95.2	87.1	85.1	79.2	684	602	4117	2940	80	220	544	15971	8850	9600
4500	3360	991	560C-180R	96.5	96.4	95.3	87.5	85.5	79.7	765	627	4797	3304	80	230	621	17370	9550	10300
5000	3750	991	560D-180R	96.5	96.4	95.3	86.9	84.0	76.8	856	710	6078	3671	100	250	703	18730	10350	11100
5500	4100	994	630D-200R	97.0	96.9	95.8	84.7	83.1	77.4	961	585	5622	4026	80	200	1119	19854	12350	13100
6000	4500	993	630D-200R	97.0	96.9	95.8	84.7	83.3	77.8	1048	576	6039	4396	80	190	1149	21115	12650	13400
6500	4850	993	630D-200R	97.1	97.0	95.9	84.8	83.6	78.5	1133	572	6483	4763	80	190	1221	22254	13050	13800
7000	5200	993	630D-200R	97.0	96.9	95.8	84.6	83.4	78.1	1225	566	6932	5129	80	190	1286	23330	13400	14150
7500	5600	993	630E-200R	97.1	97.0	95.9	84.8	83.6	78.4	1308	575	7519	5495	80	190	1357	24344	14150	14900
8000	6000	994	710D-220R	97.1	97.0	95.9	85.7	84.9	80.5	1380	543	7495	5856	60	190	1791	23336	18900	20100
9000	6700	994	710D-220R	97.2	97.1	96.0	85.8	85.0	80.7	1549	546	8459	6588	60	190	1948	24940	20600	21500

NOTES：

1. Test standard：IEC 60034-2-1 or IEEE112.
2. Tolerance：IEC 60034-1 or NEMA MG1.
3. Data presented in rating lists are typical values. Guaranteed values on request.
   Legally binding performance and specification data is given to the end user once each order is confirmed.
4. Approx. weight (1) : ASZK,AMZK,ANZK
5. Approx. weight (2) : AEZW
6. This performance data is only for sinepower, not suitable for PWM power source.
7. The voltage and frequency combinations not included in performance data are quoted case by case.

ODP,WPI,WPII,BS,DESIGN-B,CLASS F INS,CLASS B TEMP,40°C AMBIENT,S.F.1.0

8P 3000V 50Hz

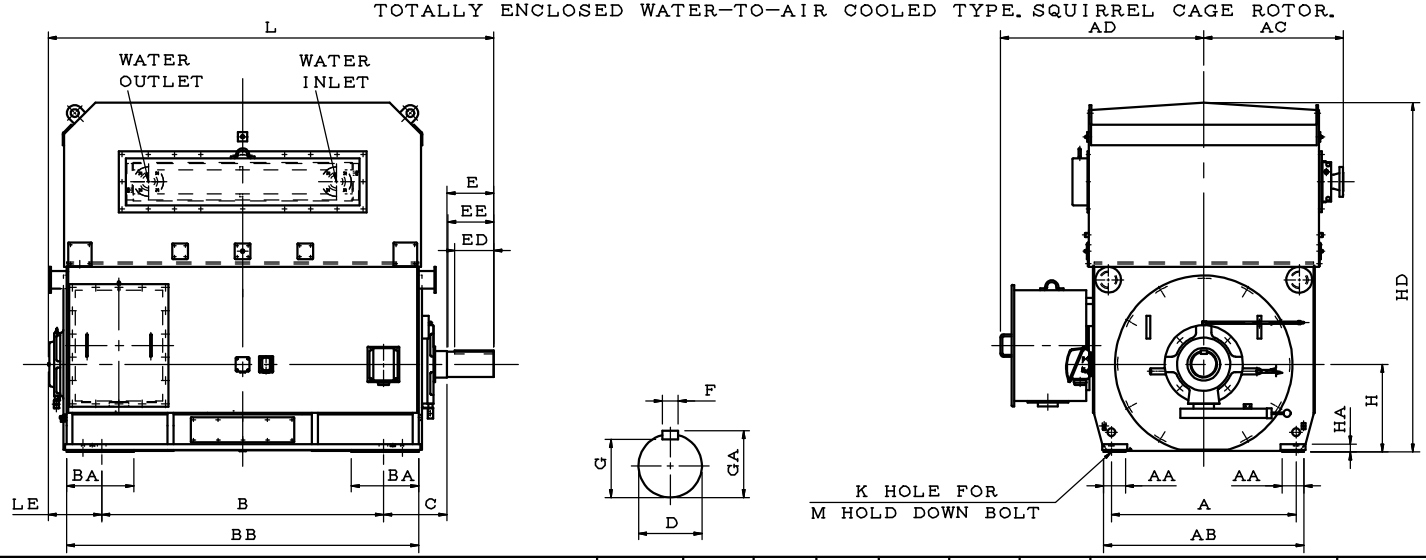
TYPICAL PERFORMANCE

OUTPUT		FULL	FRAME	EFFICIENCY			POWER FACTOR			CURRENT			TORQUE			ROTOR	Max. Load	APPROX. WEIGHT (1)	APPROX. WEIGHT (2)
HP	(kW)	LOAD RPM	NO. (SZ) (EZ)	FULL LOAD %	3/4 LOAD %	1/2 LOAD %	FULL LOAD %	3/4 LOAD %	1/2 LOAD %	Rated A	Starting %	Starting A	Rated KG-M	Starting %FLT	Max. %FLT	GD^2 $KG\text{-}M^2$	GD^2 $KG\text{-}M^2$	KGS	KGS
450	340	738	355B-110R	93.5	93.4	92.2	80.0	75.6	65.8	86	533	460	444	100	200	67	5188	2300	2850
500	375	738	355C-110R	93.4	93.3	92.1	79.8	75.4	65.5	96	530	510	493	100	200	71	5708	2400	2950
600	450	739	355D-110R	93.8	93.7	92.5	78.7	73.3	62.3	117	595	694	591	120	230	88	6710	2750	3300
700	520	739	400B-125R	94.3	94.2	93.0	83.4	80.9	73.6	128	487	622	689	70	200	128	7708	3100	3650
800	600	740	400C-125R	94.5	94.4	93.2	82.5	79.0	70.2	147	541	797	787	80	200	144	8658	3400	3950
900	670	740	400D-125R	94.8	94.7	93.5	83.3	80.3	72.3	164	536	877	885	80	200	164	9615	3650	4200
1000	750	740	400D-125R	94.8	94.7	93.5	83.8	80.9	73.3	181	537	970	983	80	200	178	10557	3800	4350
1250	930	740	450B-140R	94.9	94.8	93.6	81.8	78.5	70.2	231	538	1244	1229	100	210	218	12847	4250	4900
1500	1120	740	450C-140R	95.0	94.9	93.7	83.2	80.8	73.7	272	525	1430	1475	90	200	262	15056	4750	5400
1750	1320	741	450D-140R	95.3	95.2	94.0	83.4	80.5	73.0	316	568	1795	1718	110	200	314	17136	5200	5850
2000	1500	741	500B-160R	95.4	95.3	94.1	82.5	79.2	71.0	365	583	2127	1964	110	200	333	19202	5750	6400
2250	1680	742	500B-160R	95.5	95.4	94.2	82.1	78.1	68.9	412	642	2645	2206	120	220	383	21138	6150	6800
2500	1850	742	500C-160R	95.8	95.7	94.5	83.5	80.1	71.8	449	645	2894	2451	120	220	458	23085	6750	7400
3000	2240	742	500D-180R	96.0	95.9	94.7	83.5	80.1	72.0	537	644	3460	2942	120	220	511	26830	7550	8200
3500	2650	742	560C-180R	96.2	96.1	94.9	83.0	80.8	74.2	629	531	3342	3432	70	200	950	28116	9550	10300
4000	3000	742	560D-180R	96.2	96.1	94.9	82.9	80.7	73.9	720	541	3896	3922	70	210	1033	31263	10550	11300
4500	3360	745	630D-200R	96.7	96.6	95.4	82.0	79.5	72.2	815	561	4571	4395	70	200	1696	33914	13300	14050
5000	3750	744	630D-200R	96.7	96.6	95.4	82.2	80.4	74.0	903	524	4732	4890	60	190	1739	36890	13600	14350
5500	4100	744	630E-200R	96.8	96.7	95.5	82.4	80.5	74.1	990	540	5346	5379	70	190	1928	39628	14750	15500
6000	4500	744	710C-220R	96.7	96.6	95.4	86.5	85.3	80.6	1030	555	5716	5868	60	210	2423	42252	18900	19800
6500	4850	744	710D-220R	96.7	96.6	95.4	86.6	85.6	81.1	1114	543	6051	6357	60	200	2553	44768	19450	20350
7000	5200	744	710E-220R	96.8	96.7	95.5	86.5	84.9	79.5	1200	594	7129	6846	70	200	2742	47181	20650	21550

NOTES：

1. Test standard：IEC 60034-2-1 or IEEE112.
2. Tolerance：IEC 60034-1 or NEMA MG1.
3. Data presented in rating lists are typical values. Guaranteed values on request.
   Legally binding performance and specification data is given to the end user once each order is confirmed.
4. Approx. weight (1) : ASZK,AMZK,ANZK
5. Approx. weight (2) : AEZW
6. This performance data is only for sinepower, not suitable for PWM power source.
7. The voltage and frequency combinations not included in performance data are quoted case by case.

TOTALLY ENCLOSED WATER-TO-AIR COOLED TYPE. SQUIRREL CAGE ROTOR.



DIMENSIONS IN MM

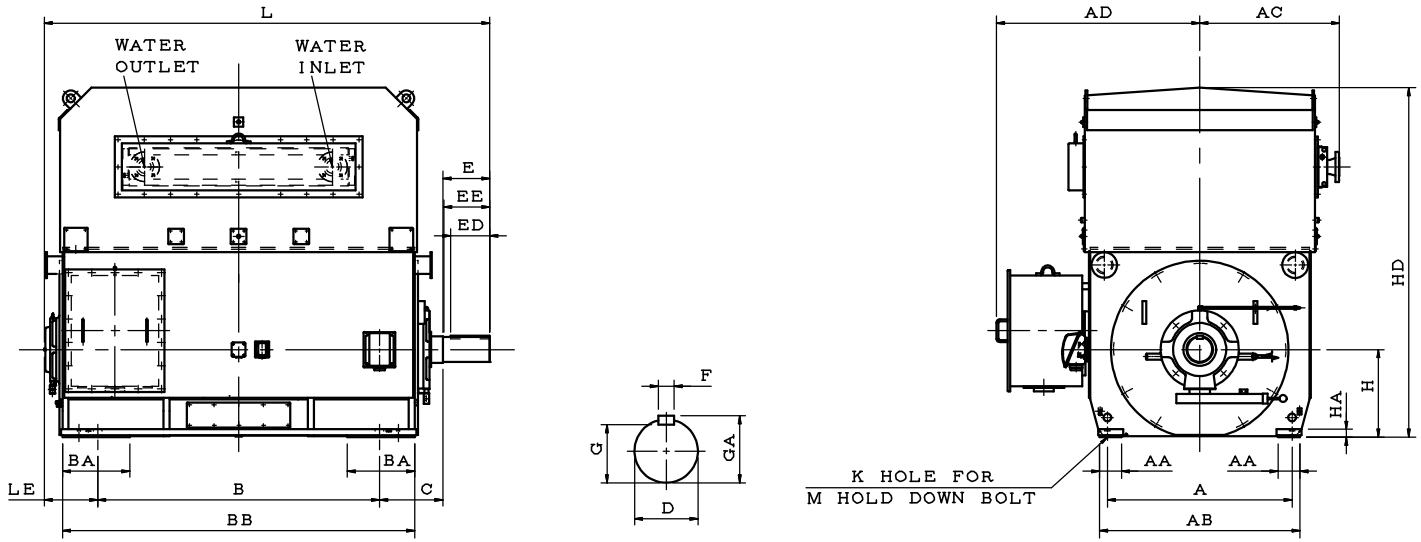
FRAME NO.	NO. OF POLES	MOUNTING									AC	AD	H	HA	HD	L	LE	SHAFT EXTENSION				KEY SIZE			BEARING		FRAME NO.
		A	AA	AB	B	BA	BB	C	K	M								D	E	EE	G	ED	F	GA	DRIVE END	OPP. D END	
355B	8P	710	85	790	800	280	1100	254	35	M24	LATER	1035	355	40	1783	1529	265	110	210	200	100	160	28	116	6324	6320	355B
355C	2P	710	85	790	900	280	1200	254	35	M24		1036	355	40	1783	1563	239	85	170	157	76	140	22	90	6218C3	6315C3	355C
	4P, 6P, 8P											1035				1629	265	110	210	200	100	160	28	116	6324	6320	
355D	2P	710	85	790	1000	280	1300	254	35	M24		1036	355	40	1783	1663	239	85	170	157	76	140	22	90	6218C3	6315C3	355D
	4P, 6P, 8P											1035				1729	265	110	210	200	100	160	28	116	6324	6320	
355E	2P	710	85	790	1120	280	1420	254	35	M24		1036	355	40	1783	1783	239	85	170	157	76	140	22	90	6218C3	6315C3	355E
355E	4P	710	85	790	1120	280	1420	254	35	M24		1035	355	40	1783	1849	265	110	210	200	100	160	28	116	6324	6320	355E
400B	6P, 8P	800	95	900	900	355	1260	280	42	M30		1086	400	40	1883	1673	283	125	210	202	114	160	32	132	6326	6322	400B
400C	4P 6P, 8P	800	95	900	1000	355	1360	280	42	M30		1086	400	40	1883	1773	283	125	210	202	114	160	32	132	6326	6322	400C
400D	2P	800	95	900	1120	355	1480	280	42	M30		1089	400	40	1883	1839	269	85	170	157	76	140	22	90	6218C3	6315C3	400D
400D	4P 6P, 8P	800	95	900	1120	355	1480	280	42	M30		1086	400	40	1883	1893	283	125	210	202	114	160	32	132	6326	6322	400D
450B	4P 6P, 8P	900	100	990	1000	380	1420	315	42	M30		1156	450	40	2003	1884	319	140	250	240	128	200	36	148	6330	6326	450B
450C	4P 6P, 8P	900	100	990	1120	380	1540	315	42	M30		1156	450	40	2003	2004	319	140	250	240	128	200	36	148	6330	6326	450C
450D	4P 6P, 8P	900	100	990	1250	380	1670	315	42	M30		1156	450	40	2003	2134	319	140	250	240	128	200	36	148	6330	6326	450D

1. TOLERANCE OF SHAFT EXTENSION DIAMETER D=m6.
2. TOLERANCE OF SHAFT CENTER HEIGHT H=
3. TOLERANCE OF KEY WIDTH F=h9.
4. USABLE SHAFT LENGTH:EE
5. ANTI-FRICTION BEARINGS.

OUTLINE DIMENSIONS SHEET

3-PHASE INDUCTION MOTOR
FRAME NO. (WZ)355B-710E

TOTALLY ENCLOSED WATER-TO-AIR COOLED TYPE. SQUIRREL CAGE ROTOR.



DIMENSIONS IN MM

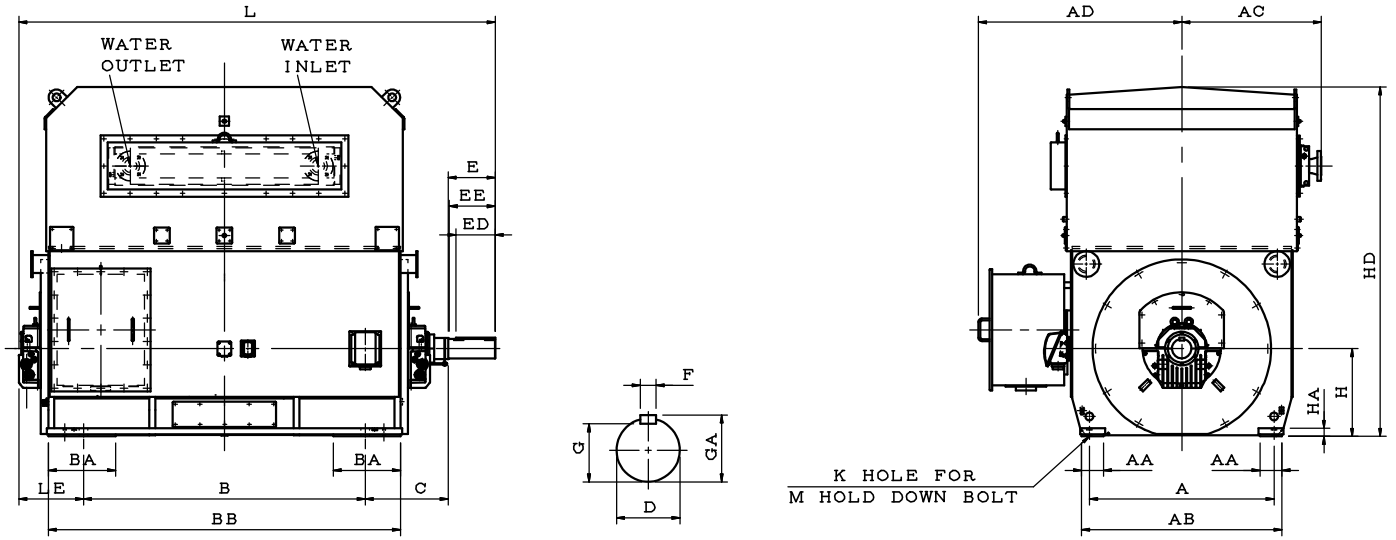
FRAME NO.	NO. OF POLES	MOUNTING									AC	AD	H	HA	HD	L	LE	SHAFT EXTENSION				KEY SIZE			BEARING		FRAME NO.
		A	AA	AB	B	BA	BB	C	K	M								D	E	EE	G	ED	F	GA	DRIVE END	OPP. D END	
500B	6P, 8P	1000	140	1150	1120	405	1570	335	48	M36	LATER	1226	500	40	2113	2113	358	160	300	290	147	250	40	169	6334	6330	500B
500C	6P, 8P	1000	140	1150	1250	405	1700	335	48	M36		1226	500	40	2113	2243	358	180	300	290	165	250	45	190	6338	6330	500C
500D	6P, 8P	1000	140	1150	1400	405	1850	335	48	M36		1226	500	40	2113	2393	358	180	300	290	165	250	45	190	6338	6330	500D
560C	6P, 8P	1180	140	1280	1400	430	1850	355	55	M42		1296	560	53	2233	2413	358	180	300	290	165	250	45	190	6338	6334	560C
560D	6P, 8P	1180	140	1280	1600	430	2050	355	55	M42		1296	560	53	2233	2613	358	180	300	290	165	250	45	190	6338	6334	560D
630D	6P, 8P	1250	160	1400	1800	480	2300	375	55	M42		1349	630	58	2408	2909	384	200	350	337	185	280	45	210	NU244 +6244	NU238	630D
630E	6P, 8P	1250	160	1400	2000	480	2500	375	55	M42		1349	630	58	2408	3109	384	200	350	337	185	280	45	210	NU244 +6244	NU238	630E
710C	6P, 8P	1400	180	1570	1800	520	2350	475	55	M42		1499	710	50	2643	3015	390	220	350	337	203	280	50	231	NU248 +6048	NU244	710C
710D	6P, 8P	1400	180	1570	2000	520	2550	475	55	M42		1499	710	50	2643	3215	390	220	350	337	203	280	50	231	NU248 +6048	NU244	710D
710E	8P	1400	180	1570	2240	520	2700	475	55	M42		1499	710	50	2643	3410	345	220	350	337	203	280	50	231	NU248 +6048	NU244	710E

1. TOLERANCE OF SHAFT EXTENSION DIAMETER D=m6.
2. TOLERANCE OF SHAFT CENTER HEIGHT H=
3. TOLERANCE OF KEY WIDTH F=h9.
4. USABLE SHAFT LENGTH:EE
5. ANTI-FRICTION BEARINGS.

OUTLINE DIMENSIONS SHEET

3-PHASE INDUCTION MOTOR
FRAME NO. (WZ)355B-710E

TOTALLY ENCLOSED WATER-TO-AIR COOLED TYPE. SQUIRREL CAGE ROTOR.



DIMENSIONS IN MM

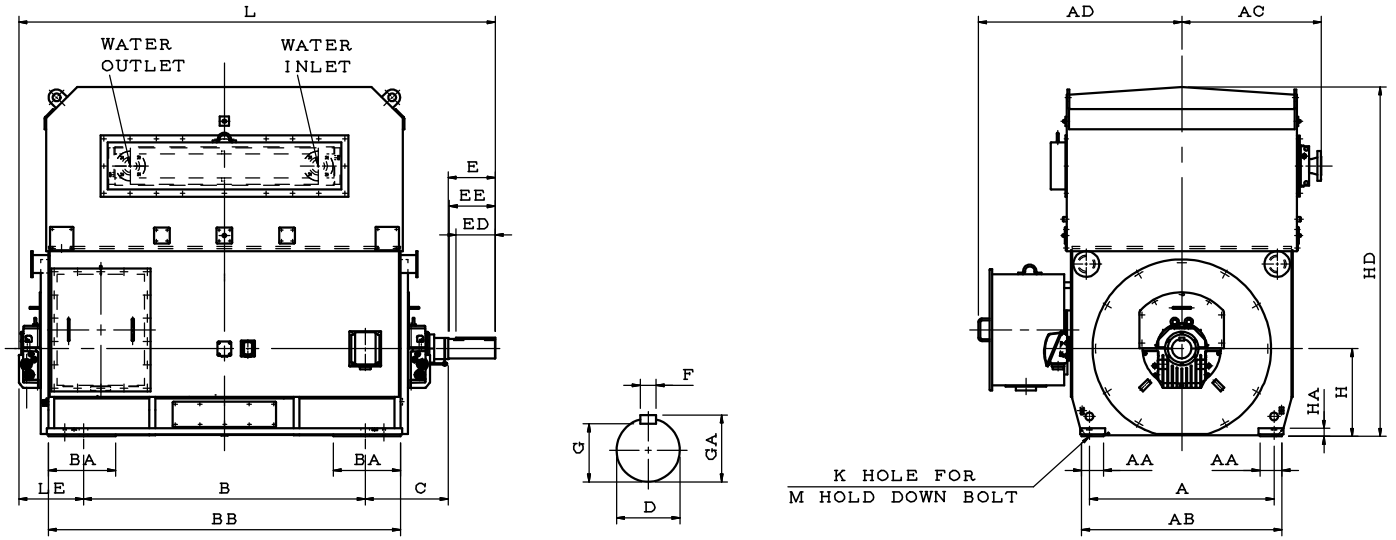
FRAME NO.	NO. OF POLES	MOUNTING									AC	AD	H	HA	HD	L	LE	SHAFT EXTENSION				KEY SIZE			BEARING		FRAME NO.
		A	AA	AB	B	BA	BB	C	K	M								D	E	EE	G	ED	F	GA	DRIVE END	OPP. D END	
355B	8P	710	85	790	800	280	1100	355	35	M24		1035	355	40	1783	1653	288	110	210	204	100	160	28	116	11/110	9 / 80	355B
355C	2P	710	85	790	900	280	1200	355	35	M24		1036	355	40	1783	1747	322	85	170	164	76	140	22	90	9S/ 80	9S/ 80	355C
	4P, 6P, 8P											1035				1753	288	110	210	204	100	160	28	116	11/110	9 / 80	
355D	2P	710	85	790	1000	280	1300	355	35	M24		1036	355	40	1783	1847	322	85	170	164	76	140	22	90	9S/ 80	9S/ 80	355D
	4P, 6P, 8P											1035				1853	288	110	210	204	100	160	28	116	11/110	9 / 80	
355E	2P	710	85	790	1120	280	1420	355	35	M24		1036	355	40	1783	1967	322	85	170	164	76	140	22	90	9S/ 80	9S/ 80	355E
	4P											1035				1973	288	110	210	204	100	160	28	116	11/110	9 / 80	
400B	6P, 8P	800	95	900	900	355	1260	400	42	M30		1086	400	40	1883	1843	333	125	210	204	114	160	32	132	11/125	11/110	400B
400C	4P 6P, 8P	800	95	900	1000	355	1360	400	42	M30	LATER	1086	400	40	1883	1943	333	125	210	204	114	160	32	132	11/125	11/110	400C
400D	2P	800	95	900	1120	355	1480	400	42	M30		1089	400	40	1883	2042	352	95	170	164	86	140	25	100	9S/ 90	9S/ 80	400D
	4P, 6P, 8P											1086				2063	333	125	210	204	114	160	32	132	11/125	11/110	
400E	2P	800	95	900	1250	355	1610	400	42	M30		1089	400	40	1883	2172	352	95	170	164	86	140	25	100	9S/ 90	9S/ 80	400E
450B	4P 6P, 8P	900	100	990	1000	380	1420	450	42	M30		1156	450	40	2003	2070	370	140	250	244	128	200	36	148	14/140	11/125	450B
450C	4P 6P, 8P	900	100	990	1120	380	1540	450	42	M30		1156	450	40	2003	2190	370	140	250	244	128	200	36	148	14/140	11/125	450C
450D	4P 6P, 8P	900	100	990	1250	380	1670	450	42	M30		1156	450	40	2003	2320	370	140	250	244	128	200	36	148	14/140	11/125	450D

1. TOLERANCE OF SHAFT EXTENSION DIAMETER D=m6.
2. TOLERANCE OF SHAFT CENTER HEIGHT H=$^{0}_{-1}$
3. TOLERANCE OF KEY WIDTH F=h9.
4. **USABLE SHAFT LENGTH:EE**
5. SLEEVE BEARINGS SELF LUBRICATION(NATURAL COOLING).
6. PROVISION FOR NONCONTACTIVE VIBRATION PROBE, DISTANCE OF "C" HAVE TO BE CHANGED F#355:450, F#400:500, F#450:530, F#500:600, F#560:630, F#630:670, F#710:710

OUTLINE DIMENSIONS SHEET

3-PHASE INDUCTION MOTOR
FRAME NO. (WZ)355B-710E

TOTALLY ENCLOSED WATER-TO-AIR COOLED TYPE. SQUIRREL CAGE ROTOR.



DIMENSIONS IN MM

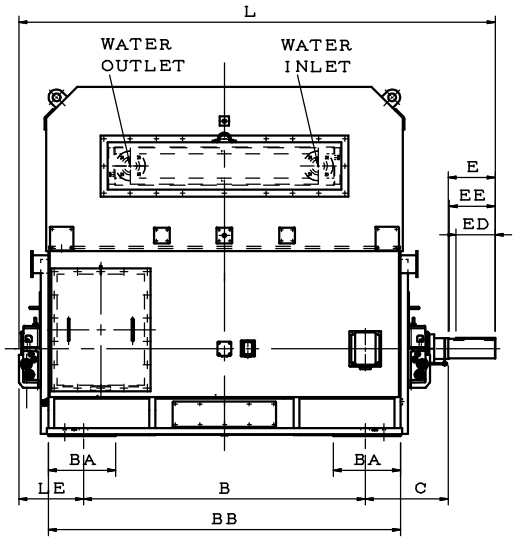
FRAME NO.	NO. OF POLES	MOUNTING									AC	AD	H	HA	HD	L	LE	SHAFT EXTENSION				KEY SIZE			BEARING		FRAME NO.
		A	AA	AB	B	BA	BB	C	K	M								D	E	EE	G	ED	F	GA	DRIVE END	OPP. D END	
500B	6P, 8P	1000	140	1150	1120	405	1570	500	48	M36		1226	500	40	2113	2331	411	180	300	287	165	250	45	190	18/180	14/140	500B
500C	6P, 8P	1000	140	1150	1250	405	1700	500	48	M36		1226	500	40	2113	2461	411	180	300	287	165	250	45	190	18/180	14/140	500C
500D	6P, 8P	1000	140	1150	1400	405	1850	500	48	M36		1226	500	40	2113	2611	411	180	300	287	165	250	45	190	18/180	14/140	500D
560C	6P	1180	140	1280	1400	430	1850	530	55	M42		1296	560	53	2233	2646	416	180	300	287	165	250	45	190	18/180	14/140	560C
	8P															2721	441	200	350	337	185	280	45	210	18/200	18/180	
560D	6P	1180	140	1280	1600	430	2050	530	55	M42		1296	560	53	2233	2846	416	180	300	287	165	250	45	190	18/180	14/140	560D
	8P															2921	441	200	350	337	185	280	45	210	18/200	18/180	
630D	6P, 8P	1250	160	1400	1800	480	2300	560	55	M42	LATER	1349	630	58	2408	3188	478	200	350	337	185	280	45	210	18/200	18/180	630D
630E	6P, 8P	1250	160	1400	2000	480	2500	560	55	M42		1349	630	58	2408	3388	478	200	350	337	185	280	45	210	18/200	18/180	630E
710C	8P	1400	180	1570	1800	520	2350	600	55	M42		1499	710	50	2643	3263	513	220	350	337	203	280	50	231	18/225	18/200	710C
710D	8P	1400	180	1570	2000	520	2550	600	55	M42		1499	710	50	2643	3463	513	220	350	337	203	280	50	231	18/225	18/200	710D
710E	8P	1400	180	1570	2240	520	2700	600	55	M42		1499	710	50	2643	3658	468	220	350	337	203	280	50	231	18/225	18/200	710E

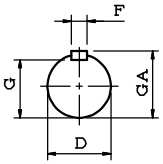
1. TOLERANCE OF SHAFT EXTENSION DIAMETER D=m6.
2. TOLERANCE OF SHAFT CENTER HEIGHT H=
3. TOLERANCE OF KEY WIDTH F=h9.
4. **USABLE SHAFT LENGTH:EE**
5. SLEEVE BEARINGS SELF LUBRICATION(NATURAL COOLING).
6. PROVISION FOR NONCONTACTIVE VIBRATION PROBE, DISTANCE OF "C" HAVE TO BE CHANGED F#355:450, F#400:500, F#450:530, F#500:600, F#560:630, F#630:670, F#710:710

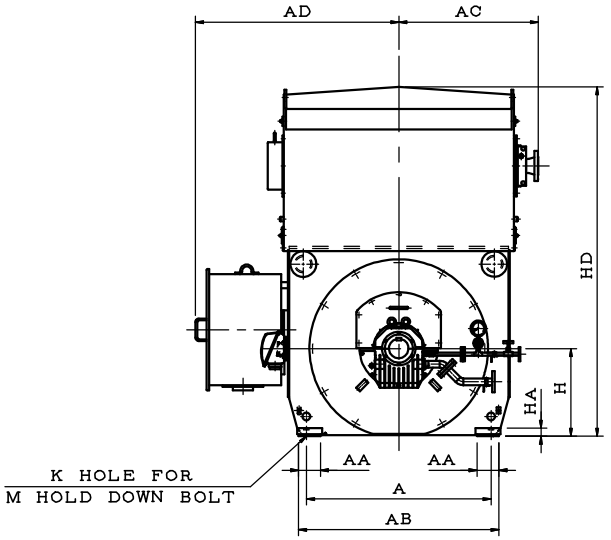
OUTLINE DIMENSIONS SHEET

3-PHASE INDUCTION MOTOR
FRAME NO. (WZ)355B-710E

TOTALLY ENCLOSED WATER-TO-AIR COOLED TYPE. SQUIRREL CAGE ROTOR.







DIMENSIONS IN MM

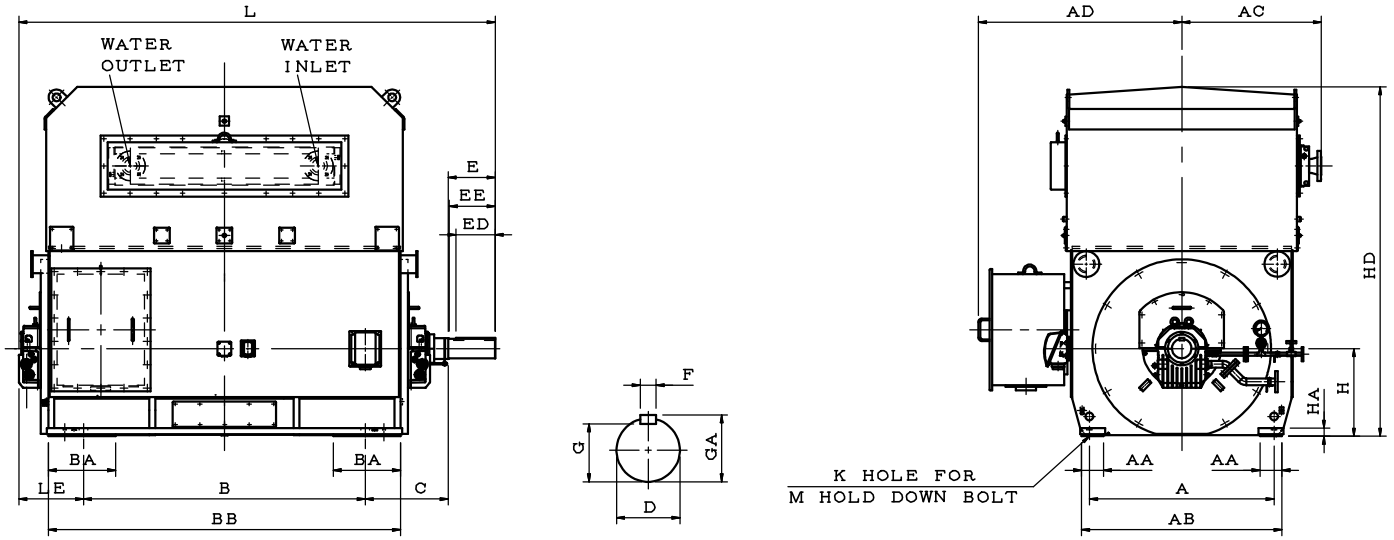
FRAME NO.	NO. OF POLES	MOUNTING									AC	AD	H	HA	HD	L	LE	SHAFT EXTENSION				KEY SIZE			BEARING		FRAME NO.
		A	AA	AB	B	BA	BB	C	K	M								D	E	EE	G	ED	F	GA	DRIVE END	OPP. D END	
450D	2P	900	100	990	1250	380	1670	450	42	M30		1159	450	40	2003	2283	373	110	210	204	100	160	28	116	11/110	9/ 80	450D
450E	2P	900	100	990	1400	380	1820	450	42	M30		1159	450	40	2003	2433	373	110	210	204	100	160	28	116	11/110	9/ 80	450E
500B	4P	1000	140	1150	1120	405	1570	500	48	M36		1226	500	40	2113	2311	391	160	300	294	147	250	40	169	14/160	11/125	500B
500C	4P	1000	140	1150	1250	405	1700	500	48	M36		1226	500	40	2113	2441	391	160	300	294	147	250	40	169	14/160	11/125	500C
500D	2P	1000	140	1150	1400	405	1850	500	48	M36	LATER	1229	500	40	2113	2513	403	125	210	204	114	160	32	132	11/125	11/110	500D
	4P											1226				2591	391	160	300	294	147	250	40	169	14/160	11/125	
500E	2P	1000	140	1150	1600	405	2050	500	48	M36		1229	500	40	2113	2713	403	125	210	204	114	160	32	132	11/125	11/110	500E
560B	4P	1180	140	1280	1250	430	1700	530	55	M42		1296	560	53	2233	2496	416	180	300	287	165	250	45	190	18/180	14/140	560B
560C	4P	1180	140	1280	1400	430	1850	530	55	M42		1296	560	53	2233	2646	416	180	300	287	165	250	45	190	18/180	14/140	560C
560D	2P	1180	140	1280	1600	430	2050	530	55	M42		1299	560	53	2233	2753	413	125	210	204	114	160	32	132	14/125	11/110	560D
	4P											1296				2846	416	180	300	287	165	250	45	190	18/180	14/140	

1. TOLERANCE OF SHAFT EXTENSION DIAMETER D=m6.
2. TOLERANCE OF SHAFT CENTER HEIGHT H=$^{0}_{-1}$
3. TOLERANCE OF KEY WIDTH F=h9.
4. USABLE SHAFT LENGTH:EE
5. SLEEVE BEARINGS (EXTERNAL OIL CIRCULATION).
6. PROVISION FOR NONCONTACTIVE VIBRATION PROBE, DISTANCE OF "C" HAVE TO BE CHANGED F#450:530, F#500:600, F#560:630. F#630:670, F#710:710

OUTLINE DIMENSIONS SHEET

3-PHASE INDUCTION MOTOR
FRAME NO. (WZ)450D-710D

TOTALLY ENCLOSED WATER-TO-AIR COOLED TYPE. SQUIRREL CAGE ROTOR.



DIMENSIONS IN MM

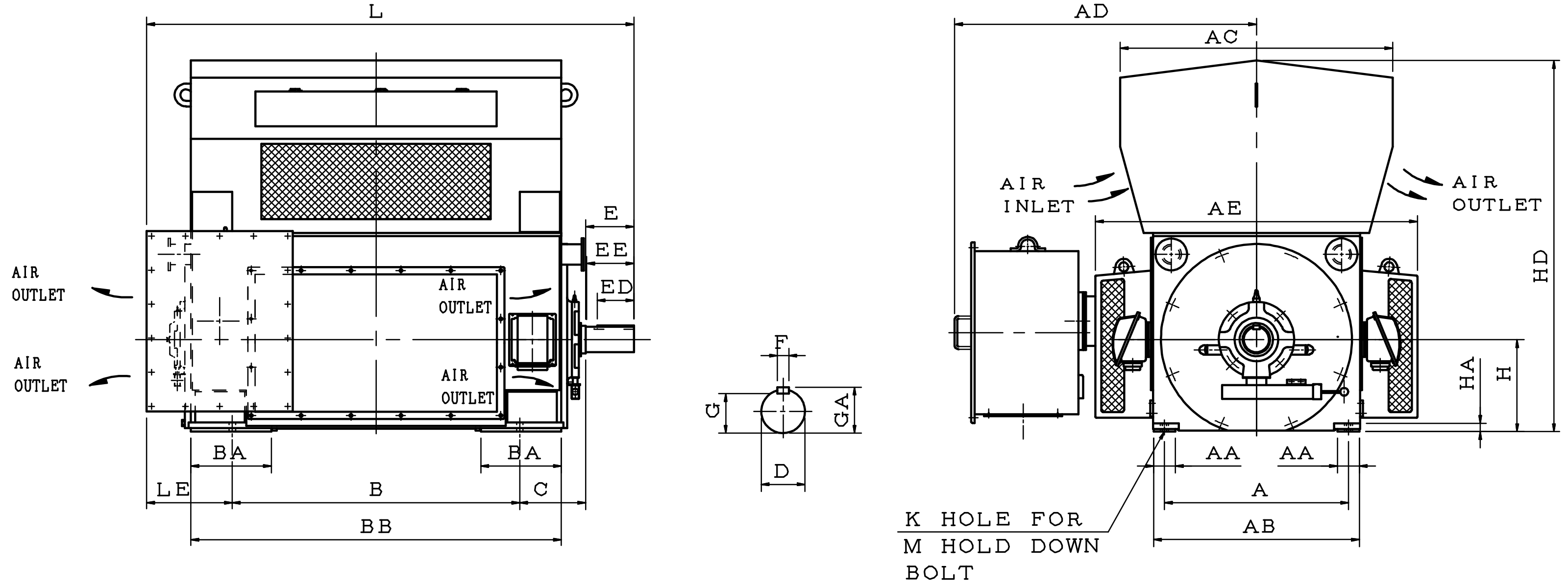
FRAME NO.	NO. OF POLES	MOUNTING									AC	AD	H	HA	HD	L	LE	SHAFT EXTENSION				KEY SIZE			BEARING		FRAME NO.
		A	AA	AB	B	BA	BB	C	K	M								D	E	EE	G	ED	F	GA	DRIVE END	OPP. D END	
630C	4P	1250	160	1400	1600	480	2100	560	55	M42		1349	630	58	2408	2988	478	200	350	337	185	280	45	210	18/200	18/180	630C
630D	4P	1250	160	1400	1800	480	2300	560	55	M42		1349	630	58	2408	3188	478	200	350	337	185	280	45	210	18/200	18/180	630D
630E	2P	1250	160	1400	2000	480	2500	560	55	M42	LATER	1352	630	58	2408	3293	483	140	250	244	128	200	36	148	14/140	14/125	630E
710C	4P, 6P	1400	180	1570	1800	520	2350	600	55	M42		1499	710	50	2643	3263	513	220	350	337	203	280	50	231	18/225	18/200	710C
710D	6P	1400	180	1570	2000	520	2550	600	55	M42		1499	710	50	2643	3463	513	220	350	337	203	280	50	231	18/225	18/200	710D

1. TOLERANCE OF SHAFT EXTENSION DIAMETER D=m6.
2. TOLERANCE OF SHAFT CENTER HEIGHT H=$^{0}_{-1}$
3. TOLERANCE OF KEY WIDTH F=h9.
4. USABLE SHAFT LENGTH:EE
5. SLEEVE BEARINGS (EXTERNAL OIL CIRCULATION).
6. PROVISION FOR NONCONTACTIVE VIBRATION PROBE, DISTANCE OF "C" HAVE TO BE CHANGED F#450:530, F#500:600, F#560:630. F#630:670, F#710:710

OUTLINE DIMENSIONS SHEET

3-PHASE INDUCTION MOTOR
FRAME NO. (WZ)450D-710D

NEMA WEATHER PROTECTED TYPE I/II. SQUIRREL CAGE ROTOR.



DIMENSIONS IN MM

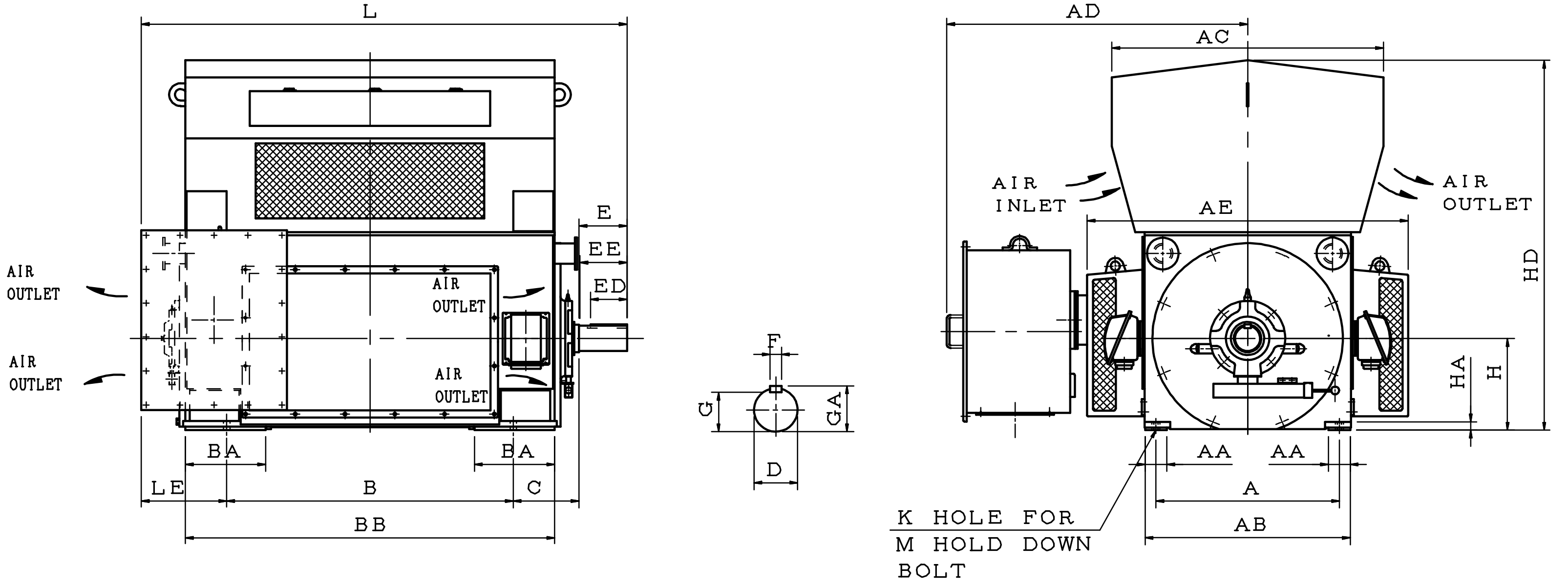
FRAME NO.	NO. OF POLES	MOUNTING									AC	AD	AE	H	HA	HD	L	LE	SHAFT EXTENSION				KEY SIZE			BEARING		FRAME NO.
		A	AA	AB	B	BA	BB	C	K	M									D	E	EE	G	ED	F	GA	DRIVE END	OPP. D END	
355B	8P	710	85	790	800	280	1100	254	35	M24	1081	1264	1190	355	37	1360	1616	352	110	210	200	100	160	28	116	6324	6320	355B
355C	2P	710	85	790	900	280	1200	254	35	M24	1081	1264	1330	355	37	1360	1646	352	70	140	127	62.5	110	20	74.5	6315C3	6315C3	355C
355C	4P / 6P&8P	710	85	790	900	280	1200	254	35	M24	1081	1264	1330 / 1190	355	37	1360	1716	352	110	210	200	100	160	28	116	6324	6320	355C
355D	2P	710	85	790	1000	280	1300	254	35	M24	1081	1264	1330	355	37	1360	1746	352	70	140	127	62.5	110	20	74.5	6315C3	6315C3	355D
355D	4P / 6P&8P	710	85	790	1000	280	1300	254	35	M24	1081	1264	1330 / 1190	355	37	1360	1816	352	110	210	200	100	160	28	116	6324	6320	355D
355E	4P	710	85	790	1120	280	1420	254	35	M24	1081	1264	1330	355	37	1360	1936	352	110	210	200	100	160	28	116	6324	6320	355E
400B	6P&8P	800	95	900	900	355	1260	280	42	M30	1185	1331	1310	400	37	1610	1762	372	125	210	202	114	160	32	132	6326	6322	400B
400C	4P / 6P&8P	800	95	900	1000	355	1360	280	42	M30	1185	1331	1450 / 1310	400	37	1610	1862	372	125	210	202	114	160	32	132	6326	6322	400C
400D	4P / 6P&8P	800	95	900	1120	355	1480	280	42	M30	1185	1331	1450 / 1310	400	37	1610	1982	372	125	210	202	114	160	32	132	6326	6322	400D

1. TOLERANCE OF SHAFT EXTENSION DIAMETER D=m6.
2. TOLERANCE OF SHAFT CENTER HEIGHT $H=^{0}_{-1}$
3. TOLERANCE OF KEY WIDTH F=h9.
4. USABLE SHAFT LENGTH:EE
5. ANTI-FRICTION BEARINGS.

OUTLINE DIMENSIONS SHEET

3-PHASE INDUCTION MOTOR
FRAME NO. (WZ)355B-710D

NEMA WEATHER PROTECTED TYPE I/II. SQUIRREL CAGE ROTOR.



DIMENSIONS IN MM

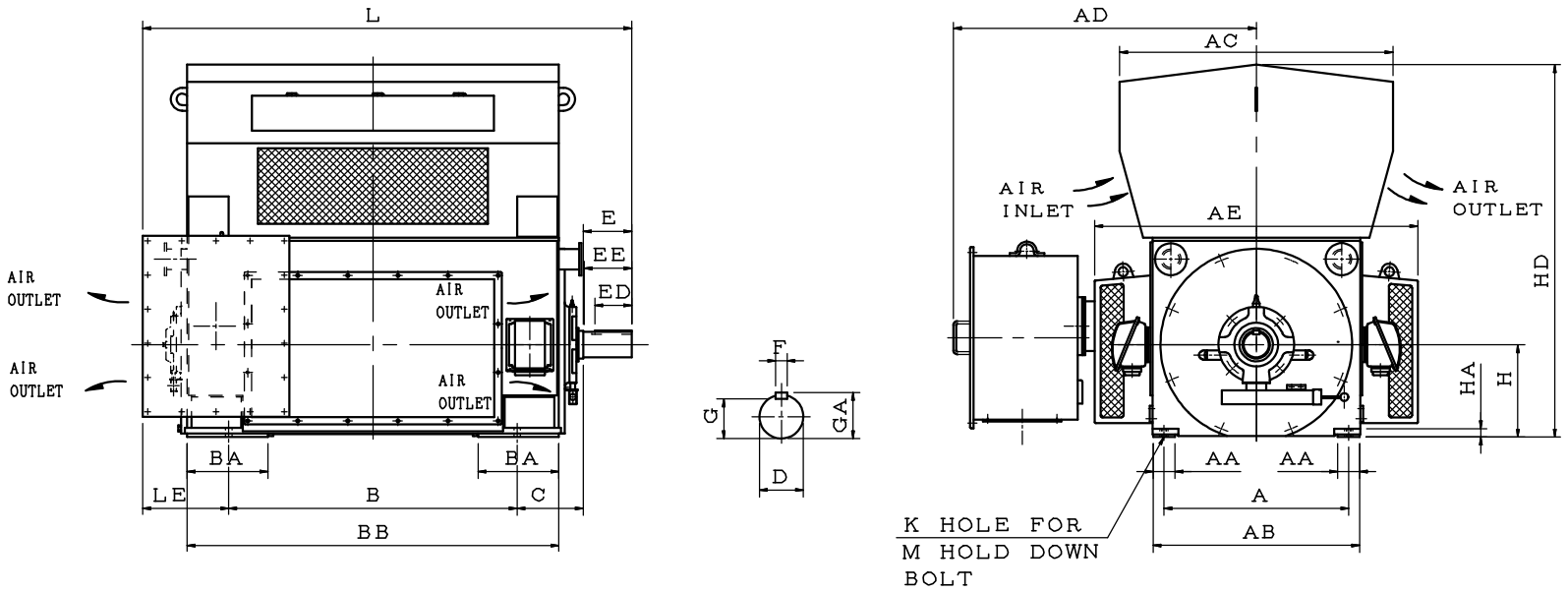
FRAME NO.	NO. OF POLES	MOUNTING									AC	AD	AE	H	HA	HD	L	LE	SHAFT EXTENSION				KEY SIZE			BEARING		FRAME NO.
		A	AA	AB	B	BA	BB	C	K	M									D	E	EE	G	ED	F	GA	DRIVE END	OPP. D END	
450B	4P / 6P&8P	900	100	990	1000	380	1420	315	42	M30	1290	1376	1540 / 1400	450	37	1712	1942	377	140	250	240	128	200	36	148	6330	6326	450B
450C	4P / 6P&8P	900	100	990	1120	380	1540	315	42	M30	1290	1376	1540 / 1400	450	37	1712	2062	377	140	250	240	128	200	36	148	6330	6326	450C
450D	4P / 6P&8P	900	100	990	1250	380	1660	315	42	M30	1290	1376	1540 / 1400	450	37	1712	2192	377	140	250	240	128	200	36	148	6330	6326	450D
500B	6P&8P	1000	140	1150	1120	405	1570	335	48	M36	1475	1456	1540	500	37	1940	2137	382	160	300	290	147	250	40	169	6334	6330	500B
500C	6P&8P	1000	140	1150	1250	405	1700	335	48	M36	1475	1456	1540	500	37	1940	2267	382	180	300	290	165	250	45	190	6338	6330	500C
500D	6P&8P	1000	140	1150	1400	405	1850	335	48	M36	1475	1456	1540	500	37	1940	2417	382	180	300	290	165	250	45	190	6338	6330	500D
560C	6P&8P	1180	140	1280	1400	430	1850	355	55	M42	1675	1529	1690	560	51	2140	2397	342	180	300	290	165	250	45	190	6338	6334	560C
560D	6P&8P	1180	140	1280	1600	430	2050	355	55	M42	1675	1529	1690	560	51	2140	2597	342	180	300	290	165	250	45	190	6338	6334	560D

1. TOLERANCE OF SHAFT EXTENSION DIAMETER D=m6.
2. TOLERANCE OF SHAFT CENTER HEIGHT H^{0}_{-1}
3. TOLERANCE OF KEY WIDTH F=h9.
4. USABLE SHAFT LENGTH:EE
5. ANTI-FRICTION BEARINGS.

OUTLINE DIMENSIONS SHEET

3-PHASE INDUCTION MOTOR
FRAME NO. (WZ)355B-710D

NEMA WEATHER PROTECTED TYPE I/II. SQUIRREL CAGE ROTOR.



DIMENSIONS IN MM

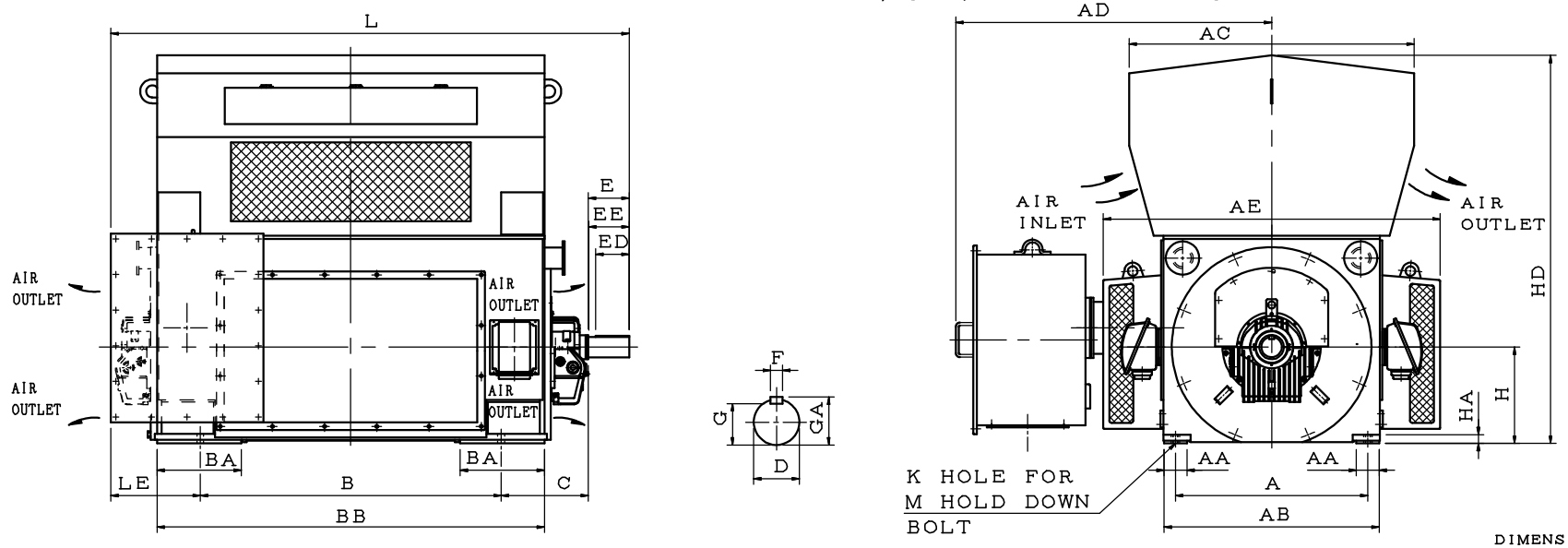
FRAME NO.	NO. OF POLES	MOUNTING									AC	AD	AE	H	HA	HD	L	LE	SHAFT EXTENSION				KEY SIZE			BEARING		FRAME NO.
		A	AA	AB	B	BA	BB	C	K	M									D	E	EE	G	ED	F	GA	DRIVE END	OPP. D END	
630D	6P&8P	1250	160	1400	1800	480	2300	375	55	M42	1750	1585	1790	630	58	2568	3002	477	200	350	337	185	280	45	210	NU244 +6244	NU238	630D
630E	6P&8P	1250	160	1400	2000	480	2500	375	55	M42	1750	1585	1790	630	58	2568	3202	477	200	350	337	185	280	45	210	NU244 +6244	NU238	630E
710C	6P&8P	1400	180	1570	1800	520	2350	475	55	M42	2150	1785	2190	710	50	2973	3127	502	220	350	337	203	280	50	231	NU248 +6048	NU244	710C
710D	6P&8P	1400	180	1570	2000	520	2550	475	55	M42	2150	1785	2190	710	50	2973	3327	502	220	350	337	203	280	50	231	NU248 +6048	NU244	710D
710E	8P	1400	180	1570	2240	520	2700	475	55	M42	2150	1785	2190	710	50	2973	3522	457	220	350	337	203	280	50	231	NU248 +6048	NU244	710E

1. TOLERANCE OF SHAFT EXTENSION DIAMETER D=m6.
2. TOLERANCE OF SHAFT CENTER HEIGHT H=±
3. TOLERANCE OF KEY WIDTH F=h9.
4. USABLE SHAFT LENGTH:EE
5. ANTI-FRICTION BEARINGS.

OUTLINE DIMENSIONS SHEET

3-PHASE INDUCTION MOTOR
FRAME NO. (WZ)355B-710D

NEMA WEATHER PROTECTED TYPE I/II. SQUIRREL CAGE ROTOR.



DIMENSIONS IN MM

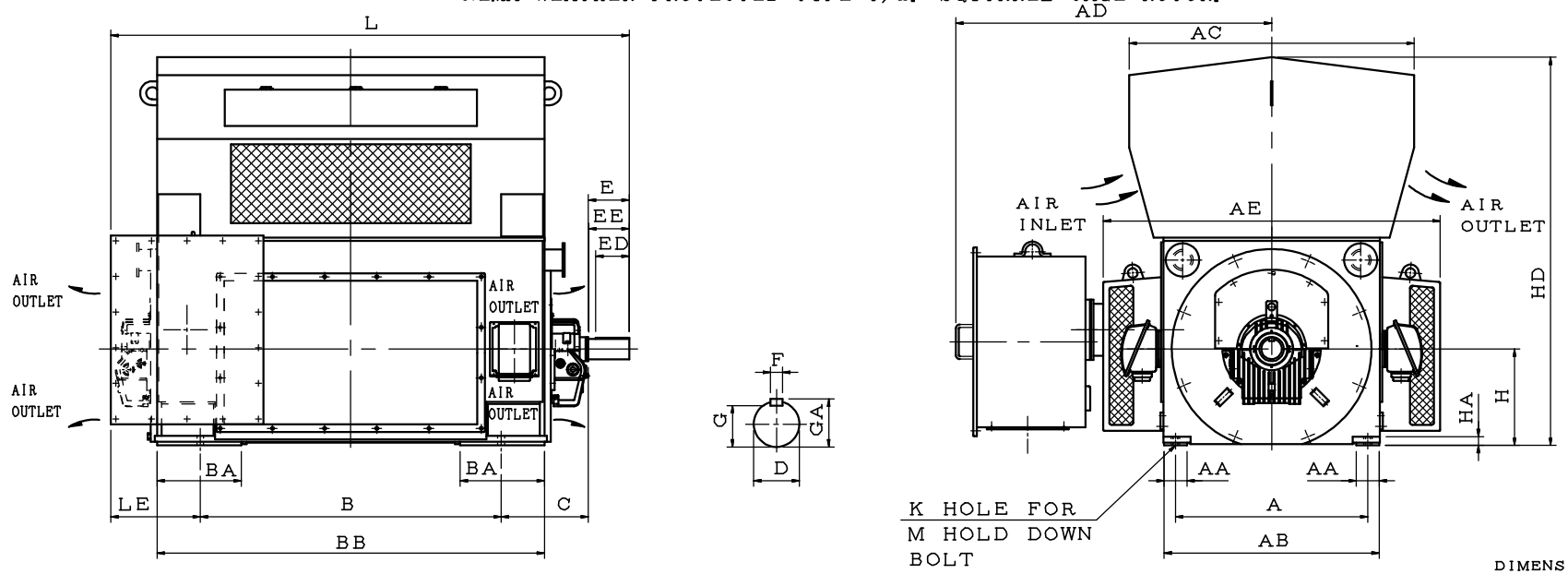
FRAME NO.	NO. OF POLES	MOUNTING									AC	AD	AE	H	HA	HD	L	LE	SHAFT EXTENSION				KEY SIZE			BEARING		FRAME NO.
		A	AA	AB	B	BA	BB	C	K	M									D	E	EE	G	ED	F	GA	DRIVE END	OPP. D END	
355B	8P	710	85	790	800	280	1100	355	35	M24	1081	1264	1190	355	37	1360	1717	352	110	210	204	100	160	28	116	11/110	9/80	355B
355C	2P	710	85	790	900	280	1200	355	35	M24	1081	1264	1330	355	37	1360	1777	352	85	170	164	76	140	22	90	9S/80	9S/80	355C
	4P																1817		110	210	204	100	160	28	116	11/110	9/80	
355C	6P&8P	710	85	790	900	280	1200	355	35	M24	1081	1264	1190	355	37	1360	1817	352	110	210	204	100	160	28	116	11/110	9/80	355C
355D	2P	710	85	790	1000	280	1300	355	35	M24	1081	1264	1330	355	37	1360	1877	352	85	170	164	76	140	22	90	9S/80	9S/80	355D
355D	4P	710	85	790	1000	280	1300	355	35	M24	1081	1264	1330	355	37	1360	1917	352	110	210	204	100	160	28	116	11/110	9/80	355D
	6P&8P												1190															
355E	2P	710	85	790	1120	280	1420	355	35	M24	1081	1264	1330	355	37	1360	1997	352	85	170	164	76	140	22	90	9S/80	9S/80	355E
	4P																2037		110	210	204	100	160	28	116	11/110	9/80	
400B	6P&8P	800	95	900	900	355	1260	400	42	M30	1185	1331	1310	400	37	1610	1882	372	125	210	204	114	160	32	132	11/125	11/110	400B
400C	4P	800	95	900	1000	355	1360	400	42	M30	1185	1331	1450	400	37	1610	1982	372	125	210	204	114	160	32	132	11/125	11/110	400C
	6P&8P												1310															
400D	2P	800	95	900	1120	355	1480	400	42	M30	1185	1331	1450	400	37	1610	2062	372	95	170	164	86	140	25	100	9S/90	9S/80	400D
400D	4P	800	95	900	1120	355	1480	400	42	M30	1185	1331	1450	400	37	1610	2102	372	125	210	204	114	160	32	132	11/125	11/110	400D
	6P&8P												1310															
400E	2P	800	95	900	1250	355	1610	400	42	M30	1185	1331	1450	400	37	1610	2192	372	95	170	164	86	140	25	100	9S/90	9S/80	400E
450B	4P	900	100	990	1000	380	1420	450	42	M30	1290	1376	1540	450	37	1712	2077	377	140	250	244	128	200	36	148	14/140	11/125	450B
	6P&8P												1400															
450C	4P	900	100	990	1120	380	1540	450	42	M30	1290	1376	1540	450	37	1712	2197	377	140	250	244	128	200	36	148	14/140	11/125	450C
	6P&8P												1400															
450D	4P	900	100	990	1250	380	1670	450	42	M30	1290	1376	1540	450	37	1712	2327	377	140	250	244	128	200	36	148	14/140	11/125	450D
	6P&8P												1400															

1. TOLERANCE OF SHAFT EXTENSION DIAMETER D=m6.
2. TOLERANCE OF SHAFT CENTER HEIGHT H=$^{0}_{-1}$
3. TOLERANCE OF KEY WIDTH F=h9.
4. USABLE SHAFT LENGTH:EE
5. SLEEVE BEARINGS SELF LUBRICATION(NATURAL COOLING).
6. PROVISION FOR NONCONTACTIVE VIBRATION PROBE, DISTANCE OF "C" HAVE TO BE CHANGED F#355:450, F#400:500, F#450:530, F#500:600, F#560:630, F#630:670, F#710:710

OUTLINE DIMENSIONS SHEET

3—PHASE INDUCTION MOTOR
FRAME NO. (WZ)355C—710E

NEMA WEATHER PROTECTED TYPE I/II. SQUIRREL CAGE ROTOR.



DIMENSIONS IN MM

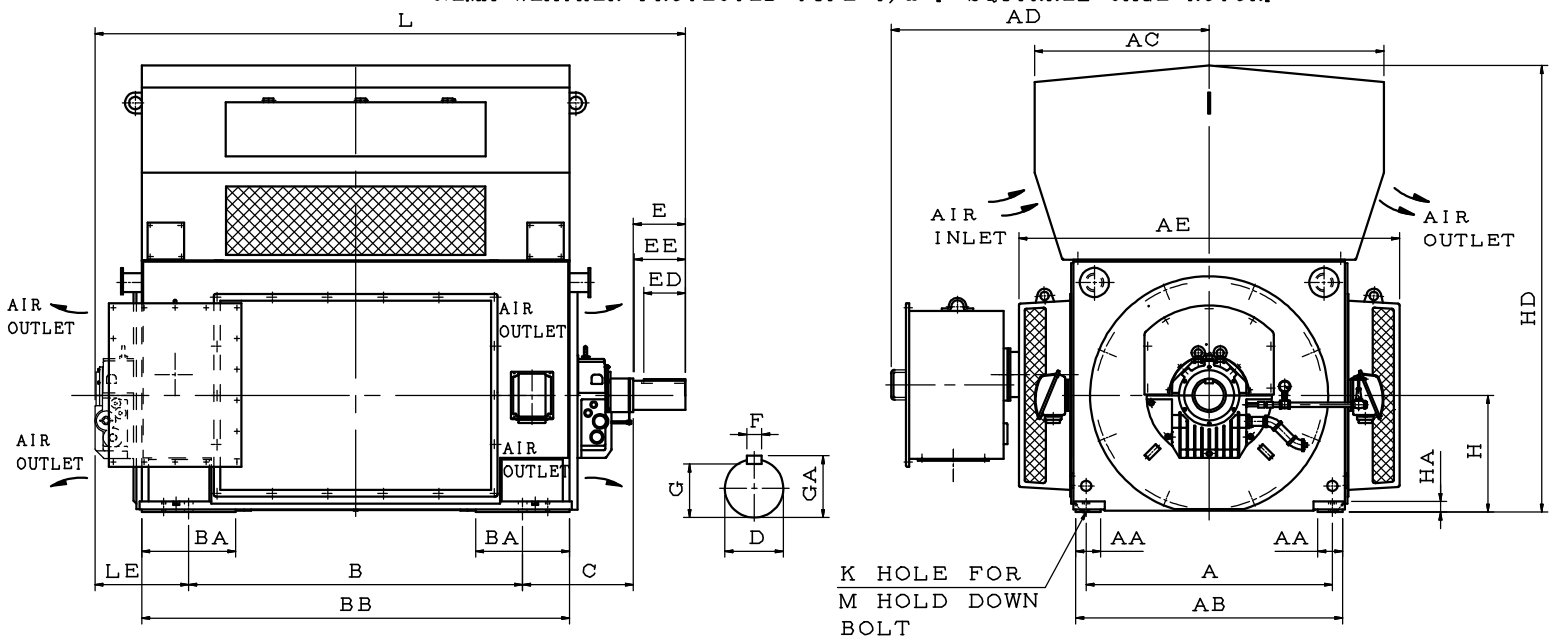
FRAME NO.	NO. OF POLES	MOUNTING									AC	AD	AE	H	HA	HD	L	LE	SHAFT EXTENSION				KEY SIZE			BEARING		FRAME NO.
		A	AA	AB	B	BA	BB	C	K	M									D	E	EE	G	ED	F	GA	DRIVE END	OPP. D END	
500B	6P&8P	1000	140	1150	1120	405	1570	500	48	M36	1475	1456	1540	500	37	1940	2323	403	180	300	287	165	250	45	190	18/180	14/140	500B
500C	6P&8P	1000	140	1150	1250	405	1700	500	48	M36	1475	1456	1540	500	37	1940	2453	403	180	300	287	165	250	45	190	18/180	14/140	500C
500D	6P&8P	1000	140	1150	1400	405	1850	500	48	M36	1475	1456	1540	500	37	1940	2603	403	180	300	287	165	250	45	190	18/180	14/140	500D
560C	6P	1180	140	1280	1400	430	1850	530	55	M42	1675	1529	1690	560	51	2140	2658	428	180	300	287	165	250	45	190	18/180	14/140	560C
	8P																2708		200	350	337	185	280	45	210	18/200	18/180	
560D	6P	1180	140	1280	1600	430	2050	530	55	M42	1675	1529	1690	560	51	2140	2858	428	180	300	287	165	250	45	190	18/180	14/140	560D
	8P																2908		200	350	337	185	280	45	210	18/200	18/180	
630D	6P&8P	1250	160	1400	1800	480	2300	560	55	M42	1750	1585	1790	630	58	2568	3188	478	200	350	337	185	280	45	210	18/200	18/180	630D
630E	6P&8P	1250	160	1400	2000	480	2500	560	55	M42	1750	1585	1790	630	58	2568	3388	478	200	350	337	185	280	45	210	18/200	18/180	630E
710C	8P	1400	180	1570	1800	520	2350	600	55	M42	2150	1785	2190	710	50	2973	3263	513	220	350	337	203	280	50	231	18/225	18/200	710C
710D	8P	1400	180	1570	2000	520	2550	600	55	M42	2150	1785	2190	710	50	2973	3463	513	220	350	337	203	280	50	231	18/225	18/200	710D
710E	8P	1400	180	1570	2240	520	2700	600	55	M42	2150	1785	2190	710	50	2973	3658	468	220	350	337	203	280	50	231	18/225	18/200	710E

1. TOLERANCE OF SHAFT EXTENSION DIAMETER D=m6.
2. TOLERANCE OF SHAFT CENTER HEIGHT H=$^{0}_{-1}$
3. TOLERANCE OF KEY WIDTH F=h9.
4. USABLE SHAFT LENGTH:EE
5. SLEEVE BEARINGS SELF LUBRICATION(NATURAL COOLING).
6. PROVISION FOR NONCONTACTIVE VIBRATION PROBE, DISTANCE OF "C" HAVE TO BE CHANGED F#355:450, F#400:500, F#450:530, F#500:600, F#560:630, F#630:670, F#710:710

OUTLINE DIMENSIONS SHEET

3—PHASE INDUCTION MOTOR
FRAME NO. (WZ)355C—710E

NEMA WEATHER PROTECTED TYPE I/II . SQUIRREL CAGE ROTOR.



DIMENSIONS IN MM

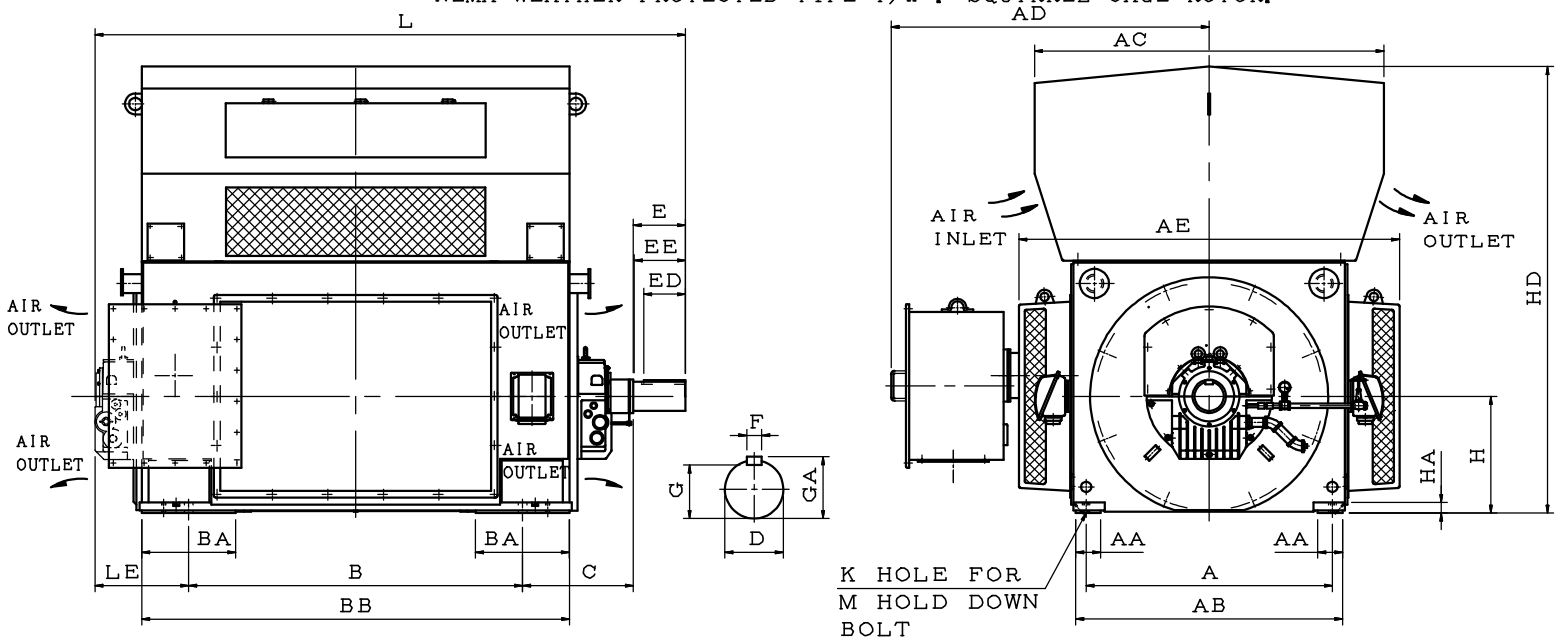
FRAME NO.	NO. OF POLES	MOUNTING									AC	AD	AE	H	HA	HD	L	LE	SHAFT EXTENSION				KEY SIZE			BEARING		FRAME NO.
		A	AA	AB	B	BA	BB	C	K	M									D	E	EE	G	ED	F	GA	DRIVE END	OPP. D END	
450D	2P	900	100	990	1250	380	1670	450	42	M30	1290	1376	1540	450	37	1712	2287	377	110	210	204	100	160	28	116	11/110	9/80	450D
450E	2P	900	100	990	1400	380	1820	450	42	M30	1290	1376	1540	450	37	1712	2437	377	110	210	204	100	160	28	116	11/110	9/80	450E
500B	4P	1000	140	1150	1120	405	1570	500	48	M36	1475	1456	1680	500	37	1940	2323	403	160	300	294	147	250	40	169	14/160	11/125	500C
500C	4P	1000	140	1150	1250	405	1700	500	48	M36	1475	1456	1680	500	37	1940	2453	403	160	300	294	147	250	40	169	14/160	11/125	500C
500D	2P	1000	140	1150	1400	405	1850	500	48	M36	1475	1456	1680	500	37	1940	2513	403	125	210	204	114	160	32	132	11/125	11/110	500D
	4P																2603		160	300	294	147	250	40	169	14/160	11/125	
500E	2P	1000	140	1150	1600	405	2050	500	48	M36	1475	1456	1680	500	37	1940	2713	403	125	210	204	114	160	32	132	11/125	11/110	500E
560C	4P	1180	140	1280	1400	430	1850	530	55	M42	1675	1529	1830	560	51	2140	2658	428	180	300	287	165	250	45	190	18/180	14/140	560C
560D	2P	1180	140	1280	1600	430	2050	530	55	M42	1675	1529	1830	560	51	2140	2743	403	125	210	204	114	160	32	132	14/125	11/110	560D
	4P																2858	428	180	300	287	165	250	45	190	18/180	14/140	

1. TOLERANCE OF SHAFT EXTENSION DIAMETER D=m6.
2. TOLERANCE OF SHAFT CENTER HEIGHT H=±
3. TOLERANCE OF KEY WIDTH F=h9.
4. USABLE SHAFT LENGTH:EE
5. SLEEVE BEARINGS (EXTERNAL OIL CIRCULATION).
6. PROVISION FOR NONCONTACTIVE VIBRATION PROBE, DISTANCE OF "C" HAVE TO BE CHANGED F#450:530, F#500:600, F#560:630, F#630:670, F#710:710

OUTLINE DIMENSIONS SHEET

3—PHASE INDUCTION MOTOR
FRAME NO. (WZ)450D—710E

NEMA WEATHER PROTECTED TYPE I/II . SQUIRREL CAGE ROTOR.



DIMENSIONS IN MM

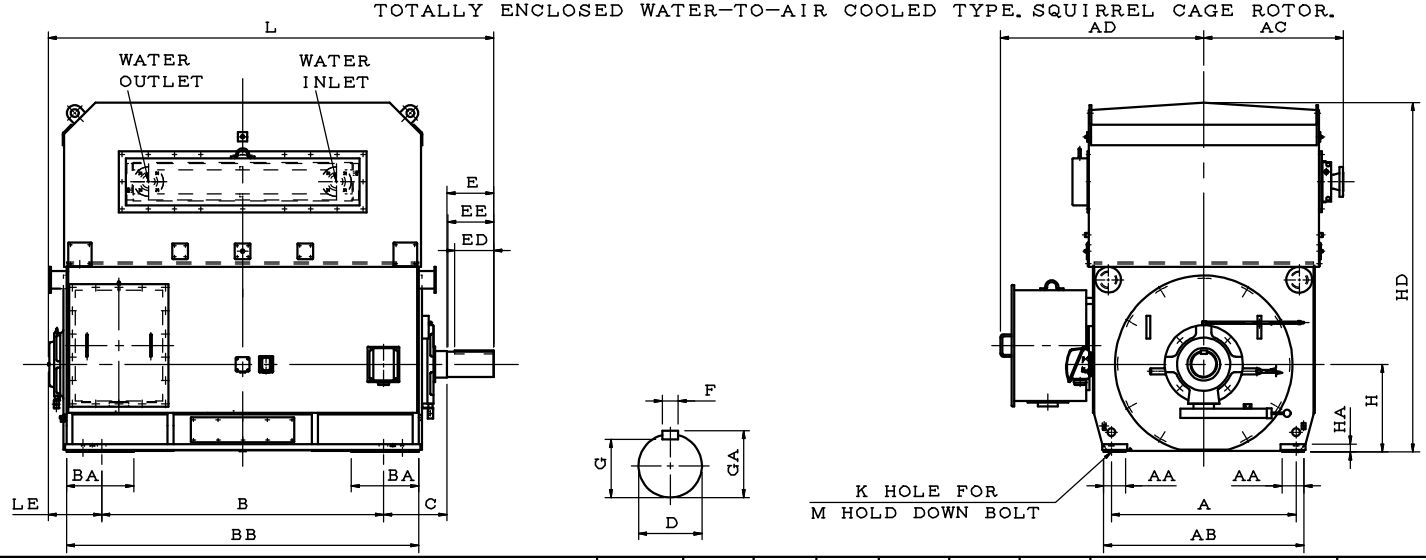
FRAME NO.	NO. OF POLES	MOUNTING									AC	AD	AE	H	HA	HD	L	LE	SHAFT EXTENSION				KEY SIZE			BEARING		FRAME NO.
		A	AA	AB	B	BA	BB	C	K	M									D	E	EE	G	ED	F	GA	DRIVE END	OPP. D END	
630C	4P	1250	160	1400	1600	480	2100	560	55	M42	1750	1585	1930	630	58	2568	2988	478	200	350	337	185	280	45	210	18/200	18/180	630C
630D	4P	1250	160	1400	1800	480	2300	560	55	M42	1750	1585	1930	630	58	2568	3188	478	200	350	337	185	280	45	210	18/200	18/180	630D
630E	2P	1250	160	1400	2000	480	2500	560	55	M42	1750	1585	1930	630	58	2568	3293	483	140	250	244	128	200	36	148	14/140	14/125	630E
710C	4P	1400	180	1570	1800	520	2350	600	55	M42	2150	1785	2330	710	50	2973	3263	513	220	350	337	203	280	50	231	18/225	18/200	710C
	6P												2190															
710D	6P	1400	180	1570	2000	520	2550	600	55	M42	2150	1785	2190	710	50	2973	3463	513	220	350	337	203	280	50	231	18/225	18/200	710D

1. TOLERANCE OF SHAFT EXTENSION DIAMETER D=m6.
2. TOLERANCE OF SHAFT CENTER HEIGHT H=±
3. TOLERANCE OF KEY WIDTH F=h9.
4. USABLE SHAFT LENGTH:EE
5. SLEEVE BEARINGS (EXTERNAL OIL CIRCULATION).
6. PROVISION FOR NONCONTACTIVE VIBRATION PROBE, DISTANCE OF "C" HAVE TO BE CHANGED F#450:530, F#500:600, F#560:630, F#630:670, F#710:710

OUTLINE DIMENSIONS SHEET

3—PHASE INDUCTION MOTOR
FRAME NO. (WZ)450D—710E

TOTALLY ENCLOSED WATER-TO-AIR COOLED TYPE. SQUIRREL CAGE ROTOR.



DIMENSIONS IN MM

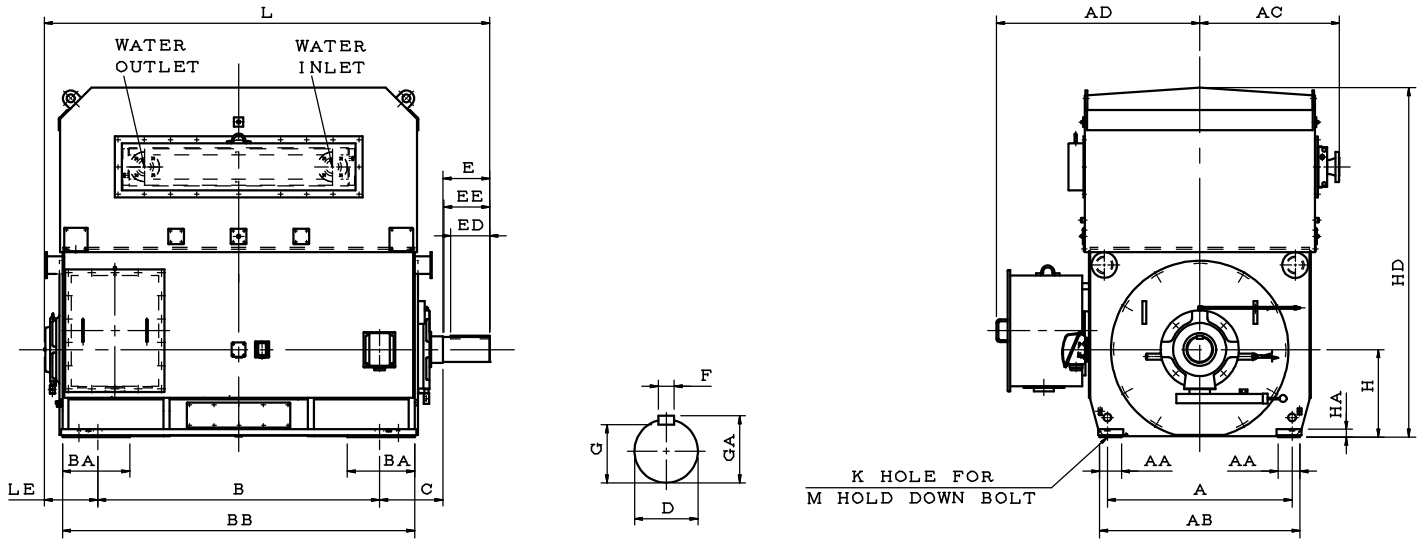
FRAME NO.	NO. OF POLES	MOUNTING									AC	AD	H	HA	HD	L	LE	SHAFT EXTENSION				KEY SIZE			BEARING		FRAME NO.
		A	AA	AB	B	BA	BB	C	K	M								D	E	EE	G	ED	F	GA	DRIVE END	OPP. D END	
355B	8P	710	85	790	800	280	1100	254	35	M24	LATER	1035	355	40	1783	1529	265	110	210	200	100	160	28	116	6324	6320	355B
355C	2P	710	85	790	900	280	1200	254	35	M24		1036	355	40	1783	1563	239	85	170	157	76	140	22	90	6218C3	6315C3	355C
	4P, 6P, 8P											1035				1629	265	110	210	200	100	160	28	116	6324	6320	
355D	2P	710	85	790	1000	280	1300	254	35	M24		1036	355	40	1783	1663	239	85	170	157	76	140	22	90	6218C3	6315C3	355D
	4P, 6P, 8P											1035				1729	265	110	210	200	100	160	28	116	6324	6320	
355E	2P	710	85	790	1120	280	1420	254	35	M24		1036	355	40	1783	1783	239	85	170	157	76	140	22	90	6218C3	6315C3	355E
355E	4P	710	85	790	1120	280	1420	254	35	M24		1035	355	40	1783	1849	265	110	210	200	100	160	28	116	6324	6320	355E
400B	6P, 8P	800	95	900	900	355	1260	280	42	M30		1086	400	40	1883	1673	283	125	210	202	114	160	32	132	6326	6322	400B
400C	4P 6P, 8P	800	95	900	1000	355	1360	280	42	M30		1086	400	40	1883	1773	283	125	210	202	114	160	32	132	6326	6322	400C
400D	2P	800	95	900	1120	355	1480	280	42	M30		1089	400	40	1883	1839	269	85	170	157	76	140	22	90	6218C3	6315C3	400D
400D	4P 6P, 8P	800	95	900	1120	355	1480	280	42	M30		1086	400	40	1883	1893	283	125	210	202	114	160	32	132	6326	6322	400D
450B	4P 6P, 8P	900	100	990	1000	380	1420	315	42	M30		1156	450	40	2003	1884	319	140	250	240	128	200	36	148	6330	6326	450B
450C	4P 6P, 8P	900	100	990	1120	380	1540	315	42	M30		1156	450	40	2003	2004	319	140	250	240	128	200	36	148	6330	6326	450C
450D	4P 6P, 8P	900	100	990	1250	380	1670	315	42	M30		1156	450	40	2003	2134	319	140	250	240	128	200	36	148	6330	6326	450D

1. TOLERANCE OF SHAFT EXTENSION DIAMETER D=m6.
2. TOLERANCE OF SHAFT CENTER HEIGHT H=
3. TOLERANCE OF KEY WIDTH F=h9.
4. USABLE SHAFT LENGTH:EE
5. ANTI-FRICTION BEARINGS.

OUTLINE DIMENSIONS SHEET

3-PHASE INDUCTION MOTOR
FRAME NO. (WZ)355B-710E

TOTALLY ENCLOSED WATER-TO-AIR COOLED TYPE. SQUIRREL CAGE ROTOR.



DIMENSIONS IN MM

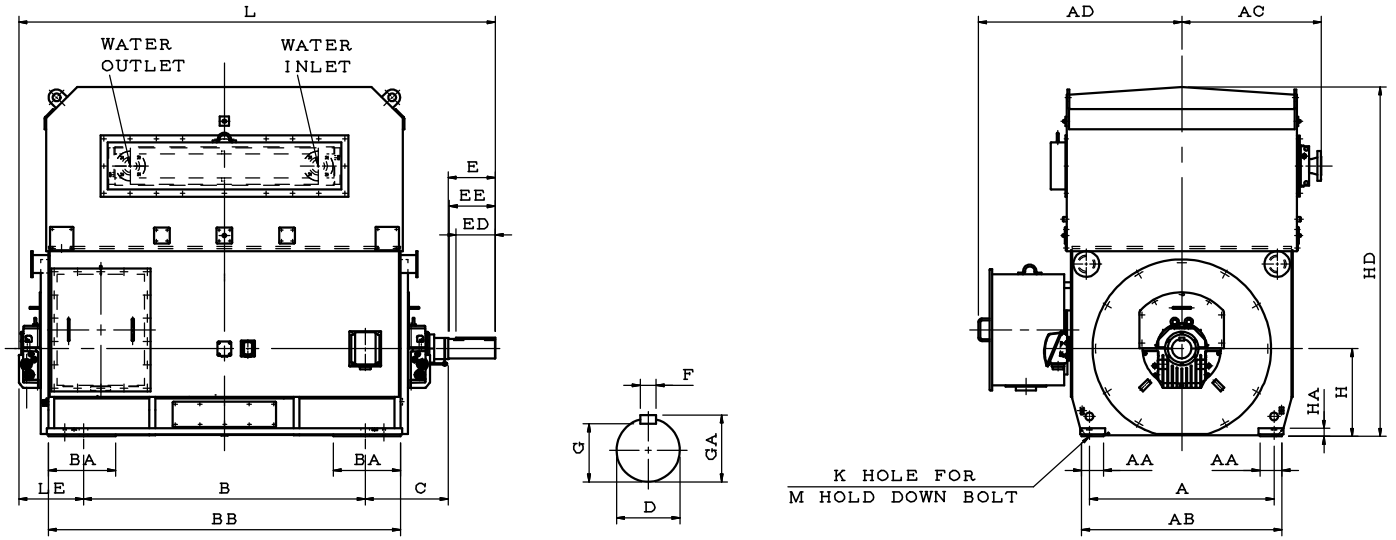
FRAME NO.	NO. OF POLES	MOUNTING									AC	AD	H	HA	HD	L	LE	SHAFT EXTENSION				KEY SIZE			BEARING		FRAME NO.
		A	AA	AB	B	BA	BB	C	K	M								D	E	EE	G	ED	F	GA	DRIVE END	OPP. D END	
500B	6P, 8P	1000	140	1150	1120	405	1570	335	48	M36	LATER	1226	500	40	2113	2113	358	160	300	290	147	250	40	169	6334	6330	500B
500C	6P, 8P	1000	140	1150	1250	405	1700	335	48	M36		1226	500	40	2113	2243	358	180	300	290	165	250	45	190	6338	6330	500C
500D	6P, 8P	1000	140	1150	1400	405	1850	335	48	M36		1226	500	40	2113	2393	358	180	300	290	165	250	45	190	6338	6330	500D
560C	6P, 8P	1180	140	1280	1400	430	1850	355	55	M42		1296	560	53	2233	2413	358	180	300	290	165	250	45	190	6338	6334	560C
560D	6P, 8P	1180	140	1280	1600	430	2050	355	55	M42		1296	560	53	2233	2613	358	180	300	290	165	250	45	190	6338	6334	560D
630D	6P, 8P	1250	160	1400	1800	480	2300	375	55	M42		1349	630	58	2408	2909	384	200	350	337	185	280	45	210	NU244 +6244	NU238	630D
630E	6P, 8P	1250	160	1400	2000	480	2500	375	55	M42		1349	630	58	2408	3109	384	200	350	337	185	280	45	210	NU244 +6244	NU238	630E
710C	6P, 8P	1400	180	1570	1800	520	2350	475	55	M42		1499	710	50	2643	3015	390	220	350	337	203	280	50	231	NU248 +6048	NU244	710C
710D	6P, 8P	1400	180	1570	2000	520	2550	475	55	M42		1499	710	50	2643	3215	390	220	350	337	203	280	50	231	NU248 +6048	NU244	710D
710E	8P	1400	180	1570	2240	520	2700	475	55	M42		1499	710	50	2643	3410	345	220	350	337	203	280	50	231	NU248 +6048	NU244	710E

1. TOLERANCE OF SHAFT EXTENSION DIAMETER D=m6.
2. TOLERANCE OF SHAFT CENTER HEIGHT H=
3. TOLERANCE OF KEY WIDTH F=h9.
4. USABLE SHAFT LENGTH:EE
5. ANTI-FRICTION BEARINGS.

OUTLINE DIMENSIONS SHEET

3-PHASE INDUCTION MOTOR
FRAME NO. (WZ)355B-710E

TOTALLY ENCLOSED WATER-TO-AIR COOLED TYPE. SQUIRREL CAGE ROTOR.



DIMENSIONS IN MM

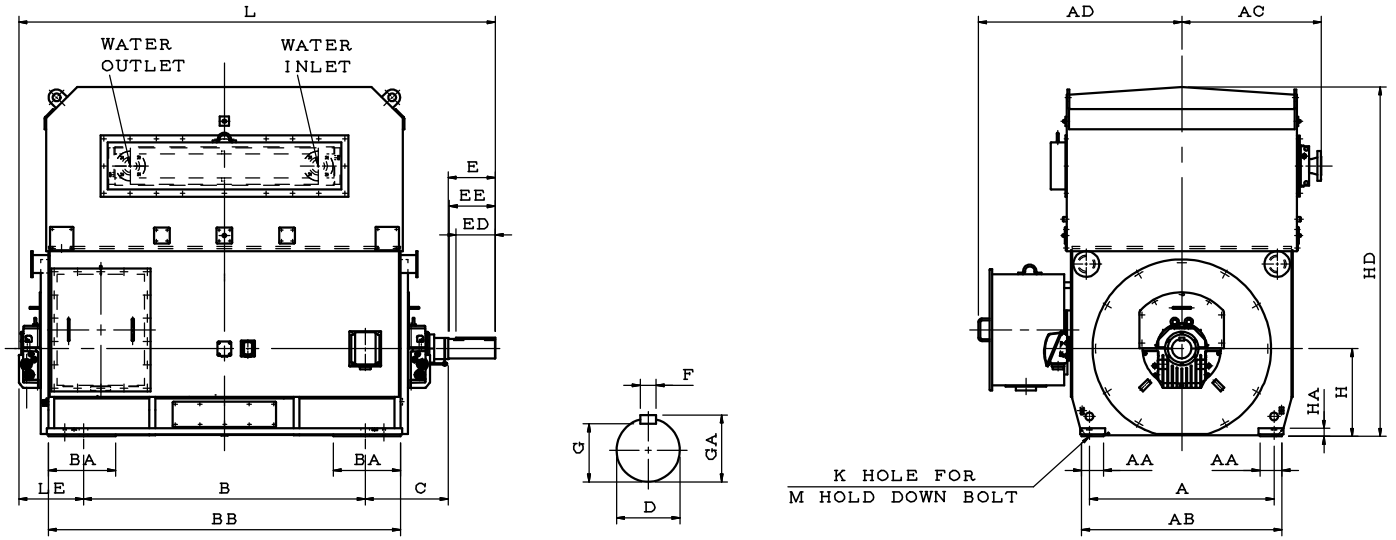
FRAME NO.	NO. OF POLES	MOUNTING									AC	AD	H	HA	HD	L	LE	SHAFT EXTENSION				KEY SIZE			BEARING		FRAME NO.
		A	AA	AB	B	BA	BB	C	K	M								D	E	EE	G	ED	F	GA	DRIVE END	OPP. D END	
355B	8P	710	85	790	800	280	1100	355	35	M24		1035	355	40	1783	1653	288	110	210	204	100	160	28	116	11/110	9 / 80	355B
355C	2P	710	85	790	900	280	1200	355	35	M24		1036	355	40	1783	1747	322	85	170	164	76	140	22	90	9S/ 80	9S/ 80	355C
	4P, 6P, 8P											1035				1753	288	110	210	204	100	160	28	116	11/110	9 / 80	
355D	2P	710	85	790	1000	280	1300	355	35	M24		1036	355	40	1783	1847	322	85	170	164	76	140	22	90	9S/ 80	9S/ 80	355D
	4P, 6P, 8P											1035				1853	288	110	210	204	100	160	28	116	11/110	9 / 80	
355E	2P	710	85	790	1120	280	1420	355	35	M24		1036	355	40	1783	1967	322	85	170	164	76	140	22	90	9S/ 80	9S/ 80	355E
	4P											1035				1973	288	110	210	204	100	160	28	116	11/110	9 / 80	
400B	6P, 8P	800	95	900	900	355	1260	400	42	M30		1086	400	40	1883	1843	333	125	210	204	114	160	32	132	11/125	11/110	400B
400C	4P 6P, 8P	800	95	900	1000	355	1360	400	42	M30	LATER	1086	400	40	1883	1943	333	125	210	204	114	160	32	132	11/125	11/110	400C
400D	2P	800	95	900	1120	355	1480	400	42	M30		1089	400	40	1883	2042	352	95	170	164	86	140	25	100	9S/ 90	9S/ 80	400D
	4P, 6P, 8P											1086				2063	333	125	210	204	114	160	32	132	11/125	11/110	
400E	2P	800	95	900	1250	355	1610	400	42	M30		1089	400	40	1883	2172	352	95	170	164	86	140	25	100	9S/ 90	9S/ 80	400E
450B	4P 6P, 8P	900	100	990	1000	380	1420	450	42	M30		1156	450	40	2003	2070	370	140	250	244	128	200	36	148	14/140	11/125	450B
450C	4P 6P, 8P	900	100	990	1120	380	1540	450	42	M30		1156	450	40	2003	2190	370	140	250	244	128	200	36	148	14/140	11/125	450C
450D	4P 6P, 8P	900	100	990	1250	380	1670	450	42	M30		1156	450	40	2003	2320	370	140	250	244	128	200	36	148	14/140	11/125	450D

1. TOLERANCE OF SHAFT EXTENSION DIAMETER D=m6.
2. TOLERANCE OF SHAFT CENTER HEIGHT H=$^{0}_{-1}$
3. TOLERANCE OF KEY WIDTH F=h9.
4. **USABLE SHAFT LENGTH:EE**
5. SLEEVE BEARINGS SELF LUBRICATION(NATURAL COOLING).
6. PROVISION FOR NONCONTACTIVE VIBRATION PROBE, DISTANCE OF "C" HAVE TO BE CHANGED F#355:450, F#400:500, F#450:530, F#500:600, F#560:630, F#630:670, F#710:710

OUTLINE DIMENSIONS SHEET

3-PHASE INDUCTION MOTOR
FRAME NO. (WZ)355B-710E

TOTALLY ENCLOSED WATER-TO-AIR COOLED TYPE. SQUIRREL CAGE ROTOR.



DIMENSIONS IN MM

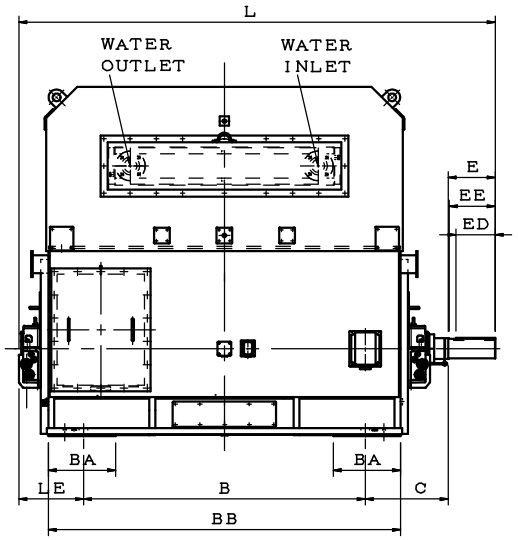
FRAME NO.	NO. OF POLES	MOUNTING									AC	AD	H	HA	HD	L	LE	SHAFT EXTENSION				KEY SIZE			BEARING		FRAME NO.
		A	AA	AB	B	BA	BB	C	K	M								D	E	EE	G	ED	F	GA	DRIVE END	OPP. D END	
500B	6P, 8P	1000	140	1150	1120	405	1570	500	48	M36		1226	500	40	2113	2331	411	180	300	287	165	250	45	190	18/180	14/140	500B
500C	6P, 8P	1000	140	1150	1250	405	1700	500	48	M36		1226	500	40	2113	2461	411	180	300	287	165	250	45	190	18/180	14/140	500C
500D	6P, 8P	1000	140	1150	1400	405	1850	500	48	M36		1226	500	40	2113	2611	411	180	300	287	165	250	45	190	18/180	14/140	500D
560C	6P	1180	140	1280	1400	430	1850	530	55	M42		1296	560	53	2233	2646	416	180	300	287	165	250	45	190	18/180	14/140	560C
	8P															2721	441	200	350	337	185	280	45	210	18/200	18/180	
560D	6P	1180	140	1280	1600	430	2050	530	55	M42		1296	560	53	2233	2846	416	180	300	287	165	250	45	190	18/180	14/140	560D
	8P															2921	441	200	350	337	185	280	45	210	18/200	18/180	
630D	6P, 8P	1250	160	1400	1800	480	2300	560	55	M42	LATER	1349	630	58	2408	3188	478	200	350	337	185	280	45	210	18/200	18/180	630D
630E	6P, 8P	1250	160	1400	2000	480	2500	560	55	M42		1349	630	58	2408	3388	478	200	350	337	185	280	45	210	18/200	18/180	630E
710C	8P	1400	180	1570	1800	520	2350	600	55	M42		1499	710	50	2643	3263	513	220	350	337	203	280	50	231	18/225	18/200	710C
710D	8P	1400	180	1570	2000	520	2550	600	55	M42		1499	710	50	2643	3463	513	220	350	337	203	280	50	231	18/225	18/200	710D
710E	8P	1400	180	1570	2240	520	2700	600	55	M42		1499	710	50	2643	3658	468	220	350	337	203	280	50	231	18/225	18/200	710E

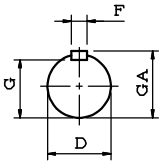
1. TOLERANCE OF SHAFT EXTENSION DIAMETER D=m6.
2. TOLERANCE OF SHAFT CENTER HEIGHT H=
3. TOLERANCE OF KEY WIDTH F=h9.
4. **USABLE SHAFT LENGTH:EE**
5. SLEEVE BEARINGS SELF LUBRICATION(NATURAL COOLING).
6. PROVISION FOR NONCONTACTIVE VIBRATION PROBE, DISTANCE OF "C" HAVE TO BE CHANGED F#355:450, F#400:500, F#450:530, F#500:600, F#560:630, F#630:670, F#710:710

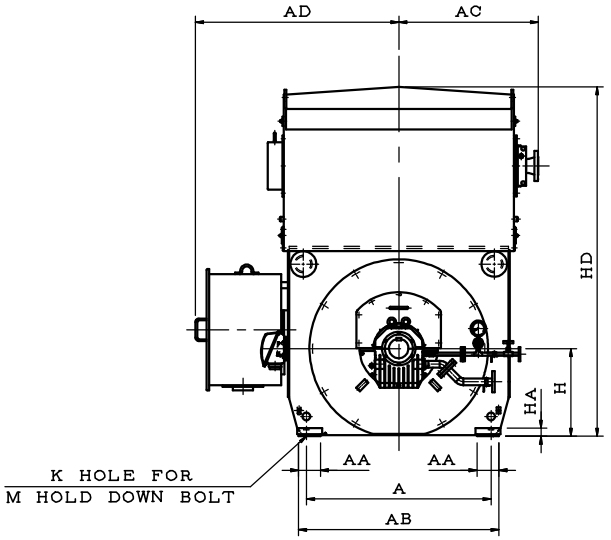
OUTLINE DIMENSIONS SHEET

3-PHASE INDUCTION MOTOR
FRAME NO. (WZ)355B-710E

TOTALLY ENCLOSED WATER-TO-AIR COOLED TYPE. SQUIRREL CAGE ROTOR.







DIMENSIONS IN MM

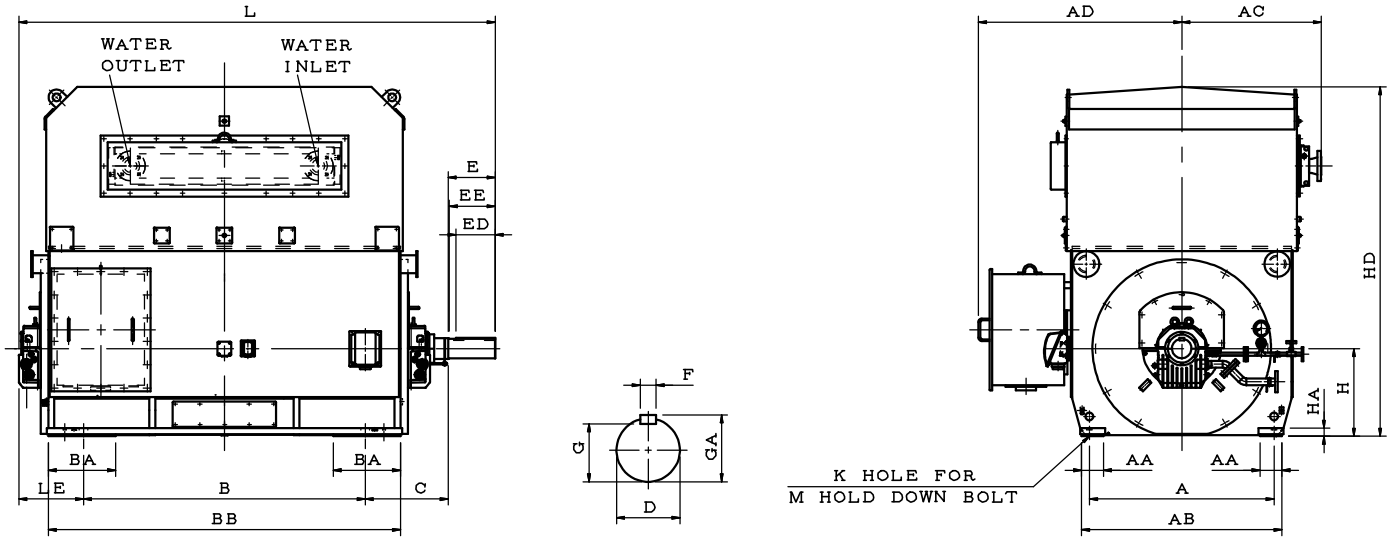
FRAME NO.	NO. OF POLES	MOUNTING									AC	AD	H	HA	HD	L	LE	SHAFT EXTENSION				KEY SIZE			BEARING		FRAME NO.
		A	AA	AB	B	BA	BB	C	K	M								D	E	EE	G	ED	F	GA	DRIVE END	OPP. D END	
450D	2P	900	100	990	1250	380	1670	450	42	M30		1159	450	40	2003	2283	373	110	210	204	100	160	28	116	11/110	9/ 80	450D
450E	2P	900	100	990	1400	380	1820	450	42	M30		1159	450	40	2003	2433	373	110	210	204	100	160	28	116	11/110	9/ 80	450E
500B	4P	1000	140	1150	1120	405	1570	500	48	M36		1226	500	40	2113	2311	391	160	300	294	147	250	40	169	14/160	11/125	500B
500C	4P	1000	140	1150	1250	405	1700	500	48	M36		1226	500	40	2113	2441	391	160	300	294	147	250	40	169	14/160	11/125	500C
500D	2P	1000	140	1150	1400	405	1850	500	48	M36	LATER	1229	500	40	2113	2513	403	125	210	204	114	160	32	132	11/125	11/110	500D
	4P											1226				2591	391	160	300	294	147	250	40	169	14/160	11/125	
500E	2P	1000	140	1150	1600	405	2050	500	48	M36		1229	500	40	2113	2713	403	125	210	204	114	160	32	132	11/125	11/110	500E
560B	4P	1180	140	1280	1250	430	1700	530	55	M42		1296	560	53	2233	2496	416	180	300	287	165	250	45	190	18/180	14/140	560B
560C	4P	1180	140	1280	1400	430	1850	530	55	M42		1296	560	53	2233	2646	416	180	300	287	165	250	45	190	18/180	14/140	560C
560D	2P	1180	140	1280	1600	430	2050	530	55	M42		1299	560	53	2233	2753	413	125	210	204	114	160	32	132	14/125	11/110	560D
	4P											1296				2846	416	180	300	287	165	250	45	190	18/180	14/140	

1. TOLERANCE OF SHAFT EXTENSION DIAMETER D=m6.
2. TOLERANCE OF SHAFT CENTER HEIGHT H=$^{0}_{-1}$
3. TOLERANCE OF KEY WIDTH F=h9.
4. USABLE SHAFT LENGTH:EE
5. SLEEVE BEARINGS (EXTERNAL OIL CIRCULATION).
6. PROVISION FOR NONCONTACTIVE VIBRATION PROBE, DISTANCE OF "C" HAVE TO BE CHANGED F#450:530, F#500:600, F#560:630. F#630:670, F#710:710

OUTLINE DIMENSIONS SHEET

3-PHASE INDUCTION MOTOR
FRAME NO. (WZ)450D-710D

TOTALLY ENCLOSED WATER-TO-AIR COOLED TYPE. SQUIRREL CAGE ROTOR.



DIMENSIONS IN MM

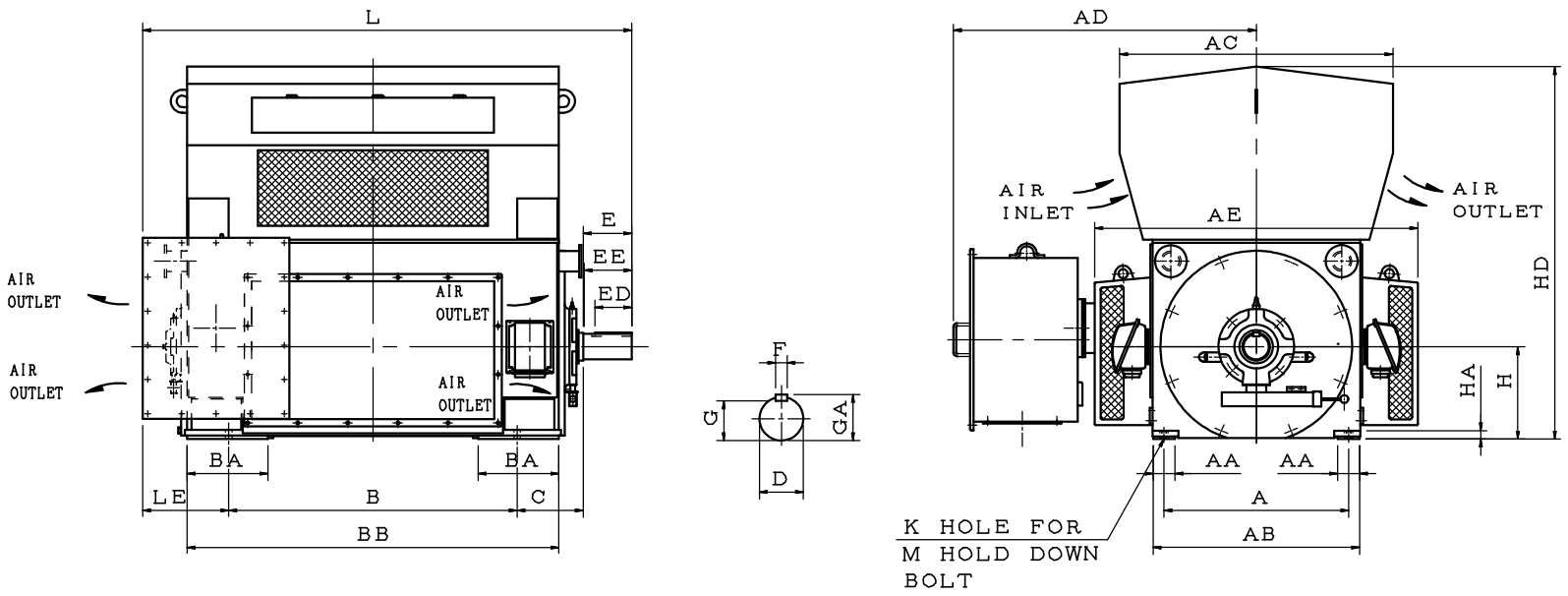
FRAME NO.	NO. OF POLES	MOUNTING									AC	AD	H	HA	HD	L	LE	SHAFT EXTENSION				KEY SIZE			BEARING		FRAME NO.
		A	AA	AB	B	BA	BB	C	K	M								D	E	EE	G	ED	F	GA	DRIVE END	OPP. D END	
630C	4P	1250	160	1400	1600	480	2100	560	55	M42		1349	630	58	2408	2988	478	200	350	337	185	280	45	210	18/200	18/180	630C
630D	4P	1250	160	1400	1800	480	2300	560	55	M42		1349	630	58	2408	3188	478	200	350	337	185	280	45	210	18/200	18/180	630D
630E	2P	1250	160	1400	2000	480	2500	560	55	M42	LATER	1352	630	58	2408	3293	483	140	250	244	128	200	36	148	14/140	14/125	630E
710C	4P, 6P	1400	180	1570	1800	520	2350	600	55	M42		1499	710	50	2643	3263	513	220	350	337	203	280	50	231	18/225	18/200	710C
710D	6P	1400	180	1570	2000	520	2550	600	55	M42		1499	710	50	2643	3463	513	220	350	337	203	280	50	231	18/225	18/200	710D

1. TOLERANCE OF SHAFT EXTENSION DIAMETER D=m6.
2. TOLERANCE OF SHAFT CENTER HEIGHT H=$^{0}_{-1}$
3. TOLERANCE OF KEY WIDTH F=h9.
4. USABLE SHAFT LENGTH:EE
5. SLEEVE BEARINGS (EXTERNAL OIL CIRCULATION).
6. PROVISION FOR NONCONTACTIVE VIBRATION PROBE, DISTANCE OF "C" HAVE TO BE CHANGED F#450:530, F#500:600, F#560:630. F#630:670, F#710:710

OUTLINE DIMENSIONS SHEET

3-PHASE INDUCTION MOTOR
FRAME NO. (WZ)450D-710D

NEMA WEATHER PROTECTED TYPE I/II. SQUIRREL CAGE ROTOR.



DIMENSIONS IN MM

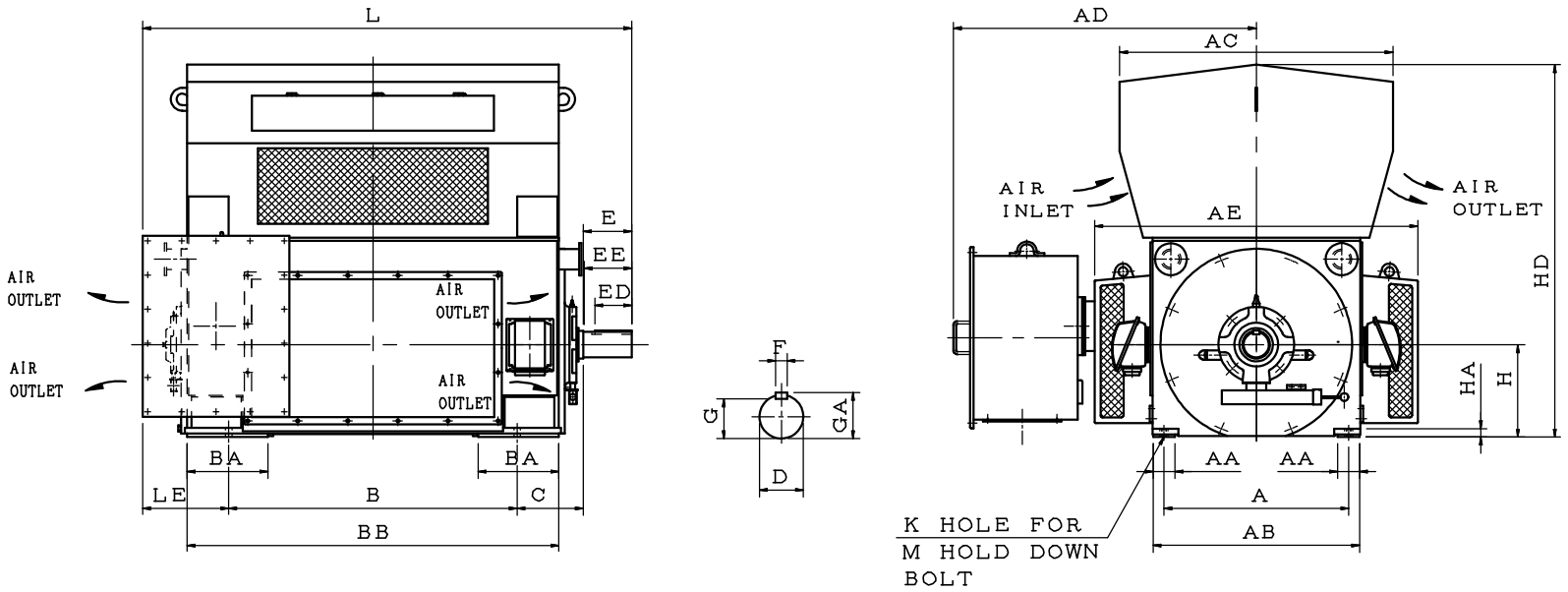
FRAME NO.	NO. OF POLES	MOUNTING									AC	AD	AE	H	HA	HD	L	LE	SHAFT EXTENSION				KEY SIZE			BEARING		FRAME NO.
		A	AA	AB	B	BA	BB	C	K	M									D	E	EE	G	ED	F	GA	DRIVE END	OPP. D END	
355B	8P	710	85	790	800	280	1100	254	35	M24	1081	1264	1190	355	37	1360	1616	352	110	210	200	100	160	28	116	6324	6320	355B
355C	2P	710	85	790	900	280	1200	254	35	M24	1081	1264	1330	355	37	1360	1646	352	70	140	127	62.5	110	20	74.5	6315C3	6315C3	355C
355C	4P 6P&8P	710	85	790	900	280	1200	254	35	M24	1081	1264	1330 1190	355	37	1360	1716	352	110	210	200	100	160	28	116	6324	6320	355C
355D	2P	710	85	790	1000	280	1300	254	35	M24	1081	1264	1330	355	37	1360	1746	352	70	140	127	62.5	110	20	74.5	6315C3	6315C3	355D
355D	4P 6P&8P	710	85	790	1000	280	1300	254	35	M24	1081	1264	1330 1190	355	37	1360	1816	352	110	210	200	100	160	28	116	6324	6320	355D
355E	4P	710	85	790	1120	280	1420	254	35	M24	1081	1264	1330	355	37	1360	1936	352	110	210	200	100	160	28	116	6324	6320	355E
400B	6P&8P	800	95	900	900	355	1260	280	42	M30	1185	1331	1310	400	37	1610	1762	372	125	210	202	114	160	32	132	6326	6322	400B
400C	4P 6P&8P	800	95	900	1000	355	1360	280	42	M30	1185	1331	1450 1310	400	37	1610	1862	372	125	210	202	114	160	32	132	6326	6322	400C
400D	4P 6P&8P	800	95	900	1120	355	1480	280	42	M30	1185	1331	1450 1310	400	37	1610	1982	372	125	210	202	114	160	32	132	6326	6322	400D

1. TOLERANCE OF SHAFT EXTENSION DIAMETER D=m6.
2. TOLERANCE OF SHAFT CENTER HEIGHT H=±
3. TOLERANCE OF KEY WIDTH F=h9.
4. USABLE SHAFT LENGTH:EE
5. ANTI-FRICTION BEARINGS.

OUTLINE DIMENSIONS SHEET

3-PHASE INDUCTION MOTOR
FRAME NO. (WZ)355B-710D

NEMA WEATHER PROTECTED TYPE I/II. SQUIRREL CAGE ROTOR.



DIMENSIONS IN MM

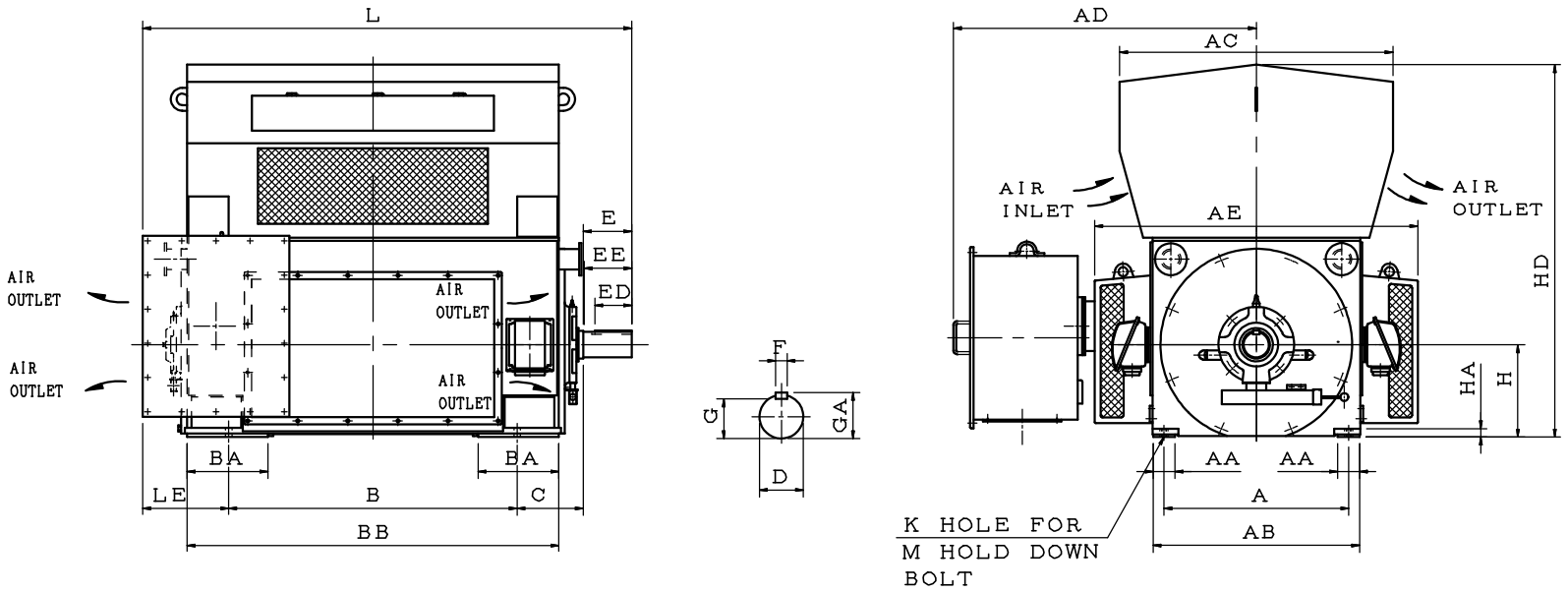
FRAME NO.	NO. OF POLES	MOUNTING									AC	AD	AE	H	HA	HD	L	LE	SHAFT EXTENSION				KEY SIZE			BEARING		FRAME NO.
		A	AA	AB	B	BA	BB	C	K	M									D	E	EE	G	ED	F	GA	DRIVE END	OPP. D END	
450B	4P	900	100	990	1000	380	1420	315	42	M30	1290	1376	1540	450	37	1712	1942	377	140	250	240	128	200	36	148	6330	6326	450B
	6P&8P												1400															
450C	4P	900	100	990	1120	380	1540	315	42	M30	1290	1376	1540	450	37	1712	2062	377	140	250	240	128	200	36	148	6330	6326	450C
	6P&8P												1400															
450D	4P	900	100	990	1250	380	1660	315	42	M30	1290	1376	1540	450	37	1712	2192	377	140	250	240	128	200	36	148	6330	6326	450D
	6P&8P												1400															
500B	6P&8P	1000	140	1150	1120	405	1570	335	48	M36	1475	1456	1540	500	37	1940	2137	382	160	300	290	147	250	40	169	6334	6330	500B
500C	6P&8P	1000	140	1150	1250	405	1700	335	48	M36	1475	1456	1540	500	37	1940	2267	382	180	300	290	165	250	45	190	6338	6330	500C
500D	6P&8P	1000	140	1150	1400	405	1850	335	48	M36	1475	1456	1540	500	37	1940	2417	382	180	300	290	165	250	45	190	6338	6330	500D
560C	6P&8P	1180	140	1280	1400	430	1850	355	55	M42	1675	1529	1690	560	51	2140	2397	342	180	300	290	165	250	45	190	6338	6334	560C
560D	6P&8P	1180	140	1280	1600	430	2050	355	55	M42	1675	1529	1690	560	51	2140	2597	342	180	300	290	165	250	45	190	6338	6334	560D

1. TOLERANCE OF SHAFT EXTENSION DIAMETER D=m6.
2. TOLERANCE OF SHAFT CENTER HEIGHT H=±
3. TOLERANCE OF KEY WIDTH F=h9.
4. USABLE SHAFT LENGTH:EE
5. ANTI-FRICTION BEARINGS.

OUTLINE DIMENSIONS SHEET

3-PHASE INDUCTION MOTOR
FRAME NO. (WZ)355B-710D

NEMA WEATHER PROTECTED TYPE I/II. SQUIRREL CAGE ROTOR.



DIMENSIONS IN MM

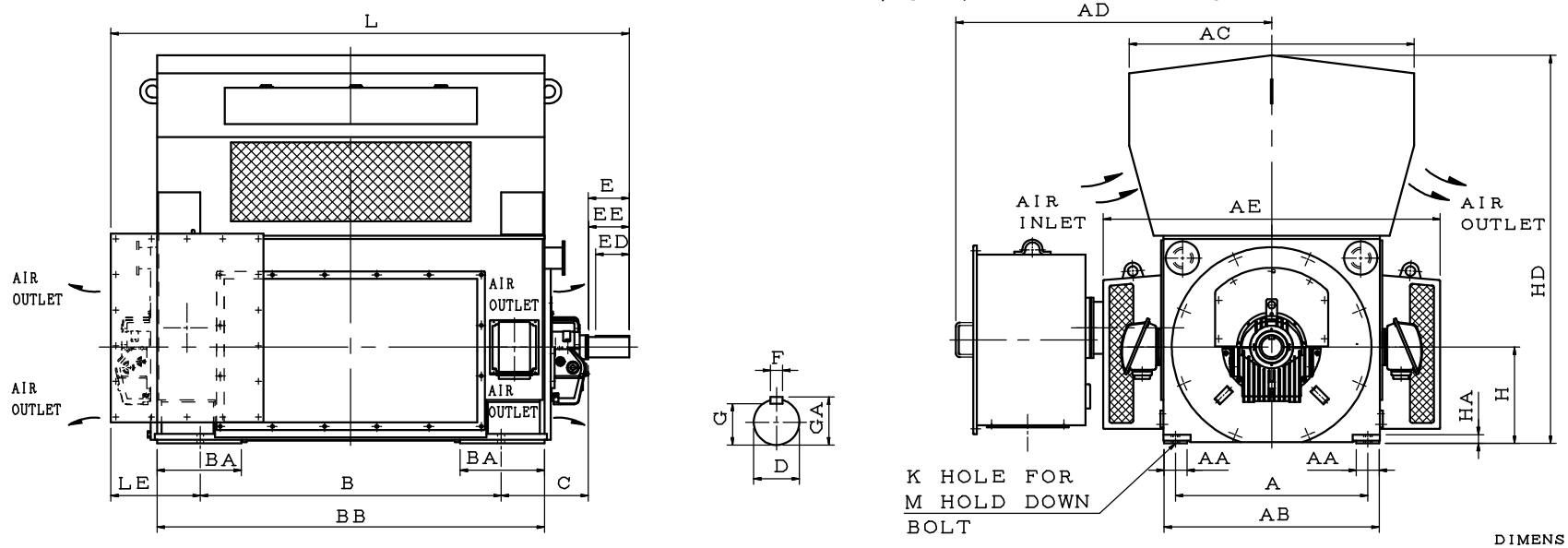
FRAME NO.	NO. OF POLES	MOUNTING									AC	AD	AE	H	HA	HD	L	LE	SHAFT EXTENSION				KEY SIZE			BEARING		FRAME NO.
		A	AA	AB	B	BA	BB	C	K	M									D	E	EE	G	ED	F	GA	DRIVE END	OPP. D END	
630D	6P&8P	1250	160	1400	1800	480	2300	375	55	M42	1750	1585	1790	630	58	2568	3002	477	200	350	337	185	280	45	210	NU244 +6244	NU238	630D
630E	6P&8P	1250	160	1400	2000	480	2500	375	55	M42	1750	1585	1790	630	58	2568	3202	477	200	350	337	185	280	45	210	NU244 +6244	NU238	630E
710C	6P&8P	1400	180	1570	1800	520	2350	475	55	M42	2150	1785	2190	710	50	2973	3127	502	220	350	337	203	280	50	231	NU248 +6048	NU244	710C
710D	6P&8P	1400	180	1570	2000	520	2550	475	55	M42	2150	1785	2190	710	50	2973	3327	502	220	350	337	203	280	50	231	NU248 +6048	NU244	710D
710E	8P	1400	180	1570	2240	520	2700	475	55	M42	2150	1785	2190	710	50	2973	3522	457	220	350	337	203	280	50	231	NU248 +6048	NU244	710E

1. TOLERANCE OF SHAFT EXTENSION DIAMETER D=m6.
2. TOLERANCE OF SHAFT CENTER HEIGHT H=±
3. TOLERANCE OF KEY WIDTH F=h9.
4. USABLE SHAFT LENGTH:EE
5. ANTI-FRICTION BEARINGS.

OUTLINE DIMENSIONS SHEET

3-PHASE INDUCTION MOTOR
FRAME NO. (WZ)355B-710D

NEMA WEATHER PROTECTED TYPE I/II. SQUIRREL CAGE ROTOR.



DIMENSIONS IN MM

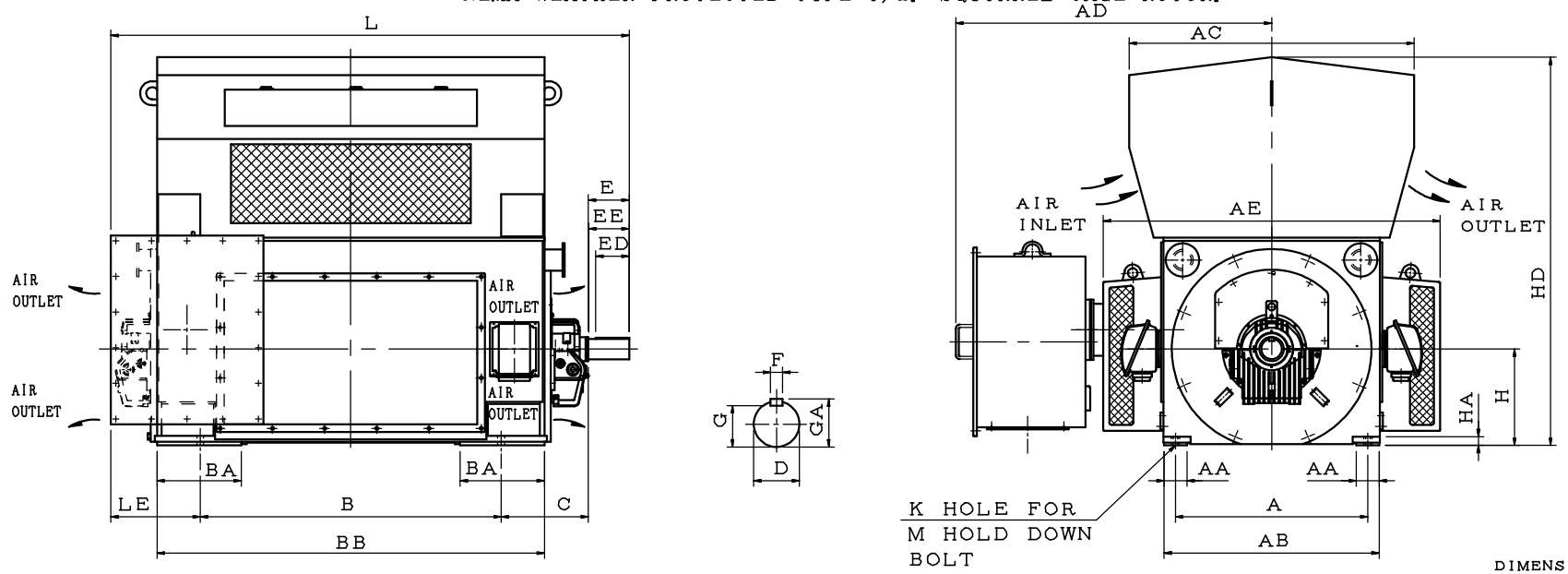
FRAME NO.	NO. OF POLES	MOUNTING									AC	AD	AE	H	HA	HD	L	LE	SHAFT EXTENSION				KEY SIZE			BEARING		FRAME NO.
		A	AA	AB	B	BA	BB	C	K	M									D	E	EE	G	ED	F	GA	DRIVE END	OPP. D END	
355B	8P	710	85	790	800	280	1100	355	35	M24	1081	1264	1190	355	37	1360	1717	352	110	210	204	100	160	28	116	11/110	9/80	355B
355C	2P	710	85	790	900	280	1200	355	35	M24	1081	1264	1330	355	37	1360	1777	352	85	170	164	76	140	22	90	9S/80	9S/80	355C
	4P																1817		110	210	204	100	160	28	116	11/110	9/80	
355C	6P&8P	710	85	790	900	280	1200	355	35	M24	1081	1264	1190	355	37	1360	1817	352	110	210	204	100	160	28	116	11/110	9/80	355C
355D	2P	710	85	790	1000	280	1300	355	35	M24	1081	1264	1330	355	37	1360	1877	352	85	170	164	76	140	22	90	9S/80	9S/80	355D
355D	4P	710	85	790	1000	280	1300	355	35	M24	1081	1264	1330	355	37	1360	1917	352	110	210	204	100	160	28	116	11/110	9/80	355D
	6P&8P												1190															
355E	2P	710	85	790	1120	280	1420	355	35	M24	1081	1264	1330	355	37	1360	1997	352	85	170	164	76	140	22	90	9S/80	9S/80	355E
	4P																2037		110	210	204	100	160	28	116	11/110	9/80	
400B	6P&8P	800	95	900	900	355	1260	400	42	M30	1185	1331	1310	400	37	1610	1882	372	125	210	204	114	160	32	132	11/125	11/110	400B
400C	4P	800	95	900	1000	355	1360	400	42	M30	1185	1331	1450	400	37	1610	1982	372	125	210	204	114	160	32	132	11/125	11/110	400C
	6P&8P												1310															
400D	2P	800	95	900	1120	355	1480	400	42	M30	1185	1331	1450	400	37	1610	2062	372	95	170	164	86	140	25	100	9S/90	9S/80	400D
400D	4P	800	95	900	1120	355	1480	400	42	M30	1185	1331	1450	400	37	1610	2102	372	125	210	204	114	160	32	132	11/125	11/110	400D
	6P&8P												1310															
400E	2P	800	95	900	1250	355	1610	400	42	M30	1185	1331	1450	400	37	1610	2192	372	95	170	164	86	140	25	100	9S/90	9S/80	400E
450B	4P	900	100	990	1000	380	1420	450	42	M30	1290	1376	1540	450	37	1712	2077	377	140	250	244	128	200	36	148	14/140	11/125	450B
	6P&8P												1400															
450C	4P	900	100	990	1120	380	1540	450	42	M30	1290	1376	1540	450	37	1712	2197	377	140	250	244	128	200	36	148	14/140	11/125	450C
	6P&8P												1400															
450D	4P	900	100	990	1250	380	1670	450	42	M30	1290	1376	1540	450	37	1712	2327	377	140	250	244	128	200	36	148	14/140	11/125	450D
	6P&8P												1400															

1. TOLERANCE OF SHAFT EXTENSION DIAMETER D=m6.
2. TOLERANCE OF SHAFT CENTER HEIGHT H=$^{0}_{-1}$
3. TOLERANCE OF KEY WIDTH F=h9.
4. USABLE SHAFT LENGTH:EE
5. SLEEVE BEARINGS SELF LUBRICATION(NATURAL COOLING).
6. PROVISION FOR NONCONTACTIVE VIBRATION PROBE, DISTANCE OF "C" HAVE TO BE CHANGED F#355:450, F#400:500, F#450:530, F#500:600, F#560:630, F#630:670, F#710:710

OUTLINE DIMENSIONS SHEET

3—PHASE INDUCTION MOTOR
FRAME NO. (WZ)355C—710E

NEMA WEATHER PROTECTED TYPE I/II. SQUIRREL CAGE ROTOR.



DIMENSIONS IN MM

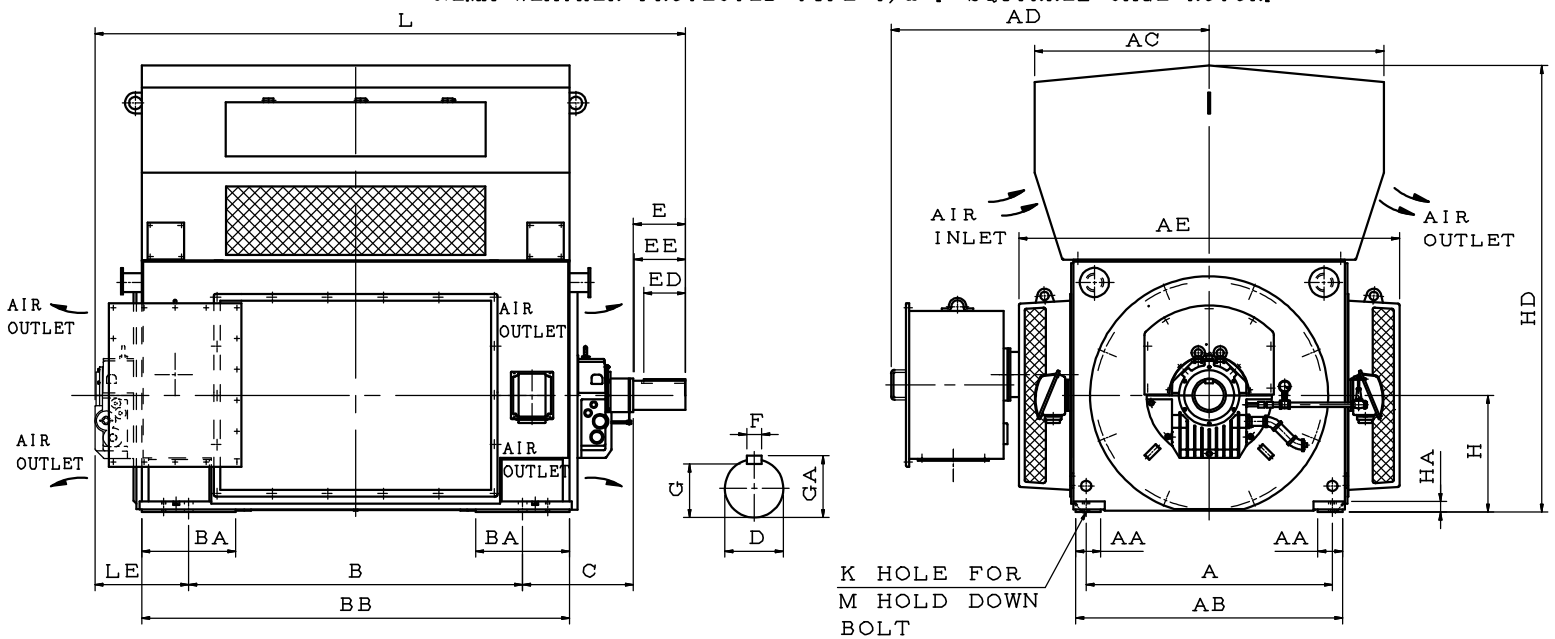
FRAME NO.	NO. OF POLES	MOUNTING									AC	AD	AE	H	HA	HD	L	LE	SHAFT EXTENSION				KEY SIZE			BEARING		FRAME NO.
		A	AA	AB	B	BA	BB	C	K	M									D	E	EE	G	ED	F	GA	DRIVE END	OPP. D END	
500B	6P&8P	1000	140	1150	1120	405	1570	500	48	M36	1475	1456	1540	500	37	1940	2323	403	180	300	287	165	250	45	190	18/180	14/140	500B
500C	6P&8P	1000	140	1150	1250	405	1700	500	48	M36	1475	1456	1540	500	37	1940	2453	403	180	300	287	165	250	45	190	18/180	14/140	500C
500D	6P&8P	1000	140	1150	1400	405	1850	500	48	M36	1475	1456	1540	500	37	1940	2603	403	180	300	287	165	250	45	190	18/180	14/140	500D
560C	6P	1180	140	1280	1400	430	1850	530	55	M42	1675	1529	1690	560	51	2140	2658	428	180	300	287	165	250	45	190	18/180	14/140	560C
	8P																2708		200	350	337	185	280	45	210	18/200	18/180	
560D	6P	1180	140	1280	1600	430	2050	530	55	M42	1675	1529	1690	560	51	2140	2858	428	180	300	287	165	250	45	190	18/180	14/140	560D
	8P																2908		200	350	337	185	280	45	210	18/200	18/180	
630D	6P&8P	1250	160	1400	1800	480	2300	560	55	M42	1750	1585	1790	630	58	2568	3188	478	200	350	337	185	280	45	210	18/200	18/180	630D
630E	6P&8P	1250	160	1400	2000	480	2500	560	55	M42	1750	1585	1790	630	58	2568	3388	478	200	350	337	185	280	45	210	18/200	18/180	630E
710C	8P	1400	180	1570	1800	520	2350	600	55	M42	2150	1785	2190	710	50	2973	3263	513	220	350	337	203	280	50	231	18/225	18/200	710C
710D	8P	1400	180	1570	2000	520	2550	600	55	M42	2150	1785	2190	710	50	2973	3463	513	220	350	337	203	280	50	231	18/225	18/200	710D
710E	8P	1400	180	1570	2240	520	2700	600	55	M42	2150	1785	2190	710	50	2973	3658	468	220	350	337	203	280	50	231	18/225	18/200	710E

1. TOLERANCE OF SHAFT EXTENSION DIAMETER D=m6.
2. TOLERANCE OF SHAFT CENTER HEIGHT H=$^{0}_{-1}$
3. TOLERANCE OF KEY WIDTH F=h9.
4. USABLE SHAFT LENGTH:EE
5. SLEEVE BEARINGS SELF LUBRICATION(NATURAL COOLING).
6. PROVISION FOR NONCONTACTIVE VIBRATION PROBE, DISTANCE OF "C" HAVE TO BE CHANGED F#355:450, F#400:500, F#450:530, F#500:600, F#560:630, F#630:670, F#710:710

OUTLINE DIMENSIONS SHEET

3—PHASE INDUCTION MOTOR
FRAME NO. (WZ)355C—710E

NEMA WEATHER PROTECTED TYPE I/II . SQUIRREL CAGE ROTOR.



DIMENSIONS IN MM

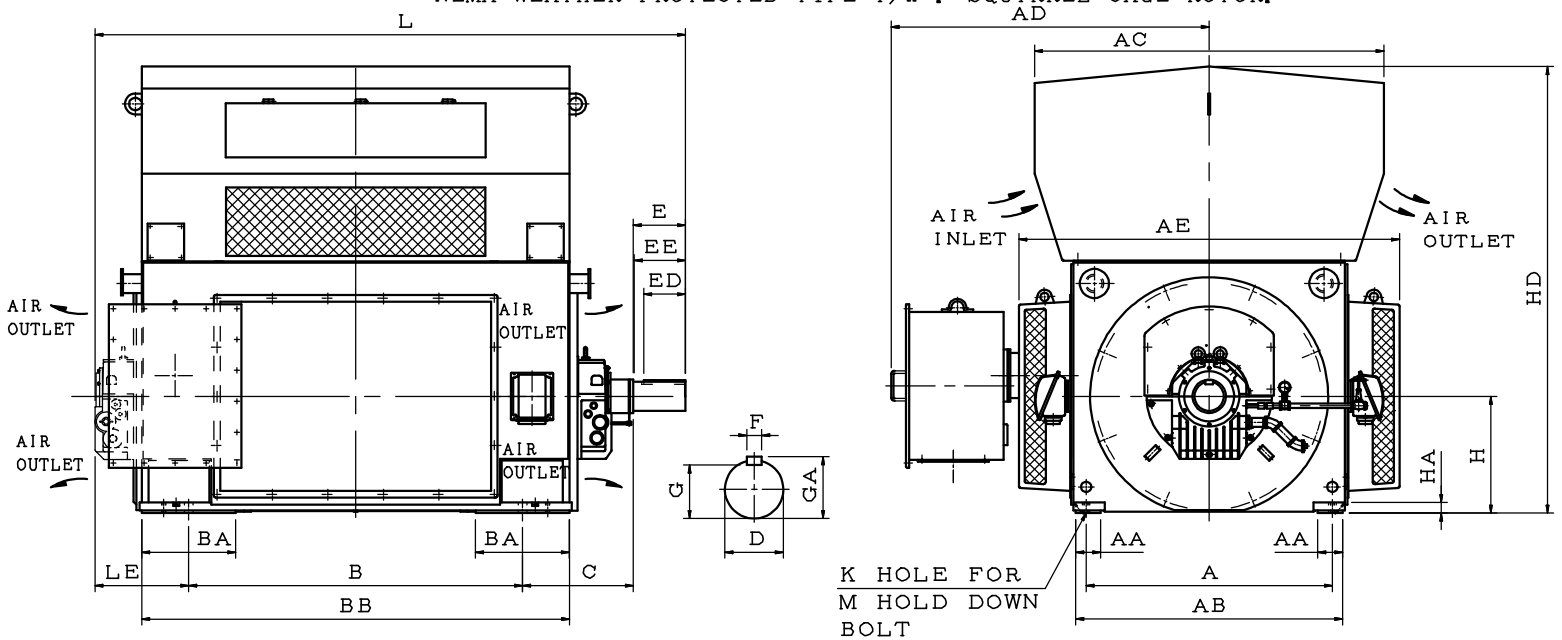
FRAME NO.	NO. OF POLES	MOUNTING									AC	AD	AE	H	HA	HD	L	LE	SHAFT EXTENSION				KEY SIZE			BEARING		FRAME NO.
		A	AA	AB	B	BA	BB	C	K	M									D	E	EE	G	ED	F	GA	DRIVE END	OPP. D END	
450D	2P	900	100	990	1250	380	1670	450	42	M30	1290	1376	1540	450	37	1712	2287	377	110	210	204	100	160	28	116	11/110	9/80	450D
450E	2P	900	100	990	1400	380	1820	450	42	M30	1290	1376	1540	450	37	1712	2437	377	110	210	204	100	160	28	116	11/110	9/80	450E
500B	4P	1000	140	1150	1120	405	1570	500	48	M36	1475	1456	1680	500	37	1940	2323	403	160	300	294	147	250	40	169	14/160	11/125	500C
500C	4P	1000	140	1150	1250	405	1700	500	48	M36	1475	1456	1680	500	37	1940	2453	403	160	300	294	147	250	40	169	14/160	11/125	500C
500D	2P	1000	140	1150	1400	405	1850	500	48	M36	1475	1456	1680	500	37	1940	2513	403	125	210	204	114	160	32	132	11/125	11/110	500D
	4P																2603		160	300	294	147	250	40	169	14/160	11/125	
500E	2P	1000	140	1150	1600	405	2050	500	48	M36	1475	1456	1680	500	37	1940	2713	403	125	210	204	114	160	32	132	11/125	11/110	500E
560C	4P	1180	140	1280	1400	430	1850	530	55	M42	1675	1529	1830	560	51	2140	2658	428	180	300	287	165	250	45	190	18/180	14/140	560C
560D	2P	1180	140	1280	1600	430	2050	530	55	M42	1675	1529	1830	560	51	2140	2743	403	125	210	204	114	160	32	132	14/125	11/110	560D
	4P																2858	428	180	300	287	165	250	45	190	18/180	14/140	

1. TOLERANCE OF SHAFT EXTENSION DIAMETER D=m6.
2. TOLERANCE OF SHAFT CENTER HEIGHT H=±
3. TOLERANCE OF KEY WIDTH F=h9.
4. USABLE SHAFT LENGTH:EE
5. SLEEVE BEARINGS (EXTERNAL OIL CIRCULATION).
6. PROVISION FOR NONCONTACTIVE VIBRATION PROBE, DISTANCE OF "C" HAVE TO BE CHANGED F#450:530, F#500:600, F#560:630, F#630:670, F#710:710

OUTLINE DIMENSIONS SHEET

3—PHASE INDUCTION MOTOR
FRAME NO. (WZ)450D—710E

NEMA WEATHER PROTECTED TYPE I/II . SQUIRREL CAGE ROTOR.



DIMENSIONS IN MM

FRAME NO.	NO. OF POLES	MOUNTING									AC	AD	AE	H	HA	HD	L	LE	SHAFT EXTENSION				KEY SIZE			BEARING		FRAME NO.
		A	AA	AB	B	BA	BB	C	K	M									D	E	EE	G	ED	F	GA	DRIVE END	OPP. D END	
630C	4P	1250	160	1400	1600	480	2100	560	55	M42	1750	1585	1930	630	58	2568	2988	478	200	350	337	185	280	45	210	18/200	18/180	630C
630D	4P	1250	160	1400	1800	480	2300	560	55	M42	1750	1585	1930	630	58	2568	3188	478	200	350	337	185	280	45	210	18/200	18/180	630D
630E	2P	1250	160	1400	2000	480	2500	560	55	M42	1750	1585	1930	630	58	2568	3293	483	140	250	244	128	200	36	148	14/140	14/125	630E
710C	4P	1400	180	1570	1800	520	2350	600	55	M42	2150	1785	2330	710	50	2973	3263	513	220	350	337	203	280	50	231	18/225	18/200	710C
	6P												2190															
710D	6P	1400	180	1570	2000	520	2550	600	55	M42	2150	1785	2190	710	50	2973	3463	513	220	350	337	203	280	50	231	18/225	18/200	710D

1. TOLERANCE OF SHAFT EXTENSION DIAMETER D=m6.
2. TOLERANCE OF SHAFT CENTER HEIGHT H=±
3. TOLERANCE OF KEY WIDTH F=h9.
4. USABLE SHAFT LENGTH:EE
5. SLEEVE BEARINGS (EXTERNAL OIL CIRCULATION).
6. PROVISION FOR NONCONTACTIVE VIBRATION PROBE, DISTANCE OF "C" HAVE TO BE CHANGED F#450:530, F#500:600, F#560:630, F#630:670, F#710:710

OUTLINE DIMENSIONS SHEET

3—PHASE INDUCTION MOTOR
FRAME NO. (WZ)450D—710E