Global Leader

ISO 9001 REGISTERED
DNV
MGMT.SYS.
RvA C024
DNV Certification B.V., The Netherlands

IEC Version

Low Voltage Induction Motor

HYUNDAI
HEAVY INDUSTRIES CO., LTD.

Real Saver from Experience Combined with Technology

Hyundai's Low Voltage Induction Motors use Finite Element Method(FEM) and Computer Aided Design(CAD) methods in an effort to develop and produce the most innovative motors from Hyundai's state-of-the-art and fully automated manufacturing facilities.
Hyundai's cast aluminum frame motors improve their performances by maximizing heat dissipation effect.
Also, Hyundai's cast iron frame motors are already reputed all over the world as the most economical for its outstanding contribution to user's energy saving with high efficiency, long life, light weight, low noise and less vibration.

We build a better future!

LOW VOLTAGE INDUCTION MOTOR

Contents

Major Products

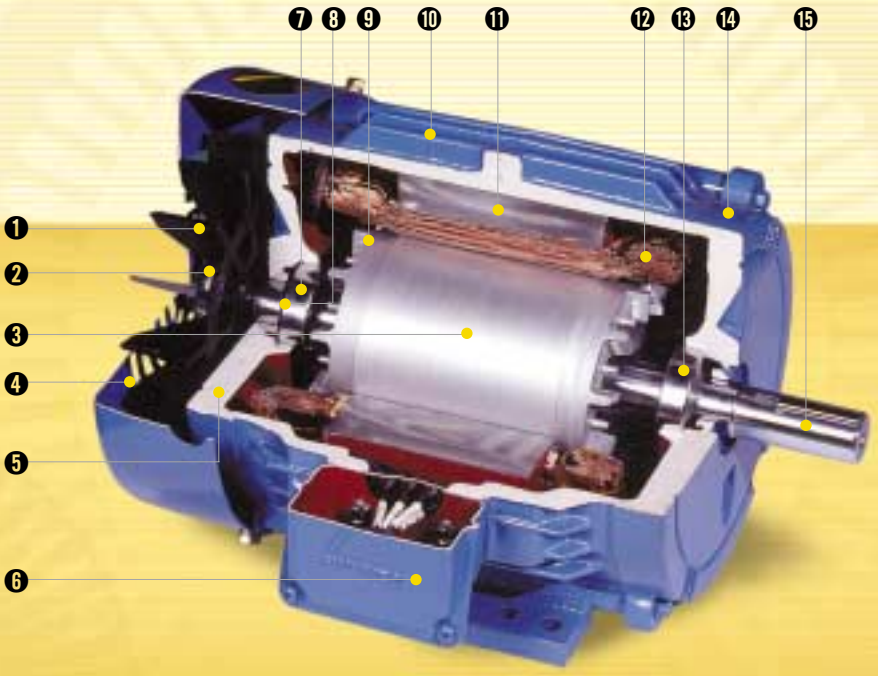
- Totally enclosed splash-proof type motors
- Open drip-proof type motors
- Weather-proof type motors
- Explosion-proof motors (increased safety type, flame-proof type)
- Special motors
  - Explosion proof motors
  - Closed coupled pump motors
  - Energy saver motors
- CE mark available for European standard

"Unique design assures the cost - effective operation and reliability you expect from HYUNDAI."

Standard Specifications (In Accordance with IEC 34, EN60034)

- Output power range: 0.09 kW to 132 kW
- Frame size: 71 frame to 280 frame
- Number of poles: 2, 4, 6 and 8 poles
- Supply Voltage: 100 V-660 V
- Frequency: 50 Hz or 60 Hz
- Time Rating: continuous
- Insulation Class: B or F
- Service Factor: 1.0
- Bearings: Ball
- Ambient Temp: 40℃
- Terminal box (horizontal type) is on the left hand side viewed from the drive end.
- Terminal Block available per request
- Direction of Rotation: Counter-clockwise viewed from the drive end
- Accessory: 1 shaft key

SECTIONAL VIEW & PARTS



Sectional View & Parts Name (Cast Iron Frame)

NAME OF PARTS	MATERIAL
❶ FAN	PLASTIC
❷ FAN CLAMP	MILD STEEL
❸ ROTOR CORE	SEMI PROCESSED LOW CARBON STEEL
❹ FAN COVER	MILD STEEL
❺ END SHIELD (N.D.E)	CAST IRON
❻ TERMINAL BOX	CAST IRON / MILD STEEL
❼ BEARING (N.D.E)	HIGH CARBON STEEL
❽ WAVE SPRING	STAINLESS STEEL
❾ BAR & END-RING	ALUMINIUM CASTING
❿ FRAME	CAST IRON
⓫ STATOR CORE	SEMI PROCESSED LOW CARBON STEEL
⓬ STATOR COIL	COPPER
⓭ BEARING (D.E)	HIGH CARBON STEEL
⓮ END SHIELD (D.E)	CAST IRON
⓯ SHAFT	CARBON STEEL

TEFC SEVERE DUTY

Feature

- **3 PHASE**
- **HORIZONTAL(B3)**
- **CAST IRON FRAME**
- **SQUIRREL CAGE**

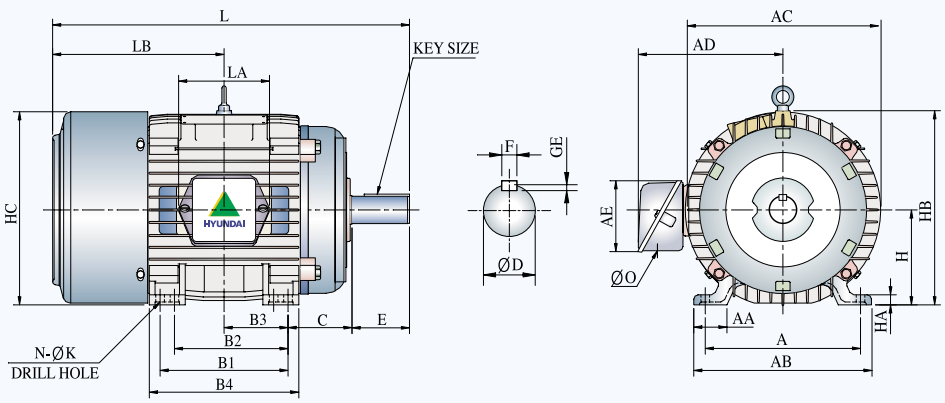
Specifications

- Output (kW) : 0.09 ~ 132
- Supply Voltage : 100 V ~ 660 V
- Frequency : 50 Hz or 60 Hz
- Protection : IP44,IP54,IP55
- Insulation : B, F
- Time rating : Continuous

FRAME	OUTPUT(KW)				Dimensions in mm											FIG.
					OVERALL						SHAFT				KEY SIZE	
	2P	4P	6P	8P	AC	H❸	HB	HC	L	LB	D❶	E	KEYWAY❷ F	KEYWAY❷ GE		
71	0.37/0.55	0.25/0.37	0.18/0.25	0.09/0.12	145	71	138	140	234	114	14	30	5	3	5×5×20	A
80	0.75/1.1	0.55/0.75	0.37/0.55	0.18/0.25	170	80	157	160	265	125	19	40	6	3.5	6×6×25	
90L	1.5/2.2	1.1/1.5	0.75/1.1	0.37/0.55	190	90	198	200	310	141.5	24	50	8	4	8×7×35	
100L	3	2.2/3	1.5	0.75	191	100	223	213	368	175	28	60	8	4	8×7×45	
112M	4	4	2.2	1.5	217	112	226	225	382	182	28	60	8	4	8×7×45	
132S	5.5/7.5	5.5	3	2.2	266	132	270	269	459	220	38	80	10	5	10×8×63	
132M	-	7.5	4/5.5	3.0	266	132	270	269	497	239	38	80	10	5	10×8×63	
160M	11/15	11	7.5	4/5.5	324	160	320	322	596	273	42	110	12	5	12×8×80	
160L	18.5	15	11	7.5	324	160	320	322	640	295	42	110	12	5	12×8×80	
180M	22	18.5	-	-	358	180	360	360	659	307	48	110	14	5.5	14×9×80	
180L	-	22	15	11	358	180	360	360	697	326	48	110	14	5.5	14×9×80	
200L	30/37	30	18.5/22	15	411	200	403	405	771	375.5	55	110	16	6	16×10×80	
225S	-	37	-	18.5	463	225	470	456	854	409.5	60	140	18	7	18×11×110	B
225M	45	-	-	-	463	225	470	456	824	409.5	55	110	16	6	16×10×80	
	-	45	30	22	463	225	470	456	854	409.5	60	140	18	7	18×11×110	
250M	55	-	-	-	512	250	528	506	945	462.5	60	140	18	7	18×11×110	
	-	55	37	30	512	250	528	506	945	462.5	65	140	18	7	18×11×110	
280S	75	-	-	-	569	280	589	559	1061	521.5	65	140	18	7	18×11×110	
	-	75	45	37	569	280	589	559	1061	521.5	75	140	20	7.5	20×12×110	
280M	90	-	-	-	569	280	589	559	1061	521.5	65	140	18	7	18×11×110	
	-	90	55	45	569	280	589	559	1061	521.5	75	140	20	7.5	20×12×110	
280L	110/132	-	-	-	569	280	589	559	1150	566	65	140	18	7	18×11×110	
	-	110/132	75/90	55/75	569	280	589	559	1180	566	80	170	22	9	22×14×140	

❶ Dimension D tolerance : ~ ϕ 28 : j6, ~ ϕ 48 : k6, ϕ 55 ~ : m6
❷ Keyway tolerance : H≦200 : N9, H≧225 : P9
❸ Dimension H tolerance : H≦250 : 0, -0.5 H≧280 : 0, -1.0

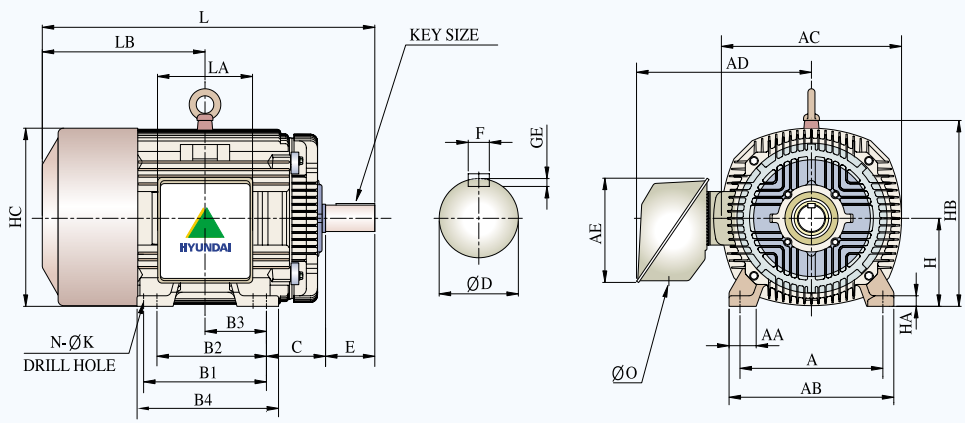
[Fig. A]



FRAME	MOUNTING											CONDUIT BOX				APPROX Wt.(kg)	FIG.
	A	AA	AB	HA	B1	B2	B3	B4	C	K ❹	N	AD	AE	LA	O		
71	112	30	143	7	90	-	45	112	45	7	4	123	90	70	ϕ22	8	A
80	125	30	155	11	100	-	50	142	50	10	4	143	90	70	ϕ22	11	
90L	140	45	162	10	125	-	62.5	162	56	10	4	150	90	70	ϕ22	18	
100L	160	44	194	12	140	-	70	166	63	12	4	175	109	136	PF0.75	30	
112M	190	40	218	12	140	(114)	70	166	70	12	8	175	109	136	PF0.75	48	
132S	216	45	248	14	140	-	70	172	89	12	4	218	109	136	PF1	82	
132M	216	45	248	14	178	(140)	89	210	89	12	8	218	109	136	PF1	88	
160M	254	47	285	17	210	-	105	243	108	15	4	275	192	136	PF1.25	130	
160L	254	47	285	17	254	(210)	127	287	108	15	8	275	192	136	PF1.25	156	
180M	279	53	315	20	241	-	120.5	280	121	15	4	290	192	136	PF1.5	198	
180L	279	53	315	20	279	(241)	139.5	325	121	15	8	290	192	136	PF1.5	205	
200L	318	60	364	23	305	(267)	152.5	350	133	19	8	362	260	180	PF2	275	
225S	356	69	410	25	(311)	286	155.5	379	149	19	8	435	260	180	PF2	340	B
225M	356	69	410	25	311	(286)	155.5	379	149	19	8	435	260	180	PF2	360	
	356	69	410	25	311	(286)	155.5	379	149	19	8	435	260	180	PF2	370	
250M	406	77	468	30	(349)	311	174.5	418	168	24	8	515	296	270	PF2.5	450	
	406	77	468	30	(349)	311	174.5	418	168	24	8	515	296	270	PF2.5	490	
280S	457	78	521	36	(419)	368	209.5	488	190	24	8	540	296	270	PF2.5	700	
	457	78	521	36	(419)	368	209.5	488	190	24	8	540	296	270	PF2.5	710	
280M	457	78	521	36	419	(368)	209.5	488	190	24	8	540	296	270	PF2.5	790	
	457	78	521	36	419	(368)	209.5	488	190	24	8	540	296	270	PF2.5	800	
280L	457	78	521	36	508	(457)	254	577	190	24	8	540	296	270	PF2.5	850	
	457	78	521	36	508	(457)	254	577	190	24	8	540	296	270	PF2.5	860	

❹ Dimension K tolerance : +0.43, 0

[Fig. B]



TEFC (ALUMINUM FRAME)

Feature

- 3 PHASE
- HORIZONTAL(B3)
- ALUMINUM FRAME
- SQUIRREL CAGE

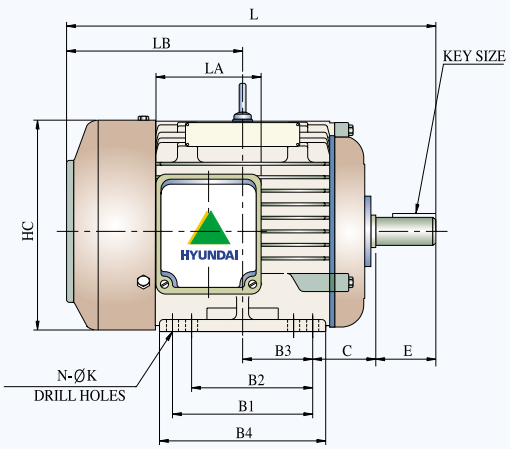
Specifications

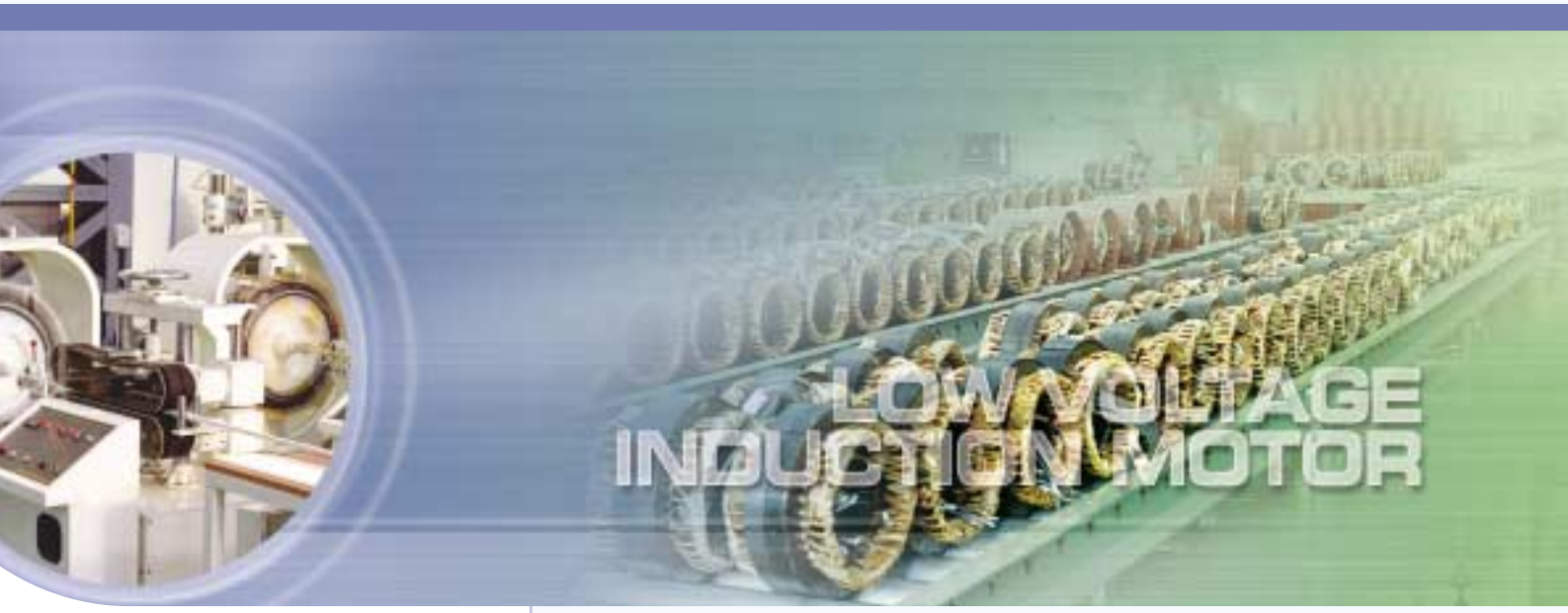
- Output (kW) : 0.09 ~ 7.5
- Supply Voltage : 100 V ~ 660 V
- Frequency : 50 Hz or 60 Hz
- Protection : IP44,IP54
- Insulation : B, F
- Time rating : Continuous

FRAME	OUTPUT(kW)				Dimensions in mm										
					OVERALL						SHAFT				KEY SIZE
	2P	4P	6P	8P	AC	H ❸	HB	HC	L	LB	D ❶	E	KEYWAY ❷		
													F	GE	
71	0.37/0.55	0.25/0.37	0.18/0.25	0.09/0.12	145	71	138	140	234	102	14	30	5	3	5×5×20
80	0.75/1.1	0.55/0.75	0.37/0.55	0.18/0.25	170	80	167	167	271	131	19	40	6	3.5	6×6×25
90L	1.5/2.2	1.1/1.5	0.75/1.1	0.37/0.55	190	90	189	189	318	150	24	50	8	4	8×7×35
100L	3	2.2/3	1.5	0.75	191	100	212	211	368	175	28	60	8	4	8×7×45
112M	4	4	2.2	1.5	191	112	224	223	382	182	28	60	8	4	8×7×45
132S	5.5/7.5	5.5	3	2.2	256	132	280	277	497	239	38	80	10	5	10×8×63
132M	-	7.5	4/5.5	3.0	256	132	280	277	497	239	38	80	10	5	10×8×63

❶ Dimension D tolerance : ~ ϕ 28 : j6, ~ ϕ 48 : k6
❷ Keyway tolerance : N9
❸ Dimension H tolerance : 0, -0.50

[Fig. A]

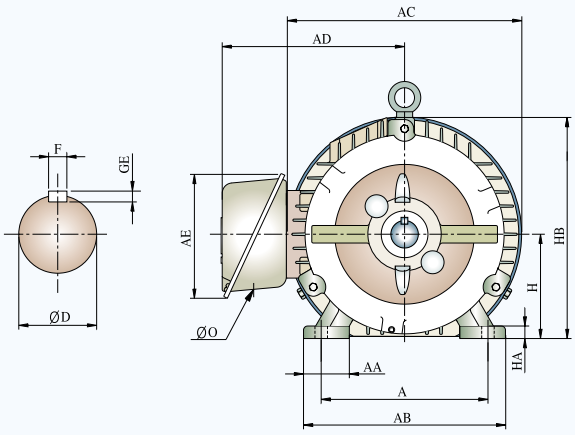




FRAME	MOUNTING										CONDUIT BOX					APPROX Wt.(kg)
	A	AA	AB	HA	B1	B2	B3	B4	C	K ❹	N	AD	AE	LA	O	
71	112	30	145	7	90	-	45	112	45	7	4	144	90	70	ϕ10	15
80	125	30	158	10	100	-	50	125	50	10	4	149	90	88	ϕ13	18
90L	140	45	172	12	125	-	62.5	156	56	10	4	164	90	88	ϕ13	20
100L	160	44	194	12	140	-	70	166	63	12	4	175	123	105	ϕ28	24
112M	190	44	220	13	140	-	70	166	70	12	4	175	123	105	ϕ28	28
132S	216	40	250	15	(178)	140	89	210	89	12	8	218	148	125	ϕ35	40
132M	216	40	250	15	178	(140)	89	210	89	12	8	218	148	125	ϕ35	47

❹ Dimension K tolerance : +0.43, 0

[Fig. B]



TEFC-F SEVERE DUTY

Feature

- 3 PHASE
- FLANGE(B5)
- CAST IRON FRAME
- SQUIRREL CAGE

Specifications

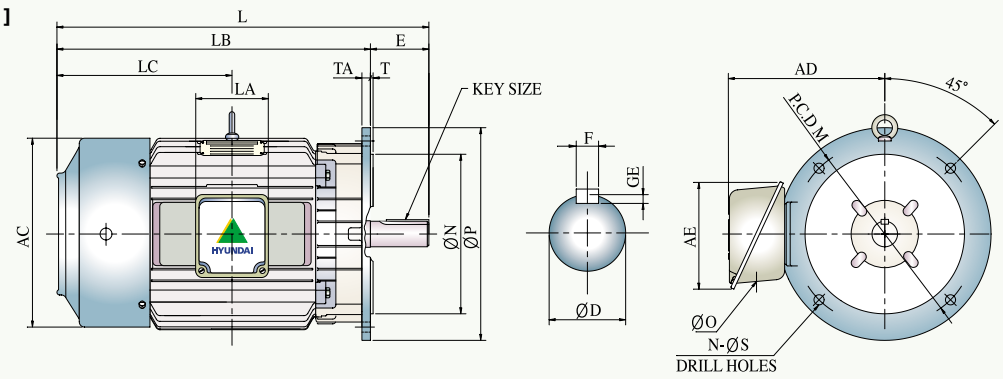
- Output (kW) : 0.75 ~ 132
- Supply Voltage : 100 V ~ 660 V
- Frequency : 50 Hz or 60 Hz
- Protection : IP44,IP54,IP55
- Insulation : B, F
- Time rating : Continuous

FRAME	OUTPUT(KW)				Dimensions in mm								KEY SIZE	FIG.
					OVERALL				SHAFT					
	2P	4P	6P	8P	AC	L	LB	LC	D ❶	E	KEYWAY ❷ F	KEYWAY ❷ GE		
100L	3	2.2/3	1.5	0.75	210	368	308	175	28	60	8	4	8×7×45	A
112M		4	2.2	1.5	210	382	322	182	28	60	8	4	8×7×45	
132S	5.5/7.5	5.5	3	2.2	266	459	379	220	38	80	10	5	10×8×63	
132M		7.5	4/5.5	3.0	266	497	417	239	38	80	10	5	10×8×63	
160M	11/15	11	7.5	4/5.5	317	596	486	273	42	110	12	5	12×8×80	
160L		15	11	7.5	317	640	530	295	42	110	12	5	12×8×80	
180M	22	18.5	-	-	355	659	549	307	48	110	14	5.5	14×9×80	
180L		22	15	11	355	697	587	326	48	110	14	5.5	14×9×80	
200L	30/37	30	18.5/22	15	411	771	661	375.5	55	110	16	6	16×10×80	
225S		37	-	18.5	450	854	714	409.5	60	140	18	7	18×11×110	B
225M	45	-	-	-	450	824	714	409.5	55	110	16	6	16×10×80	
		45	30	22	450	854	714	409.5	60	140	18	7	18×11×110	
250M	55	-	-	-	500	945	805	462.5	60	140	18	7	18×11×110	
		55	37	30	500	945	805	462.5	65	140	18	7	18×11×110	
280S	75	-	-	-	570	1061	921	521.5	65	140	18	7	18×11×110	
		75	45	37	570	1061	921	521.5	75	140	20	7.5	20×12×110	
280M	90	-	-	-	570	1061	921	521.5	65	140	18	7	18×11×110	
		90	55	45	570	1061	921	521.5	75	140	20	7.5	20×12×110	
280L	110/132	-	-	-	570	1150	1010	566	65	140	18	7	18×11×110	
		110/132	75/90	55/75	570	1180	1010	566	80	170	22	9	22×14×140	

❶ Dimension D tolerance : ~ ϕ 28 : j6, ~ ϕ 48 : k6, ϕ 55 ~ : m6

❷ Keyway tolerance : H≦200 : N9, H≧225 : P9

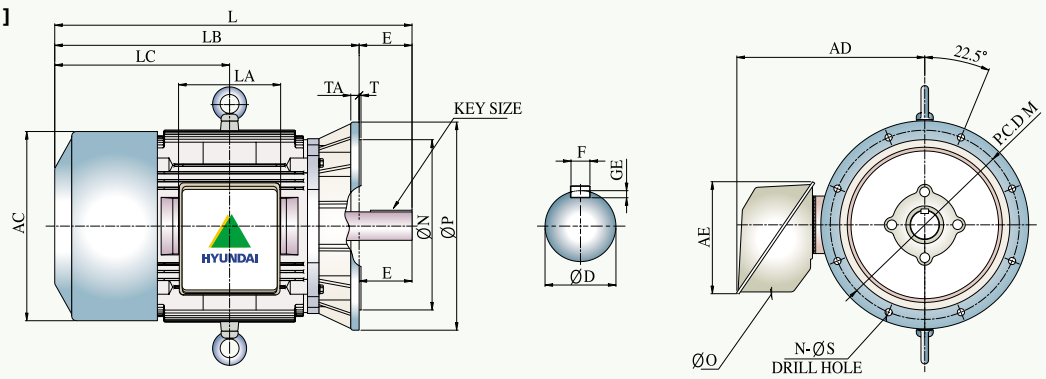
[Fig. A]



FRAME	FLANGE							CONDUIT BOX				APPROX Wt.(kg)	FIG.
	M	N ❸	P	n	S	TA	T	AD	AE	LA	O		
100L	215	180	250	4	15	13	4	185	109	136	PF0.75	32	A
112M	215	180	250	4	15	13	4	197	109	136	PF0.75	49	
132S	265	230	300	4	15	16	4	216	109	136	PF1	83	
132M	265	230	300	4	15	16	4	216	109	136	PF1	89	
160M	300	250	350	4	19	16	5	312	192	136	PF1.25	132	
160L	300	250	350	4	19	16	5	312	192	136	PF1.25	158	
180M	300	250	350	4	19	16	5	327	192	136	PF1.5	205	
180L	300	250	350	4	19	16	5	327	192	136	PF1.5	212	
200L	350	300	400	4	19	19	5	362	260	180	PF2	285	
225S	400	350	450	8	19	21	5	445	260	180	2	380	B
225M	400	350	450	8	19	21	5	445	260	180	PF2	400	
	400	350	450	8	19	21	5	445	260	180	PF2	410	
250M	500	450	550	8	19	22	5	520	296	270	PF2.5	500	
	500	450	550	8	19	22	5	520	296	270	PF2.5	535	
280S	500	450	550	8	19	25	5	550	296	270	PF2.5	780	
	500	450	550	8	19	25	5	550	296	270	PF2.5	790	
280M	500	450	550	8	19	25	5	550	296	270	PF2.5	870	
	500	450	550	8	19	25	5	550	296	270	PF2.5	880	
280L	500	450	550	8	19	25	5	550	296	270	PF2.5	930	
	500	450	550	8	19	25	5	550	296	270	PF2.5	940	

❸ Dimension N tolerance : ~ ϕ 450 : j6, ~ ϕ 680 : js6

[Fig. B]



TEFC-F

Feature

- 3 PHASE
- FLANGE(B5)
- ROLLED STEEL FRAME
- SQUIRREL CAGE

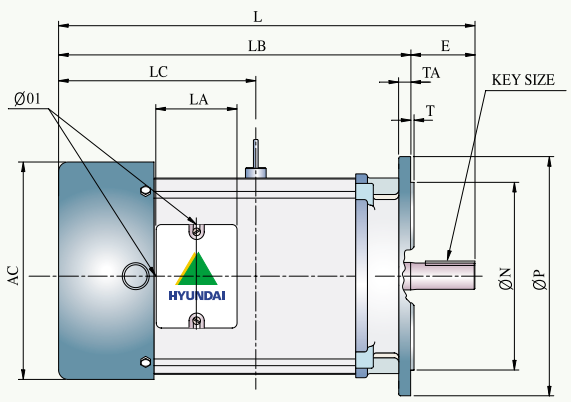
Specifications

- Output (kW) : 0.75 ~ 22
- Supply Voltage : 100 V ~ 660 V
- Frequency : 50 Hz or 60 Hz
- Protection : IP44,IP54
- Insulation : B, F
- Time rating : Continuous

FRAME	OUTPUT(kW)				Dimensions in mm								
					OVERALL				SHAFT				KEY SIZE
	2P	4P	6P	8P	AC	L	LB	LC	D ❶	E	KEYWAY ❷ F	KEYWAY ❷ GE	
112M	4	4	2.2	0.75	251	414	354	189	28	60	8	4	8×7×45
132S	5.5/7.5	5.5	3	1.5	292	533	453	240	38	80	10	5	10×8×63
132M	-	7.5	4/5.5	2.2	292	533	453	240	38	80	10	5	10×8×63
160M	11/15	11	7.5	4	347	704	594	305	42	110	12	5	12×8×80
160L	18.5	15	11	5.5	347	704	594	305	42	110	12	5	12×8×80
180M	22	18.5	-	7.5	387	757	647	343	48	110	14	5.5	14×9×80
180L	-	22	15	-	387	757	647	343	48	110	14	5.5	14×9×80

❶ Dimension D tolerance : ~ ϕ 28 : j6, ~ ϕ 48 : k6 ❷ Keyway tolerance : N9

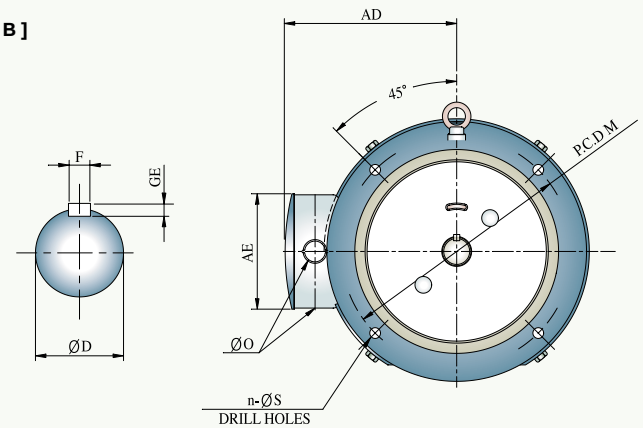
[Fig. A]



FRAME	FLANGE							CONDUIT BOX					APPROX Wt.(kg)
	M	N ❸	P	n	S	TA	T	AD	AE	LA	O	O1	
112M	215	180	250	4	15	13	4	184	110	86	28	35	38
132S	265	230	300	4	15	16	4	204	110	86	35	28	55
132M	265	230	300	4	15	16	4	204	110	86	35	28	69
160M	300	250	350	4	19	16	5	258	160	120	44	50	107
160L	300	250	350	4	19	16	5	258	160	120	44	50	134
180M	300	250	350	4	19	16	5	273	160	120	50	44	165
180L	300	250	350	4	19	16	5	273	160	120	50	44	181

❸ Dimension N tolerance : j6

[Fig. B]



DP

Feature

- 3 PHASE
- HORIZONTAL(B3)
- STEEL FRAME
- SQUIRREL CAGE

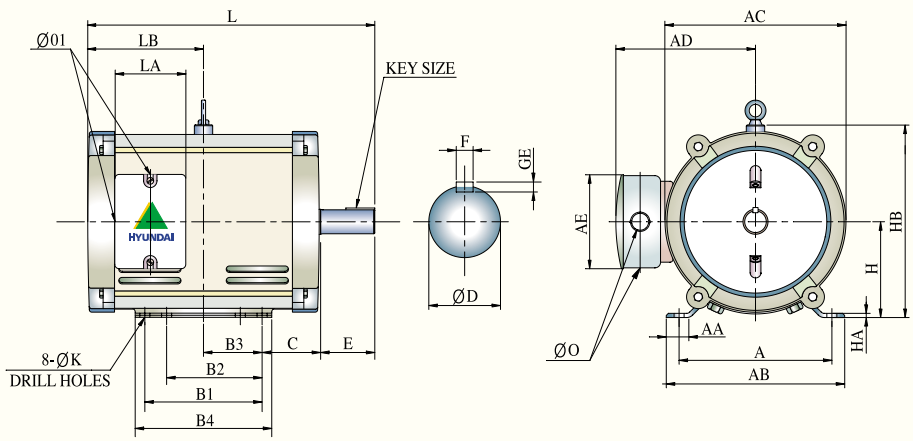
Specifications

- Output (kW) : 1.5 ~ 150
- Supply Voltage : 100 V ~ 660 V
- Frequency : 50 Hz or 60 Hz
- Protection : IP22
- Insulation : B, F
- Time rating : Continuous

FRAME	OUTPUT(kW)				Dimensions in mm									KEY SIZE	FIG.
					OVERALL					SHAFT					
	2P	4P	6P	8P	AC	H ❸	HB	L	LB	D ❶	E	KEYWAY ❷ F	KEYWAY ❷ GE		
112M	4	4	2.2	1.5	216	112	220	337	137	28	60	8	4	8×7×45	A
132S	5.5/7.5	5.5	3	2.2	256	132	260	434	176	38	80	10	5	10×8×63	
132M	-	7.5	4/5.5	3.0	256	132	260	434	176	38	80	10	5	10×8×63	
160M	11/15	11	7.5	4/5.5	312	160	314	577	232	48	110	14	5.5	14×9×80	
160L	18.5/22	15/18.5	11	7.5	312	160	314	577	232	48	110	14	5.5	14×9×80	
180M	30	22	15	11	342	180	350	630	259	55	110	16	6	16×10×80	
180L	37	30	18.5	15	342	180	350	630	259	55	110	16	6	16×10×80	
200M	45	37	22	18.5	420	200	418	668	261.5	60	140	18	7	18×11×110	B
200L	55	45	30	22	420	200	418	668	261.5	60	140	18	7	18×11×110	
225M	75	-	-	-	460	225	465	745	300.5	60	140	18	7	18×11×110	
	-	55	37	30	460	225	465	745	300.5	65	140	18	7	18×11×110	
250S	90	-	-	-	523	250	520	782	318.5	65	140	18	7	18×11×110	
	-	75	45	37	523	250	520	782	318.5	75	140	20	7.5	20×12×110	
255M	110	-	-	-	523	250	520	820	337.5	65	140	18	7	18×11×110	
		90	55	45	523	250	520	820	337.5	75	140	20	7.5	20×12×110	
280S	132	-	-	-	569	280	590	883	369	65	140	18	7	18×11×110	
	-	110	75	55	569	280	590	913	369	80	170	22	9	22×14×140	
280M	150	-	-	-	569	280	590	934	394.5	65	140	18	7	18×11×110	
	-	132	90	75	569	280	590	964	394.5	80	170	22	9	22×14×140	

❶ Dimension D tolerance : ~ ϕ 28 : j6, ~ ϕ 48 : k6
❷ Keyway tolerance : H≦200 : N9, H≧225 : P9
❸ Dimension H tolerance : H≦250 : 0, -0.5, H≧280 : 0, -1.0

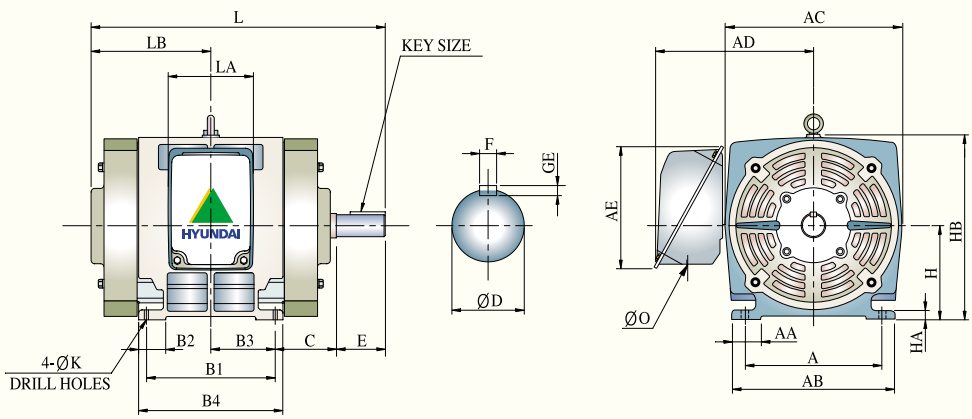
[Fig. A]



FRAME	MOUNTING										CONDUIT BOX					APPROX Wt.(kg)	FIG. ❺
	A	AA	AB	HA	B1	B2	B3	B4	C	K ❹	AD	AE	LA	O	O1		
112M	190	29	213	5	140	(114)	70	163	70	12	184	110	86	28	35	32	
132S	216	35	244	6	(178)	140	89	206	89	12	204	110	86	35	28	48	
132M	216	35	244	6	178	(140)	89	206	89	12	204	110	86	35	28	55	
160M	254	35	290	8	(254)	210	127	290	108	15	258	160	120	44	50	89	A
160L	254	35	290	8	254	(210)	127	290	108	15	258	160	120	44	50	104	
180M	279	35	315	9	(279)	241	139.5	315	121	15	273	160	120	50	44	135	
180L	279	35	315	9	279	(241)	139.5	315	121	15	273	160	120	50	44	169	
200M	318	79	379	20	(305)	267	152.5	350	133	19	370	260	180	60	-	245	
200L	318	79	379	20	305	(267)	152.5	350	133	19	370	260	180	60	-	250	
225M	356	89	414	25	311	78	155.5	400	149	19	400	260	180	60	-	340	
250S	406	100	490	29	311	120	155.5	407	168	24	432	296	270	76	-	410	B
250M	406	100	490	29	349	120	174.5	447	168	24	432	296	270	76	-	430	
280S	457	110	560	32	368	102.5	184	435	190	24	525	296	270	76	-	-	
280M	457	110	560	32	419	109	209.5	486	190	24	525	296	270	76	-	-	

❹ Dimension K tolerance : +0.43, 0
❺ Fig.A : Rolled steel frame motor, Fig.B : Cast iron frame motor

[Fig. B]



DP-F

Feature

- 3 PHASE
- HORIZONTAL(B5)
- ROLLED STEEL FRAME
- SQUIRREL CAGE

Specifications

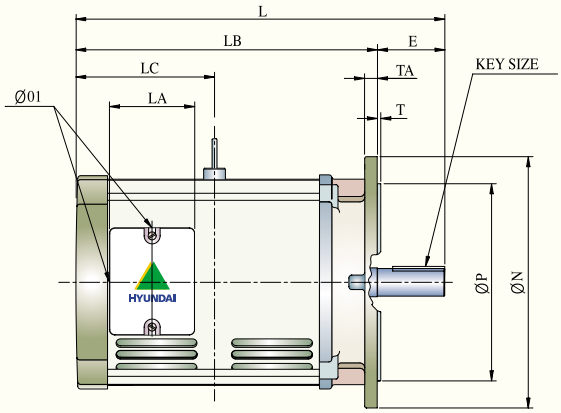
- Output (kW) : 0.75 ~ 37
- Supply Voltage : 100 V ~ 660 V
- Frequency : 50 Hz or 60 Hz
- Protection : IP22
- Insulation : B, F
- Time rating : Continuous

FRAME	OUTPUT(kW)				Dimensions in mm								
					OVERALL				SHAFT				
	2P	4P	6P	8P	AC	L	LB	LC	D ❶	E	KEYWAY ❷ F	KEYWAY ❷ GE	KEY SIZE
112M	4	4	2.2	0.75	216	361	301	137	28	60	8	4	8×7×45
132S	5.5/7.5	5.5	3	1.5	256	469	389	176	38	80	10	5	10×8×63
132M	-	7.5	4/5.5	2.2	256	469	389	176	38	80	10	5	10×8×63
160M	11/15	11	7.5	4	312	631	521	232	48	110	14	5.5	14×9×80
160L	18.5/22	15/18.5	11	5.5	312	631	521	232	48	110	14	5.5	14×9×80
180M	30	22	15	7.5	342	673	563	259	55	110	16	6	16×10×80
180L	37	30	18.5	11	342	673	563	259	55	110	16	6	16×10×80

❶ Dimension D tolerance : ~ ϕ 28 : j6, ~ ϕ 48 : k6, ϕ 55 ~ : m6

❷ Keyway tolerance : N9

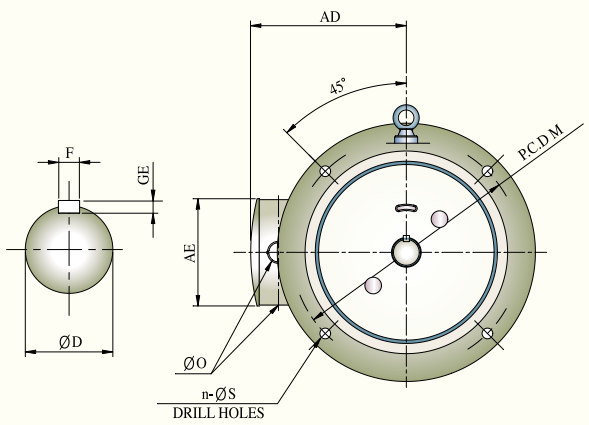
[Fig. A]



FRAME	FLANGE							CONDUIT BOX					APPROX Wt.(kg)
	M	N ❸	P	n	S	TA	T	AD	AE	LA	O	O1	
112M	215	180	250	4	15	13	4	184	110	86	28	35	33
132S	265	230	300	4	15	16	4	204	110	86	35	28	49
132M	265	230	300	4	15	16	4	204	110	86	35	28	56
160M	350	300	400	4	19	16	5	258	160	120	44	50	90
160L	350	300	400	4	19	16	5	258	160	120	44	50	105
180M	350	300	400	4	19	16	5	273	160	120	50	44	137
180L	350	300	400	4	19	16	5	273	160	120	50	44	172

❸ Dimension N tolerance : j6

[Fig. B]



Special Motors

Explosion-Proof Motor for Explosive Gases

- Increased-safety type (EEx e)
- Flame-proof type (EEx d)
- Applications: Oil refinery plant, mill plant, mine industry and other places having explosive gases

Treadmill Motor

- Aluminum frame motor
- Inverter rated motor
- Applications: Treadmill (Running machine)

Close Coupled Pump Motor

- NEMA JM, JP shaft options
- Clamped pulley-end bearing
- Removable base
- Drip-cover is available
- Application: pumps

Crown Triton™ Motor

- Premium efficiency
- TEFC Heavy duty
- Applications(For the process industries): oil refinery plant, steel plant, paper & pulp plant food & beverage plant, and other places necessary to reduce operating costs
- CSA C US Certified (LR 109502, EEV 109973) and accepted in U.S. and CANADA