

Customer :
Project Name :
Project No. :
Revision No. :

SPECIFICATION for INDUCTION MOTOR



0		For Bidding			
No.	DATE	DESCRIPTION	PREPARED BY	CHECKED BY	APPROVED BY



AC INDUCTION MOTOR DATA SHEET

IEEE841 TYPE

Catalog No.	IEEE60-18-364T	Item No.	Rev. No.	[]
Project Name		Project No.	Quantity	sets

GENERAL SPECIFICATION		PERFORMANCE DATA				
Frame Size	364T	Rated Output	45 kW 60 HP			
Type	PJP	Number of Poles	4			
Enclosure(Protection)	Totally Enclosed / IP55	Rotor Type	Squirrel Cage			
Method of Cooling	IC411(FC)	Starting Method*	D.O.L			
Rated Frequency	60 Hz	Rated Voltage	575 V	460 V	230 V	
Number of Phases	3	Current	Full Load	56.0 A	69.9 A	
Insulation Class	F		Locked-rotor**	670 %	670 %	670 %
Temp. Rise at full load (by resistance method)		Efficiency				
at 1.0 S.F	80 deg. C	50% Load		92.0 %		
Motor Location	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor	75% Load		94.0 %		
Altitude	Less than 1,000 meter	100% Load		95.0 %		
Relative Humidity	Less than 80 %	Power Factor(p.u)				
Ambient Temp.	40 deg. C (Max.)	50% Load		0.700		
Duty Type	Continuous (S1)	75% Load		0.800		
Service Factor	1.15	100% Load		0.850		
Mounting	B3	Speed at Full Load	1780 r.p.m			
Bearing	Type	Anti-Friction				
	DE/N-DE	6314C3 / 6213C3				
	Lubricant	Grease(Polyrex-EM)				
External Thrust	Not applicable					
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt	Torque				
Shaft Extension	Single	Full Load		178.1 lb.ft		
Terminal Box	Main	Locked-rotor**		150 %		
	Aux.	Breakdown**		220 %		
Location	Refer to Outline Drawing	Moment of Inertia (J)				
Application		Load(Max.)		616.991 lb.ft2		
Area classification	Hazardous	Motor		17.640 lb.ft2		
Type of Ex-Protection	Class I&II, Division 2	Sound Pressure Level (No-load & mean value at 1m from motor)				
Applicable Standard	IEEE841, NEMA MG1, CSA C390			82 dB(A)		
ACCESSORIES		Vibration				
		3.8 mm/sec (peak)				
		Permissible number of consecutive starts		Cold		3 times
				Hot		2 times
		Paint	Munsell No.	7.5BG6/1.5		

ACCESSORIES	SUBMITTAL DRAWING
	Outline Dimension Drawing \ Motor Weight(Approx.)
	B3 LM-I1364B3PL001 780 lb.

SPARE PARTS	REMARK
	1. Premium efficiency according to NEMA MG1
	2. Inverter Duty @ 1.0 Service Factor & F Temperature rise
	- 10:1 VT (20:1 VT at 50% load)
	- 10:1 CT
	- CHP up to 1.5 times base speed, NEMA MG1 Part31
3. CSA Certification	
- Class I, Division 2, Group A, B, C & D	
- Class II, Division 2 Group E, F & G (Group E : up to 320Fr.)	
4. Service Factor 1.15 and Temperature rise B are applicable under the condition of sine wave power.	
5. Service Factor 1.25 is applicable to motors of 100HP or less with temperature rise F & Non-Hazardous.	
	Date DSND CHKD CHKD APPD
	2024-07-13 S.H. Lee I.K. Kim R.G. Kim S.W. Kim

[Note] Others not mentioned in this data sheet shall be in accordance with maker standard.
 Above technical data are only design values and shall be guaranteed with tolerance of applicable standard.
 Inspection and performance test shall be done according to maker standard, if not mentioned.
 * In case of Inverter-Fed Motor, performance data is based on sine wave tests. It may be different from test data of Inverter combined motor.
 ** Data is based on rated voltage & frequency and is expressed as a percentage of full-load value.

1	2	3	4
REV	DATE	CONTENTS	REVD BY CHKD BY CHKD BY APPD BY

4.72



CROWN TRITON
Premium Efficiency AC 3 Phase Motor


60HP	4P	460V	Cat. No.	IEEE60-18-364T				
Model	HLS364SR04		INS. Class	F	HD-F1	Amps	69.9	
Type	HLS	Duty	CONT	Code	G	Amb.	40°C	
Frame	364T	Encl.	TEFC	S.F.	1.15	RPM	1780	
Bearing	Drive	6314C3		S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)		3/4 Eff.	94%	
	Opp.	6213C3				NEMA Design	B	
Usable at	50Hz 60HP 380V 83.4A 1475rpm S.F.: 1.0 Eff.: 94.2% Code: E							
	50Hz 60HP 400/415V 80.7/79.4A 1478/1479rpm S.F.: 1.0 Eff.: 94.4/94.5% Code: F/G							
CSA Certified for	Model	LATER		Type	PJP			
	CLASS I, Div. 2, Gr. A, B, C & D CLASS I, Zone 2, Gr. IIA, IIB, & IIC	CLASS II, Div. 2, Gr. E, F & G (Gr. E : Up to 320FR)		Temp. Code (sine wave)	Frame	140~320FR	360~400FR	440FR
		Amb. 40°C	T3C (160°C)		T3B (165°C)	T3A (180°C)		
Amb. 55°C	T3A (180°C)	T3A (180°C)	T3 (200°C)					
No.	-		Date	-		Weight	780 lb	

IEEE Std 841-2021 **MARINE DUTY IEEE45**

4M-135701 Made in Korea H1



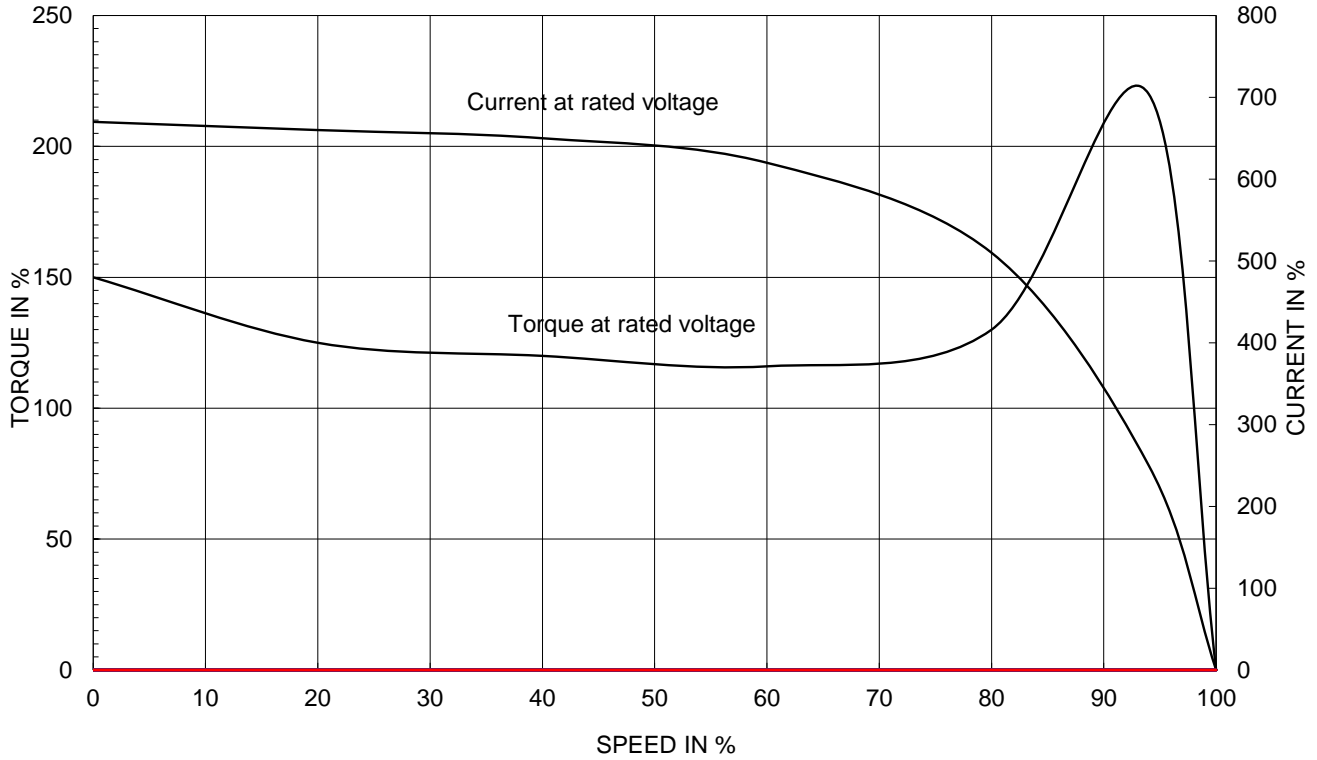
2.36

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 IEEE841 (HL)	DWG SIZE
CHKD BY	I.K.KIM	SCALE	NONE			A4 (1:1)
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	TITLE NAMEPLATE DRAWING		
DSND BY	S.H.LEE	DATE	2024.06.07			
				REF. NO	4M-135701	Sheet No. of
				DWG NO	NP-IEEE60-18-364T	Revision No. 0

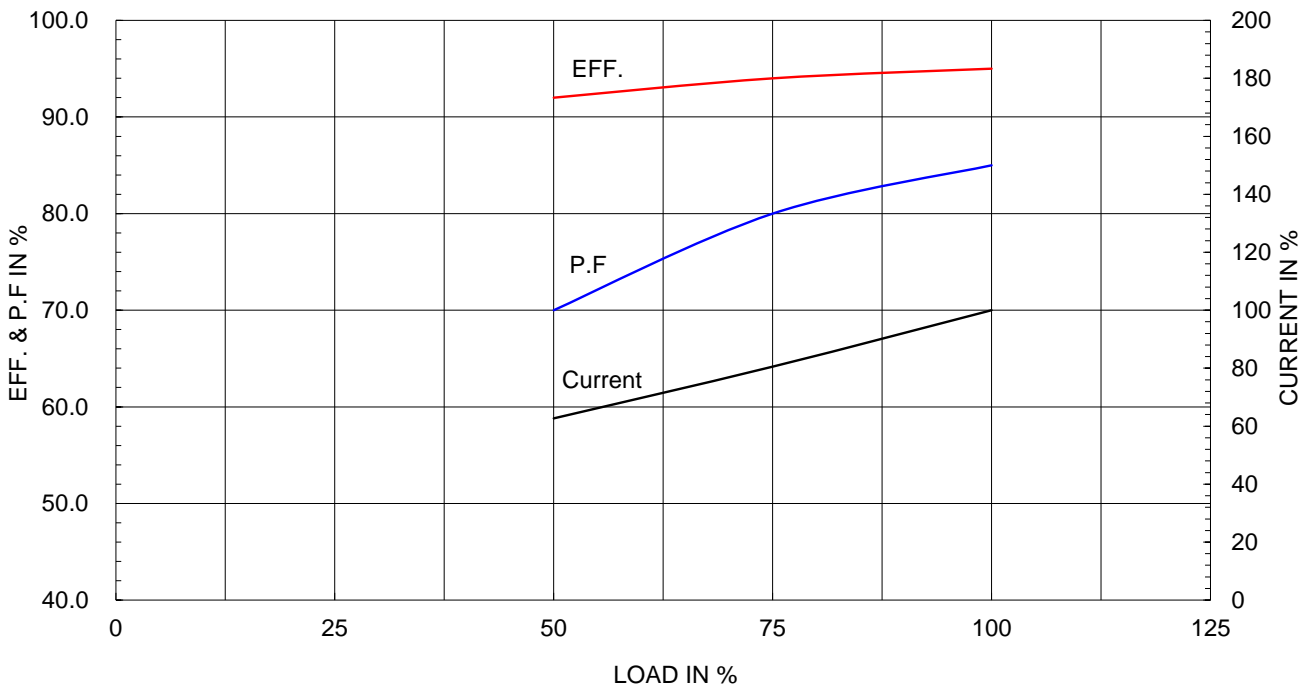
Type :	PJP	
Full Load Torque :	178.1	lb.ft
Load moment of Inertia (J) :	616.991	lb.ft ²
Motor moment of Inertia (J) :	17.640	lb.ft ²

45kW	60HP	4 P	60 Hz
Speed at Full Load :			1780 RPM
Rated Voltage	575V	460V	230V
Full Load Current	56.0A	69.9A	139.9A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE

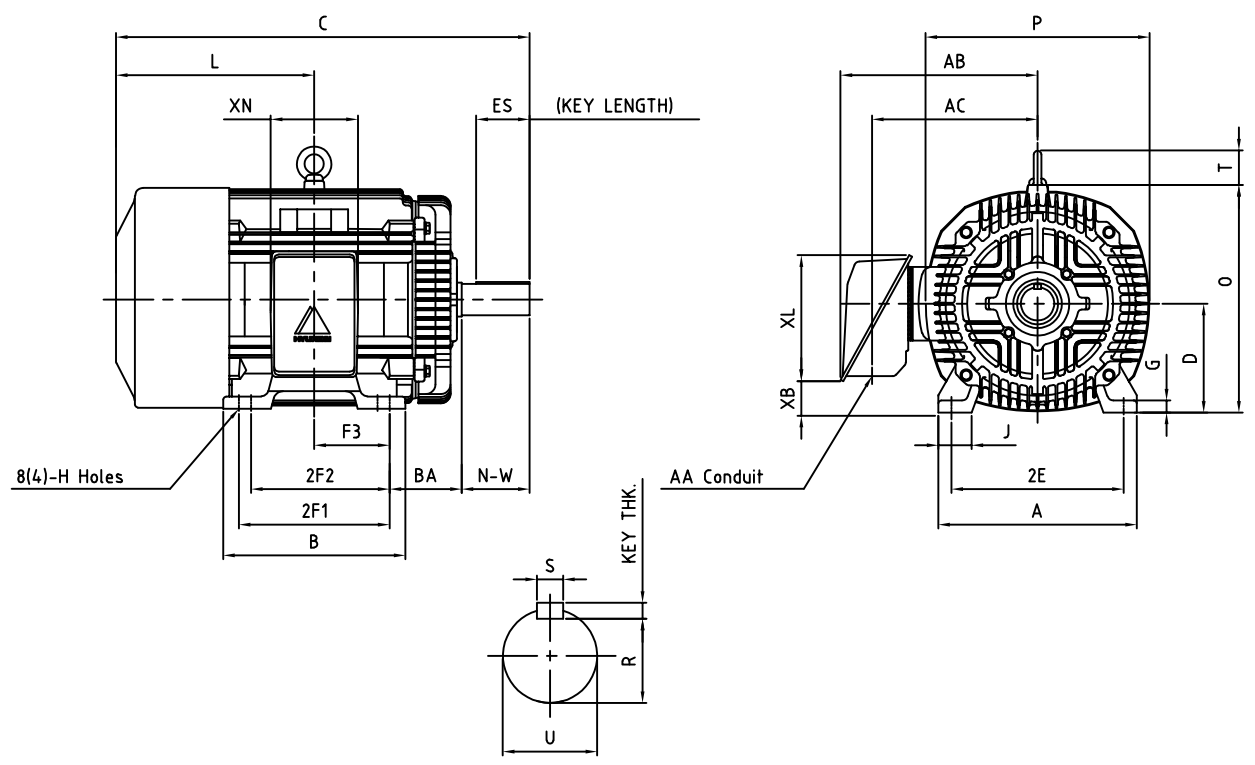


본 도면은 HD현대일렉트릭(주) 재산이며 허가없이 복사할 수 없음 (취급주의)

THIS DRAWING IS PROPRIETARY TO HYUNDAI ELECTRIC. NO PART OF THIS DRAWING MAYBE REPRODUCED WITHOUT THE PERMISSION OF HYUNDAI ELECTRIC.

1	2	3	4
▽	50S	REV	DATE
▽▽	12.5S		
▽▽▽	3.2S		
▽▽▽▽	0.4S		

IEEE841



DIMENSIONS

Unit : inch

M O U N T I N G									C O N D U I T B O X					APPROX. WGT.(LB)	
A	B	2E	2F1	2F2	F3	G	J	H	AA	AB	AC	XB	XL		XN
16.14	14.92	14.00	(12.25)	11.25	6.122	0.98	2.72	0.66	3.00	17.13	13.82	2.70	10.24	7.09	780

O V E R A L L							S H A F T					KEY	BEARING	
BA	C	D	L	O	P	T	U	N-W	KEYWAY			THK.	DRIVE END	OPP. DRIVE END
									R	ES	S			
5.88	35.20	9.00	17.32	18.50	18.23	2.80	2.375	5.88	2.021	4.28	0.625	0.625	6314C3	6213C3

NOTE

1. Dimension "D" tolerance : +0.00inch - 0.03inch (143T-365T) ; +0.000inch - 0.06inch (404T-449T)
2. Dimension "U" tolerance : +0.000inch - 0.005inch (143T-215T), +0.000inch - 0.001inch (254T-449T)
3. Dimension "R" tolerance : +0.000inch - 0.015inch

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	NEMA 364T		DWG SIZE
CHKD BY	R.G.KIM	SCALE	NONE	TITLE			A4 (1:1)
CHKD BY	Y.H.BAE	PROJEC'N	3각법(3rd Angle)				OUTLINE
DSND BY	H.K.LEE	DATE	2021-04-30	REF. NO	350A8113AA	Sheet No.	
				DWG NO	LM-11364B3PL001	Revision No.	0



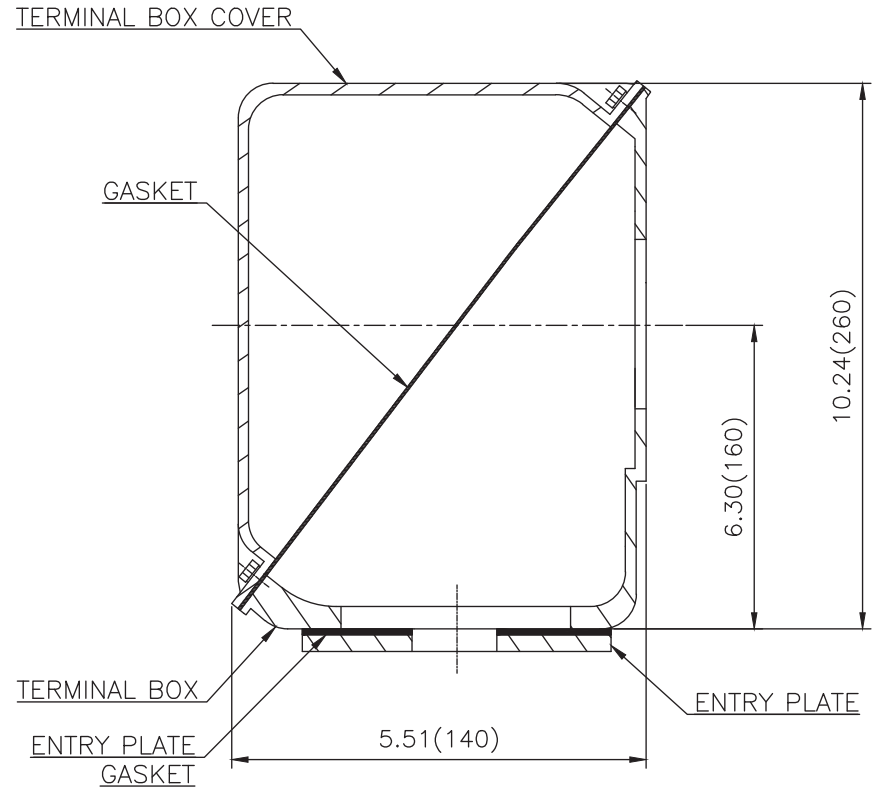
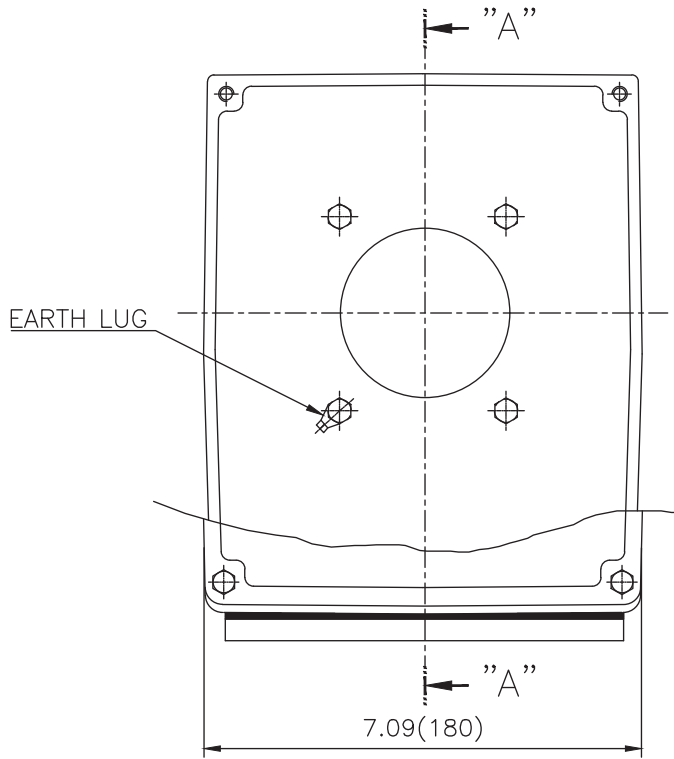


HD HYUNDAI ELECTRIC

본 도면은 HD현대일렉트릭(주) 재산이며 허가없이 복사할 수 없음 (취급주의)

THIS DRAWING IS PROPRIETARY TO HYUNDAI ELECTRIC. NO PART OF THIS DRAWING MAY BE REPRODUCED WITHOUT THE PERMISSION OF HYUNDAI ELECTRIC.

Cls. I&II, Div. 2 IEEE 841



SEC. "A" - "A"

▽	50S
▽▽	12.5S
▽▽▽	3.2S
▽▽▽▽	0.4S

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

일반가공공차		일반재공공차	
1-4	±0.1	6-30	±0.5
4-18	±0.2	30-120	±0.8
18-63	±0.3	120-315	±1.2
63-250	±0.5	315-1000	±2.0
250-	±0.8	1000-	±3.0

Q'TY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.
APPD BY	S.Y.KIM	UNIT	inch(mm)	SUBJECT	FR.360 (CAST IRON)	DWG SIZE	A3 (1:1.2)
CHKD BY		SCALE	1/1.2	TITLE			
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	MAIN TERMINAL BOX ASS'Y			
DSND BY	내승희	DATE	2023-10-19	REF. NO		Sheet No.	of
HD HYUNDAI ELECTRIC				DWG NO	3M-248450	Revision No.	0