

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.	IEEE60-36-364TS	Item No.	Rev. No. [      ]
Project Name		Project No.	Quantity                      sets

GENERAL SPECIFICATION		PERFORMANCE DATA				
Frame Size	364TS	Rated Output	45 kW                      60 HP			
Type	PJP	Number of Poles	2			
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	52.5 A	65.6 A	
Insulation Class	F		Locked-rotor**	680 %	680 %	680 %
Temp. Rise at full load (by resistance method)		Efficiency				
at 1.0 S.F	80 deg. C	50% Load		91.1 %		
Motor Location	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor	75% Load		93.1 %		
Altitude	Less than 1,000 meter	100% Load		94.1 %		
Relative Humidity	Less than 80 %	Power Factor(p.u)				
Ambient Temp.	40 deg. C (Max.)	50% Load		0.765		
Duty Type	Continuous ( S1 )	75% Load		0.865		
Service Factor	1.15	100% Load		0.915		
Mounting	B3	Speed at Full Load	3570 r.p.m			
Bearing	Type	Anti-Friction				
	DE/N-DE	6213C3 / 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		88.8 lb.ft		
Terminal Box	Main	Locked-rotor**		140 %		
	Aux.	Breakdown**		220 %		
Box Location	Refer to Outline Drawing	Moment of Inertia (J)				
Application		Load(Max.)		112.720 lb.ft2		
Area classification	Hazardous	Motor		9.280 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		
SPARE PARTS		SUBMITTAL DRAWING				
		Outline Dimension Drawing		Motor Weight(Approx.)		
		B3	LM-I1364B3CL001	780 lb.		
REMARK		<ol style="list-style-type: none"> <li>1. Premium efficiency according to NEMA MG1</li> <li>2. Inverter Duty @ 1.0 Service Factor &amp; F Temperature rise               <ul style="list-style-type: none"> <li>- 10:1 VT (20:1 VT at 50% load)</li> <li>- 10:1 CT</li> <li>- CHP up to 1.5 times base speed, NEMA MG1 Part31</li> </ul> </li> <li>3. CSA Certification               <ul style="list-style-type: none"> <li>- Class I, Division 2, Group A, B, C &amp; D</li> <li>- Class II, Division 2 Group E, F &amp; G (Group E : up to 320Fr.)</li> </ul> </li> <li>4. Service Factor 1.15 and Temperature rise B are applicable under the condition of sine wave power.</li> <li>5. Service Factor 1.25 is applicable to motors of 100HP or less with temperature rise F &amp; Non-Hazardous.</li> </ol>				
		Date	DSND	CHKD	CHKD	APPD
		2024-07-13	S.H. Lee	I.K. Kim	R.G. Kim	S.W. Kim

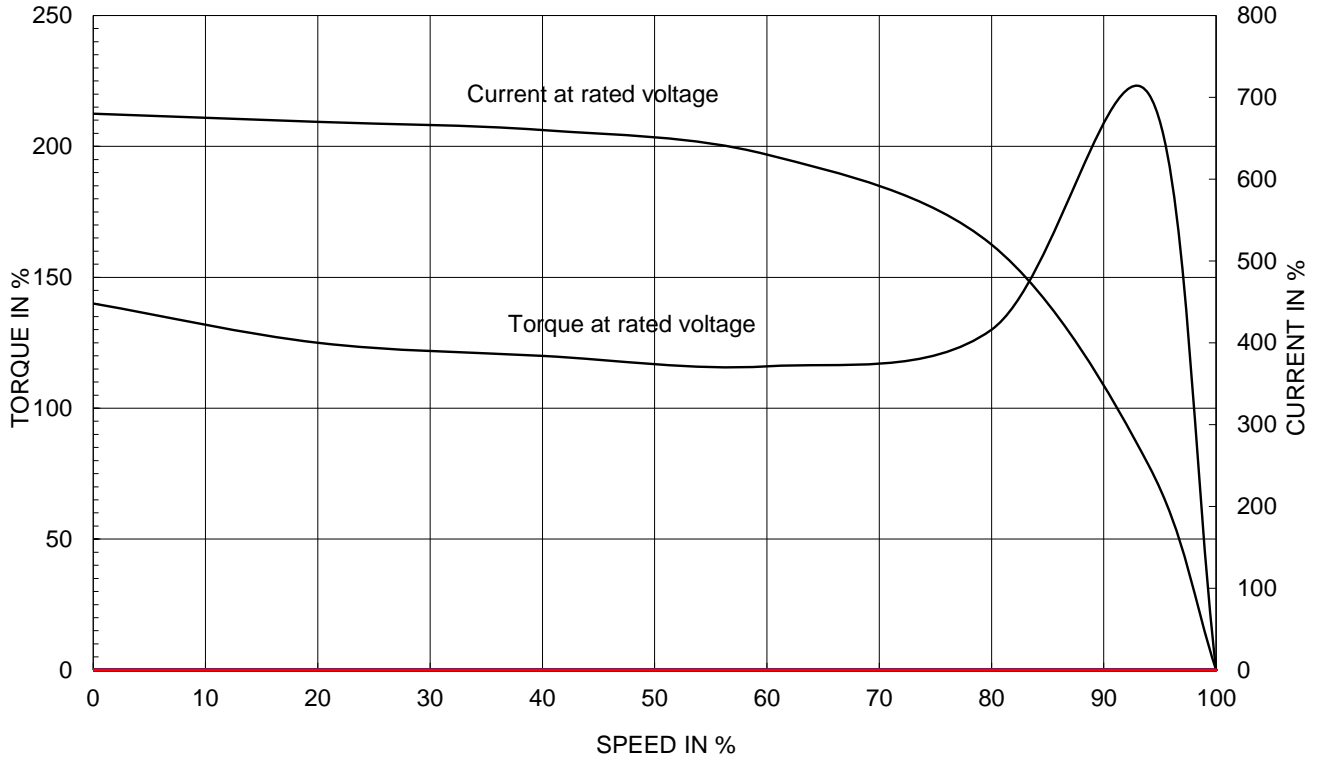
[Note] Others not mentioned in this data sheet shall be in accordance with maker standard.  
 Above technical data are only design values and shall be guaranteed with tolerance of applicable standard.  
 Inspection and performance test shall be done according to maker standard, if not mentioned.  
 \* 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.



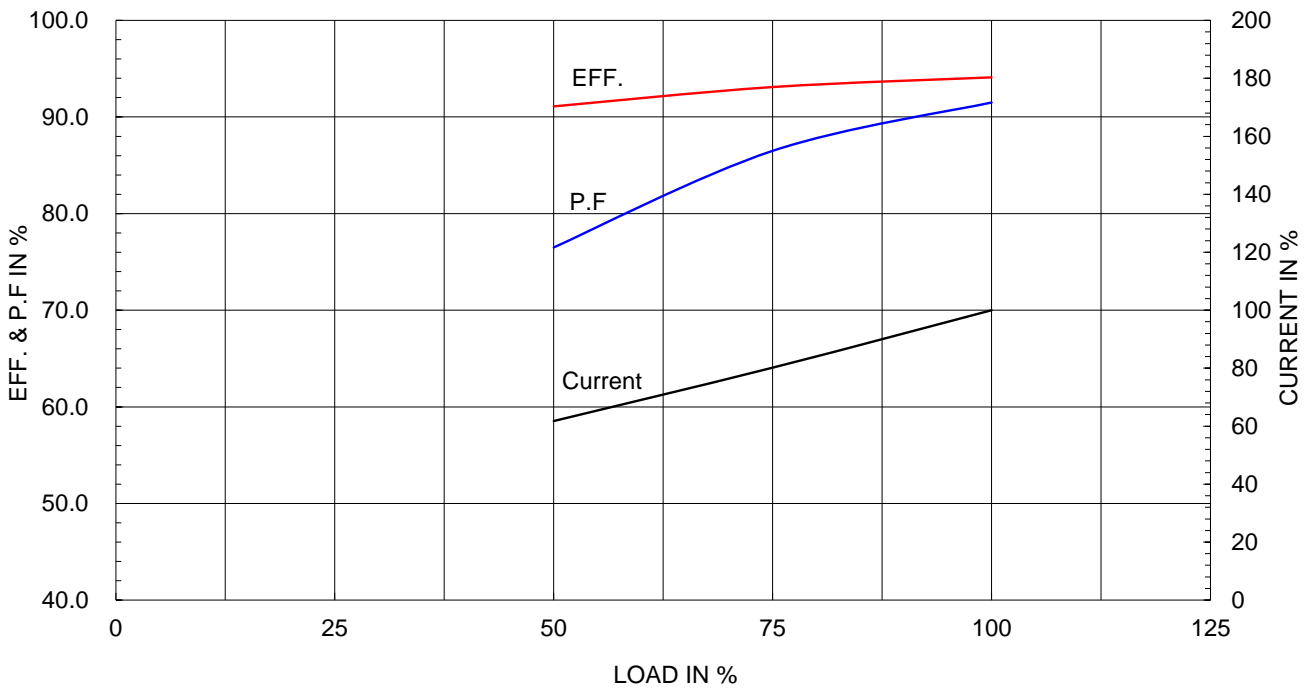
Type :	PJP
Full Load Torque :	88.8 lb.ft
Load moment of Inertia (J) :	112.720 lb.ft <sup>2</sup>
Motor moment of Inertia (J) :	9.280 lb.ft <sup>2</sup>

45kW 60HP	2 P	60 Hz
Speed at Full Load :		3570 RPM
Rated Voltage	575V	460V 230V
Full Load Current	52.5A	65.6A 131.2A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE

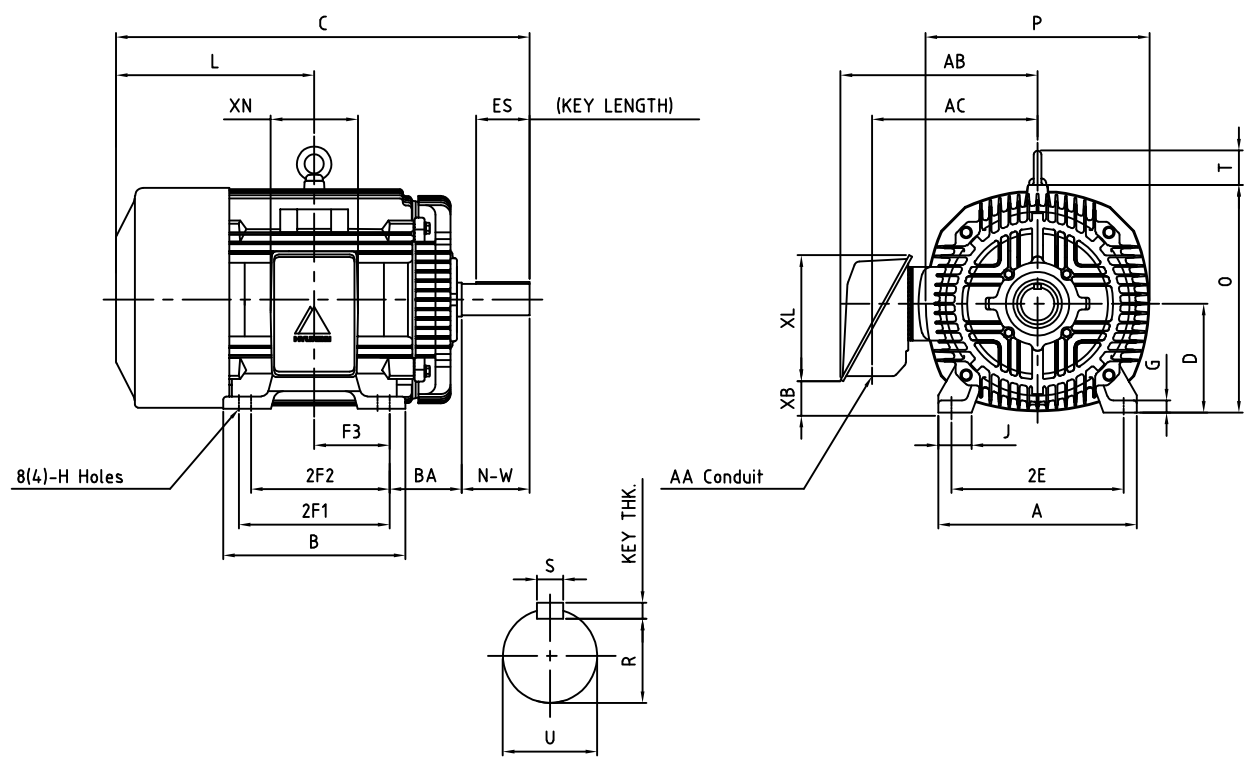


본 도면은 HD현대일렉트릭(주) 재산이며 허가없이 복사할 수 없음 (취급주의)

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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	13.18	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	33.06	9.00	17.32	18.50	18.23	2.80	1.875	3.75	1.591	2.03	0.500	0.500	6213C3	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 364TS		DWG SIZE
CHKD BY	R.G.KIM	SCALE	NONE	TITLE			A4 ( 1:1 )
CHKD BY	Y.H.BAE	PROJEC'N	3각법(3rd Angle)				
DSND BY	H.K.LEE	DATE	2021-04-30	<b>OUTLINE</b>			
				DWG NO	LM-I1364B3CL001	Revision No.	0



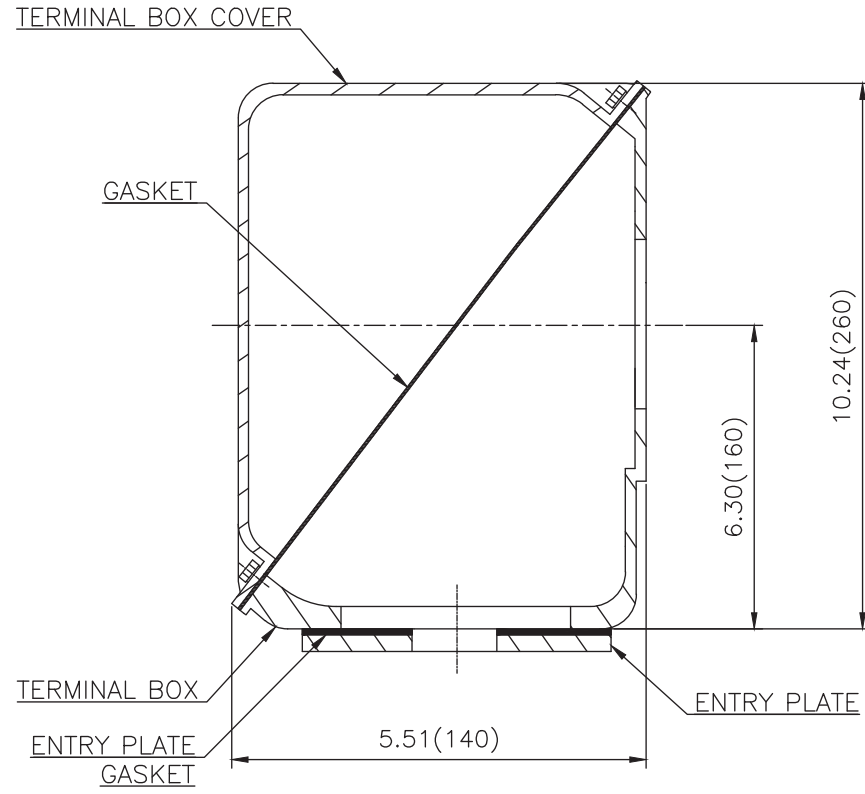
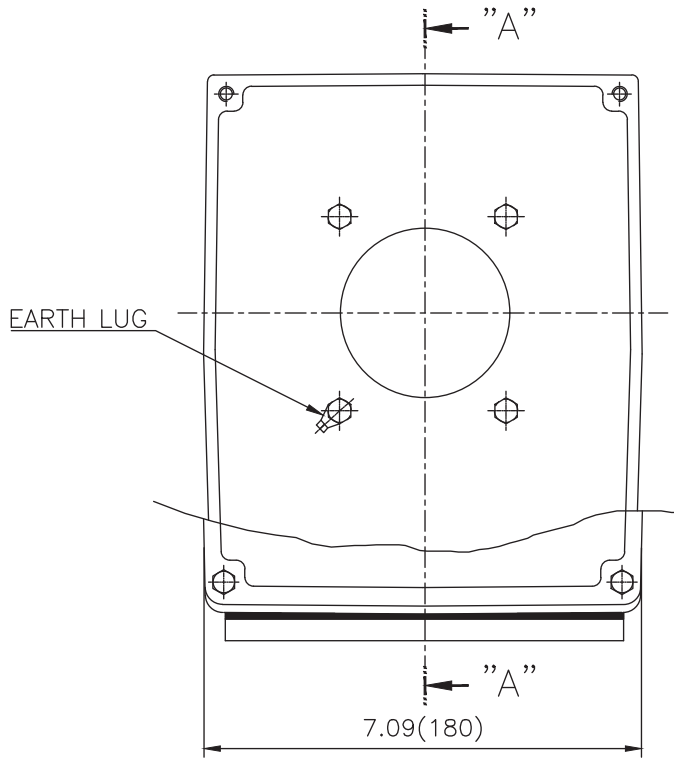


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# Cls. I&II, Div. 2 IEEE 841



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
				DWG NO	3M-248450	Revision No.	0