

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

Model No. or RFQ No.		Item No.		Rev. No.	[    ]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA			
Frame Size	364TC		Rated Output	45 kW      60.0 HP		
Type	PJP		Number of Poles	4		
Enclosure(Protection)	Totally Enclosed / IP55		Rotor Type	Squirrel Cage		
Method of Cooling	IC411(FC)		Starting Method*	<input checked="" type="checkbox"/> D.O.L <input type="checkbox"/> Y-Δ		
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      139.9 A
Insulation Class	<input checked="" type="checkbox"/> F <input type="checkbox"/> B <input type="checkbox"/> H			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 checked="" type="checkbox"/> Indoor <input type="checkbox"/> Outdoor			75% Load      94.0 %			
Altitude      Less than 1000 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			100% Load      0.850			
Mounting      B35			Speed at Full Load      1780 r.p.m			
Bearing	Type	Anti-Friction		Torque		
	DE/N-DE	6314C3 / 6213C3		Full Load	178.1 lb.ft	
	Lubricant	Grease		Locked-rotor**	150 %	
External Thrust      Not applicable			Breakdown**      220 %			
Coupling Method <input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-Belt			Moment of Inertia (J)			
Shaft Extension <input checked="" type="checkbox"/> Single <input type="checkbox"/> Double			Load(Max.)      616.991 lb.ft <sup>2</sup>			
Terminal Box	Main	<input type="checkbox"/> Aluminum <input checked="" type="checkbox"/> Cast Iron		Motor      17.640 lb.ft <sup>2</sup>		
	Aux.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Sound Pressure Level (No-load & mean value at 1m from motor)		
	Location	Refer to Outline Drawing		82 dB(A)		
Application			Vibration      3.8 mm/sec (peak)			
Area classification      Hazardous			Permissible number of consecutive starts			
Type of Ex-Protection      Class I & II, Division 2			Cold      3 times			
Applicable Standard      NEMA MG1, CSA C390			Hot      2 times			
			Paint	Munsell No.	4.0PB5.4/5.5(VL-451)	

ACCESSORIES	SUBMITTAL DRAWING
	Outline Dimension Drawing \ Motor Weight(Approx.)
	B35      LM-T1364C4PL001      825 lb.

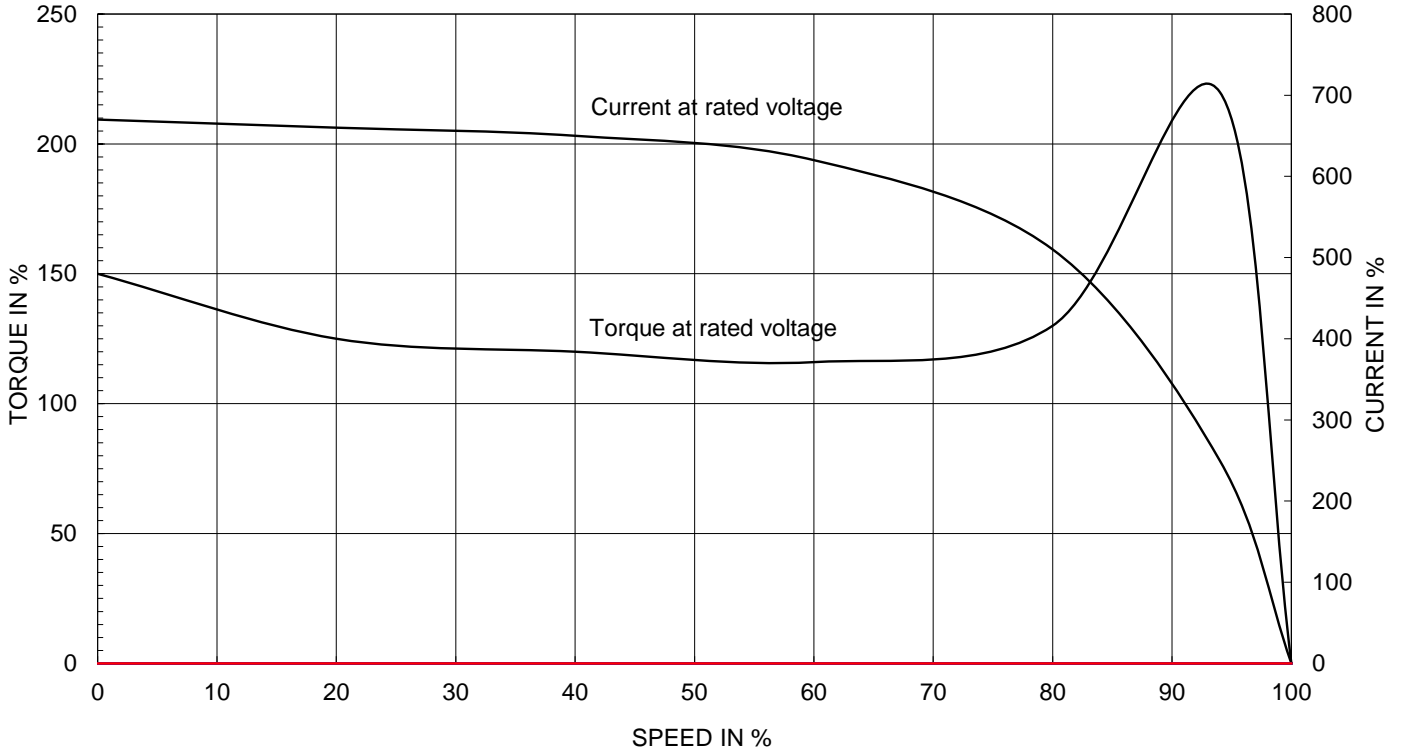
REMARK										
<p>1. Premium efficiency according to NEMA MG1</p> <p>2. Inverter Duty @ 1.0 Service Factor &amp; F Temperature rise</p> <ul style="list-style-type: none"> <li>- 10:1 VT (20:1 VT at 50% load)</li> <li>- 10:1 CT</li> <li>- CHP up to 1.5 times base speed</li> </ul> <p>3. CSA Certification</p> <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> <p>4. Service Factor 1.15 and Temperature rise B are applicable under the condition of sine wave power.</p> <p>5. Service Factor 1.25 is applicable to motors of 100HP or less with temperature rise F &amp; Non-Hazardous.</p>										
<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Date</td> <td style="width: 15%;">DSND</td> <td style="width: 15%;">CHKD</td> <td style="width: 15%;">CHKD</td> <td style="width: 15%;">APPD</td> </tr> <tr> <td>2023-11-13</td> <td>I.S. Ko</td> <td>S.H. Lee</td> <td>Y.K. Kim</td> <td>S.Y. Kim</td> </tr> </table>	Date	DSND	CHKD	CHKD	APPD	2023-11-13	I.S. Ko	S.H. Lee	Y.K. Kim	S.Y. Kim
Date	DSND	CHKD	CHKD	APPD						
2023-11-13	I.S. Ko	S.H. Lee	Y.K. Kim	S.Y. 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.

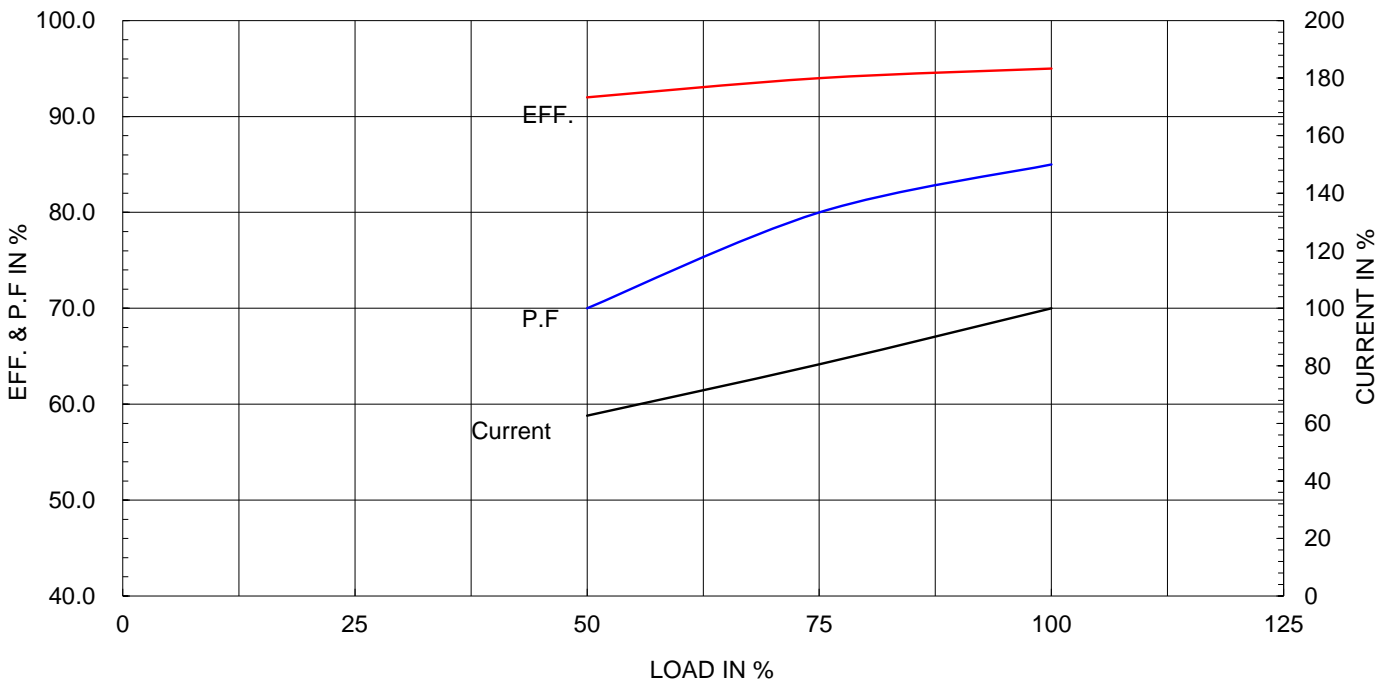
Type :	PJP
Full Load Torque :	178.1 lb.ft
Load moment of Inertia (J) :	- lb.ft2
Motor moment of Inertia (J) :	17.640 lb.ft2

45 kW	60 HP	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



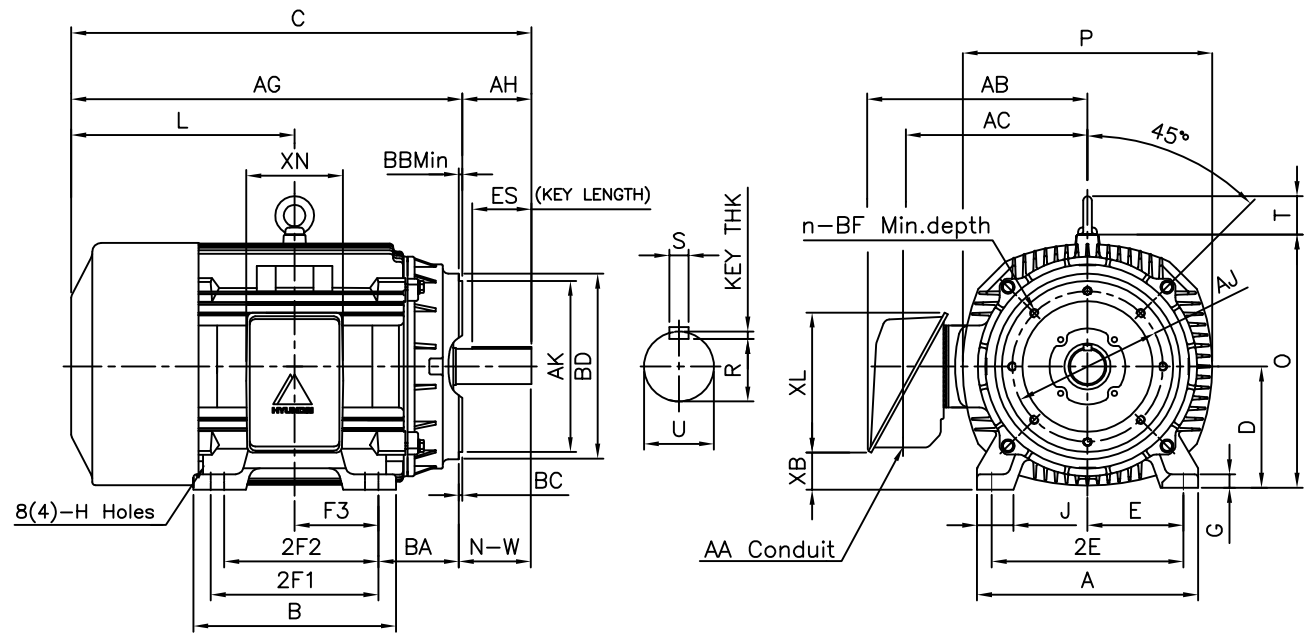
OUTPUT VS EFF., P.F & CURRENT CURVE



본 도면은 HD현대일렉트릭(주) 재산이며 허가없이 복사할 수 없습니다 (취급유의)

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▽	50S	REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY
▽▽	12.5S							
▽▽▽	3.2S							
▽▽▽▽	0.4S							



**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	825

O V E R A L L									S H A F T				KEY	BEARING	
BA	C	D	L	O	P	T	AG	U	N-W	KEYWAY			THK.	DRIVE END	OPP. DRIVE END
										R	ES	S			
5.88	34.01	9.00	16.13	18.50	17.75	2.80	28.13	2.375	5.88	2.021	4.28	0.625	0.625	6314C3	6213C3

C - F A C E								
AJ	AK	BB Min	BC	BD	BF	BF depth	n	AH
11.00	12.50	0.25	0.25	13.54	5/8-11	0.94	8	5.62

**NOTE**

- 1.Dimension "D" tolerance : +0.00inch ~ -0.03inch (143TC-365TC) : +0.000inch ~ -0.06inch (404TC-449TC)
- 2.Dimension "U" tolerance : +0.000inch ~ -0.0005inch (143TC-215TC): +0.000inch ~ -0.001inch (254TC-449TC)
- 3.Dimension "R" tolerance : +0.000inch ~ - 0.015inch
- 4.Dimension "AK" tolerance : +0.000inch ~ -0.003inch (143TC-286TC): +0.000inch ~ -0.005inch (324TC-449TC)

APPD BY	S.K.HAN	UNIT	inch	SUBJECT	NEMA 364TC	DWG SIZE A4 ( 1:1 )
CHKD BY	S.Y.KIM	SCALE	None			
CHKD BY	Y.H.BAE	PROJEC'N	3rd Angle	TITLE <b>OUTLINE</b>		
DSND BY	H.C.LIM	DATE	2019-06-05			



REF. NO	350A1313AA	Sheet No.	of
DWG NO	LM-T1364C4PL001	Revision No.	0

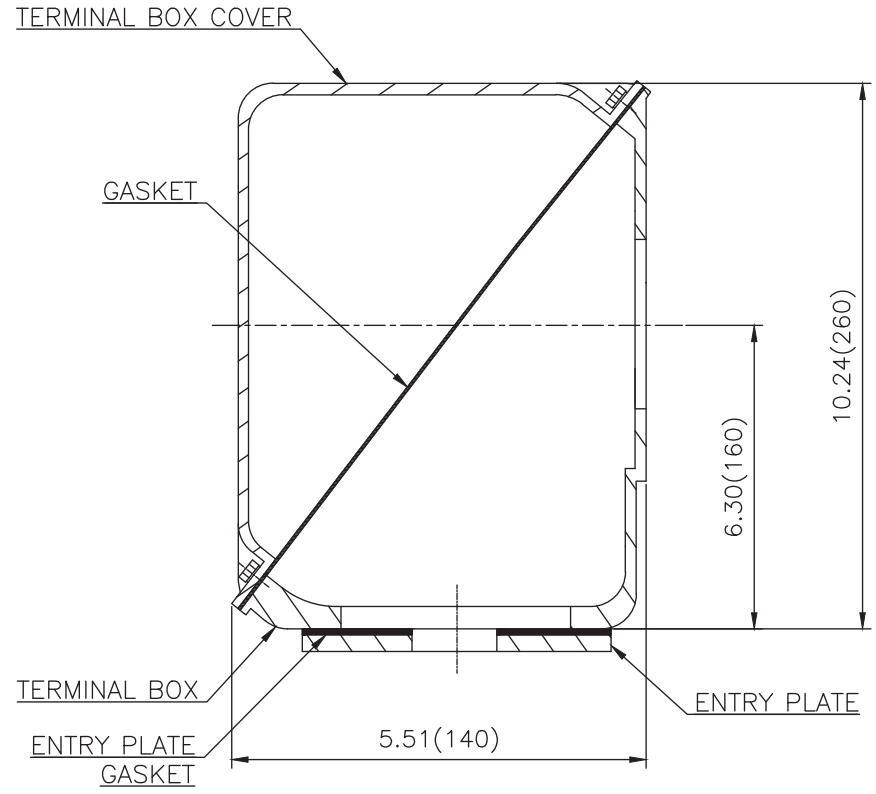
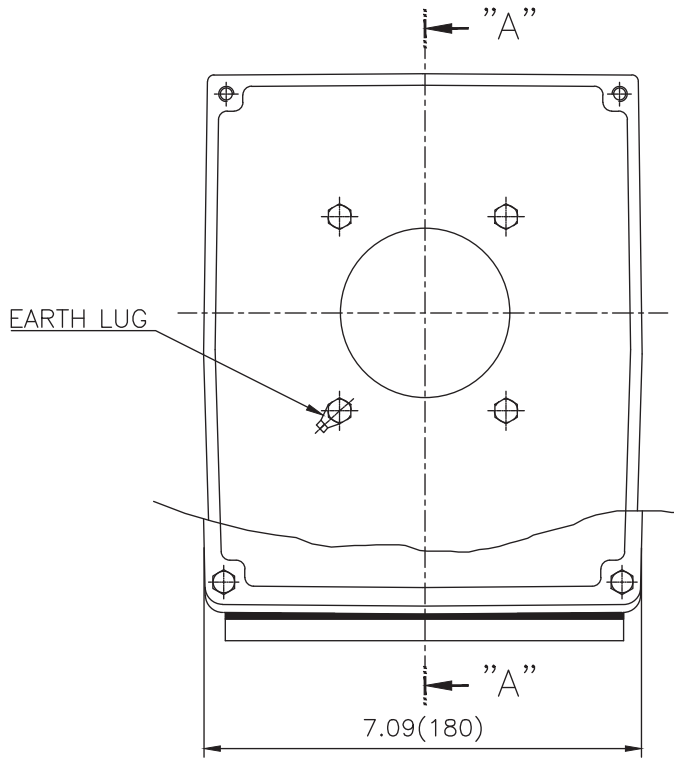


**HD HYUNDAI ELECTRIC**

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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
<b>HD HYUNDAI ELECTRIC</b>				DWG NO	3M-248450	Revision No.	0