

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	286TC	Rated Output	22 kW	30.0 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	29.1 A	36.4 A	72.8 A
Insulation Class	<input checked="" type="checkbox"/> F <input type="checkbox"/> B <input type="checkbox"/> H		Locked-rotor**	740 %	740 %	740 %
Temp. Rise at full load (by resistance method)		Efficiency				
at 1.0 S.F    80 deg. C		50% Load		90.6 %		
Motor Location	<input checked="" type="checkbox"/> Indoor <input type="checkbox"/> Outdoor	75% Load		92.6 %		
Altitude	Less than 1000 meter	100% Load		93.6 %		
Relative Humidity	Less than 80 %	Power Factor(p.u)				
Ambient Temp.	40 deg. C (Max.)	50% Load		0.660		
Duty Type	Continuous (S1)	75% Load		0.760		
Service Factor		100% Load		0.810		
Mounting	B35	Speed at Full Load		1775 r.p.m		
Bearing	Type	Anti-Friction				
	DE/N-DE	6310ZC3 / 6310ZC3				
	Lubricant	Grease				
External Thrust	Not applicable					
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-Belt	Torque				
Shaft Extension	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double	Full Load		87.3 lb.ft		
Terminal Box	Main	<input type="checkbox"/> Aluminum <input checked="" type="checkbox"/> Cast Iron		Locked-rotor**		170 %
	Aux.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Breakdown**		220 %
Location	Refer to Outline Drawing					
Application		Moment of Inertia (J)				
Area classification	Hazardous	Load(Max.)		160.272 lb.ft2		
Type of Ex-Protection	Class I & II, Division 2	Motor		5.578 lb.ft2		
Applicable Standard	NEMA MG1, CSA C390	Sound Pressure Level (No-load & mean value at 1m from motor)				
		72 dB(A)				
		Vibration				3.8 mm/sec (peak)
		Permissible number of consecutive starts		Cold		3 times
				Hot		2 times
		Paint	Munsell No.	4.0PB5.4/5.5(VL-451)		

ACCESSORIES	SUBMITTAL DRAWING
	Outline Dimension Drawing \ Motor Weight(Approx.)
	B35    LM-T2286C4PLV23    430 lb.

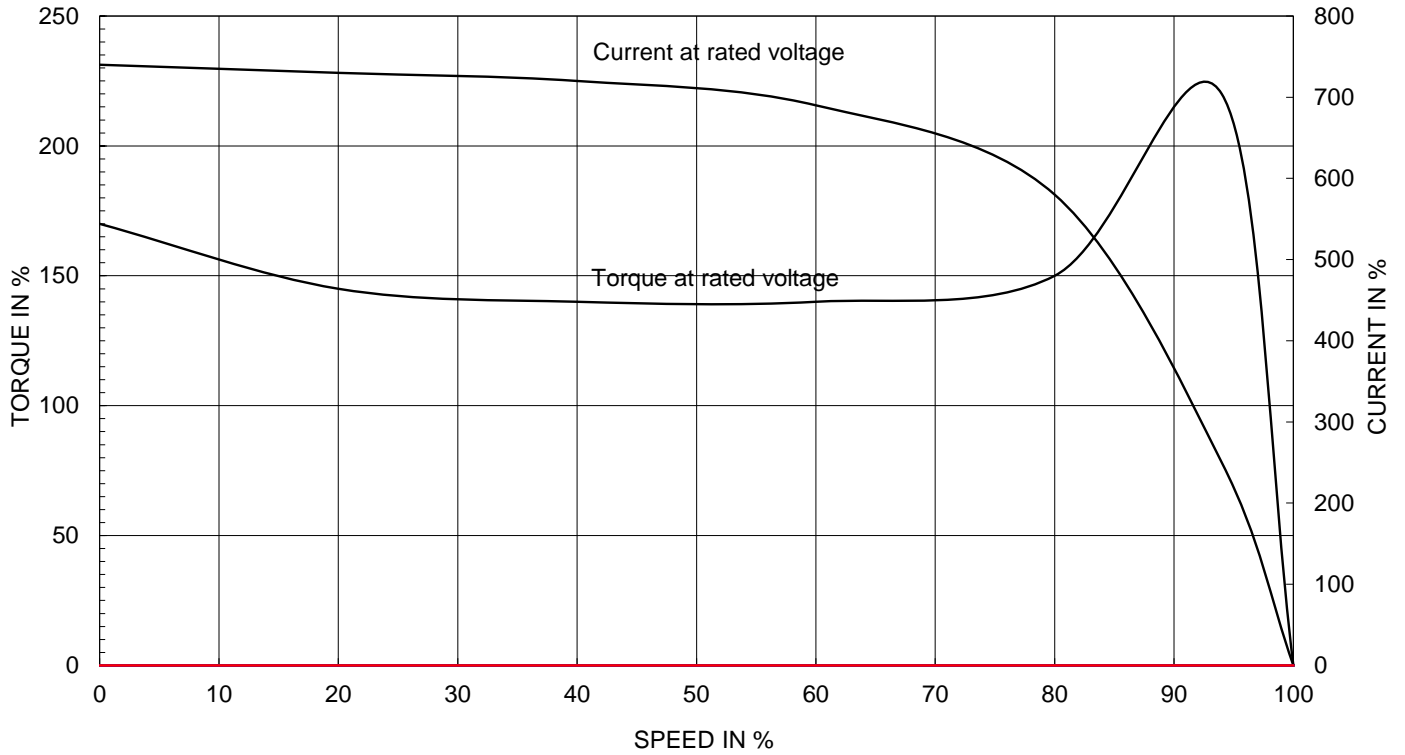
REMARK										
1. Premium efficiency according to NEMA MG1 2. Inverter Duty @ 1.0 Service Factor & F Temperature rise - 10:1 VT (20:1 VT at 50% load) - 10:1 CT - CHP up to 1.5 times base speed 3. CSA Certification - Class I, Division 2, Group A, B, C & D - Class II, Division 2 Group E, F & G (Group 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.										
<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.

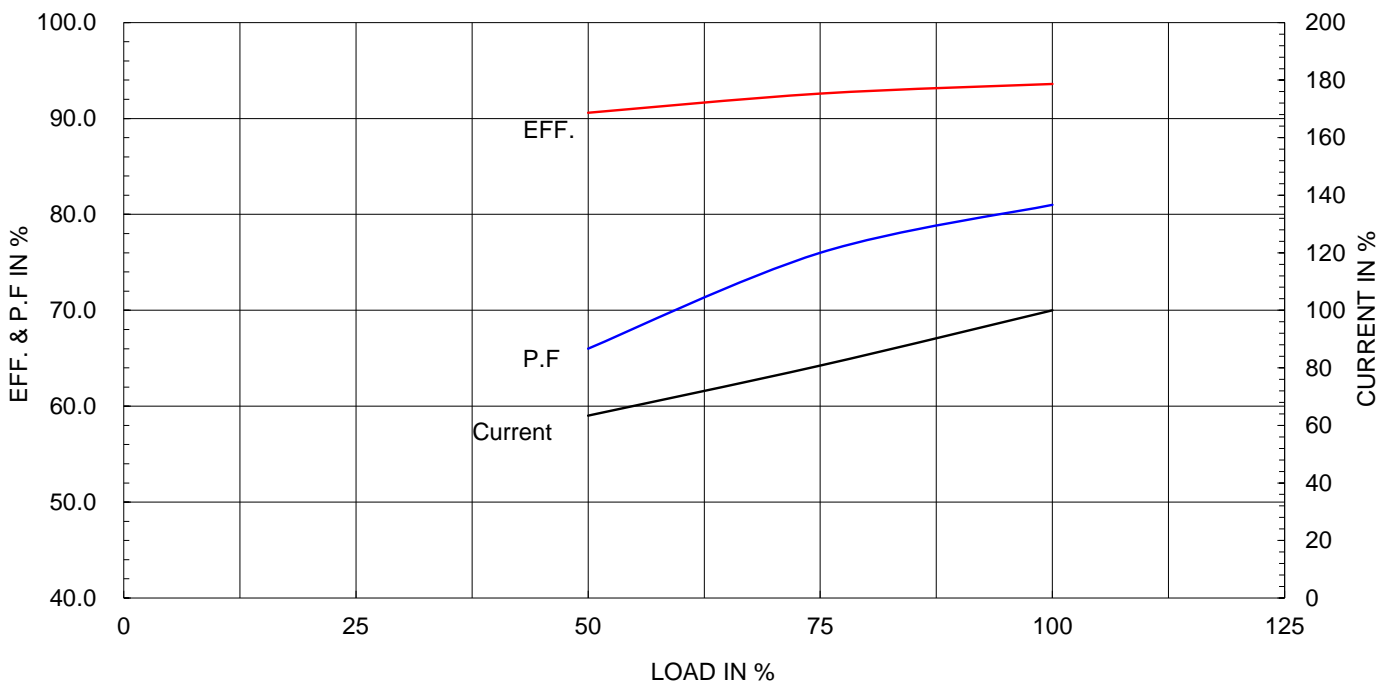
Type :	PJP
Full Load Torque :	87.3 lb.ft
Load moment of Inertia (J) :	- lb.ft <sup>2</sup>
Motor moment of Inertia (J) :	5.578 lb.ft <sup>2</sup>

22 kW	30 HP	4 P	60 Hz
Speed at Full Load :			1775 RPM
Rated Voltage	575V	460V	230V
Full Load Current	29.1A	36.4A	72.8A

SPEED VS TORQUE & CURRENT CURVE



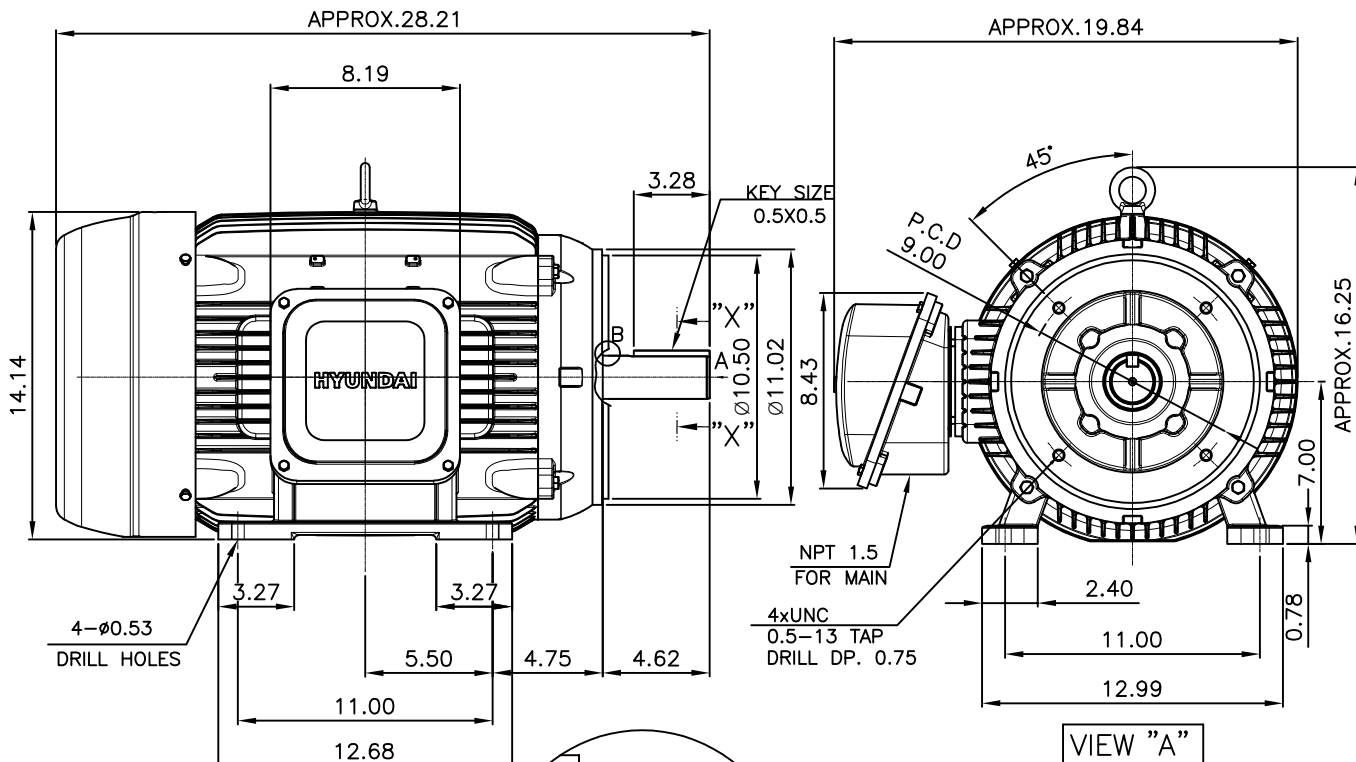
OUTPUT VS EFF., P.F & CURRENT CURVE



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

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1		2		3		4			
▽	50S	REV	DATE	CONTENTS		REVD BY	CHKD BY	CHKD BY	APPD BY
▽▽	12.5S								
▽▽▽	3.2S								
▽▽▽▽	0.4S								



### NOTE

[TOLERANCE]

- CENTER HEIGHT : +0.00inch - 0.03inch
- SHAFT DIAMETER : +0.000inch - 0.001inch
- KEYWAY DEPTH : +0.000inch - 0.015inch

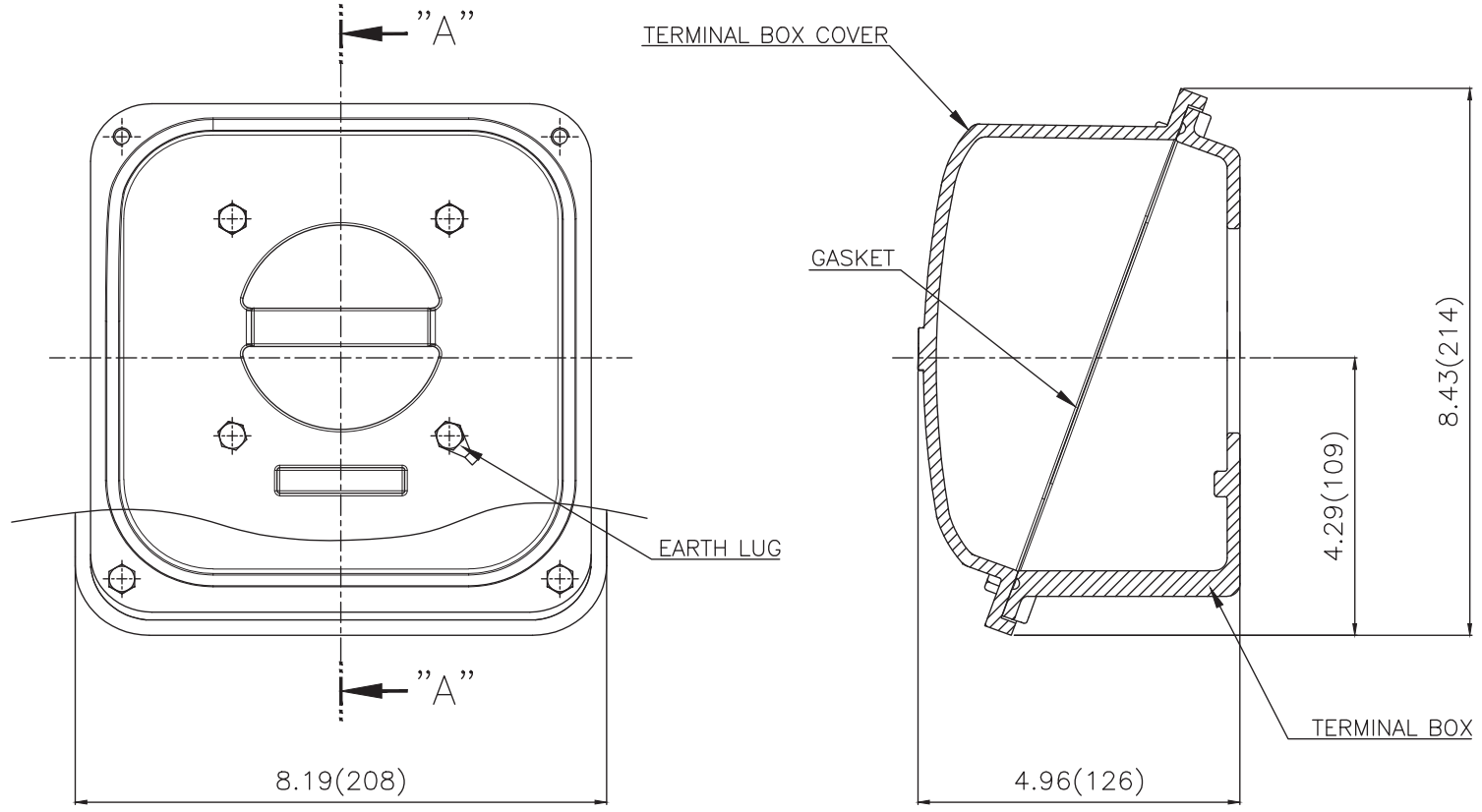
DETAIL - B

SECTION "X-X"  
SCALE 4/8.5

APPD BY	S.Y.KIM	UNIT	mm	SUBJECT	NEMA 286TC	DWG SIZE	
CHKD BY	R.G.KIM	SCALE	1/8.5	TITLE	OUTLINE	A4 ( 1:8.5 )	
CHKD BY		PROJEC'N	3rd Angle	REF. NO		Sheet No. of	
DSND BY	주유림	DATE	2021-04-29	DWG NO		LM-T2286C4PLV23	Revision No. 0



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



▽	50S
▽▽	12.5S
▽▽▽	3.2S
▽▽▽▽	0.4S

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

일반가공공차		일반제관공차	
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. 250-280 (CAST IRON)	DWG SIZE	
CHKD BY		SCALE	1/2	TITLE	TERMINAL BOX ASS'Y		
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	DATE	2023-10-19		
DSND BY	배승희						
REF. NO		Sheet No.	of				
DWG NO	3M-248458	Revision No.	0				

