

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	145T	Rated Output	1.5 kW	2.0 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	2.39 A	2.98 A 5.96 A
Insulation Class	<input checked="" type="checkbox"/> F <input type="checkbox"/> B <input type="checkbox"/> H		Locked-rotor**	830 %	830 % 830 %
Temp. Rise at full load (by resistance method)		Efficiency			
at 1.0 S.F	80 deg. C	50% Load		83.5 %	
Motor Location	<input checked="" type="checkbox"/> Indoor <input type="checkbox"/> Outdoor	75% Load		85.5 %	
Altitude	Less than 1000 meter	100% Load		86.5 %	
Relative Humidity	Less than 80 %	Power Factor(p.u)			
Ambient Temp.	40 deg. C (Max.)	50% Load		0.580	
Duty Type	Continuous (S1)	75% Load		0.680	
Service Factor		100% Load		0.730	
Mounting	B3	Speed at Full Load		1745 r.p.m	
Bearing	Type	Anti-Friction			
	DE/N-DE	6205ZZC3 / 6204ZZC3			
	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		6.1 lb.ft	
Terminal Box	Main	<input type="checkbox"/> Aluminum <input checked="" type="checkbox"/> Cast Iron		Locked-rotor**	
	Aux.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		245 %	
Location	Refer to Outline Drawing				
Application		Breakdown**		280 %	
Area classification	Hazardous	Moment of Inertia (J)			
Type of Ex-Protection	Class I & II, Division 2	Load(Max.)		15.365 lb.ft2	
Applicable Standard	NEMA MG1, CSA C390	Motor		0.078 lb.ft2	
		Sound Pressure Level (No-load & mean value at 1m from motor)			
		56 dB(A)			
		Vibration			
		3.8 mm/sec (peak)			
		Permissible number of consecutive starts		Cold	
		Hot		2 times	
		Paint	Munsell No.	4.0PB5.4/5.5(VL-451)	

ACCESSORIES	SUBMITTAL DRAWING
	Outline Dimension Drawing \ Motor Weight(Approx.)
	B3 LM-T2145B3PLV23 55 lb.

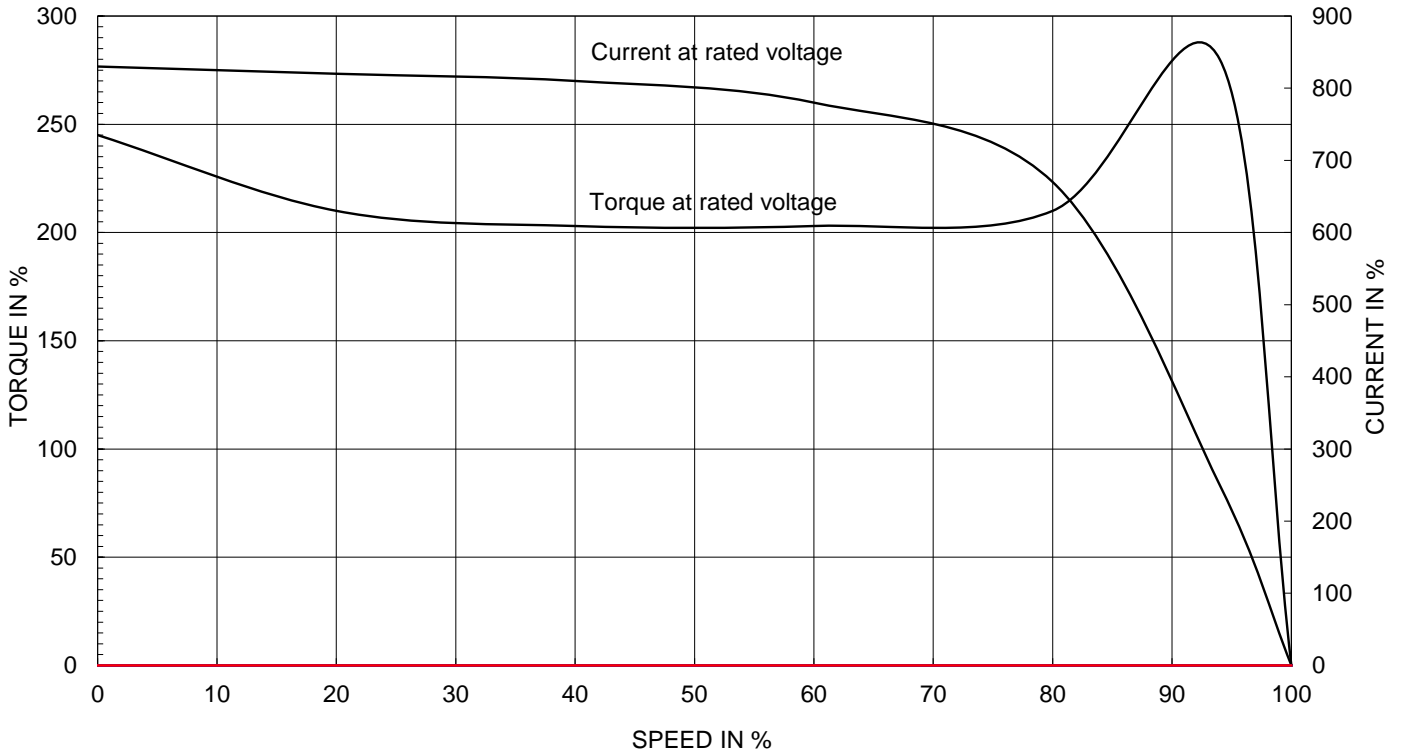
REMARK										
1. Premium efficiency according to NEMA MG1 2. Inverter Duty @ 1.0 Service Factor & F Temperature rise - 10:1 VT (20:1 VT at 50% load) - 10:1 CT - CHP up to 1.5 times base speed , NEMA MG1 Part31 3. CSA Certification - Class I, Division 2, Group A, B, C & D - Class II, Division 2 Group 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.										
<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.

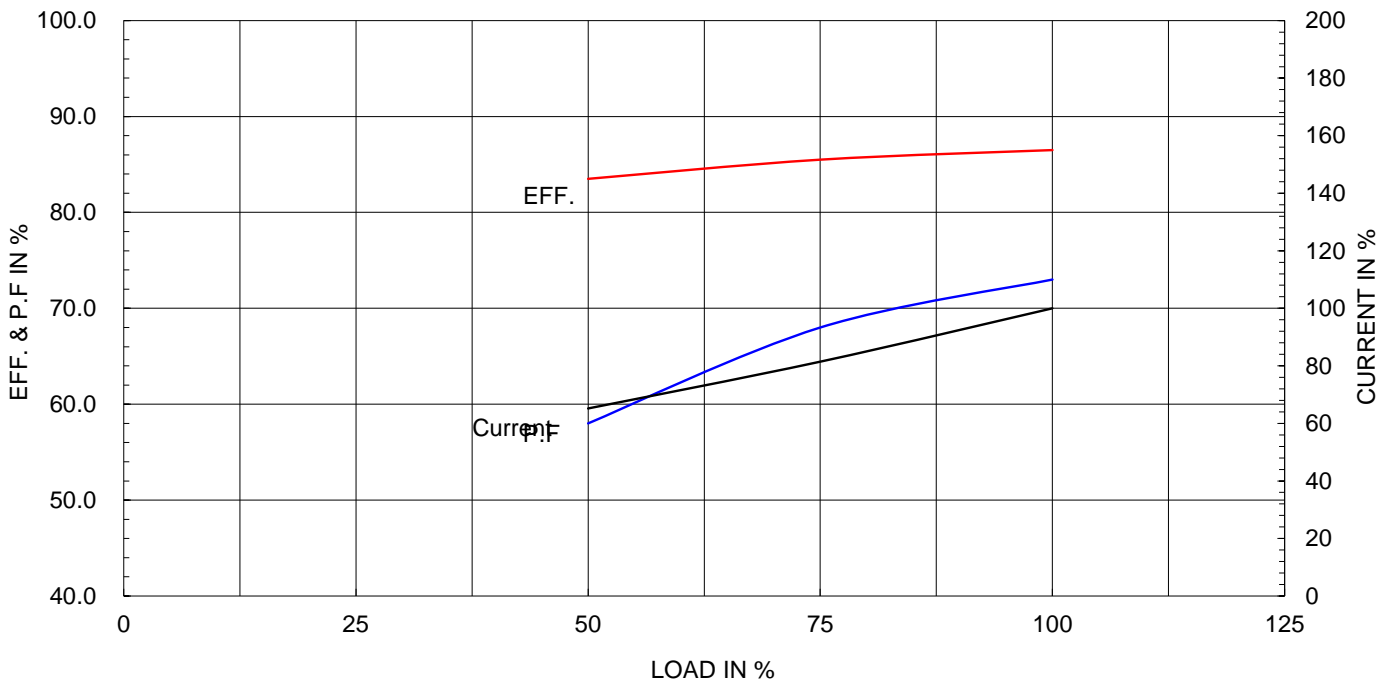
Type :	PJP
Full Load Torque :	6.1 lb.ft
Load moment of Inertia (J) :	- lb.ft2
Motor moment of Inertia (J) :	0.078 lb.ft2

1.5 kW	2 HP	4 P	60 Hz
Speed at Full Load :			1745 RPM
Rated Voltage	575V	460V	230V
Full Load Current	2.4A	3.0A	6.0A

SPEED VS TORQUE & CURRENT CURVE



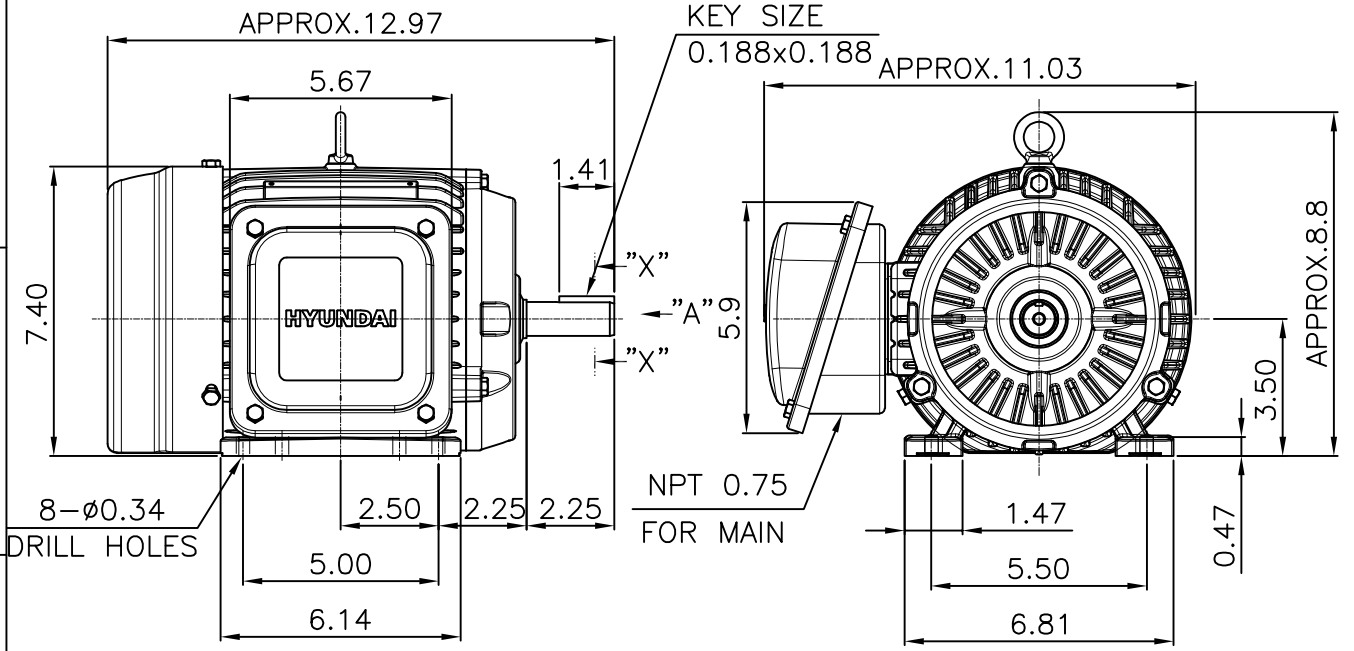
OUTPUT VS EFF., P.F & CURRENT CURVE



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

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

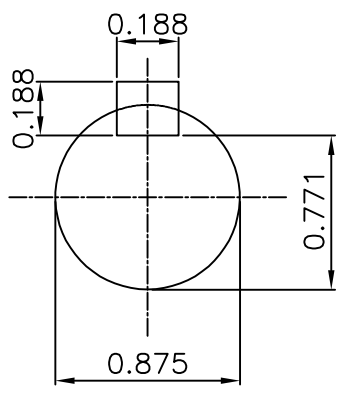
▽	50S	REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY
▽▽	12.5S							
▽▽▽	3.2S							
▽▽▽▽	0.4S							



VIEW "A"

NOTE
[TOLERANCE]

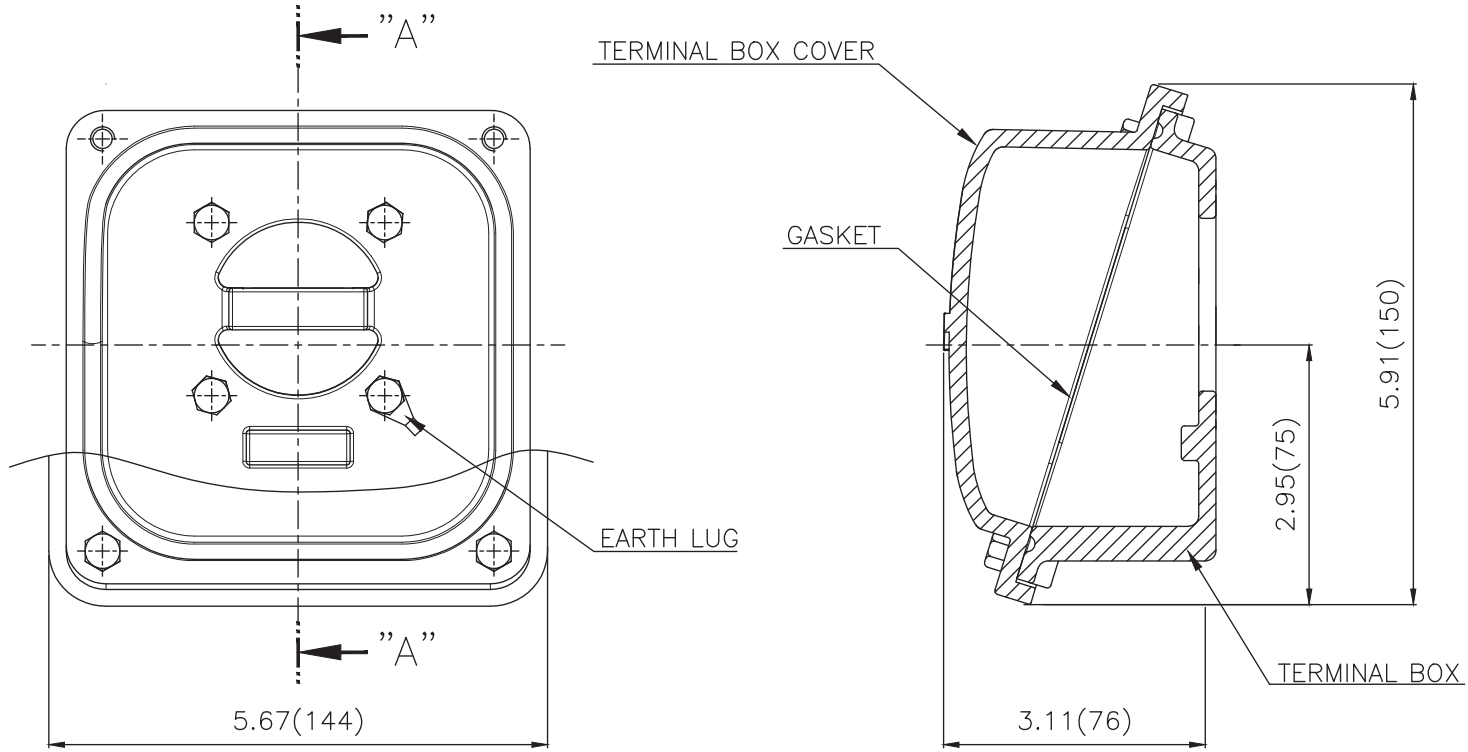
- CENTER HEIGHT : +0.00inch - 0.03inch
- SHAFT DIAMETER : +0.000inch - 0.0005inch
- KEYWAY DEPTH : +0.000inch - 0.015inch



SECTION "X-X"
SCALE 5/5

APPD BY	S.Y.KIM	UNIT	mm	SUBJECT	NEMA 145T	DWG SIZE	A4 (1:5)
CHKD BY	R.G.KIM	SCALE	1/5	TITLE	OUTLINE		
CHKD BY		PROJEC'N	3rd Angle	REF. NO		Sheet No.	of
DSND BY	주유림	DATE	2021-04-28	DWG NO	LM-T2145B3PLV23	Revision No.	0

**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		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. 140-180 (CAST IRON)	DWG SIZE	
CHKD BY		SCALE	1/1.5	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-248456	Revision No.	0				

