

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.	IEEE100-12-444T	Item No.	Rev. No. []
Project Name		Project No.	Quantity sets

GENERAL SPECIFICATION		PERFORMANCE DATA			
Frame Size	444T	Rated Output	75 kW 100 HP		
Type	PJP	Number of Poles	6		
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	93.3 A	116.6 A 233.1 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		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	1185 r.p.m		
Bearing	Type	Anti-Friction	Torque		
	DE/N-DE	NU318 / 6316C3	Full Load	445.9 lb.ft	
	Lubricant	Grease(Polyrex-EM)	Locked-rotor**	140 %	
External Thrust	Not applicable	Breakdown**	220 %		
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt	Moment of Inertia (J)			
Shaft Extension	Single	Load(Max.)	3,008.432 lb.ft2		
Terminal Box	Main	Cast Iron	Motor	73.410 lb.ft2	
	Aux.	No	Sound Pressure Level (No-load & mean value at 1m from motor)		
Location	Refer to Outline Drawing			80 dB(A)	
Application		Vibration		3.8 mm/sec (peak)	
Area classification	Hazardous	Permissible number of consecutive starts	Cold	3 times	
Type of Ex-Protection	Class I&II, Division 2		Hot	2 times	
Applicable Standard	IEEE841, NEMA MG1, CSA C390	Paint	Munsell No.	7.5BG6/1.5	

ACCESSORIES

SUBMITTAL DRAWING		
Outline Dimension Drawing	Motor Weight(Approx.)	
B3	LM-I1444B3PL001	1530 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.

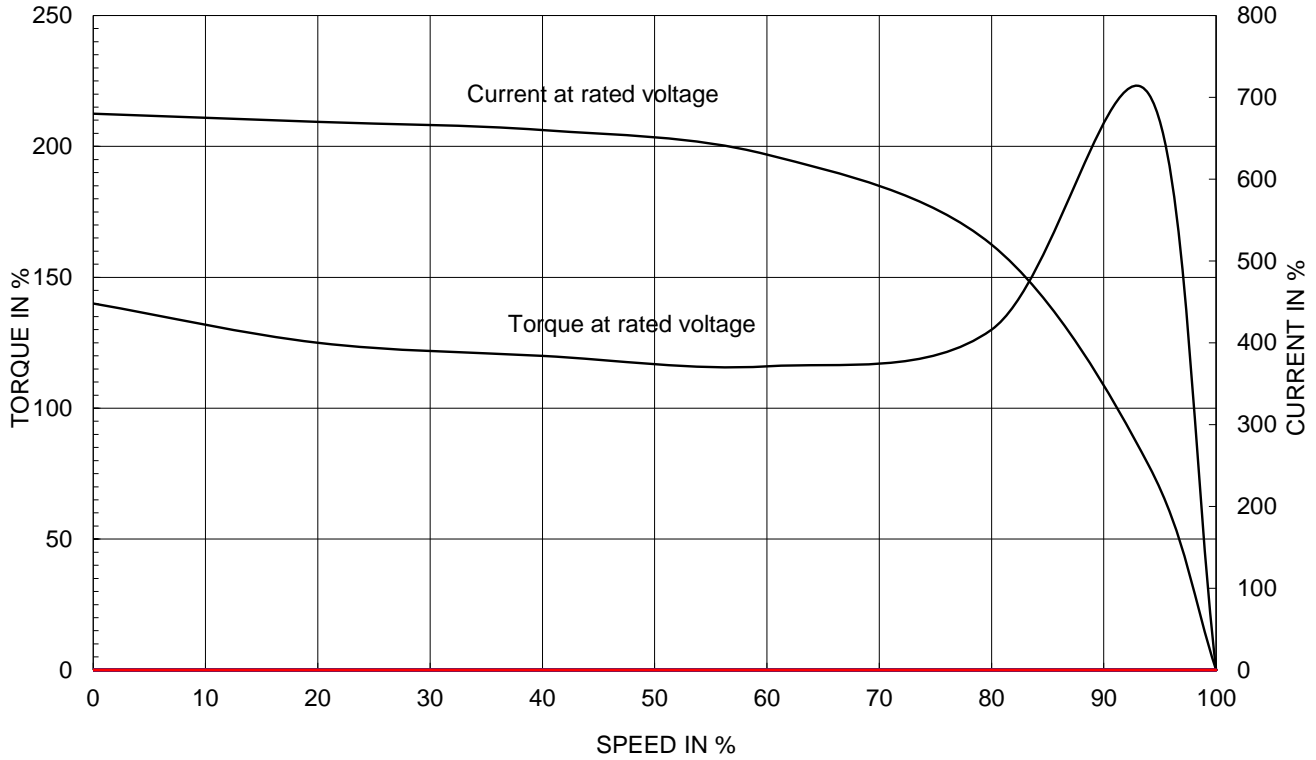
Date	DSND	CHKD	CHKD	APPD
2024-07-13	S.H. Lee	I.K. Kim	R.G. Kim	S.W. Kim

[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.

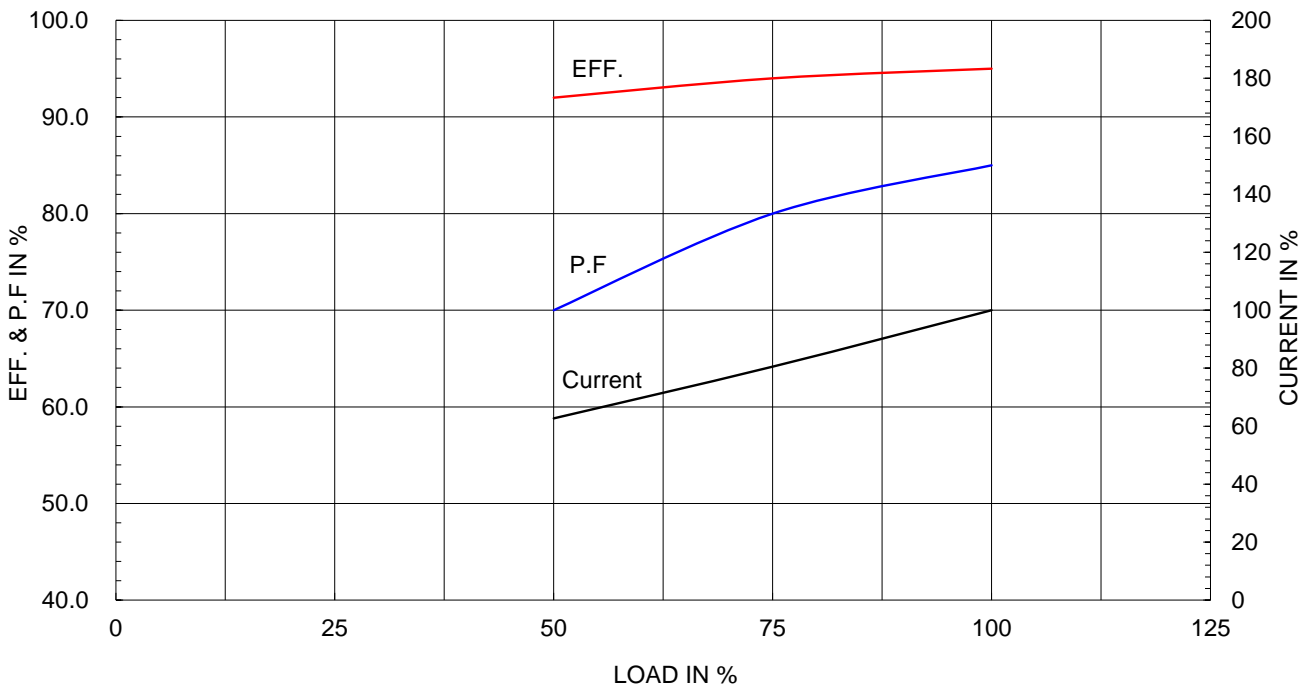
Type :	PJP	
Full Load Torque :	445.9	lb.ft
Load moment of Inertia (J) :	3008.432	lb.ft ²
Motor moment of Inertia (J) :	73.410	lb.ft ²

75kW	100HP	6 P	60 Hz
Speed at Full Load :			1185 RPM
Rated Voltage	575V	460V	230V
Full Load Current	93.3A	116.6A	233.1A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE

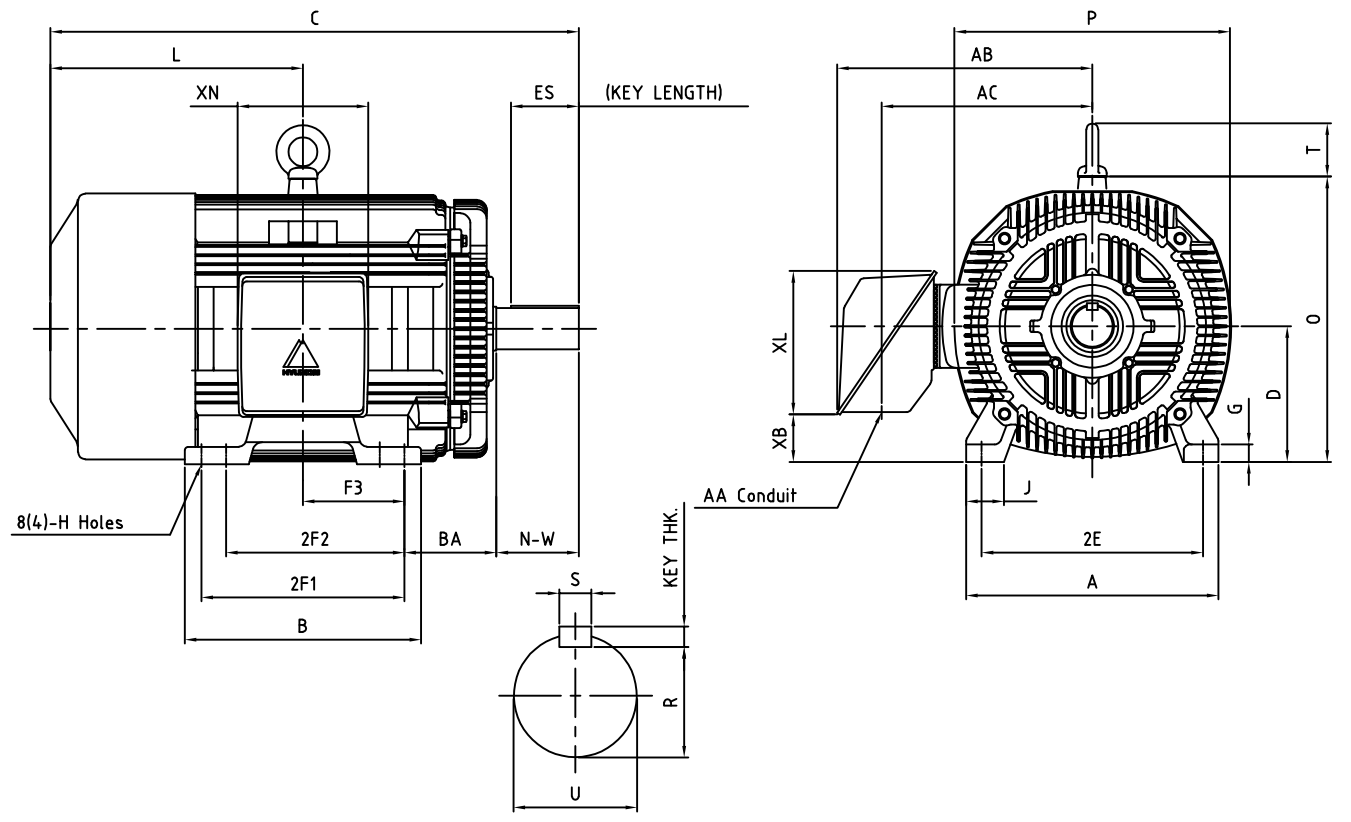


본 도면은 HD현대일렉트릭(주) 재산이며 허가없이 복사할 수 없음 (취급유의)

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

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	
20.51	19.21	18.00	(16.50)	14.50	8.248	1.42	3.07	0.81	3.00	21.26	18.03	3.83	11.65	10.63	1530

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			
7.50	46.45	11.00	22.22	23.19	22.40	4.33	3.375	8.50	2.880	6.93	0.875	0.875	6318C3	6316C3

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 444T	DWG SIZE	A4 (1:1)		
CHKD BY	R.G.KIM	SCALE	NONE	TITLE	OUTLINE	REF. NO	350A8117AA		
CHKD BY	Y.H.BAE	PROJEC'N	3각법(3rd Angle)					Sheet No.	of
DSND BY	H.K.LEE	DATE	2021-04-30					DWG NO	LM-11444B3PL001

**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

일반기준공차		일반재판공차	
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. 400-440 (CAST IRON)	DWG SIZE	A3 (1:1.2)
CHKD BY		SCALE	1/1.2	TITLE	MAIN TERMINAL BOX ASS'Y		
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	REF. NO		Sheet No.	of
DSND BY	배승희	DATE	2023-10-19	DWG NO	3M-248451	Revision No.	0

