

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

Catalog No.	HHI125-36-444TS	Item No.	Rev. No.	[]
Project Name		Project No.	Quantity	sets

GENERAL SPECIFICATION		PERFORMANCE DATA				
Frame Size	444TS	Rated Output	95 kW 125 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	111.6 A	139.5 A	
Insulation Class	F		Locked-rotor**	700 %	700 %	700 %
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		0.750		
Duty Type	Continuous (S1)	75% Load		0.850		
Service Factor	1.15	100% Load		0.900		
Mounting	B3	Speed at Full Load	3570 r.p.m			
Bearing	Type	Anti-Friction				
	DE/N-DE	6314C3 / 6314C3				
	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	187.5 lb.ft			
Terminal Box	Main	Cast Iron				
	Aux.	No				
	Location	Refer to Outline Drawing				
Application		Moment of Inertia (J)				
Area classification	Hazardous	Load(Max.)	238.491 lb.ft2			
Type of Ex-Protection	Class I&II, Division 2	Motor	27.420 lb.ft2			
Applicable Standard	NEMA MG1, CSA C390	Sound Pressure Level (No-load & mean value at 1m from motor)				
ACCESSORIES		92 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.)
	B3 LM-T1444B3CL001 1610 lb.

SPARE PARTS	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.

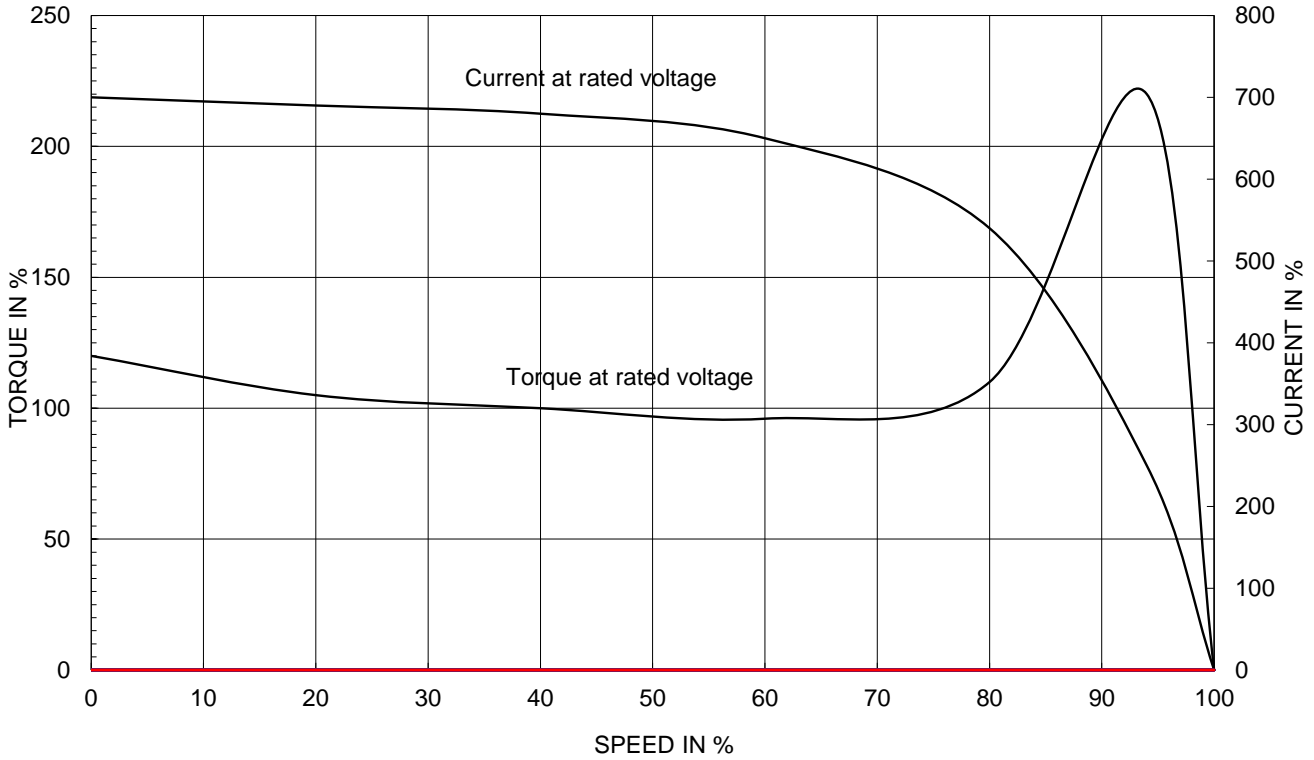
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REV	DATE	CONTENTS		REVD BY	CHKD BY	CHKD BY	APPD BY
<p>4.72</p>							
<p>CROWN TRITON Premium Efficiency AC 3 Phase Motor</p> 							
125HP 2P 230/460V				Cat. No. HHI125-36-444TS			
Model HLS444SR02		INS. Class F HD-F1		Amps 278.9/139			
Type HLS		Duty CONT		Code G		Amb. 40°C Hertz 60Hz	
Frame 444TS		Encl. TEFC		S.F. 1.15		RPM 3570 NEMA Nom. Eff. 95%	
Bearing	Drive 6314C3		S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)			3/4 Eff. 94%	
	Opp. 6314C3					NEMA Design B	
Usable at	50Hz 125HP 380V 165.4A 2962rpm S.F.: 1.0 Eff.: 94.8% Code: E						
	50Hz 125HP 400/415V 157.5/152.5A 2966/2969rpm S.F.: 1.0 Eff.: 94.9/95% Code: F/G						
CSA Certified for	Model LATER		Type PJP		Temp. Code		
	CLASS I, Div. 2, Gr. A, B, C & D CLASS I, Zone 2, Gr. IIA, IIB, & IIC		CLASS II, Div. 2 Gr. E, F & G (Gr. E : Up to 320FR)		Frame 140~320FR 360~400FR 440FR Amb. 40°C T3C (160°C) T3B (165°C) T3A (180°C) Amb. 55°C T3A (180°C) T3A (180°C) T3 (200°C)		
No. -		Date -		Weight 1610 lb			
4M-135702		MARINE DUTY IIEE45		Made in Korea H1			
APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 Severe Duty (HHI, 364-449)		DWG SIZE
CHKD BY	I.K.KIM	SCALE	NONE	TITLE	NAMEPLATE DRAWING		
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	REF. NO	4M-135702		Sheet No. of
DSND BY	S.H.LEE	DATE	2024.06.07	DWG NO	NP-HHI125-36-444TS		Revision No. 0
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2.36

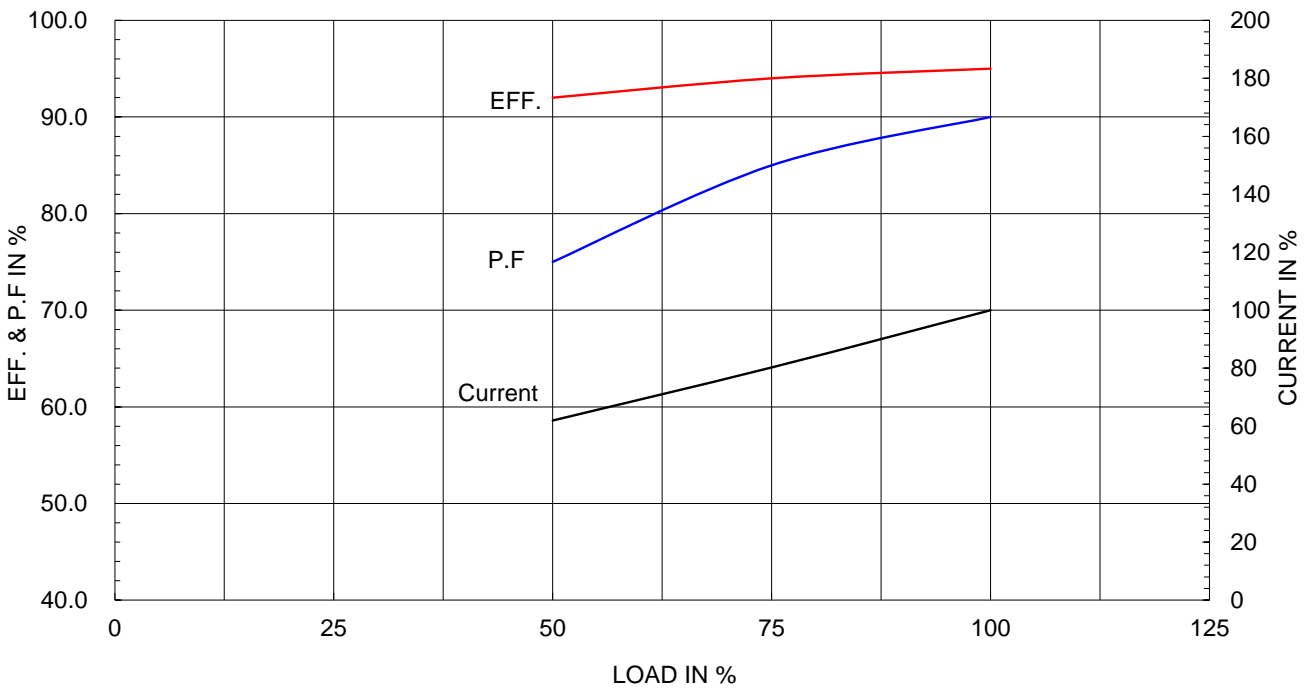
Type :	PJP
Full Load Torque :	187.5 lb.ft
Load moment of Inertia (J) :	238.491 lb.ft ²
Motor moment of Inertia (J) :	27.420 lb.ft ²

95kW 125HP	2 P	60 Hz
Speed at Full Load :		3570 RPM
Rated Voltage	575V	460V 230V
Full Load Current	111.6A	139.5A 278.9A

SPEED VS TORQUE & CURRENT CURVE



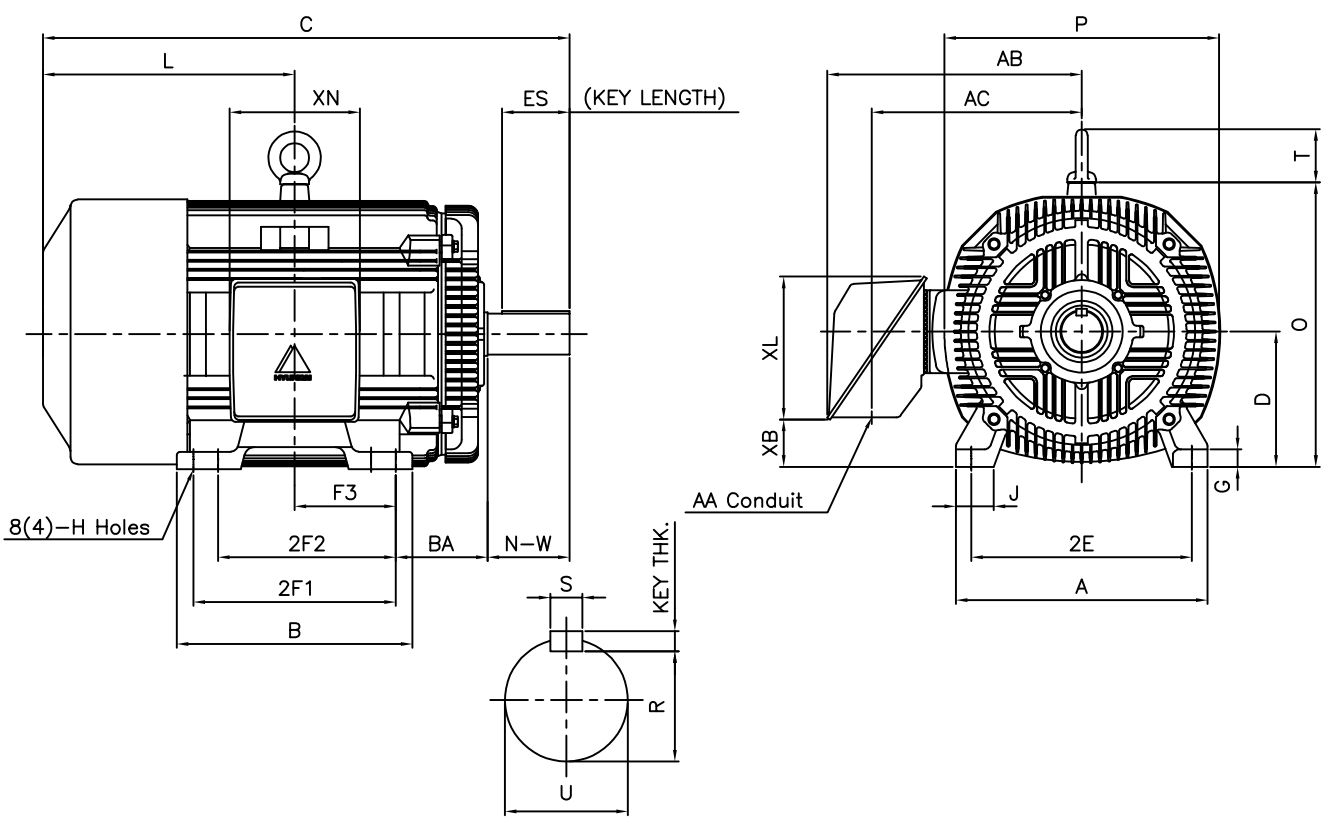
OUTPUT VS EFF., P.F & CURRENT CURVE



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

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	CONTENTS		REVD BY	CHKD 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	
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	1610

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	41.46	11.00	20.96	23.19	22.40	4.33	2.375	4.75	2.021	3.03	0.625	0.625	6314C3	6314C3

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.K.HAN	UNIT	INCH	SUBJECT	444TS	DWG SIZE	A4 (1:1)				
Q.P CHK	I.K.KIM	SCALE	NONE	TITLE	OUTLINE	REF. NO	350A1117BA				
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle					DWG NO	LM-T1444B3CL001	Sheet No.	of
DSND BY	B.Y.KIM	DATE	2019.06.05								



**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			
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	MAIN TERMINAL BOX ASS'Y			
DSND BY	배승희	DATE	2023-10-19	REF. NO		Sheet No.	of
				DWG NO	3M-248451	Revision No.	0

