

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

GENERAL SPECIFICATION		PERFORMANCE DATA			
Frame Size	444TSC	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 %
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	B5	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)			
		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.)	
B5	LM-T1444C5CL001	1770 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

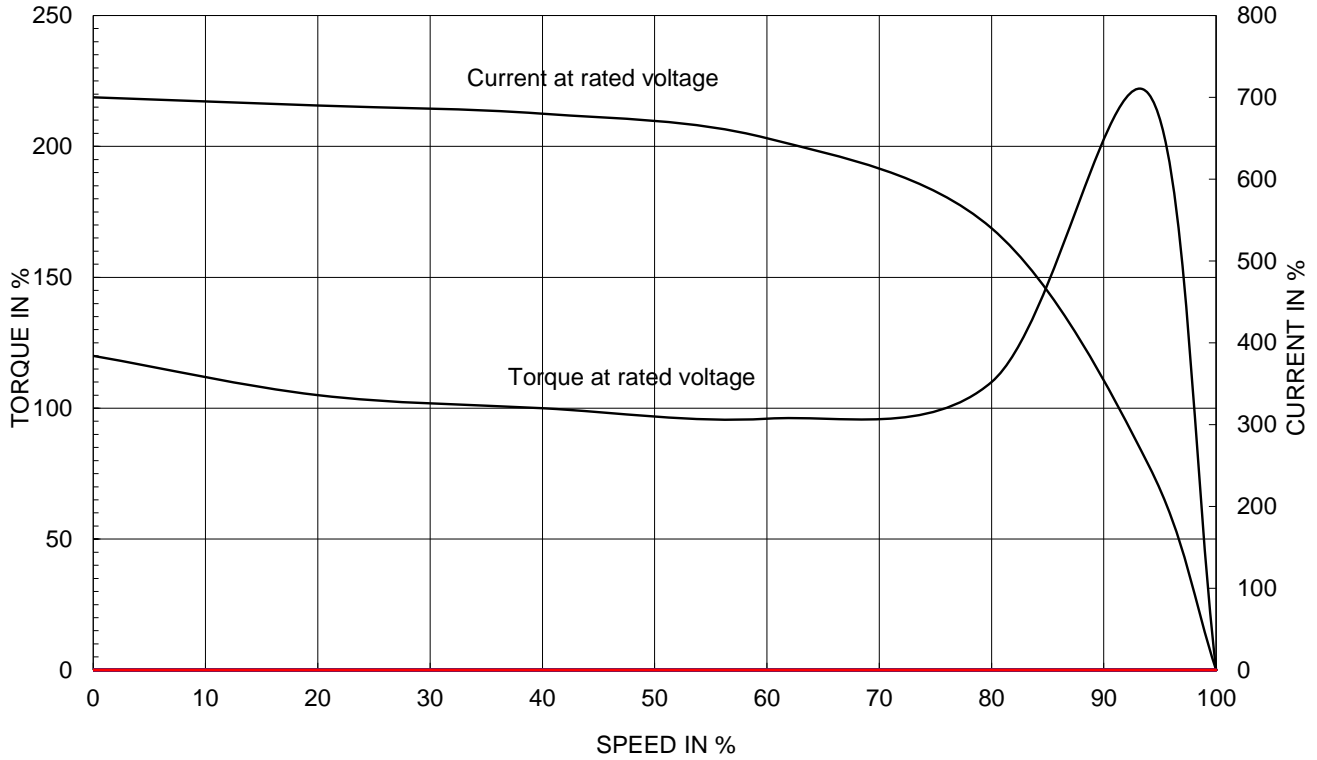
[Note] Others not mentioned in this data sheet shall be in accordance with maker standard.
 Above technical data are only design values and shall be guaranteed with tolerance of applicable standard.
 Inspection and performance test shall be done according to maker standard, if not mentioned.
 * In case 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																																									
<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="width: 40%; text-align: center;"> <h2 style="margin: 0;">CROWN TRITON</h2> <p style="margin: 0;">Premium Efficiency AC 3 Phase Motor</p> </div> <div style="width: 20%; text-align: center;"> </div> </div> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <tr> <td colspan="2">125HP 2P 230/460V</td> <td colspan="2">Cat. No. HHI125-36-444TSCRD</td> </tr> <tr> <td>Model HLS444PR02</td> <td>INS. Class F HD-F1</td> <td>Amps</td> <td>278.9/139</td> </tr> <tr> <td>Type HLS</td> <td>Duty CONT</td> <td>Code G</td> <td>Amb. 40°C</td> </tr> <tr> <td>Frame 444TSC</td> <td>Encl. TEFC</td> <td>S.F. 1.15</td> <td>RPM 3570</td> </tr> <tr> <td rowspan="2">Bearing</td> <td>Drive 6314C3</td> <td colspan="2">S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)</td> </tr> <tr> <td>Opp. 6314C3</td> <td>3/4 Eff.</td> <td>94%</td> </tr> <tr> <td rowspan="2">Usable at</td> <td colspan="3">50Hz 125HP 380V 165.4A 2962rpm S.F.: 1.0 Eff.: 94.8% Code: E</td> </tr> <tr> <td colspan="3">50Hz 125HP 400/415V 157.5/152.5A 2966/2969rpm S.F.: 1.0 Eff.: 94.9/95% Code: F/G</td> </tr> <tr> <td rowspan="2">CSA Certified for</td> <td>Model LATER</td> <td>Type PJP</td> <td>Temp. Code (sine wave)</td> </tr> <tr> <td>CLASS I, Div. 2, Gr. A, B, C & D CLASS I, Zone 2, Gr. IIA, IIB, & IIC</td> <td>CLASS II, Div. 2 Gr. E, F & G (Gr. E : Up to 320FR)</td> <td>Frame Amb. 40°C Amb. 55°C</td> </tr> <tr> <td>No. -</td> <td>Date -</td> <td>Weight</td> <td>1770 lb</td> </tr> </table> <div style="display: flex; justify-content: space-between; align-items: center; margin-top: 10px;"> <div style="width: 30%;"> <p>4M-135702</p> <p>MARINE DUTY IIEE45</p> </div> <div style="width: 30%; text-align: center;"> <p>Made in Korea H1</p> </div> <div style="width: 20%; text-align: right;"> </div> </div>										125HP 2P 230/460V		Cat. No. HHI125-36-444TSCRD		Model HLS444PR02	INS. Class F HD-F1	Amps	278.9/139	Type HLS	Duty CONT	Code G	Amb. 40°C	Frame 444TSC	Encl. TEFC	S.F. 1.15	RPM 3570	Bearing	Drive 6314C3	S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)		Opp. 6314C3	3/4 Eff.	94%	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 (sine wave)	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 Amb. 40°C Amb. 55°C	No. -	Date -	Weight	1770 lb
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4.72																																																		
2.36																																																		
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		A4 (1:1)																																										
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-HHI125-36-444TSCRD		Revision No. 0																																										
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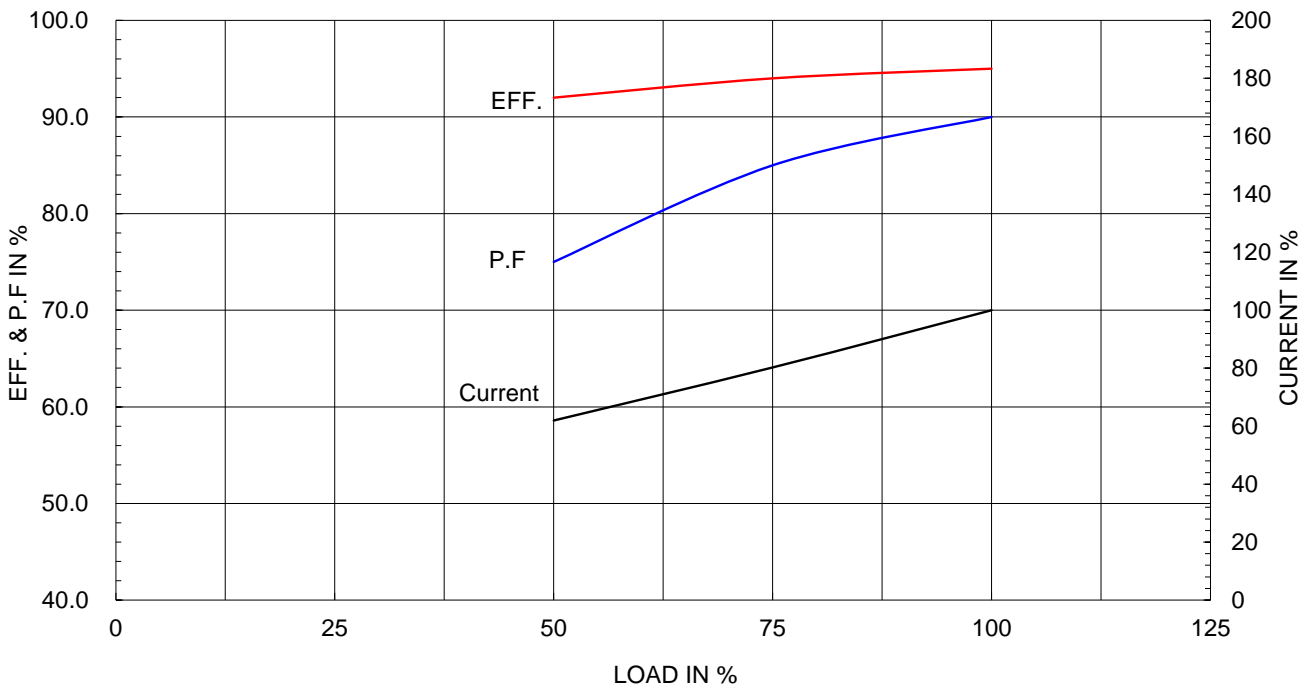
Type :	PJP
Full Load Torque :	187.5 lb.ft
Load moment of Inertia (J) :	238.491 lb.ft ²
Motor moment of Inertia (J) :	27.420 lb.ft ²

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

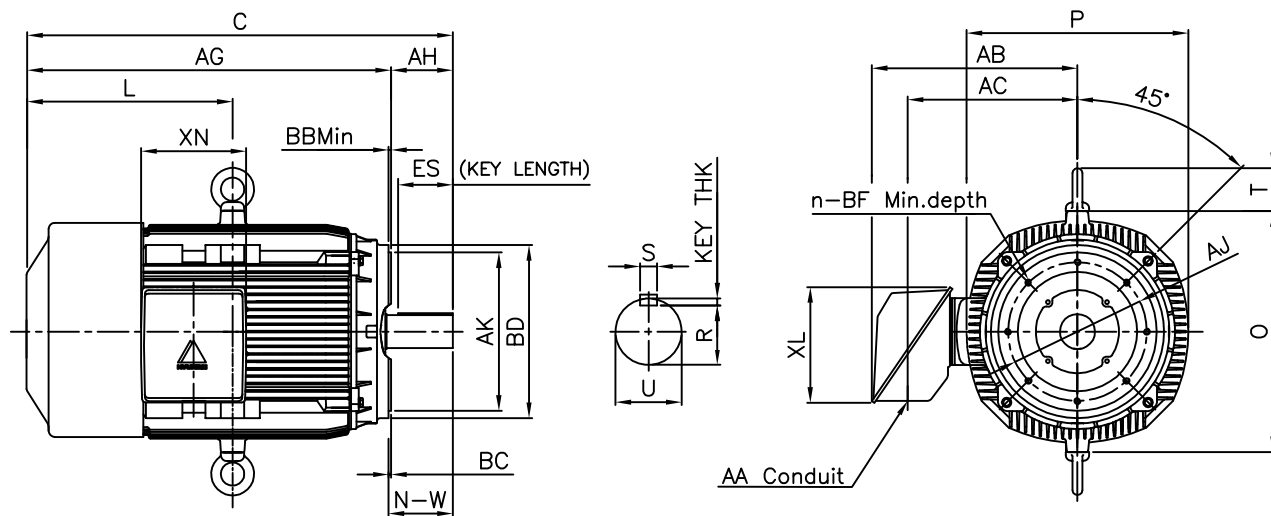
SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



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



DIMENSIONS

Unit : inch

C - F A C E										CONDUIT BOX					APPROX. WGT.(LB)
AJ	AK	BB Min	BC	BD	BF	BF depth	n	AH	AA	AB	AC	XL	XN		
14.00	16.00	0.25	0.25	17.48	5/8-11	0.94	8	4.50	3.00	21.26	18.03	11.65	10.63	1770	

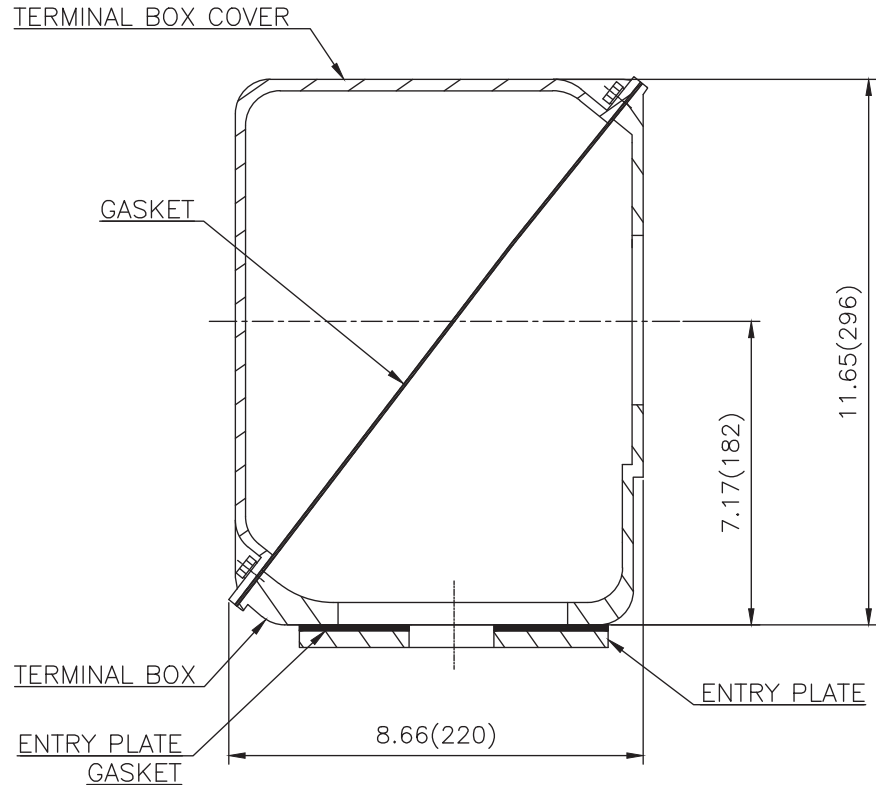
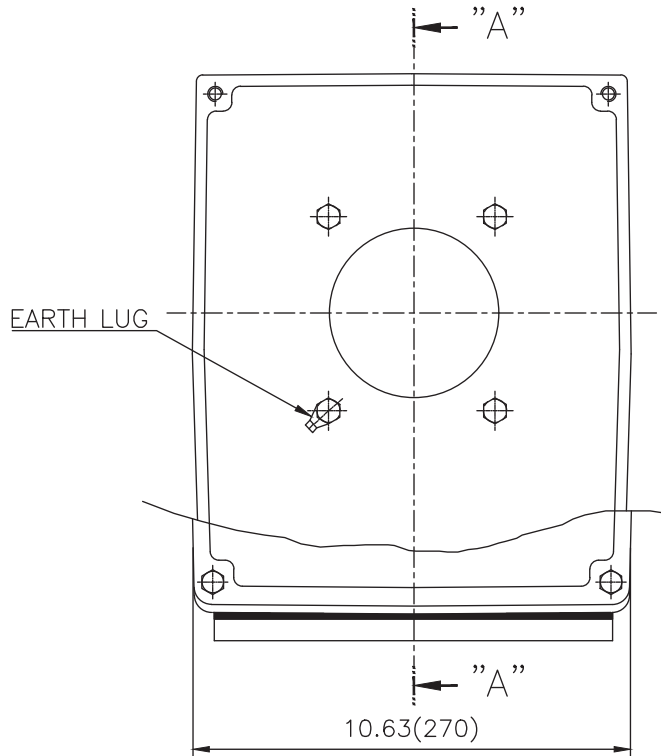
O V E R A L L						S H A F T					KEY	BEARING	
C	L	O	P	T	AG	U	N-W	KEYWAY			THK.	DRIVE END	OPP. DRIVE END
								R	ES	S			
41.46	20.96	24.33	22.44	4.33	36.71	2.375	4.75	2.021	3.03	0.625	0.625	6314C3	6314C3

NOTE

- Dimension "U" tolerance : +0.000inch ~ -0.0005inch (143TC-215TC): +0.000inch ~ -0.001inch (254TC-449TC)
- Dimension "R" tolerance : +0.000inch ~ - 0.015inch
- Dimension "AK" tolerance : +0.000inch ~ -0.003inch (143TC-286TC): +0.000inch ~ -0.005inch (324TC-449TC)

APPD BY	S.K.HAN	UNIT	INCH	SUBJECT	NEMA 444TSC	DWG SIZE	A4 (1:1)		
CHKD BY	S.Y.KIM	SCALE	NONE			TITLE	OUTLINE		
CHKD BY	Y.H.BAE	PROJEC'N	3각법(3rd Angle)						
DSND BY	N.R.LEE	DATE	2019-06-03						
REF. NO				350A1517BA	Sheet No.		of		
DWG NO				LM-T1444C5CL001	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

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

