

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.	HHI125-18-444TC	Item No.	Rev. No.	[]
Project Name		Project No.	Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA			
Frame Size	444TC		Rated Output	95 kW		125 HP
Type	PJP		Number of Poles	4		
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	113.6 A	142.0 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		92.4 %	
Motor Location	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor		75% Load		94.4 %	
Altitude	Less than 1,000 meter		100% Load		95.4 %	
Relative Humidity	Less than 80 %		Power Factor(p.u)			
Ambient Temp.	40 deg. C (Max.)		50% Load		0.730	
Duty Type	Continuous (S1)		75% Load		0.830	
Service Factor	1.15		100% Load		0.880	
Mounting	B35		Speed at Full Load	1785 r.p.m		
Bearing	Type	Anti-Friction	Torque			
	DE/N-DE	6318C3 / 6316C3	Full Load		374.9 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.)		1,507.479 lb.ft2	
Terminal Box	Main	Cast Iron	Motor		52.510 lb.ft2	
	Aux.	No	Sound Pressure Level (No-load & mean value at 1m from motor)			
Location	Refer to Outline Drawing				85 dB(A)	
Application			Vibration		3.8 mm/sec (peak)	
Area classification	Hazardous		Permissible number of consecutive starts		Cold 3 times Hot 2 times	
Type of Ex-Protection	Class I&II, Division 2		Paint		Munsell No. 4.0PB5.4/5.5(VL-451)	
Applicable Standard	NEMA MG1, CSA C390					

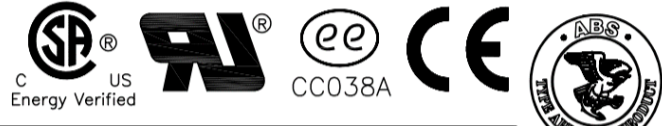


ACCESSORIES

SUBMITTAL DRAWING		
Outline Dimension Drawing	Motor Weight(Approx.)	
B35	LM-T1444C4PL001	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.

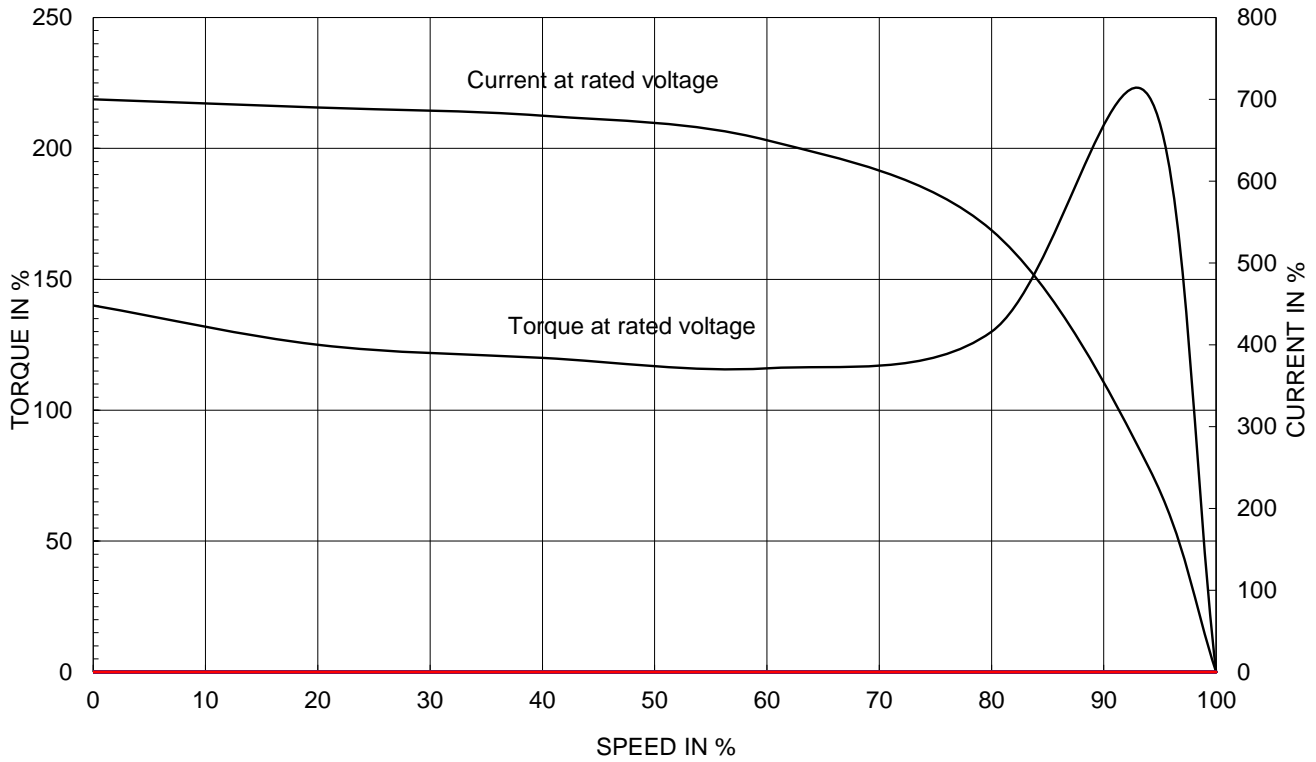
1		2		3		4	
REV	DATE	CONTENTS		REVD BY	CHKD BY	CHKD BY	APPD BY
<p>4.72</p>							
<p>CROWN TRITON Premium Efficiency AC 3 Phase Motor</p> 							
125HP 4P 230/460V				Cat. No. HHI125-18-444TC			
Model HLS444PR04		INS. Class F HD-F1		Amps 284.1/142			
Type HLS		Duty CONT		Code H		Amb. 40°C Hertz 60Hz	
Frame 444TC		Encl. TEFC		S.F. 1.15		RPM 1785 NEMA Nom. Eff. 95.4%	
Bearing	Drive 6318C3		S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)			3/4 Eff. 94.4%	
	Opp. 6316C3					NEMA Design B	
Usable at	50Hz 125HP 380V 168.6A 1480rpm S.F.: 1.0 Eff.: 94.7% Code: E						
	50Hz 125HP 400/415V 160.9/156.6A 1482/1484rpm S.F.: 1.0 Eff.: 95/95.2% 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	<p>NAMEPLATE DRAWING</p>		
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle				
DSND BY	S.H.LEE	DATE	2024.06.07				
				REF. NO	4M-135702		Sheet No. of
				DWG NO	NP-HHI125-18-444TC		Revision No. 0
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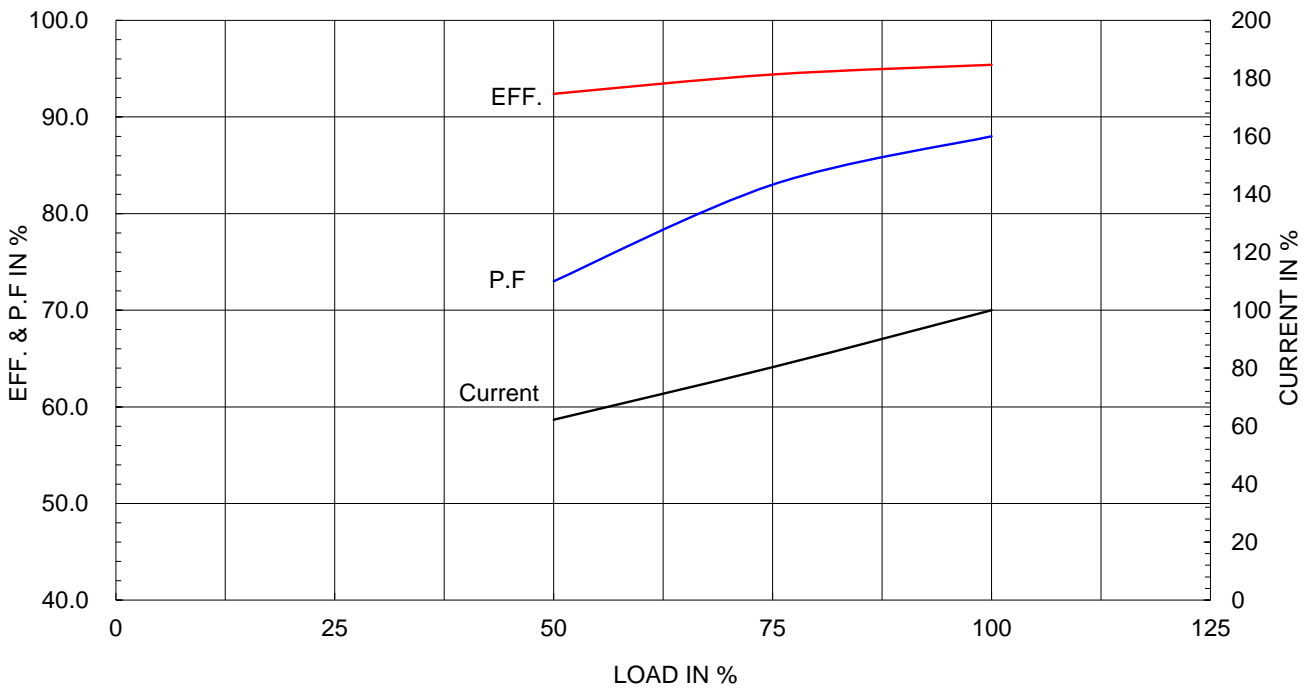
Type :	PJP	
Full Load Torque :	374.9	lb.ft
Load moment of Inertia (J) :	1507.479	lb.ft2
Motor moment of Inertia (J) :	52.510	lb.ft2

95kW	125HP	4 P	60 Hz
Speed at Full Load :			1785 RPM
Rated Voltage	575V	460V	230V
Full Load Current	113.6A	142.0A	284.1A

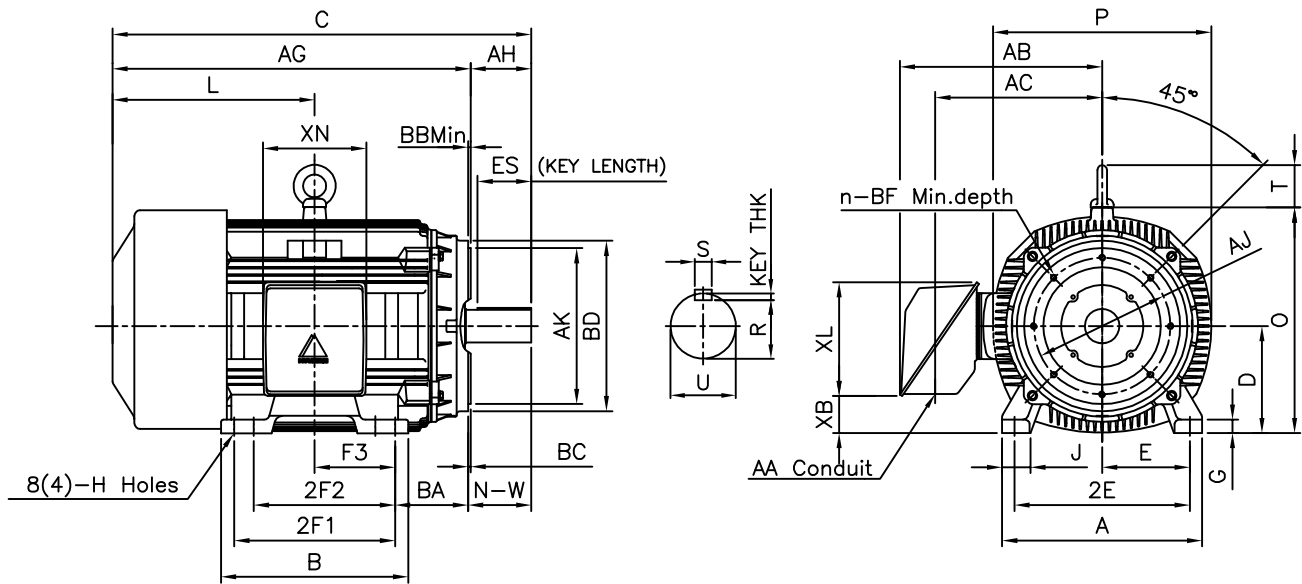
SPEED VS TORQUE & CURRENT CURVE



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

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	AG	U	N-W	KEYWAY			THK.	DRIVE END	OPP. DRIVE END
										R	ES	S			
7.50	45.21	11.00	20.96	23.19	22.44	4.33	36.71	3.375	8.50	2.880	6.93	0.875	0.875	6318C3	6316C3

C - F A C E								
AJ	AK	BB Min	BC	BD	BF	BF depth	n	AH
14.00	16.00	0.25	0.25	17.48	5/8-11	0.94	8	8.25

NOTE

- 1.Dimension "D" tolerance : +0.00inch ~ -0.03inch (143TC-365TC) : +0.000inch ~ -0.06inch (404TC-449TC)
- 2.Dimension "U" tolerance : +0.000inch ~ -0.0005inch (143TC-215TC): +0.000inch ~ -0.001inch (254TC-449TC)
- 3.Dimension "R" tolerance : +0.000inch ~ - 0.015inch
- 4.Dimension "AK" tolerance : +0.000inch ~ -0.003inch (143TC-286TC): +0.000inch ~ -0.005inch (324TC-449TC)

APPD BY	S.K.HAN	UNIT	inch	SUBJECT	NEMA 44TC	DWG SIZE	A4 (11)
CHKD BY	S.Y.KIM	SCALE	None				
CHKD BY	Y.H.BAE	PROJEC'N	3rd Angle	TITLE OUTLINE			
DSND BY	H.C.LIM	DATE	2019-06-05				
				REF. NO	350A1317AA	Sheet No.	of
				DWG NO	LM-T1444C4PL001	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	DATE	2023-10-19	REF. NO	Sheet No. of
DSND BY	배승희	DATE	2023-10-19	DWG NO	3M-248451	Revision No.	0

