

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.	HHI250-18-449T	Item No.	Rev. No. []
Project Name		Project No.	Quantity sets

GENERAL SPECIFICATION		PERFORMANCE DATA				
Frame Size	449T	Rated Output	190 kW 250 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	225.4 A	281.7 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		93.2 %		
Motor Location	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor	75% Load		95.2 %		
Altitude	Less than 1,000 meter	100% Load		96.2 %		
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	B3	Speed at Full Load		1785 r.p.m		
Bearing	Type	Anti-Friction				
	DE/N-DE	NU318 / 6316C3				
	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		749.9 lb.ft		
Terminal Box	Main	Locked-rotor**		140 %		
	Aux.	Breakdown**		220 %		
Location	Refer to Outline Drawing	Moment of Inertia (J)				
Application		Load(Max.)		3,318.708 lb.ft2		
Area classification	Hazardous	Motor		105.370 lb.ft2		
Type of Ex-Protection	Class I&II, Division 2	Sound Pressure Level (No-load & mean value at 1m from motor)				
Applicable Standard	NEMA MG1, CSA C390			85 dB(A)		
ACCESSORIES		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)		
SPARE PARTS		SUBMITTAL DRAWING				
		Outline Dimension Drawing		Motor Weight(Approx.)		
		B3	LM-T1449B3PL001	2430 lb.		
REMARK		<ol style="list-style-type: none"> 1. Premium efficiency according to NEMA MG1 2. Inverter Duty @ 1.0 Service Factor & F Temperature rise <ul style="list-style-type: none"> - 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 <ul style="list-style-type: none"> - 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
		<p>[Note] Others not mentioned in this data sheet shall be in accordance with maker standard.</p> <p>Above technical data are only design values and shall be guaranteed with tolerance of applicable standard.</p> <p>Inspection and performance test shall be done according to maker standard, if not mentioned.</p> <p>* 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.</p> <p>** Data is based on rated voltage & frequency and is expressed as a percentage of full-load value.</p>				

1	2	3	4
REV	DATE	CONTENTS	REVD BY CHKD BY CHKD BY APPD BY

4.72

CROWN TRITON
Premium Efficiency AC 3 Phase Motor

250HP	4P	460V	Cat. No.	HHI250-18-449T				
Model	HLS449SR04		INS. Class	F	HD-F1	Amps	281.7	
Type	HLS	Duty	CONT	Code	G	Amb.	40°C	
Hertz	60Hz							
Frame	449T	Encl.	TEFC	S.F.	1.15	RPM	1785	
NEMA Nom. Eff.	96.2%							
Bearing	Drive	NU318		S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)			3/4 Eff.	95.2%
	Opp.	6316C3					NEMA Design	B
Usable at	50Hz 250HP 380V 340.8A 1480rpm S.F.: 1.0 Eff.: 95.6% Code: F							
	50Hz 250HP 400/415V 325.3/316.1A 1482/1484rpm S.F.: 1.0 Eff.: 95.9/96% Code: G/G							
CSA Certified for	Model	LATER		Type	PJP			
	CLASS I, Div. 2, Gr. A, B, C & D	CLASS II, Div. 2 Gr. E, F & G (Gr. E : Up to 320FR)		Temp. Code (sine wave)	Amb. 40°C	T3C (160°C)	T3B (165°C)	T3A (180°C)
Frame	140~320FR	360~400FR	440FR	Amb. 55°C	T3A (180°C)	T3A (180°C)	T3 (200°C)	
No.	-		Date	-		Weight	2430 lb	

4M-135702
Made in Korea H1

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			A4 (1:1)
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	TITLE NAMEPLATE DRAWING		
DSND BY	S.H.LEE	DATE	2024.06.07			

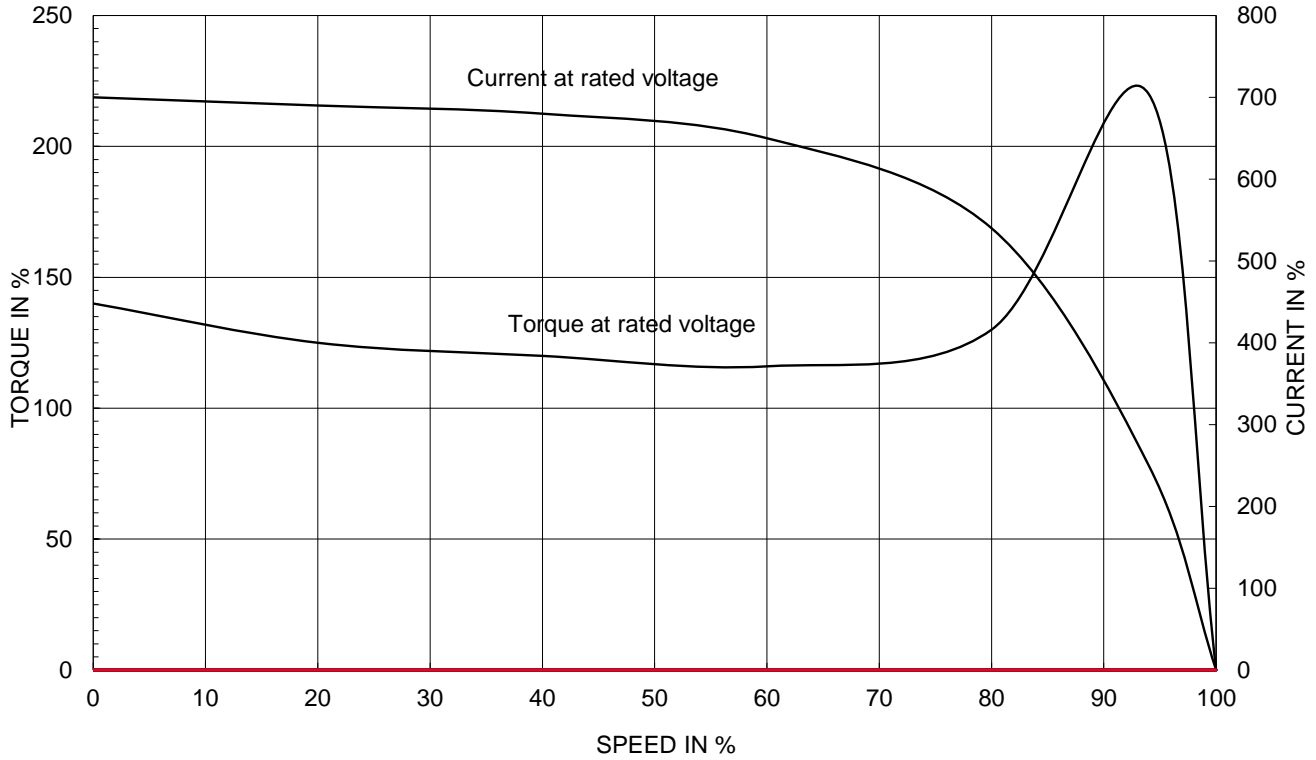


REF. NO	4M-135702	Sheet No.	of
DWG NO	NP-HHI250-18-449T	Revision No.	0

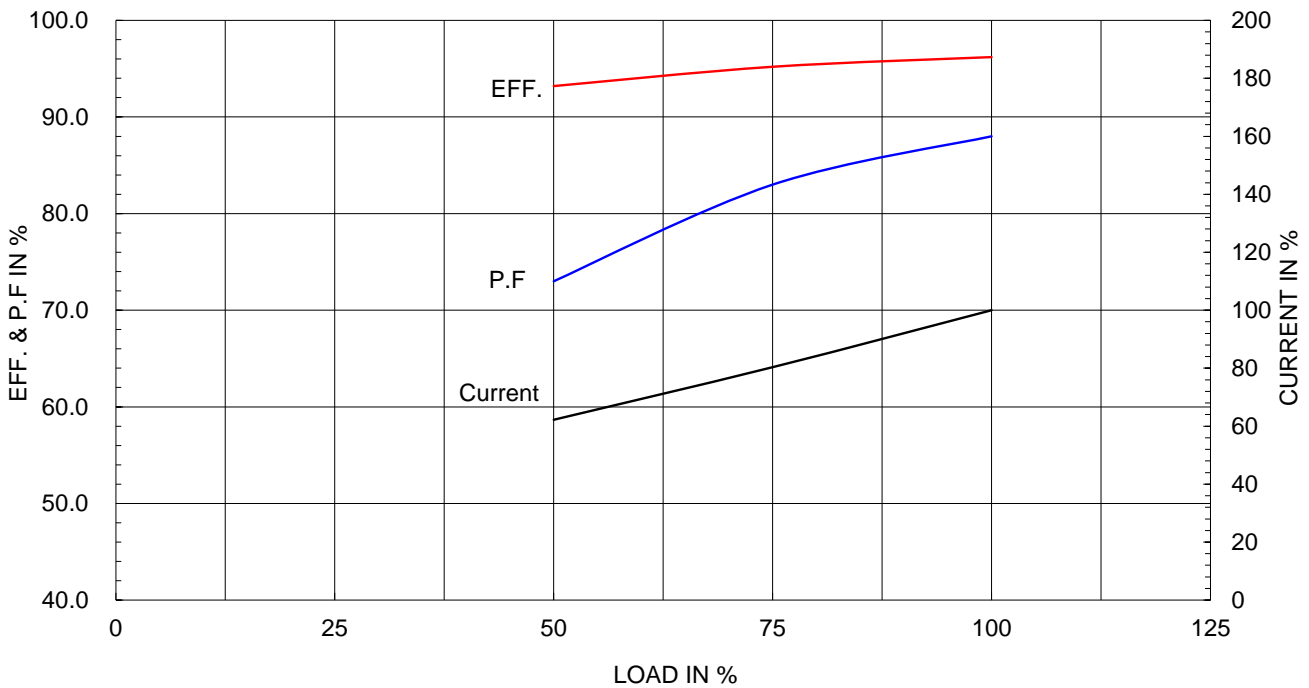
Type :	PJP	
Full Load Torque :	749.9	lb.ft
Load moment of Inertia (J) :	3318.708	lb.ft ²
Motor moment of Inertia (J) :	105.370	lb.ft ²

190kW	250HP	4 P	60 Hz
Speed at Full Load :			1785 RPM
Rated Voltage	575V	460V	230V
Full Load Current	225.4A	281.7A	563.4A

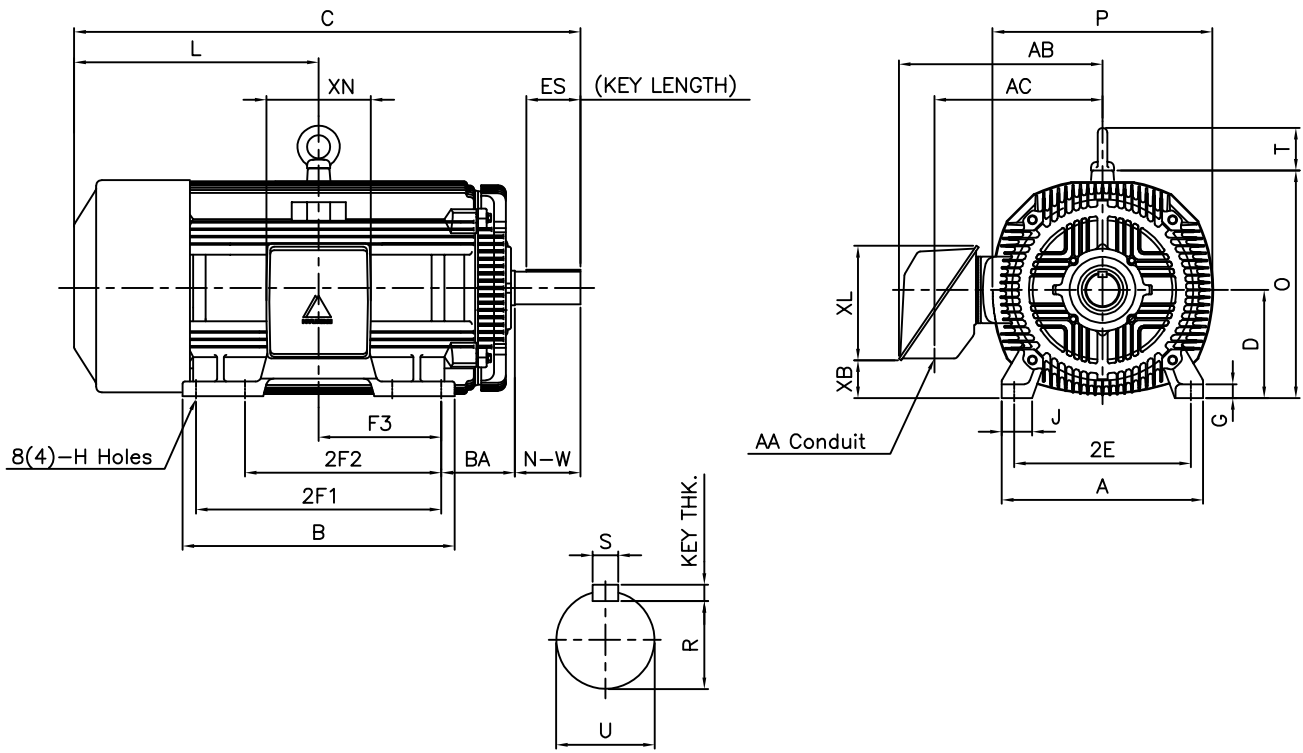
SPEED VS TORQUE & CURRENT CURVE



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	27.72	18.00	25.00	(20.00)	12.500	1.42	3.07	0.81	3.00	21.26	18.03	3.83	11.65	10.63	2430

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	53.83	11.00	25.33	23.19	22.40	4.33	3.375	8.50	2.880	6.93	0.875	0.875	6318C3 or NU318	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.K.HAN	UNIT	INCH	SUBJECT	449T	DWG SIZE	A4 (1:1)				
Q.P CHK	I.K.KIM	SCALE	NONE	TITLE	OUTLINE	REF. NO	350A1120AA				
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle					DWG NO	LM-T1449B3PL001	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	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

