

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.	HHI150-36-445TSC	Item No.	Rev. No.	[]
Project Name		Project No.	Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA			
Frame Size	445TSC		Rated Output	110 kW 150 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	129.2 A	161.5 A 323.0 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	B35		Speed at Full Load	3570 r.p.m		
Bearing	Type	Anti-Friction	Torque			
	DE/N-DE	6314C3 / 6314C3	Full Load		217.1 lb.ft	
	Lubricant	Grease(Polyrex-EM)	Locked-rotor**		120 %	
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.)		293.072 lb.ft2	
Terminal Box	Main	Cast Iron	Motor		33.660 lb.ft2	
	Aux.	No	Sound Pressure Level (No-load & mean value at 1m from motor)			
Location	Refer to Outline Drawing				92 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-T1445C4CL001	1850 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

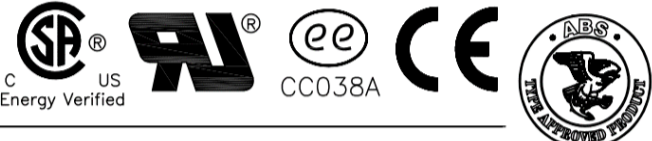
[Note] Others not mentioned in this data sheet shall be in accordance with maker standard.
 Above technical data are only design values and shall be guaranteed with tolerance of applicable standard.
 Inspection and performance test shall be done according to maker standard, if not mentioned.
 * In case 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


4.72

CROWN TRITON


Premium Efficiency AC 3 Phase Motor



150HP	2P	460V	Cat. No.	HHI150-36-445TSC				
Model	HLS445PR02		INS. Class	F	HD-F1	Amps	161.5	
Type	HLS	Duty	CONT	Code	G	Amb.	40°C	
Hertz	60Hz							
Frame	445TSC	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 150HP 380V 196.5A 2962rpm S.F.: 1.0 Eff.: 94.7% Code: E							
	50Hz 150HP 400/415V 186.5/179.8A 2966/2969rpm S.F.: 1.0 Eff.: 94.9/95% Code: F/G							
CSA Certified for	Model	LATER		Type	PJP			
	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)		Temp. Code (sine wave)	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	1850 lb	

4M-135702
Made in Korea H1


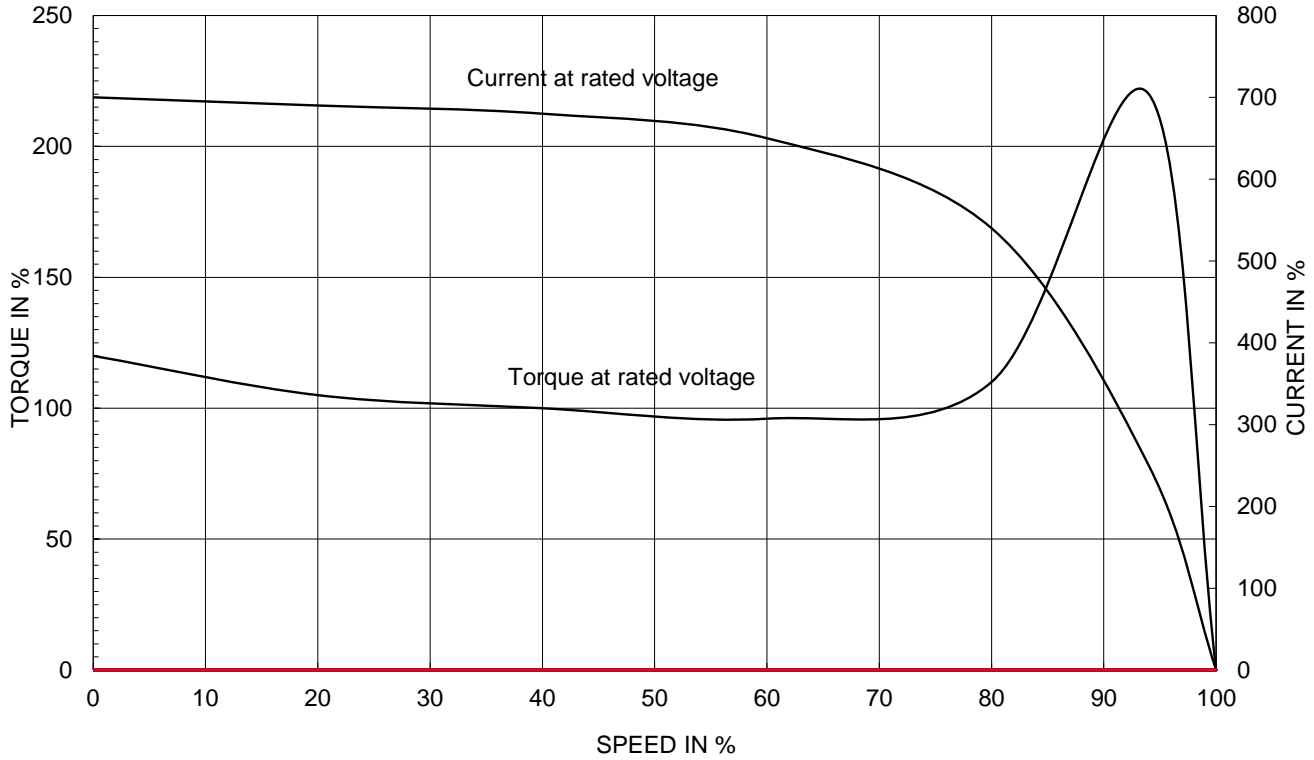
2.36

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-HHI150-36-445TSC	Revision No. 0

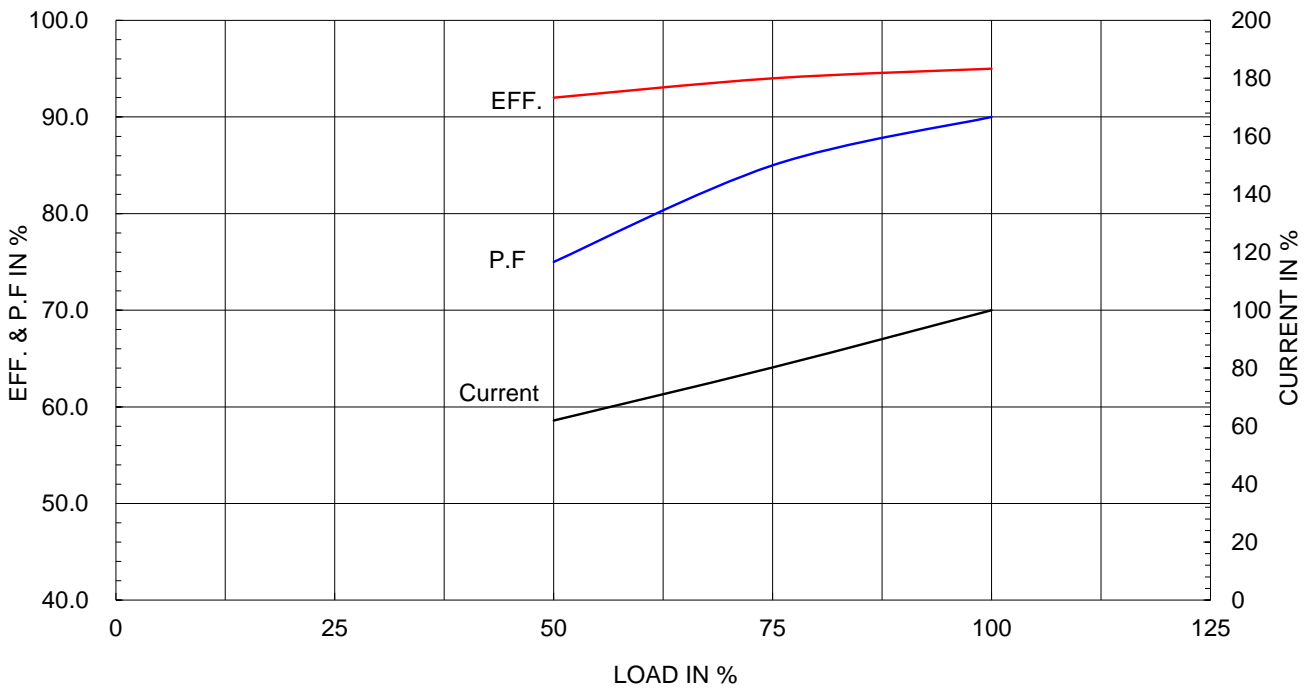
Type :	PJP
Full Load Torque :	217.1 lb.ft
Load moment of Inertia (J) :	293.072 lb.ft2
Motor moment of Inertia (J) :	33.660 lb.ft2

110kW 150HP	2 P	60 Hz
Speed at Full Load :		3570 RPM
Rated Voltage	575V	460V 230V
Full Load Current	129.2A	161.5A 323.0A

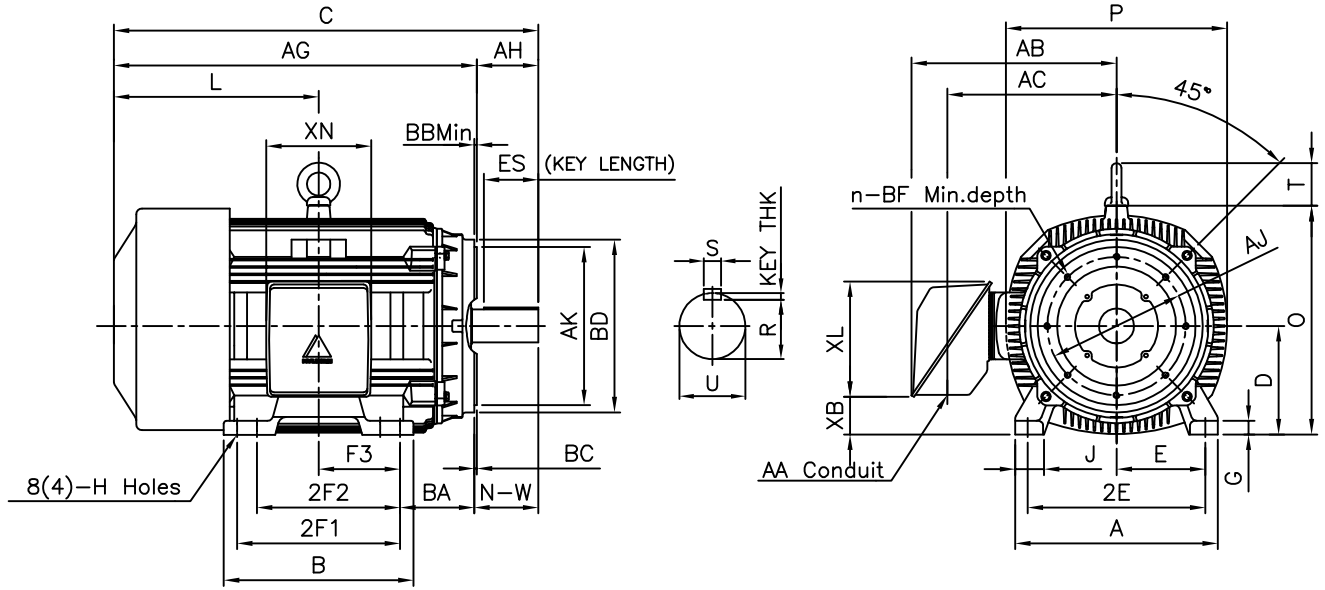
SPEED VS TORQUE & CURRENT CURVE



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	1850

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	41.46	11.00	20.96	23.19	22.44	4.33	36.71	2.375	4.75	2.021	3.03	0.625	0.625	6314C3	6314C3

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	4.50

NOTE

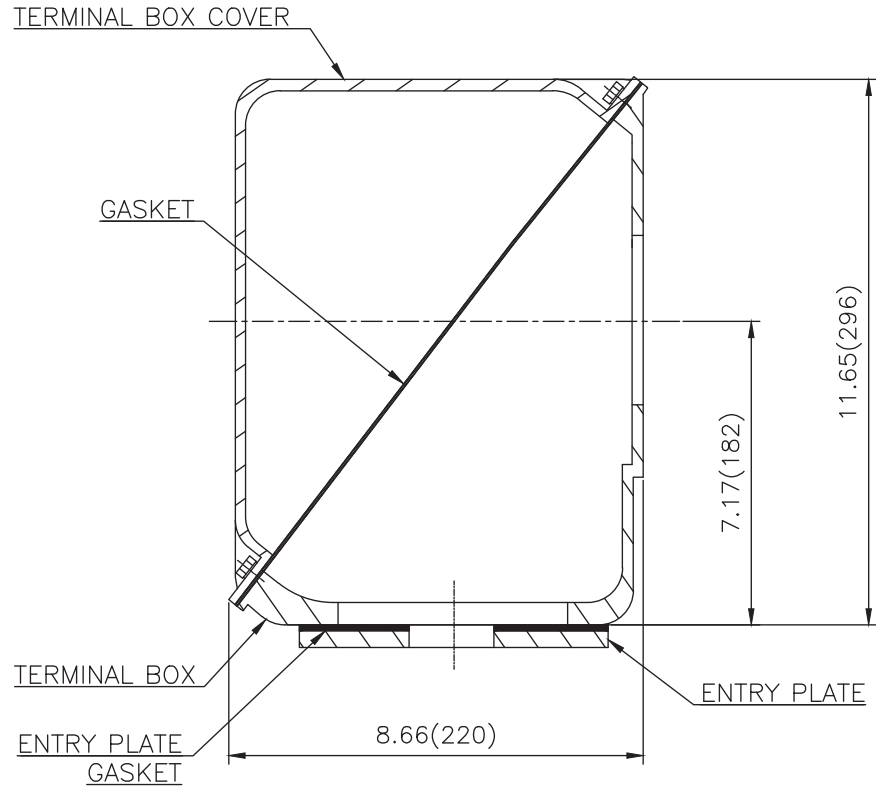
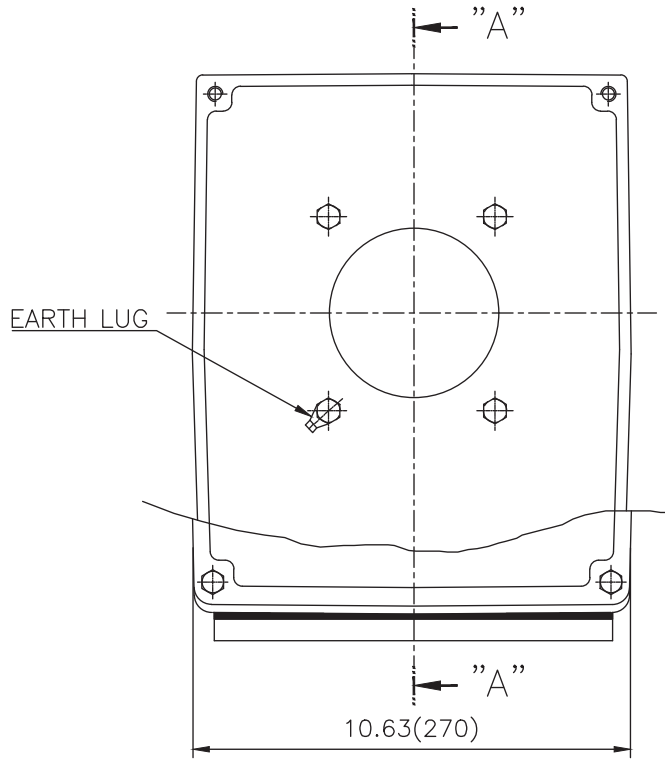
- 1.Dimension "D" tolerance : +0.00inch ~ -0.03inch (143TC-365TC) : +0.000inch ~ -0.06inch (404TC-449TC)
- 2.Dimension "U" tolerance : +0.000inch ~ -0.0005inch (143TC-215TC): +0.000inch ~ -0.001inch (254TC-449TC)
- 3.Dimension "R" tolerance : +0.000inch ~ - 0.015inch
- 4.Dimension "AK" tolerance : +0.000inch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

APPD BY	S.K.HAN	UNIT	inch	SUBJECT	NEMA 445TSC	DWG SIZE	A4 (1:1)
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	350A1318BA	Sheet No.	of
DWG NO	LM-T1445C4CL001	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
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

