

Customer :
Project Name :
Project No. :
Revision No. :

SPECIFICATION for INDUCTION MOTOR



0		For Bidding			
No.	DATE	DESCRIPTION	PREPARED BY	CHECKED BY	APPROVED BY

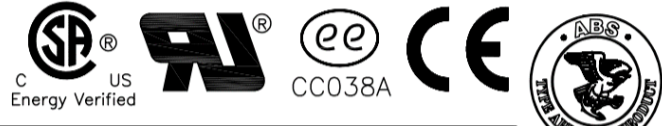



AC INDUCTION MOTOR DATA SHEET

Catalog No.	HHI250-36-449TSCRD	Item No.	Rev. No. []
Project Name		Project No.	Quantity sets

GENERAL SPECIFICATION		PERFORMANCE DATA				
Frame Size	449TSC	Rated Output	190 kW 250 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	221.3 A	276.6 A 553.2 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		92.8 %		
Motor Location	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor	75% Load		94.8 %		
Altitude	Less than 1,000 meter	100% Load		95.8 %		
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		374.9 lb.ft		
Terminal Box	Main	Locked-rotor**		120 %		
	Aux.	Breakdown**		220 %		
Box Location	Refer to Outline Drawing	Moment of Inertia (J)				
Application		Load(Max.)		463.931 lb.ft2		
Area classification	Hazardous	Motor		58.330 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			92 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.)		
		B5	LM-T1449C5CL001	2590 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

[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.

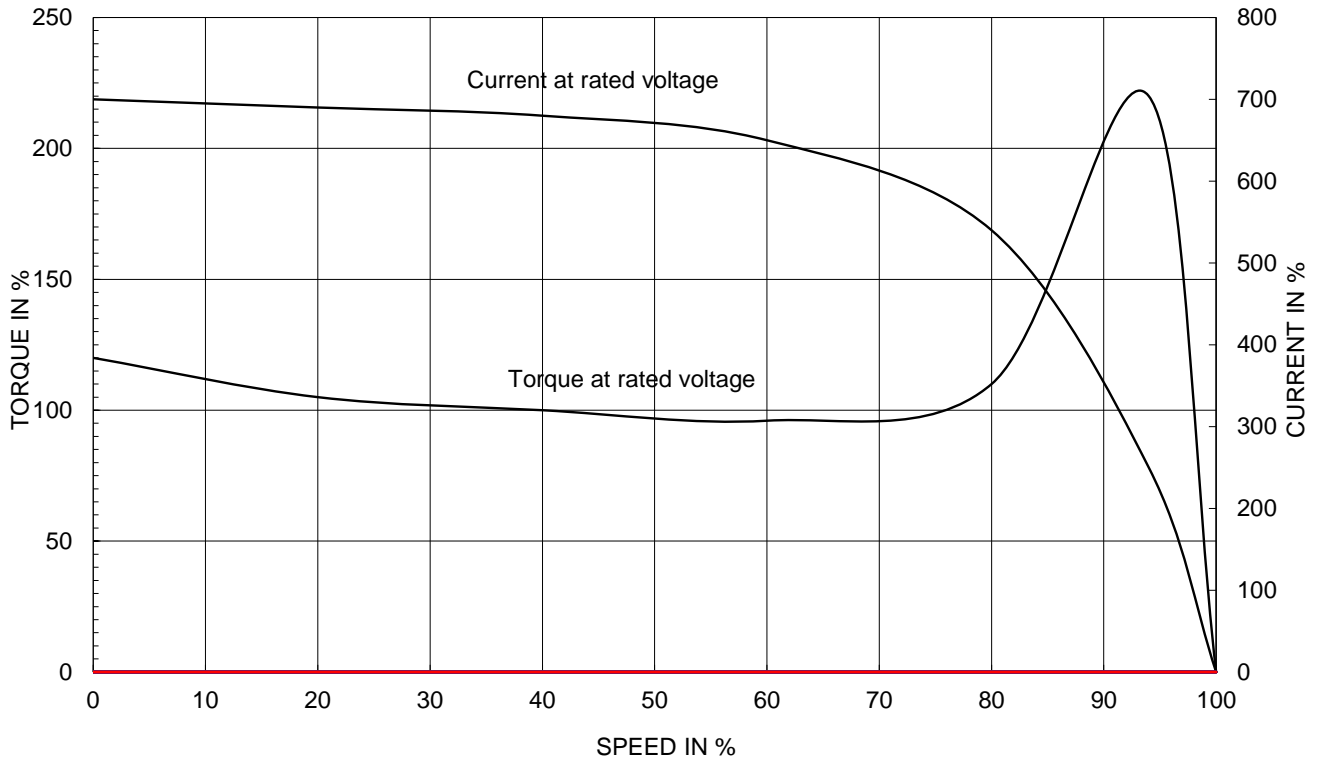
1		2		3		4	
REV	DATE	CONTENTS		REVD BY	CHKD BY	CHKD BY	APPD BY
<p>4.72</p>							
<p>CROWN TRITON Premium Efficiency AC 3 Phase Motor</p> 							
250HP 2P 460V				Cat. No. HHI250-36-449TSCRD			
Model HLS449PR02		INS. Class F HD-F1		Amps 276.6			
Type HLS		Duty CONT		Code G		Amb. 40°C Hertz 60Hz	
Frame 449TSC		Encl. TEFC		S.F. 1.15		RPM 3570 NEMA Nom. Eff. 95.8%	
Bearing	Drive 6314C3		S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)			3/4 Eff. 94.8%	
	Opp. 6314C3					NEMA Design B	
Usable at	50Hz 200HP 380V 264.9A 2970rpm S.F.: 1.0 Eff.: 95.6% Code: G						
	50Hz 200HP 400/415V 251.1/242A 2973/2975rpm S.F.: 1.0 Eff.: 95.7/95.8% Code: H/J						
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 2590 lb			
4M-135702		MARINE DUTY IEEE45		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-HHI250-36-449TSCRD		Revision No. 0
1		2		3		4	

2.36

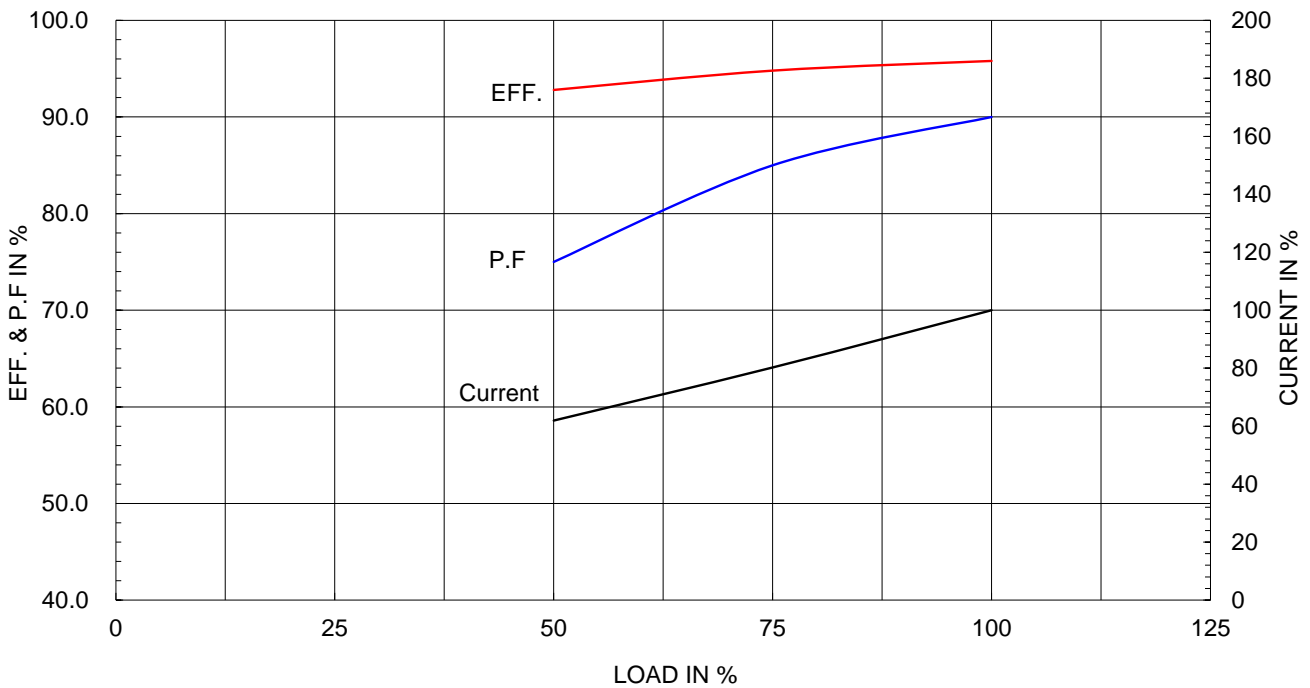
Type :	PJP
Full Load Torque :	374.9 lb.ft
Load moment of Inertia (J) :	463.931 lb.ft ²
Motor moment of Inertia (J) :	58.330 lb.ft ²

190kW	250HP	2 P	60 Hz
Speed at Full Load :			3570 RPM
Rated Voltage	575V	460V	230V
Full Load Current	221.3A	276.6A	553.2A

SPEED VS TORQUE & CURRENT CURVE



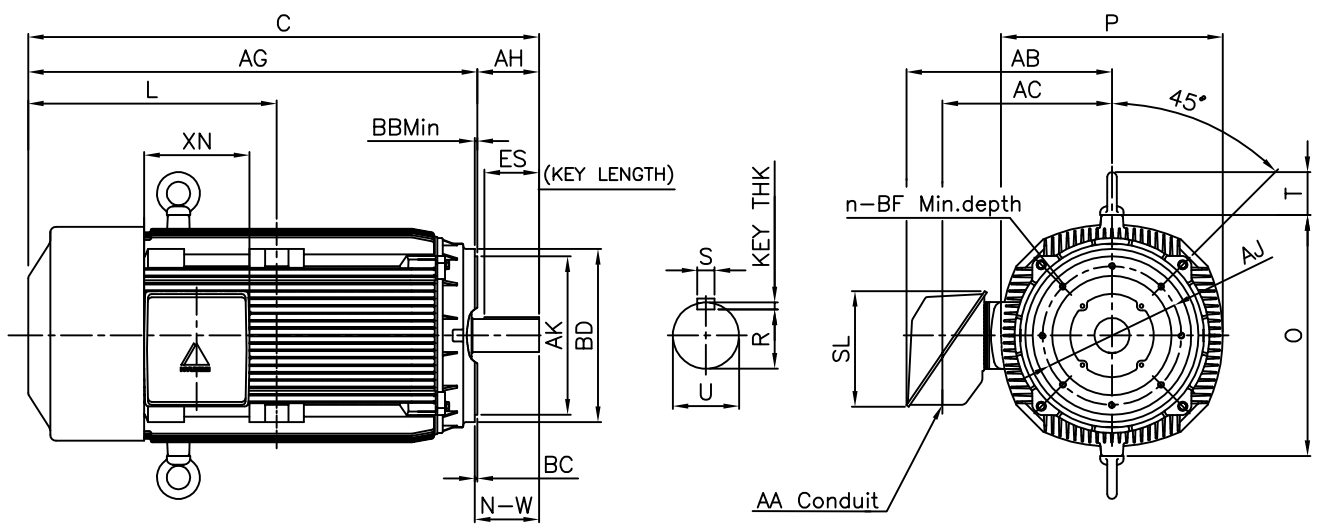
OUTPUT VS EFF., P.F & CURRENT CURVE



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

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
▽▽	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	2590

O V E R A L L						S H A F T					KEY THK.	BEARING	
C	L	O	P	T	AG	U	N-W	KEYWAY				DRIVE END	OPP. DRIVE END
								R	ES	S			
50.08	25.33	24.33	22.44	4.33	45.33	2.375	4.75	2.021	3.03	0.625	0.625	6314C3	6314C3

NOTE

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

APPD BY	S.K.HAN	UNIT	INCH	SUBJECT	NEMA 449TSC	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	350A1520BA	Sheet No.	of		
				DWG NO	LM-T1449C5CL001	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			
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

