

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 IEEE841 TYPE

Catalog No.	IEEE300-12-L449TC-IBSH	Item No.		Rev. No.	[]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA				
Frame Size	L449TC		Rated Output	225 kW		300 HP	
Type	PJP		Number of Poles	6			
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	280.7 A	350.9 A	
Insulation Class	F			Locked-rotor**	675 %	675 %	675 %
Temp. Rise at full load (by resistance method)			Efficiency				
at 1.0 S.F			80 deg. C				
Motor Location	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor		50% Load		92.8 %		
Altitude	Less than 1,000 meter		75% Load		94.8 %		
Relative Humidity	Less than 80 %		100% Load		95.8 %		
Ambient Temp.	40 deg. C (Max.)		Power Factor(p.u)				
Duty Type	Continuous (S1)		50% Load		0.690		
Service Factor	1.15		75% Load		0.790		
Mounting	B35		100% Load		0.840		
Bearing	Type	Anti-Friction	Speed at Full Load				
	DE/N-DE	6322C3 / 6318C3-INS.	1185 r.p.m				
	Lubricant	Grease(Polyrex-EM)	Torque				
External Thrust	Not applicable		Full Load		1,337.6 lb.ft		
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt		Locked-rotor**		135 %		
Shaft Extension	Single		Breakdown**		220 %		
Terminal	Main	Cast Iron	Moment of Inertia (J)				
Box	Aux.	Yes	Load(Max.)		3,240.000 lb.ft2		
	Location	Refer to Outline Drawing	Motor		172.297 lb.ft2		
Application			Sound Pressure Level (No-load & mean value at 1m from motor)				
Area classification	Hazardous		80 dB(A)				
Type of Ex-Protection	Class I&II, Division 2		Vibration				
Applicable Standard	IEEE841, NEMA MG1, CSA C390		3.8 mm/sec (peak)				
ACCESSORIES *. Space Heater : 1EA/Motor			Permissible number of consecutive starts				
			Cold		2 times		
			Hot		1 time		
			Paint	Munsell No.	7.5BG6/1.5		
			SUBMITTAL DRAWING				
Outline Dimension Drawing			Motor Weight(Approx.)				
B35		LM-I044XC4UE001	3420 lb.				
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. NDE side : Insulated bearing							
4. CSA Certification							
-. Class I, Division 2, Group A, B, C & D; Temp code : T3							
-. Class II, Division 2 Group F & G; Temp code : T3							
5. Shaft material : AISI4140							
Date		DSND	CHKD	CHKD	APPD		
2024-09-22		E.J.LEE	I.K. Kim	R.G. Kim	S.W. Kim		

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[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.

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

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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

300HP 6P 460V	Cat. No. IEE300-12-L449TC-IBSH	
Model LATER	INS. Class F	Amps 350.9
Type PJP	Duty CONT	Code G
Frame L449TC	Encl. TEFC	Amb. 40°C
Bearing	Drive 6322C3	S.F. 1.15 RPM 1185
	Opp. 6318C3-INS.	NEMA Nom. Eff. 95.8%
Usable at	50Hz 250HP 380V 358.73A 985rpm S.F.: 1.0 Eff.: 95.8% Code: G	
	50Hz 250HP 400/415V 353.41/353.74A 986/987rpm S.F.: 1.0 Eff.: 95.8/95.8% Code: H/J	
CSA Certified for	CLASS I, Div. 2, Gr. A, B, C & D	CLASS II, Div. 2, Gr. F & G
	CLASS I, Zone 2, Gr. IIA, IIB, & IIC	
		Temp. Code (sine wave)
	Frame L440FR - 500FR	Amb. 40°C T3 (200°C)
	Amb. 55°C	T3 (200°C)
No. -	Date -	Weight 3420 lb

IEEE Std 841-2021
4M-136054

MARINE DUTY IEE45
Made in Korea H1

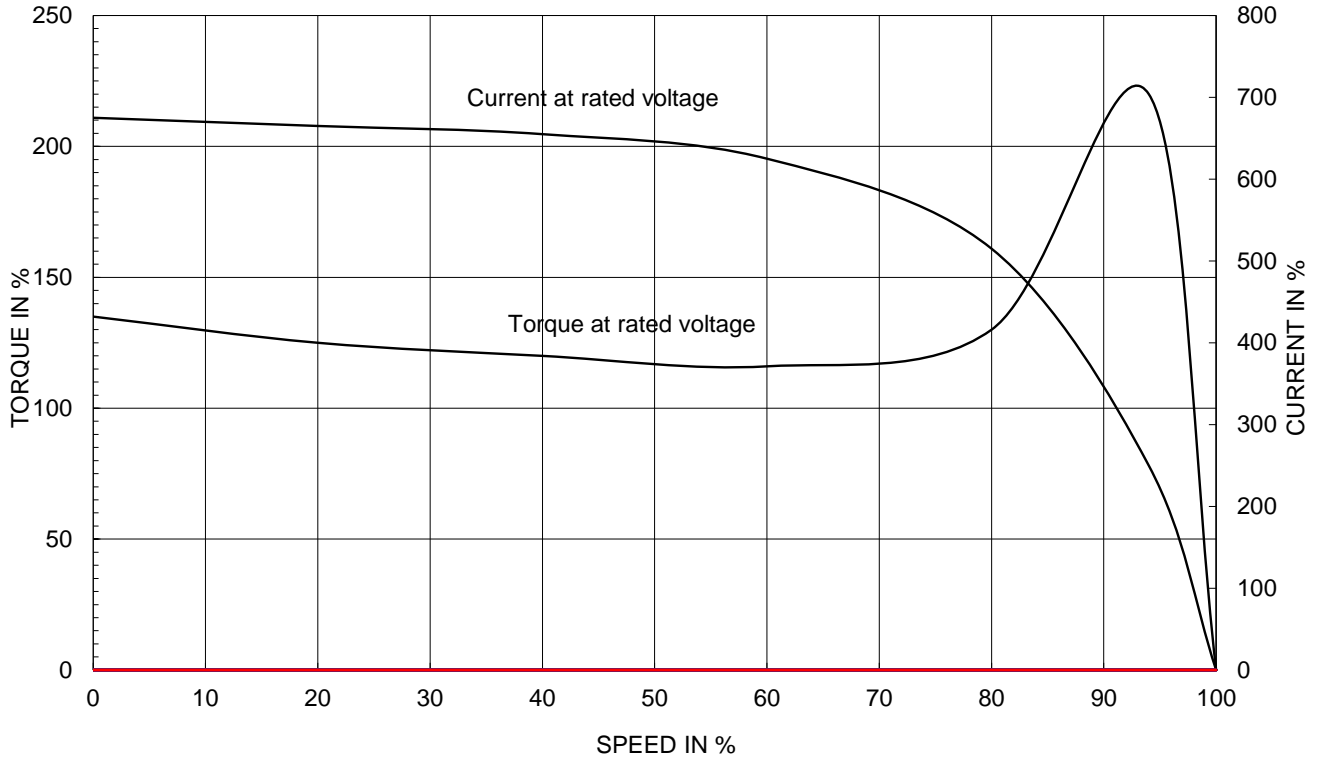
2.36

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 IEE841 (XL)	DWG SIZE
CHKD BY	I.K.KIM	SCALE	NONE			A4 (1:1)
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	NAMEPLATE DRAWING		
DSND BY	S.H.LEE	DATE	2024.06.07			
				REF. NO	4M-136054	Sheet No. of
				DWG NO	NP-IEE300-12-L449TC-IBSH	Revision No. 0

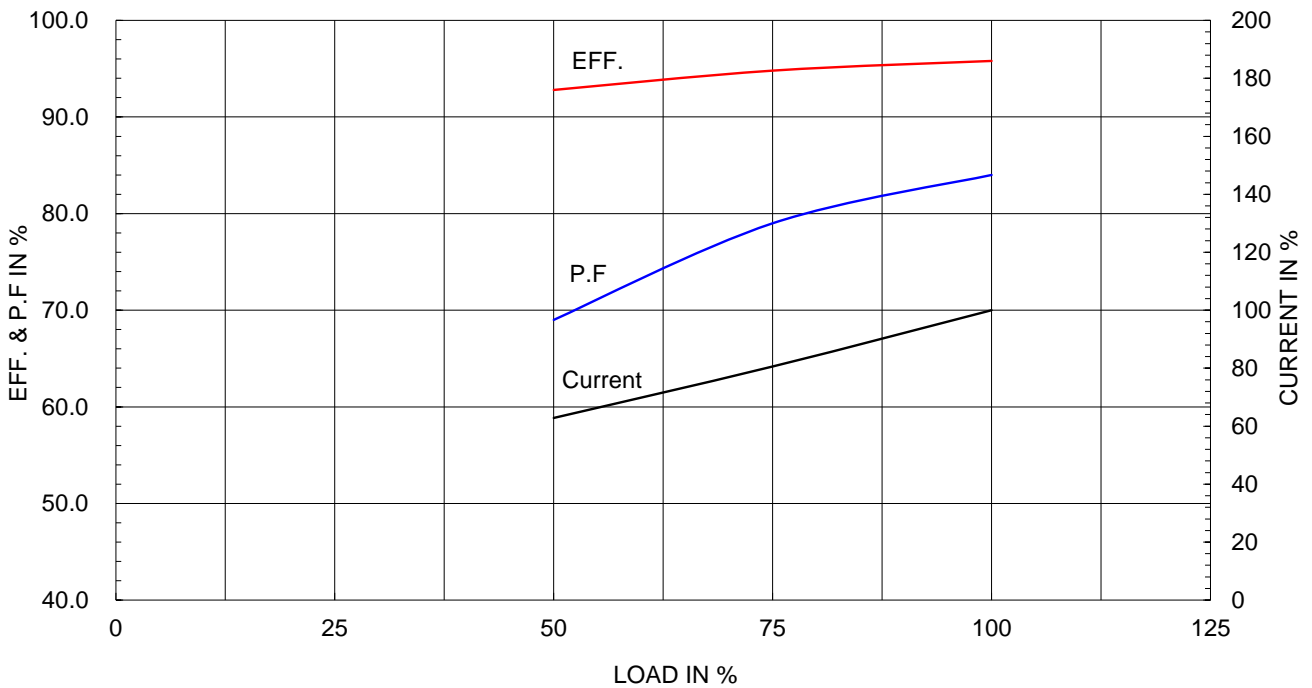
Type :	PJP
Full Load Torque :	1337.6 lb.ft
Load moment of Inertia (J) :	3240.000 lb.ft ²
Motor moment of Inertia (J) :	172.297 lb.ft ²

225kW 300HP	6 P	60 Hz
Speed at Full Load : 1185 RPM		
Rated Voltage	575V	460V 230V
Full Load Current	280.7A	350.9A 701.9A

SPEED VS TORQUE & CURRENT CURVE

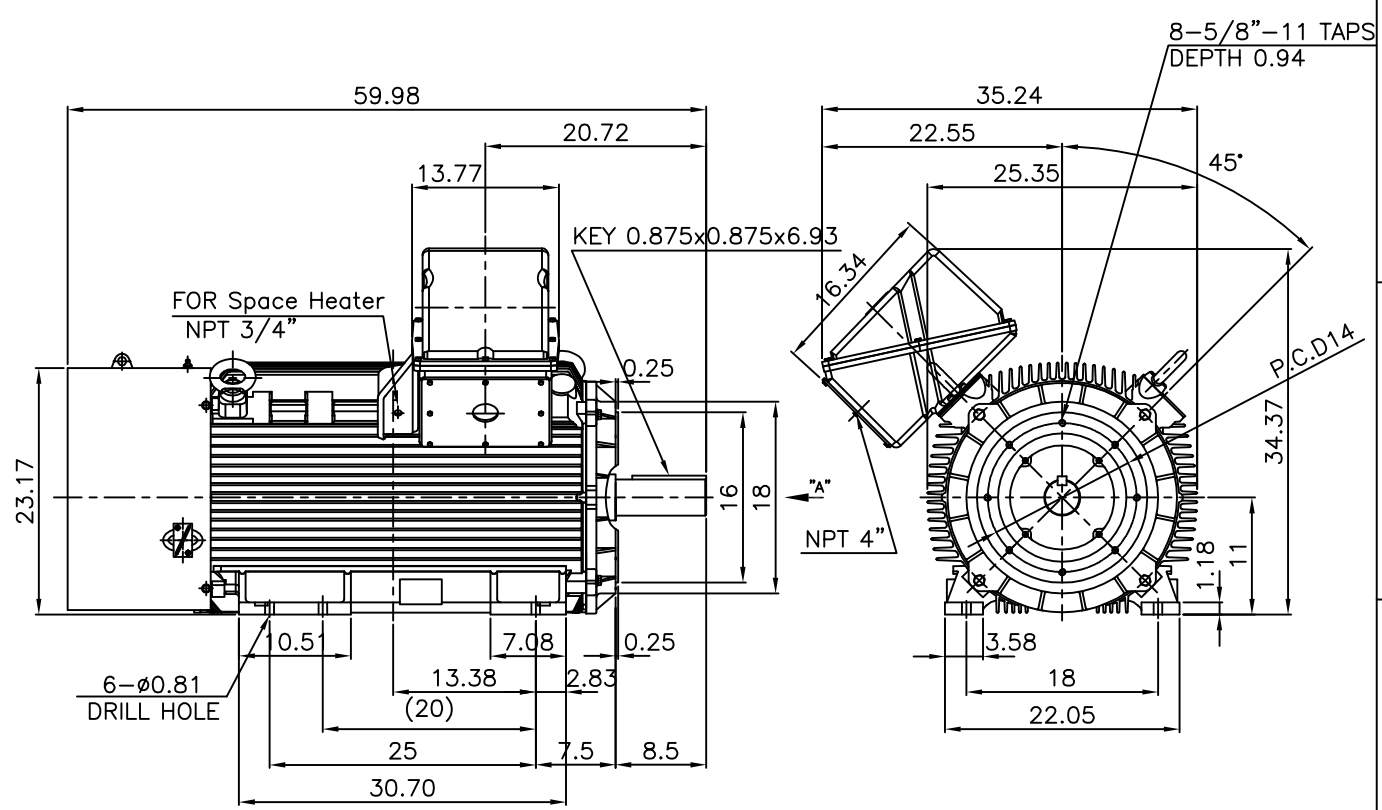


OUTPUT VS EFF., P.F & CURRENT CURVE



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

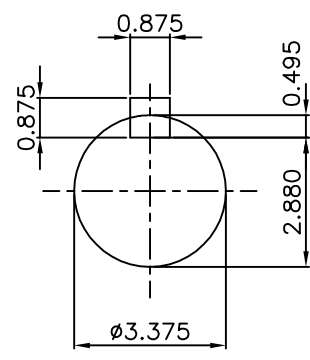
IEEE841



NOTE

1.TOLERANCE :

CENTER HEIGHT	11	+0.000	-0.060
RABBET DIAMETER	ø16	0	-0.005
SHAFT DIAMETER	ø3.375	+0.000	-0.001
KEYWAY WIDTH	0.875	+0.003	-0.000



VIEW "A"

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	Fr.L449TC	DWG SIZE	A4 (1:18)
CHKD BY	O.J.KIM	SCALE	1/18	TITLE	OUTLINE		
CHKD BY	R.G.KIM	PROJEC'N	3각법(3rd Angle)				
DSND BY	H.K.LEE	DATE	2021-04-27				



REF. NO		Sheet No.	of
DWG NO	LM-1044XC4UE001	Revision No.	0

**Cls. I&II, Div. 2
IEEE 841**



SEC. "A" - "A"

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

APPD BY	S.Y.KIM	UNIT	inch(mm)	SUBJECT	FR. L440 (CAST IRON)	DWG SIZE
CHKD BY		SCALE	1/3.5	TITLE	MAIN TERMINAL BOX ASS'Y	A3 (1:3.5)
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle			
DSND BY	최승희	DATE	2023-10-19			
				REF. NO		Sheet No. of
				DWG NO	3M-248452	Revision No. 0

**Cls. I&II, Div. 2
IEEE 841**



REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

APPD BY	S.Y.KIM	UNIT	inch(mm)	SUBJECT	FR.180 (CAST IRON)	DWG SIZE
CHKD BY		SCALE	1/1	TITLE	SUB. TERMINAL BOX ASS'Y	A3 (1:1.1)
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle			
DSND BY	배승희	DATE	2024-01-18			
				REF. NO		Sheet No. of
				DWG NO	3M-165278	Revision No. 0