

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.	IEEE400-36-L449TS-IBSHSP	Item No.	Rev. No.	[      ]
Project Name		Project No.	Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA			
Frame Size	L449TS	Rated Output	300 kW      400 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	349.4 A	436.7 A      873.4 A	
Insulation Class	F		Locked-rotor**	680 %	680 %      680 %	
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	B3	Speed at Full Load		3570 r.p.m		
Bearing	Type	Anti-Friction				
	DE/N-DE	6315C3 / 6315C3-INS.				
	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		592.0 lb.ft		
Terminal Box	Main	Locked-rotor**		145 %		
	Aux.	Breakdown**		240 %		
Location	Refer to Outline Drawing	Moment of Inertia (J)				
Application		Load(Max.)		315.000 lb.ft2		
Area classification	Hazardous	Motor		60.755 lb.ft2		
Type of Ex-Protection	Class I&II, Division 2	Sound Pressure Level (No-load & mean value at 1m from motor)				
Applicable Standard	IEEE841, NEMA MG1, CSA C390			87 dB(A)		
<b>ACCESSORIES</b> *. Space Heater : 1EA/Motor		Vibration				3.8 mm/sec (peak)
		Permissible number of consecutive starts		Cold	2 times	
				Hot	1 time	
		Paint	Munsell No.	7.5BG6/1.5		
<b>SPARE PARTS</b> 1. Spare Axial Fan (C.W Direction)		<b>SUBMITTAL DRAWING</b>				
		Outline Dimension Drawing		Motor Weight(Approx.)		
		B3	LM-I044XB3CE001	3820 lb.		
		<b>REMARK</b>				
		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. Uni-directional CCW viewed from drive end.						
		Date	DSND	CHKD	CHKD	APPD
		2024-09-22	E.J.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

400HP 2P 460V	Cat. No. IEE400-36-L449TS-IBSHSP		
Model LATER	INS. Class F	Amps	436.7
Type PJP	Duty CONT	Code G	Amb. 40°C
Frame L449TS	Encl. TEFC	S.F. 1.15	RPM 3570
Bearing	Drive 6315C3	S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)	
	Opp. 6315C3-INS.	NEMA Nom. Eff.	95.8%
Usable at	50Hz 335HP 380V 440.54A 2970rpm S.F.: 1.0 Eff.: 95.8% Code: G		
	50Hz 335HP 400/415V 423.22/407.88A 2972/2975rpm S.F.: 1.0 Eff.: 95.8/95.81% Code: H/H		
CSA Certified for	CLASS I, Div. 2, Gr. A, B, C & D	CLASS II, Div. 2, Gr. F & G	Temp. Code (sine wave)
	CLASS I, Zone 2, Gr. IIA, IIB, & IIC		Frame L440FR - 500FR
			Amb. 40°C T3 (200°C)
		Amb. 55°C T3 (200°C)	
No. -	Date -	Weight	3820 lb

IEEE Std 841-2021 MARINE DUTY IEE45

4M-136054 Made in Korea H1

HD HYUNDAI ELECTRIC

2.36

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 IEE45 (XL)	DWG SIZE
CHKD BY	I.K.KIM	SCALE	NONE	TITLE	NAMEPLATE DRAWING	A4 ( 1:1 )
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle			
DSND BY	S.H.LEE	DATE	2024.06.07			
HD HYUNDAI ELECTRIC				REF. NO	4M-136054	Sheet No. of
				DWG NO	NP-IEE400-36-L449TS-IBSHSP	Revision No. <b>0</b>



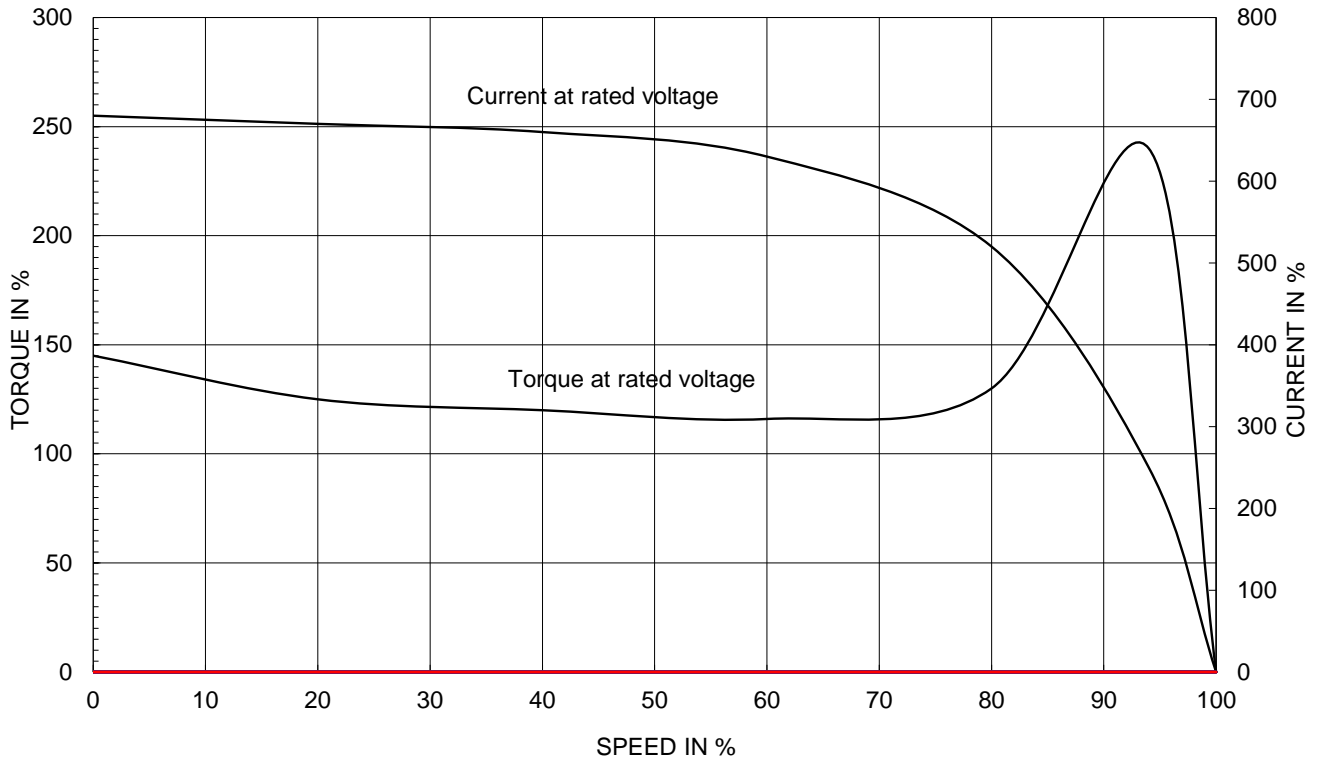
# PERFORMANCE CURVE

CURVE NO.  
PC-IEEE400-36-L449TS-IBSHSP

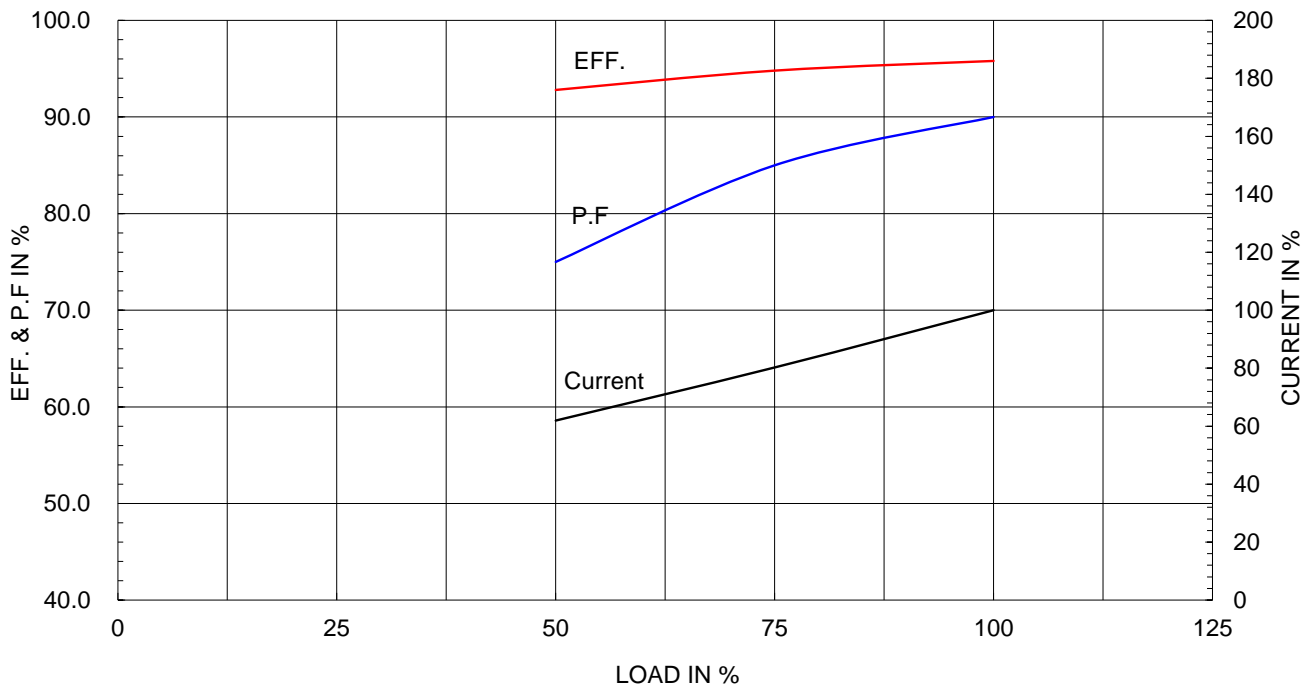
Type :	PJP
Full Load Torque :	592.0 lb.ft
Load moment of Inertia (J) :	315.000 lb.ft2
Motor moment of Inertia (J) :	60.755 lb.ft2

300kW 400HP	2 P	60 Hz
Speed at Full Load : 3570 RPM		
Rated Voltage	575V	460V 230V
Full Load Current	349.4A	436.7A 873.4A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE

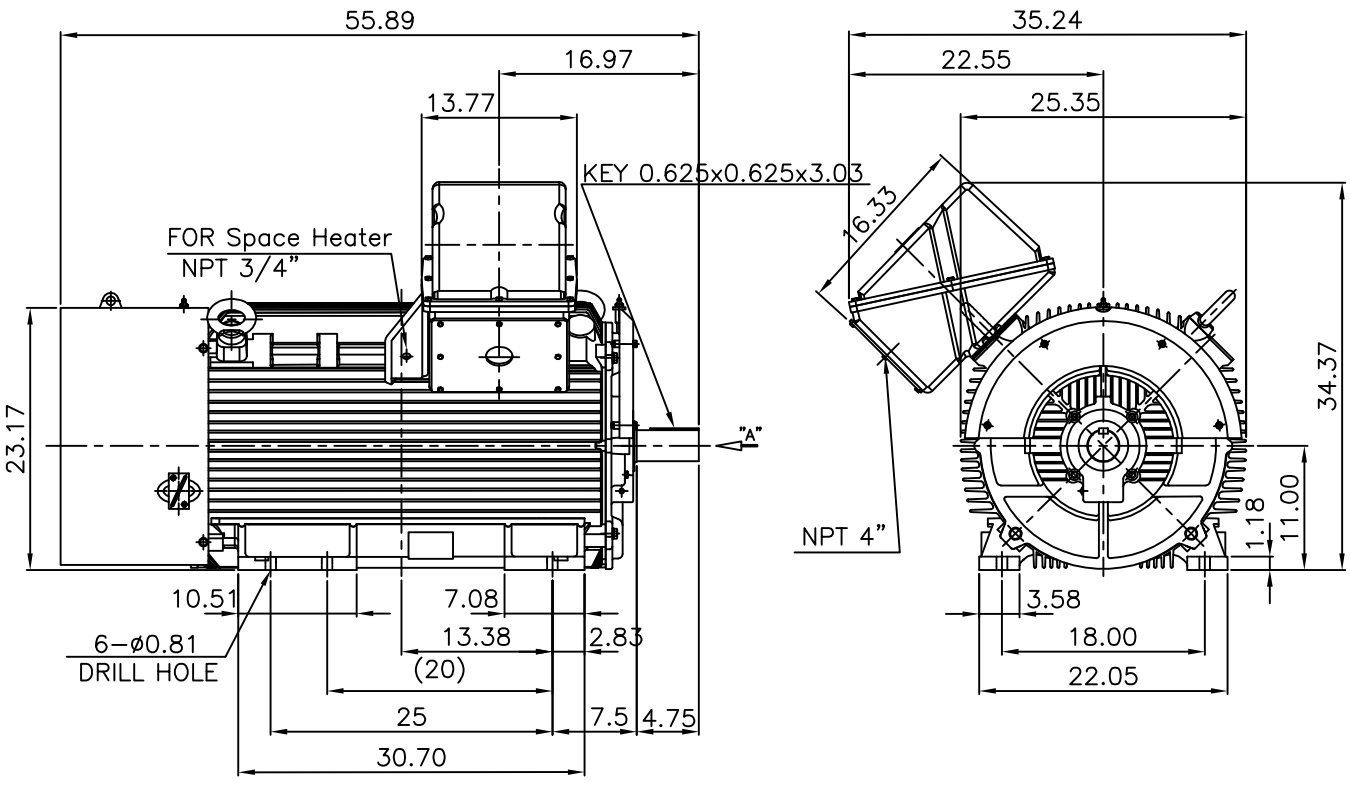


본 도면은 HD현대일렉트릭(주) 재산이며 허가없이 복사할 수 없음 (취급주의)

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

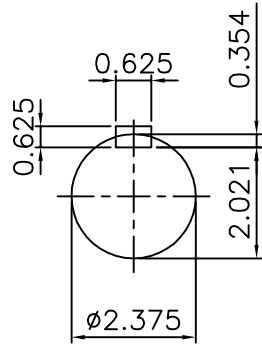
**IEEE841**



**NOTE**

1.TOLERANCE :

CENTER HEIGHT	11	+0.000	-0.060
SHAFT DIAMETER	ø2.375	+0.000	-0.001
KEYWAY WIDTH	0.625	+0.002	-0.000



VIEW "A"

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	Fr.L449TS	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)	REF. NO		Sheet No.	of
DSND BY	H.K.LEE	DATE	2021-04-27	DWG NO	LM-I044XB3CE001	Revision No.	0



**Cls. I&II, Div. 2  
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SEC. "A" - "A"

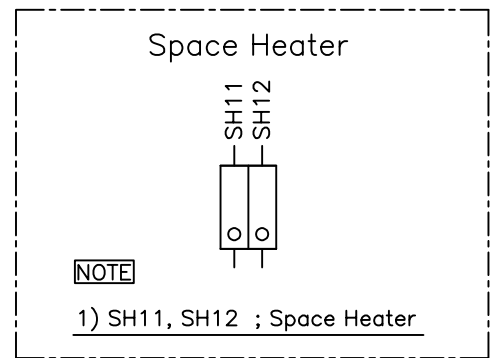
REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

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**



SEC. "A" - "A"



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	
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	REF. NO		Sheet No. of
DSND BY	박승희	DATE	2024-01-18	DWG NO	3M-165278	Revision No. 0

