

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.	IEEE300-36-L449TS-IBBRSRSHSP	Item No.		Rev. No.	[]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA			
Frame Size	L449TS	Rated Output	225 kW			300 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	262.0 A	327.5 A	655.1 A
Insulation Class	F		Locked-rotor**	700 %	700 %	700 %
Temp. Rise at full load (by resistance method)	at 1.0 S.F		Efficiency			
	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	Torque			
	DE/N-DE	6315C3 / 6315C3-INS.	Full Load	444.0 lb.ft		
	Lubricant	Grease(Polyrex-EM)	Locked-rotor**	130 %		
External Thrust	Not applicable		Breakdown**	225 %		
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt		Moment of Inertia (J)			
Shaft Extension	Single		Load(Max.)	246.000 lb.ft2		
Terminal Box	Main	Cast Iron	Motor	43.668 lb.ft2		
	Aux.	Yes	Sound Pressure Level (No-load & mean value at 1m from motor)			
	Location	Refer to Outline Drawing	87 dB(A)			
Application		Vibration	3.8 mm/sec (peak)			
Area classification	Hazardous	Permissible number of consecutive starts	Cold	2 times		
Type of Ex-Protection	Class I&II, Division 2		Hot	1 time		
Applicable Standard	IEEE841, NEMA MG1, CSA C390	Paint	Munsell No.	7.5BG6/1.5		

ACCESSORIES	
*	B.T.D.(Pt 100 Ω at 0°C,Single) : 2EA/Motor
*	W.T.D.(Pt 100 Ω at 0°C) : 2EA/Ph.
*	Space Heater : 1EA/Motor

SPARE PARTS	
1.	Spare Axial Fan (C.W Direction)

SUBMITTAL DRAWING			
Outline Dimension Drawing	Motor Weight(Approx.)		
B3	LM-I044XB3C7001	2890 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. 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.

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

THIS DRAWING IS PROPRIETARY TO HYUNDAI ELECTRIC. NO PART OF THIS DRAWING
MAYBE REPRODUCED WITHOUT THE PERMISSION OF HYUNDAI ELECTRIC.

4.72

2.36

CROWN TRITON
Premium Efficiency AC 3 Phase Motor

300HP 2P 460V	Cat. No. IEE300-36-L449TS-IBBRSRSHSP
Model LATER	INS. Class F Amps 327.5
Type PJP Duty CONT	Code G Amb. 40°C Hertz 60Hz
Frame L449TS Encl. TEFC	S.F. 1.15 RPM 3570 NEMA Nom. Eff. 95.8%
Bearing	Drive 6315C3 S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31) 3/4 Eff. 94.8%
	Opp. 6315C3-INS. NEMA Design B
Usable at	50Hz 250HP 380V 334.81A 2970rpm S.F.: 1.0 Eff.: 95.8% Code: G
	50Hz 250HP 400/415V 321.65/309.99A 2972/2975rpm S.F.: 1.0 Eff.: 95.8/95.81% Code: H/J
CSA Certified for	CLASS I, Div. 2, Gr. A, B, C & D
	CLASS I, Zone 2, Gr. IIA, IIB, & IIC
	CLASS II, Div. 2, Gr. F & G
Temp. Code	Frame L440FR - 500FR
	Amb. 40°C T3 (200°C)
	Amb. 55°C T3 (200°C)
No. -	Date - Weight 2890 lb

IEEE Std 841-2021 MARINE DUTY IEE45
 4M-136054 Made in Korea H1

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-IEE300-36-L449TS-IBBRSRSHSP	Revision No. 0



PERFORMANCE CURVE

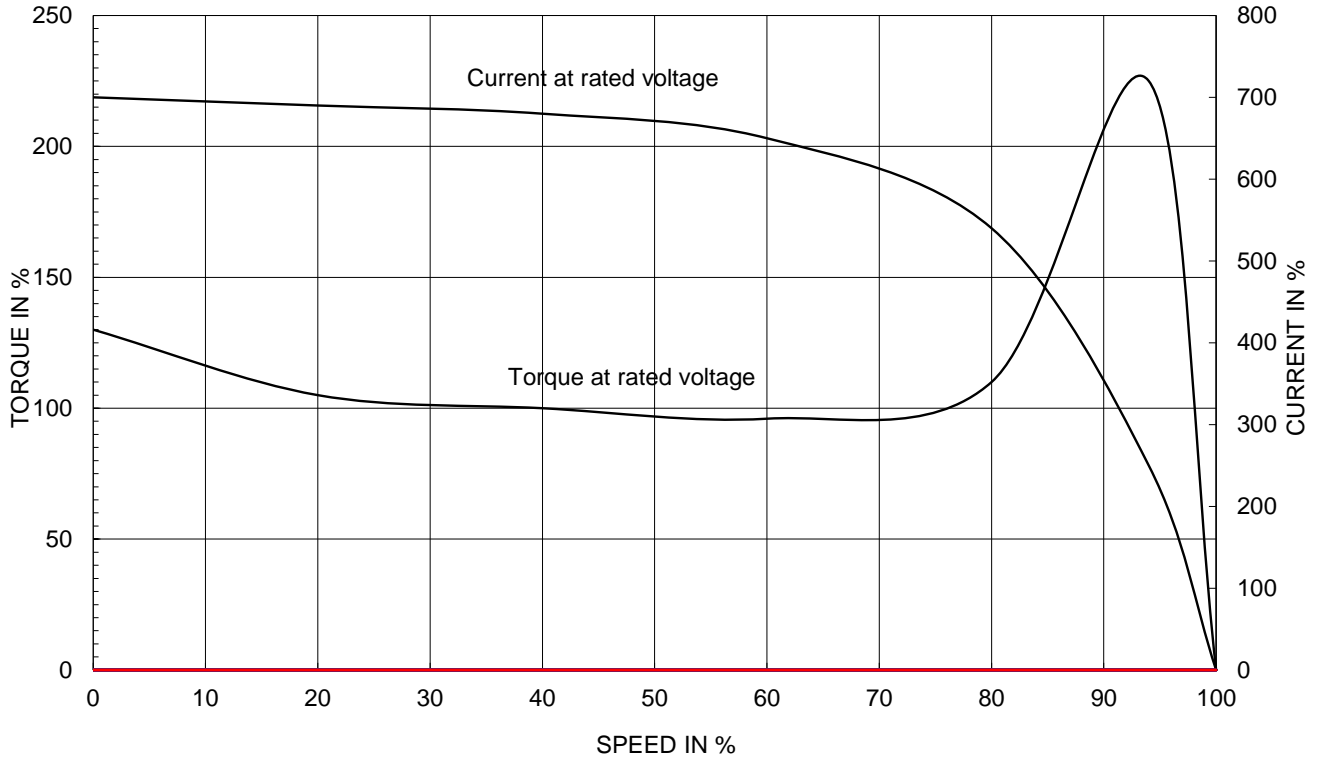
CURVE NO.

PC-IEEE300-36-L449TS-IBBRSRSHSP

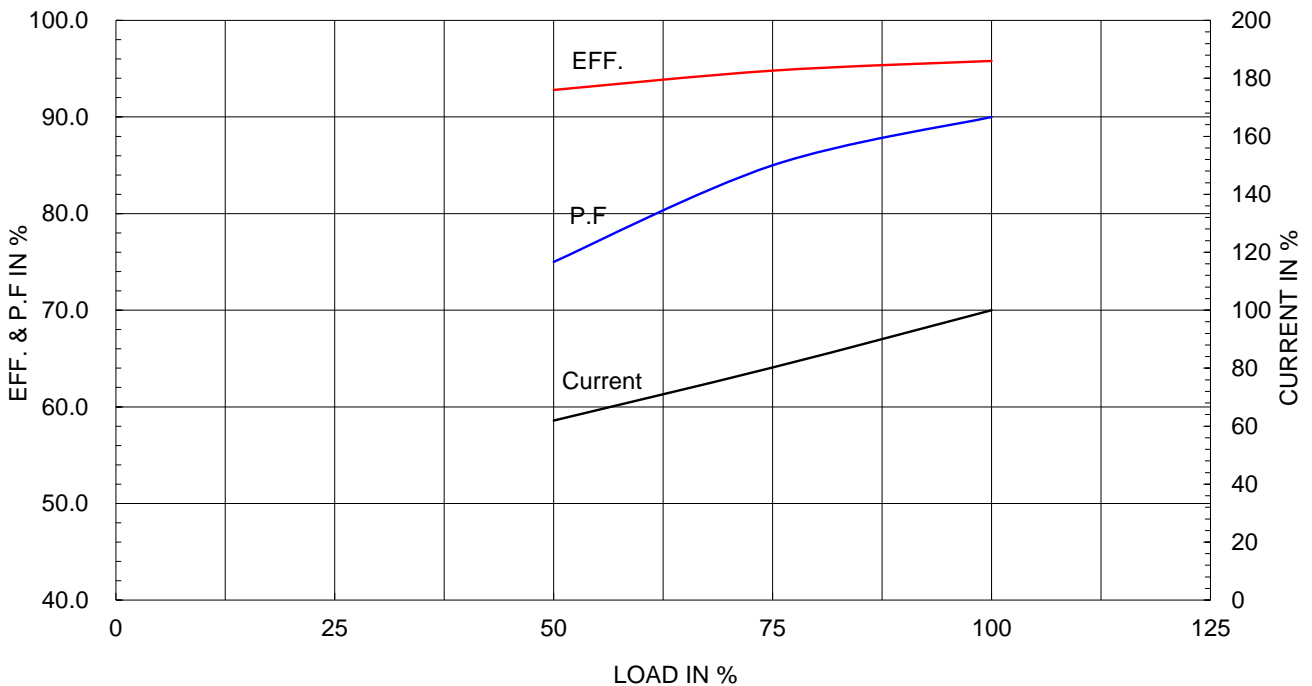
Type :	PJP
Full Load Torque :	444.0 lb.ft
Load moment of Inertia (J) :	246.000 lb.ft2
Motor moment of Inertia (J) :	43.668 lb.ft2

225kW 300HP	2 P	60 Hz
Speed at Full Load :		3570 RPM
Rated Voltage	575V	460V 230V
Full Load Current	262.0A	327.5A 655.1A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE

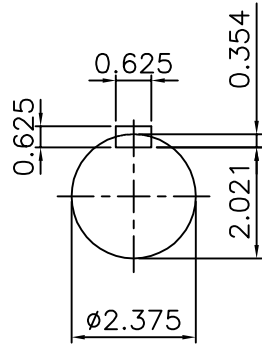
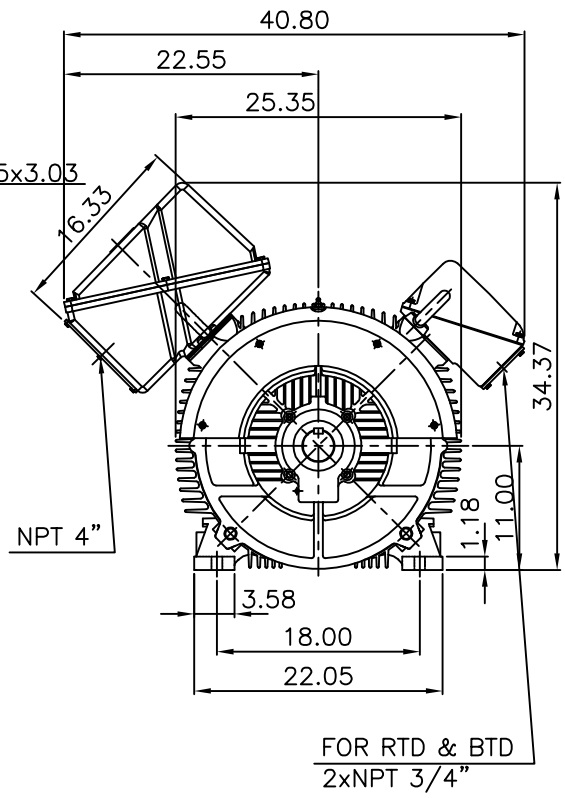
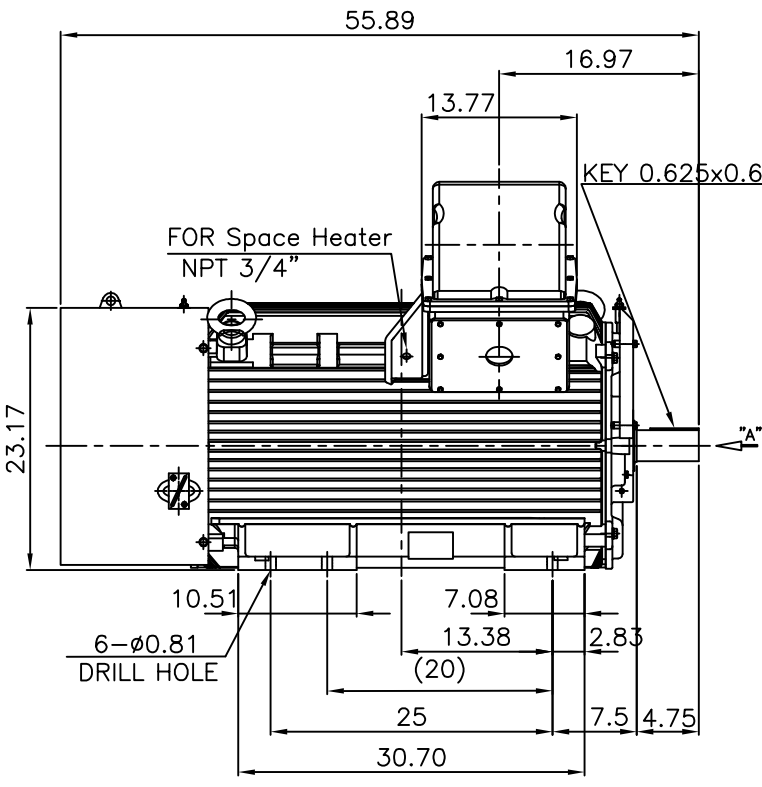


본 도면은 HD현대일렉트릭(주) 재산이며 허가없이 복사할 수 없음 (취급주의)

THIS DRAWING IS PROPRIETARY TO HYUNDAI ELECTRIC. NO PART OF THIS DRAWING MAYBE REPRODUCED WITHOUT THE PERMISSION OF HYUNDAI ELECTRIC.

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

IEEE841



VIEW "A"

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

APPD BY	S.Y.KIM	UNIT	INCH
CHKD BY	O.J.KIM	SCALE	1/18
CHKD BY	R.G.KIM	PROJEC'N	3각법(3rd Angle)
DSND BY	H.K.LEE	DATE	2021-04-27

SUBJECT	Fr.L449TS	DWG SIZE	A4 (1:18)
TITLE	OUTLINE		



REF. NO		Sheet No.	of
DWG NO	LM-I044XB3C7001	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

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

THIS DRAWING IS PROPRIETARY TO HYUNDAI ELECTRIC. NO PART OF THIS DRAWING
MAY BE REPRODUCED WITHOUT THE PERMISSION OF HYUNDAI ELECTRIC.



REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

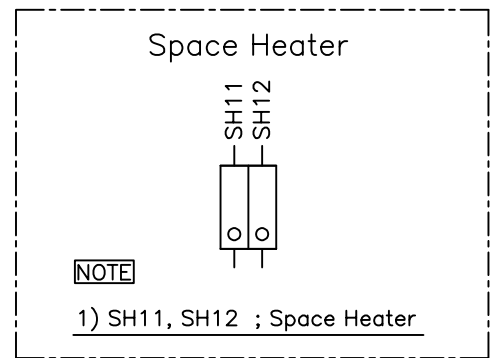
APPD BY	S.Y.KIM	UNIT	inch(mm)	SUBJECT	FR.360 (CAST IRON)	DWG SIZE	A3 (1:2.2)
CHKD BY		SCALE	1/1	TITLE	AUX. TERMINAL BOX ASS'Y		
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	REF. NO		Sheet No.	of
DSND BY	배승희	DATE	2024-01-18	DWG NO	3M-165277	Revision No.	0



**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	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