

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.	IEEE350-18-L449TC-IBSH	Item No.	Rev. No.	[      ]
Project Name		Project No.	Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA			
Frame Size	L449TC	Rated Output	260 kW		350 HP	
Type	PJP	Number of Poles	4			
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	308.4 A	385.5 A	
Insulation Class	F		Locked-rotor**	715 %	715 %	
Temp. Rise at full load (by resistance method)		Efficiency				
at 1.0 S.F	80 deg. C		50% Load	93.2 %		
Motor Location	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor		75% Load	95.2 %		
Altitude	Less than 1,000 meter		100% Load	96.2 %		
Relative Humidity	Less than 80 %	Power Factor(p.u)				
Ambient Temp.	40 deg. C (Max.)		50% Load	0.730		
Duty Type	Continuous ( S1 )		75% Load	0.830		
Service Factor	1.15		100% Load	0.880		
Mounting	B35	Speed at Full Load	1785 r.p.m			
Bearing	Type	Anti-Friction	Torque			
	DE/N-DE	6322C3 / 6318C3-INS.	Full Load	1,026.2 lb.ft		
	Lubricant	Grease(Polyrex-EM)	Locked-rotor**	135 %		
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.)	1,370.000 lb.ft2		
Terminal Box	Main	Cast Iron	Motor	118.425 lb.ft2		
	Aux.	Yes	Sound Pressure Level (No-load & mean value at 1m from motor)			
	Location	Refer to Outline Drawing		85 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
*. Space Heater : 1EA/Motor

SUBMITTAL DRAWING		
Outline Dimension Drawing	Motor Weight(Approx.)	
B35	LM-I044XC4UE001	3190 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

SPARE PARTS

[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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	REV	DATE	CONTENTS

**4.72**

**2.36**

<b>CROWN TRITON</b>		<b>Premium Efficiency AC 3 Phase Motor</b>									
350HP	4P	460V	Cat. No.	IEEE350-18-L449TC-IBSH							
Model	LATER		INS. Class	F		Amps	385.5				
Type	PJP	Duty	CONT		Code	G	Amb.	40°C	Hertz	60Hz	
Frame	L449TC	Encl.	TEFC		S.F.	1.15	RPM	1785	NEMA Nom. Eff.	96.2%	
Bearing	Drive	6322C3		S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)			3/4 Eff.	95.2%			
	Opp.	6318C3-INS.		NEMA Design	B						
Usable at	50Hz 300HP 380V 404.65A 1485rpm S.F.: 1.0 Eff.: 96% Code: G										
	50Hz 300HP 400/415V 393.36/387.77A 1486/1487rpm S.F.: 1.0 Eff.: 96/96.1% Code: H/J										
CSA Certified for	CLASS I, Div. 2, Gr. A, B, C & D			CLASS II, Div. 2, Gr. F & G			Temp. Code		Frame	L440FR - 500FR	
	CLASS I, Zone 2, Gr. IIA, IIB, & IIC						(sine wave)		Amb. 40°C	T3 (200°C)	
									Amb. 55°C	T3 (200°C)	
No.	-			Date	-			Weight	3190 lb		
<b>IEEE Std 841-2021</b>				<b>MARINE DUTY IEEE45</b>							
4M-136054				Made in Korea H1							

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 IEEE841 (XL)	DWG SIZE	A4 ( 1:1 )
CHKD BY	I.K.KIM	SCALE	NONE	TITLE	<b>NAMEPLATE DRAWING</b>		
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle				
DSND BY	S.H.LEE	DATE	2024.06.07				
				REF. NO	<b>4M-136054</b>	Sheet No.	of
				DWG NO	NP-IEEE350-18-L449TC-IBSH	Revision No.	<b>0</b>



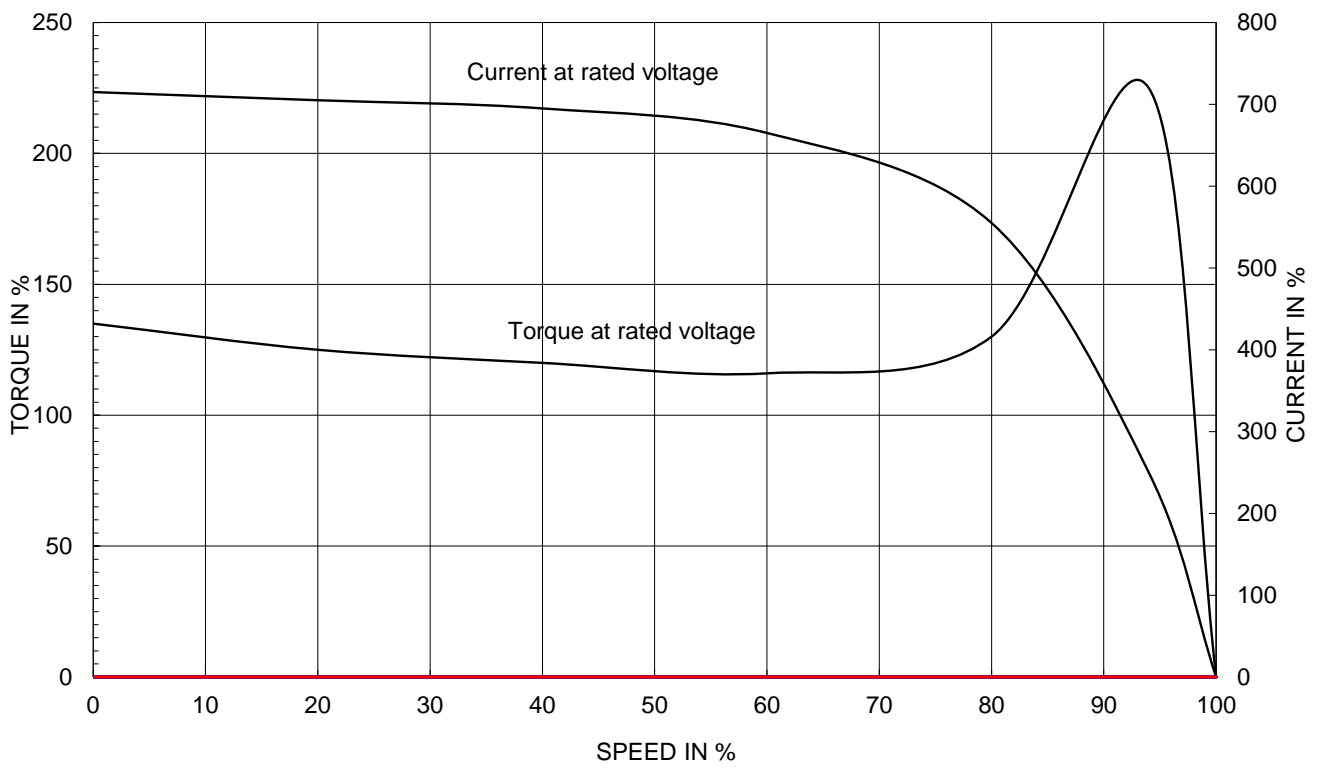
# PERFORMANCE CURVE

CURVE NO.  
PC-IEEE350-18-L449TC-IBSH

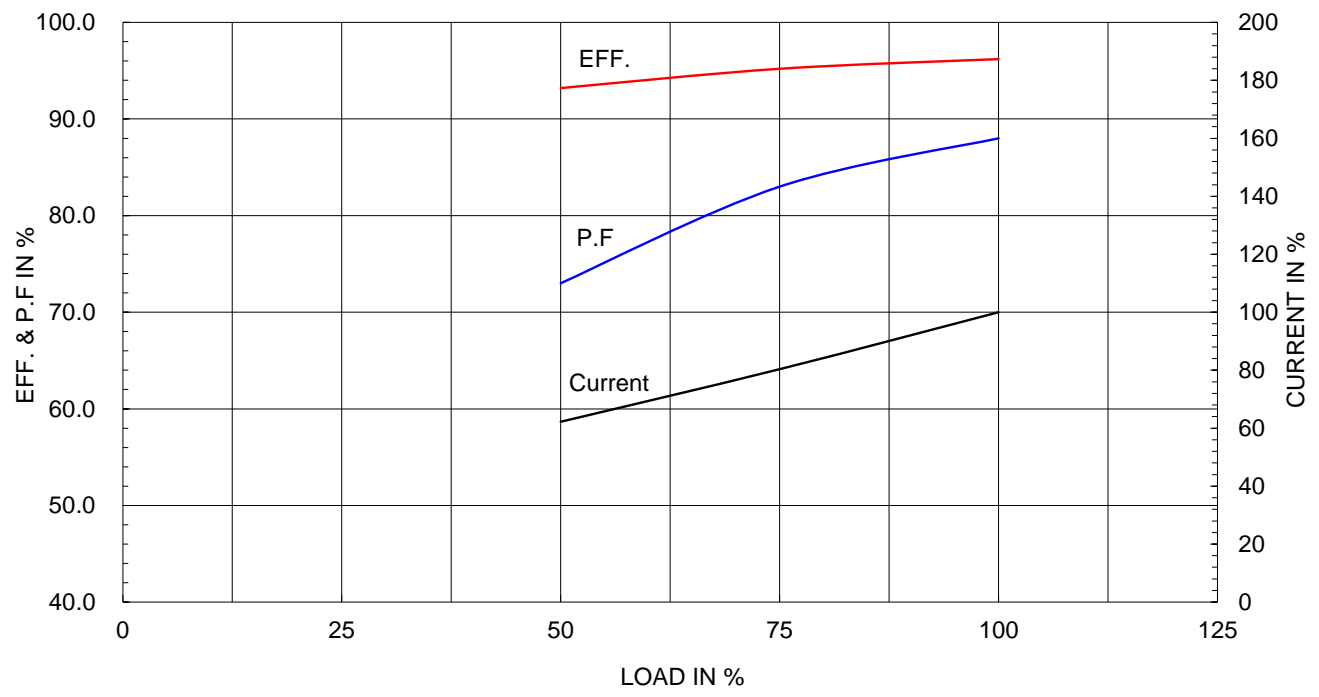
Type :	PJP
Full Load Torque :	1026.2 lb.ft
Load moment of Inertia (J) :	1370.000 lb.ft2
Motor moment of Inertia (J) :	118.425 lb.ft2

260kW 350HP	4 P	60 Hz
Speed at Full Load :		1785 RPM
Rated Voltage	575V	460V 230V
Full Load Current	308.4A	385.5A 771.0A

SPEED VS TORQUE & CURRENT CURVE

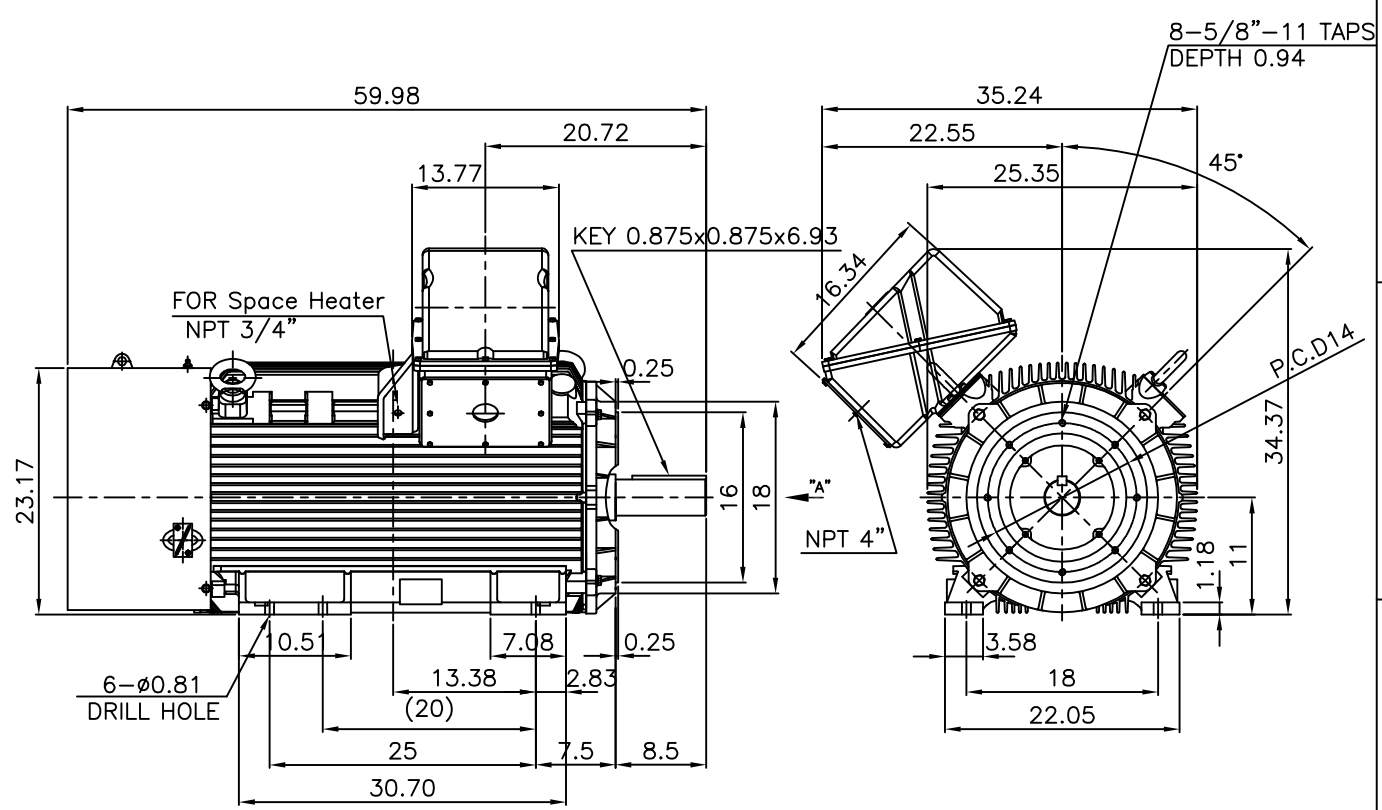


OUTPUT VS EFF., P.F & CURRENT CURVE



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

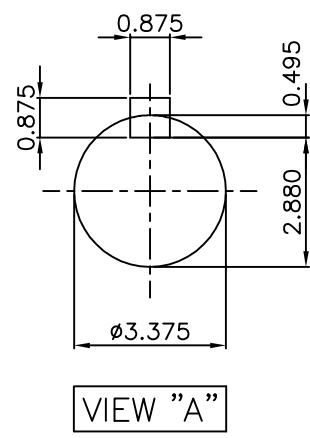
**IEEE841**



**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

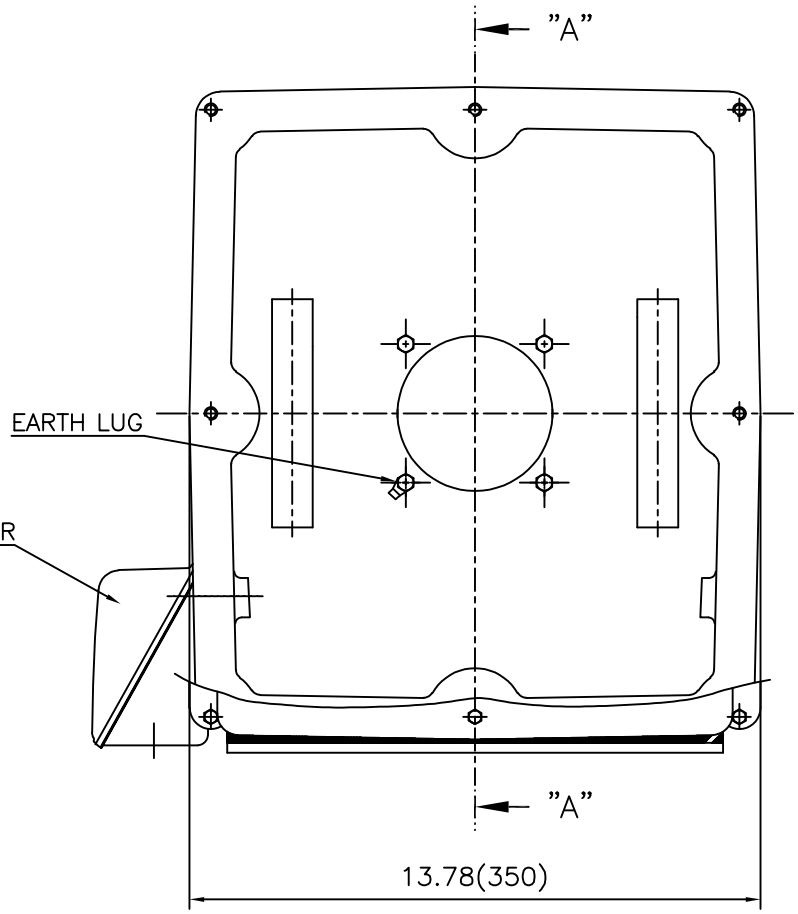


APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	Fr.L449TC	DWG SIZE	A4 (1:18)
CHKD BY	O.J.KIM	SCALE	1/18	TITLE	OUTLINE		
CHKD BY	R.G.KIM	PROJEC'N	3각법(3rd Angle)	REF. NO		Sheet No.	of
DSND BY	H.K.LEE	DATE	2021-04-27	DWG NO	LM-1044XC4UE001	Revision No.	0



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

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



SEC. "A" - "A"

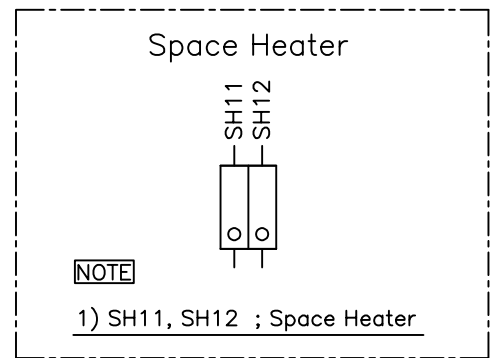
REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

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**



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