

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.	IEEE250-12-L449T-IBBRSRSH	Item No.		Rev. No.	[]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA				
Frame Size	L449T	Rated Output	190 kW			250 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	237.1 A	296.3 A	592.7 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		0.690			
Duty Type	Continuous (S1)	75% Load		0.790			
Service Factor	1.15	100% Load		0.840			
Mounting	B3	Speed at Full Load		1185 r.p.m			
Bearing	Type	Anti-Friction					
	DE/N-DE	NU322 / 6318C3-INS.					
	Lubricant	Grease(Polyrex-EM)					
External Thrust	Not applicable						
Coupling Method	<input type="checkbox"/> Direct <input type="checkbox"/> V-belt	Torque					
Shaft Extension	Single	Full Load		1,129.6 lb.ft			
Terminal Box	Main	Locked-rotor**		135 %			
	Aux.	Breakdown**		200 %			
Location	Refer to Outline Drawing	Moment of Inertia (J)					
Application		Load(Max.)		2,740.000 lb.ft2			
Area classification	Hazardous	Motor		158.295 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					80 dB(A)	
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		Vibration					3.8 mm/sec (peak)
		Permissible number of consecutive starts		Cold	2 times		
				Hot	1 time		
		Paint	Munsell No.	7.5BG6/1.5			
		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							
SPARE PARTS		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.

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REV	DATE	CONTENTS	REVD BY CHKD BY CHKD BY APPD BY

4.72



CROWN TRITON
Premium Efficiency AC 3 Phase Motor




250HP	6P	460V	Cat. No.	IEEE250-12-L449T-IBBRSRSH				
Model	LATER		INS. Class	F	Amps	296.3		
Type	PJP	Duty	CONT	Code	H	Amb.	40°C	
Hertz	60Hz							
Frame	L449T	Encl.	TEFC	S.F.	1.15	RPM	1185	
NEMA Nom. Eff.	95.8%							
Bearing	Drive	NU322		S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)			3/4 Eff.	94.8%
	Opp.	6318C3-INS.					NEMA Design	B Torque
Usable at								
CSA Certified for	CLASS I, Div. 2, Gr. A, B, C & D		CLASS II, Div. 2, Gr. F & G		Temp. Code (sine wave)	Frame	L440FR - 500FR	
	CLASS I, Zone 2, Gr. IIA, IIB, & IIC					Amb. 40°C	T3 (200°C)	
						Amb. 55°C	T3 (200°C)	
No.	-		Date	-		Weight	2890 lb	

IEEE Std 841-2021


4M-136054

MARINE DUTY IEEE45

Made in Korea H1



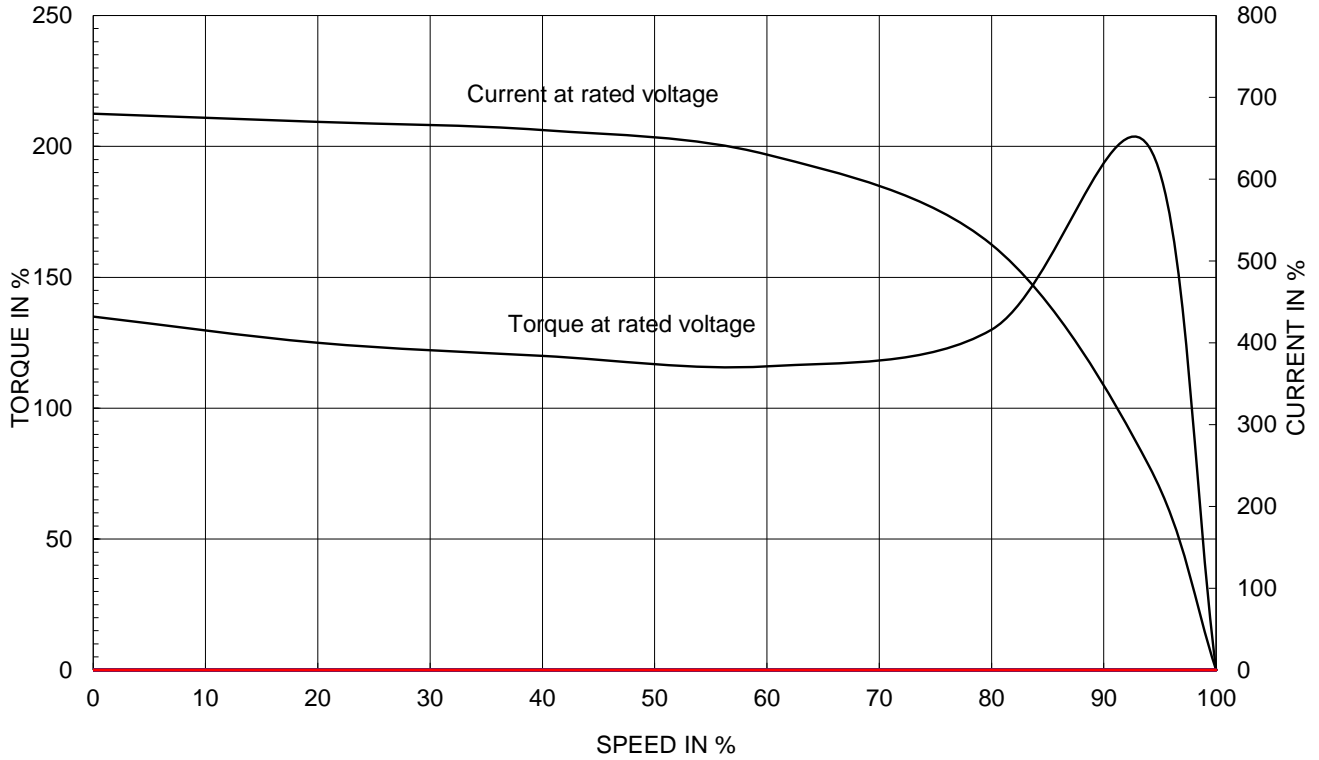
2.36

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				
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	TITLE NAMEPLATE DRAWING			
DSND BY	S.H.LEE	DATE	2024.06.07				
				REF. NO	4M-136054	Sheet No.	of
				DWG NO	NP-IEEE250-12-L449T-IBBRSRSH	Revision No.	0

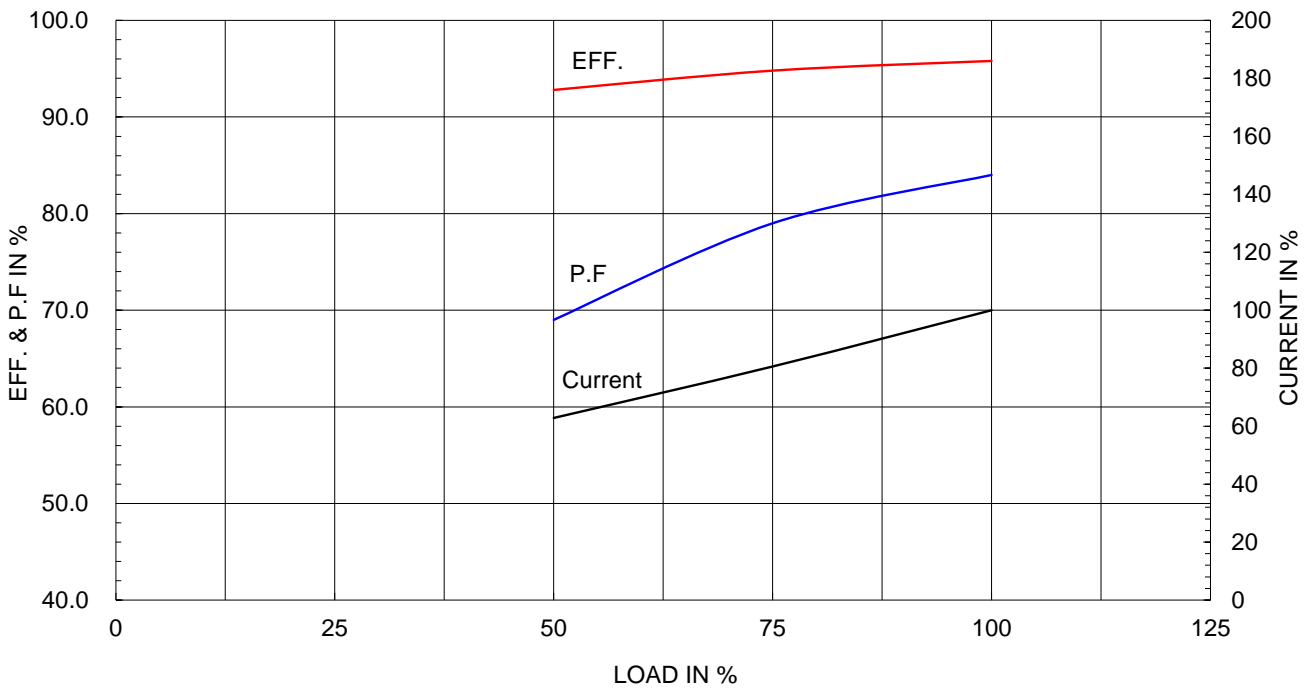
Type :	PJP
Full Load Torque :	1129.6 lb.ft
Load moment of Inertia (J) :	2740.000 lb.ft ²
Motor moment of Inertia (J) :	158.295 lb.ft ²

190kW 250HP	6 P	60 Hz
Speed at Full Load :		1185 RPM
Rated Voltage	575V	460V 230V
Full Load Current	237.1A	296.3A 592.7A

SPEED VS TORQUE & CURRENT CURVE

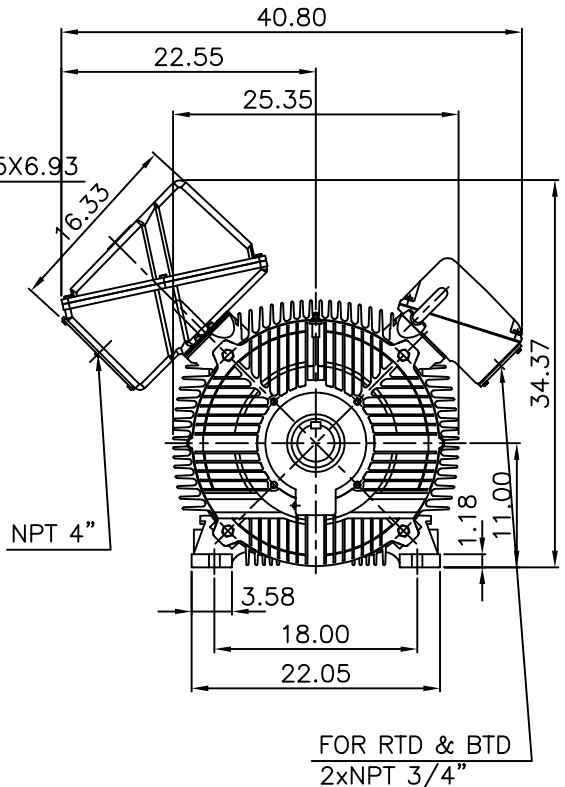
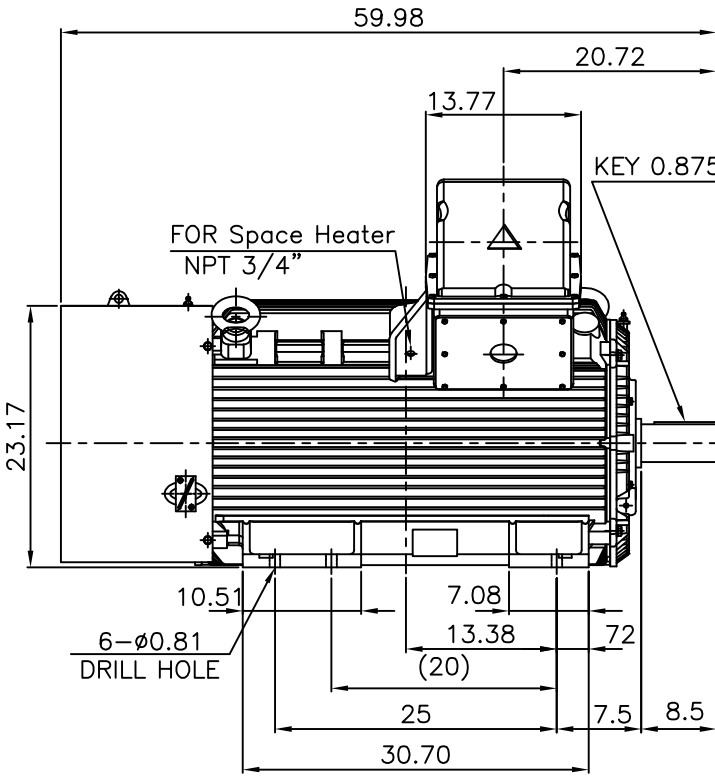


OUTPUT VS EFF., P.F & CURRENT CURVE



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

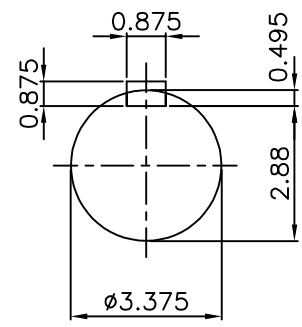
IEEE841



NOTE

1.TOLERANCE :

CENTER HEIGHT	11	+0.000	-0.060
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.L449T	DWG SIZE	A4 (1:18)
CHKD BY	O.J.KIM	SCALE	1/18	TITLE	NEMA STD SHAFT(4140 SHAFT)		
CHKD BY	R.G.KIM	PROJEC'N	3각법(3rd Angle)	OUTLINE			
DSND BY	H.K.LEE	DATE	2021-04-27				
				REF. NO		Sheet No.	of
				DWG NO	LM-1044XB3U7001	Revision No.	0

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IEEE 841**



SEC. "A" - "A"

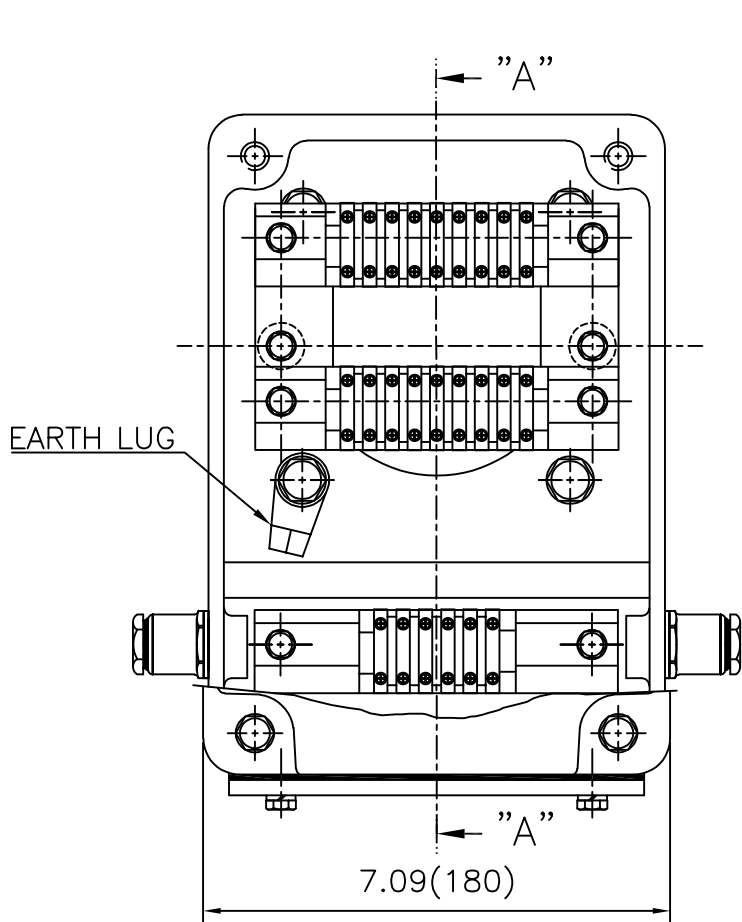
REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

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

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



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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	A3 (1:1.1)
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	배승희	DATE	2024-01-18	DWG NO	3M-165278	Revision No.	0

