

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.	IEEE400-18-L449TC-IBBRSRSH	Item No.	Rev. No. []
Project Name		Project No.	Quantity sets

GENERAL SPECIFICATION		PERFORMANCE DATA				
Frame Size	L449TC	Rated Output	300 kW 400 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	355.8 A	444.8 A	
Insulation Class	F		Locked-rotor**	710 %	710 %	710 %
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				
	DE/N-DE	6322C3 / 6318C3-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		1,184.0 lb.ft		
Terminal Box	Main	Locked-rotor**		135 %		
	Aux.	Breakdown**		225 %		
Box Location	Refer to Outline Drawing	Moment of Inertia (J)				
Application		Load(Max.)		1,550.000 lb.ft2		
Area classification	Hazardous	Motor		129.342 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	85 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		
		SUBMITTAL DRAWING				
		Outline Dimension Drawing		Motor Weight(Approx.)		
		B35	LM-I044XC4U7001	3720 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	
		2024-07-13	S.H. Lee	I.K. Kim	R.G. Kim	
				APPD	S.W. Kim	

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	SUBMITTAL DRAWING Outline Dimension Drawing \ Motor Weight(Approx.) <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%; text-align: center;">B35</td> <td style="width: 25%; text-align: center;">LM-I044XC4U7001</td> <td style="width: 50%; text-align: center;">3720 lb.</td> </tr> </table> 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 <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%; text-align: center;">Date</td> <td style="width: 20%; text-align: center;">DSND</td> <td style="width: 20%; text-align: center;">CHKD</td> <td style="width: 20%; text-align: center;">CHKD</td> <td style="width: 20%; text-align: center;">APPD</td> </tr> <tr> <td style="text-align: center;">2024-07-13</td> <td style="text-align: center;">S.H. Lee</td> <td style="text-align: center;">I.K. Kim</td> <td style="text-align: center;">R.G. Kim</td> <td style="text-align: center;">S.W. Kim</td> </tr> </table>	B35	LM-I044XC4U7001	3720 lb.	Date	DSND	CHKD	CHKD	APPD	2024-07-13	S.H. Lee	I.K. Kim	R.G. Kim	S.W. Kim
B35	LM-I044XC4U7001	3720 lb.												
Date	DSND	CHKD	CHKD	APPD										
2024-07-13	S.H. 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.

1	2	3	4
REV	DATE	CONTENTS	REVD BY

4.72

CROWN TRITON

Premium Efficiency AC 3 Phase Motor







400HP	4P	460V	Cat. No.	IEEE400-18-L449TC-IBBRSRSH			
Model	LATER		INS. Class	F	Amps	444.8	
Type	PJP	Duty	CONT	Code	G	Amb. 40°C	
Frame	L449TC	Encl.	TEFC	S.F.	1.15	RPM 1785	
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 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 3720 lb	

IEEE Std 841-2021


4M-136054

MARINE DUTY IEEE45

Made in Korea H1



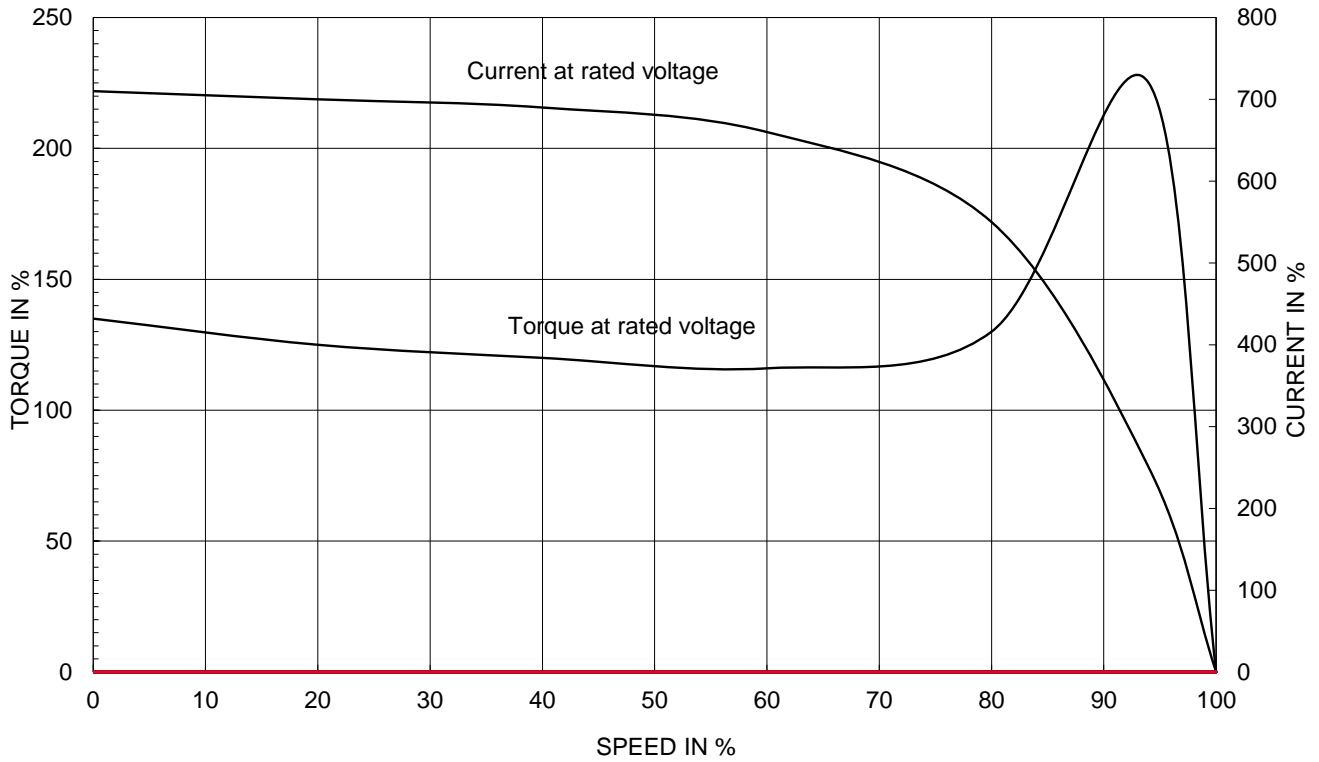
2.36

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 IEEE841 (XL)	DWG SIZE
CHKD BY	I.K.KIM	SCALE	NONE			A4 (1:1)
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-IEEE400-18-L449TC-IBBRSRSH	Revision No. 0

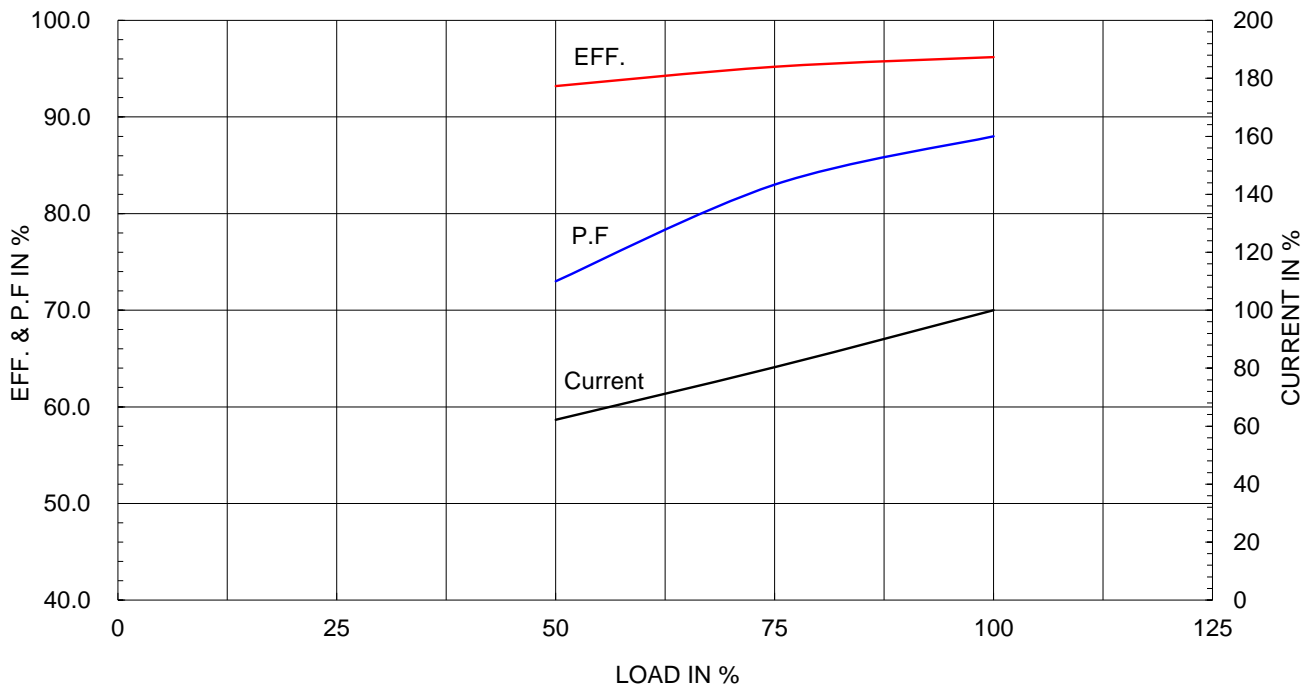
Type :	PJP
Full Load Torque :	1184.0 lb.ft
Load moment of Inertia (J) :	1550.000 lb.ft2
Motor moment of Inertia (J) :	129.342 lb.ft2

300kW 400HP	4 P	60 Hz
Speed at Full Load :		1785 RPM
Rated Voltage	575V	460V 230V
Full Load Current	355.8A	444.8A 889.6A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



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



SEC. "A" - "A"

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY
1						
2						
3						
4						

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

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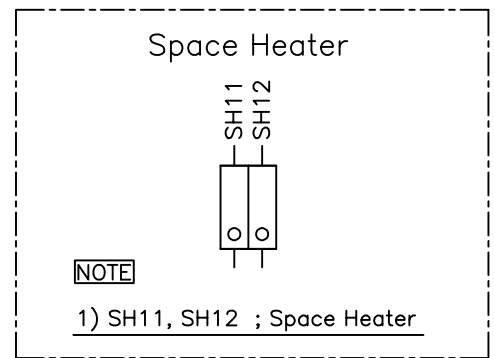
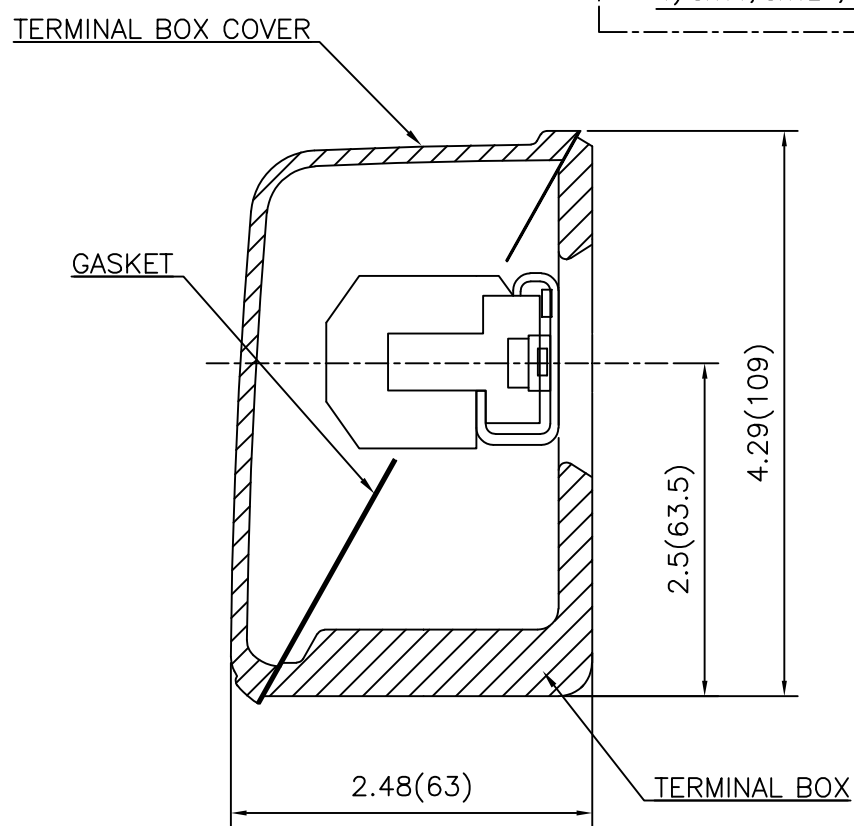
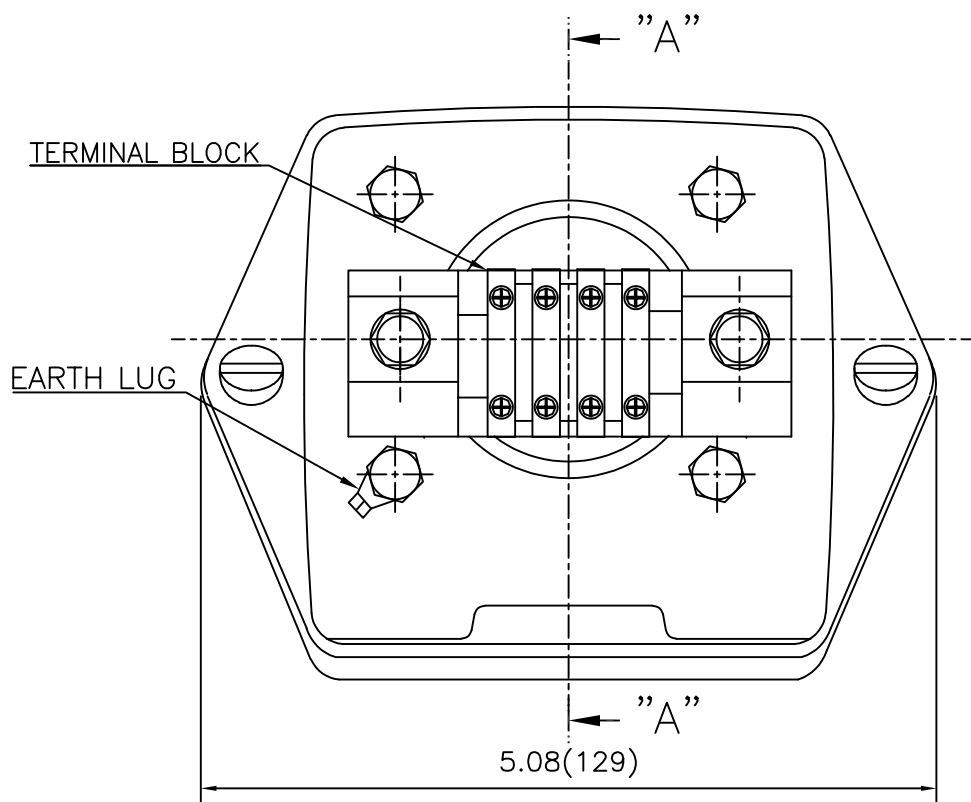


REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

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		
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**



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

