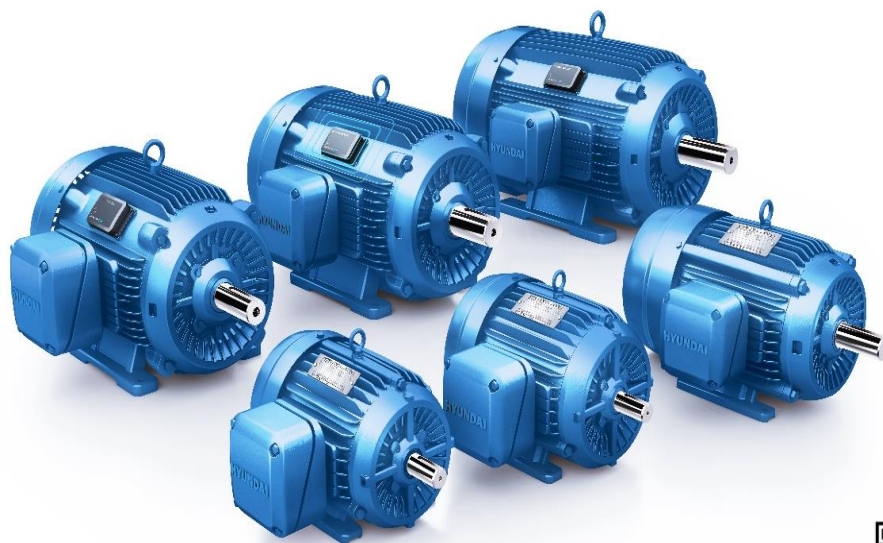


Customer :
Project Name :
Project No. :
Revision No. :

SPECIFICATION for INDUCTION MOTOR



0		For Bidding			
No.	DATE	DESCRIPTION	PREPARED BY	CHECKED BY	APPROVED BY

AC INDUCTION MOTOR DATA SHEET

Catalog No.	HHI250-36-449TS	Item No.				Rev. No.	[]		
Project Name		Project No.				Quantity	sets		
GENERAL SPECIFICATION					PERFORMANCE DATA				
Frame Size	449TS		Rated Output	190 kW		250 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	221.3 A	276.6 A	553.2 A		
Insulation Class	F			Locked-rotor**	700 %	700 %	700 %		
Temp. Rise at full load (by resistance method)			Efficiency						
	at 1.0 S.F	80 deg. C							
Motor Location	☐ Indoor ☐ Outdoor		50% Load 92.8 %						
Altitude	Less than 1,000 meter		75% Load 94.8 %						
Relative Humidity	Less than 80 %		100% Load 95.8 %						
Ambient Temp.	40 deg. C (Max.)		Power Factor(p.u)						
Duty Type	Continuous (S1)		50% Load 0.750						
Service Factor	1.15		75% Load 0.850						
Mounting	B3		100% Load 0.900						
Bearing	Type	Anti-Friction	Speed at Full Load 3570 r.p.m						
	DE/N-DE	6314C3 / 6314C3	Torque						
	Lubricant	Grease(Polyrex-EM)	Full Load 374.94 lb.ft						
External Thrust	Not applicable		Locked-rotor** 120 %						
Coupling Method	☒ Direct ☐ V-belt		Breakdown** 220 %						
Shaft Extension	Single		Moment of Inertia (J)						
Terminal	Main	Cast Iron	Load(Max.) 463.931 lb.ft2						
Box	Aux.	No	Motor 58.330 lb.ft2						
	Location	Refer to Outline Drawing	Sound Pressure Level (No-load & mean value at 1m from motor)						
Application			92 dB(A)						
Area classification	Hazardous		Vibration 3.8 mm/sec (peak)						
Type of Ex-Protection	Class I&II, Division 2		Permissible number of Cold 3 times						
Applicable Standard	NEMA MG1, CSA C390		consecutive starts Hot 2 times						
			Paint	Munsell No.	4.0PB5.4/5.5(VL-451)				
ACCESSORIES			SUBMITTAL DRAWING						
			Outline Dimension Drawing \ Motor Weight(Approx.)						
			B3	LM-T1449B3CL001	2430 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 (1 hour duty, 4:1 continuous)						
			-. CHP up to 1.5 times base speed, NEMA MG1 Part31						
			3. CSA Certification						
			-. Class I, Division 2, Group A, B, C & D						
			-. Class II, Division 2 Group E, F & G (Group E : up to 320Fr.)						
			4. Service Factor 1.15 and Temperature rise B are applicable under the condition of sine wave power.						
			5. Service Factor 1.25 is applicable to motors of 100HP or less with temperature rise F & Non-Hazardous.						
			6. Temp. code : T3A(180°C) at sine wave						
			Date	DSND	CHKD	CHKD	APPD		
			2025-07-22	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.

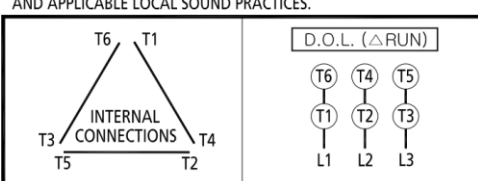
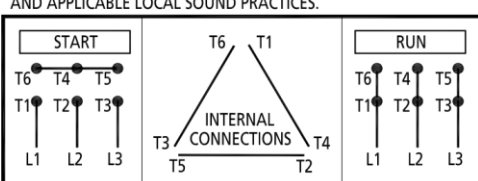
** Data is based on rated voltage & frequency and is expressed as a percentage of full-load value.

MAIN NAMEPLATE

4.72

CROWN TRITON											
Premium Efficiency AC 3 Phase Motor										C Energy Verified	
250HP 2P 460V				Cat. No. HHI250-36-449TS							
Model HLS449SR0208				INS. Class F		HD-F1		Amps 276.6A			
Type HLS		Duty CONT		Code G		Amb. 40°C		Hertz 60Hz			
Frame 449TS		Encl. TEFC		S.F. 1.15		RPM 3570		NEMA Nom. Eff. 95.8%			
Bearing		Drive 6314C3		S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)				3/4 Eff. 94.8%			
		Opp. 6314C3						NEMA Design B			
Usable at		50Hz 250HP 380V 339.2A 2962rpm S.F.: 1.0 Eff.: 95.3% Code: E									
		50Hz 250HP 400/415V 319.8/307.6A 2966/2969rpm S.F.: 1.0 Eff.: 95.6/95.7% Code: F/G									
CSA Certified for		Model LATER		Type PJP		Temp. Code (sine wave)		Frame 140~320FR		360~400FR 440FR	
		CLASS I, Div. 2, Gr. A, B, C & D CLASS I, Zone 2, Gr. IIA, IIB, & IIC		CLASS II, Div. 2 Gr. E, F & G (Gr. E: Up to 320FR)		Amb. 40°C Amb. 55°C		T3C (160°C) T3A (180°C)		T3B (165°C) T3A (180°C) T3 (200°C)	
No. -				Date -				Weight 2430 lb			
4M-135702				Made in Korea H1							
MARINE DUTY IEEE45											

WIRING DIAGRAM

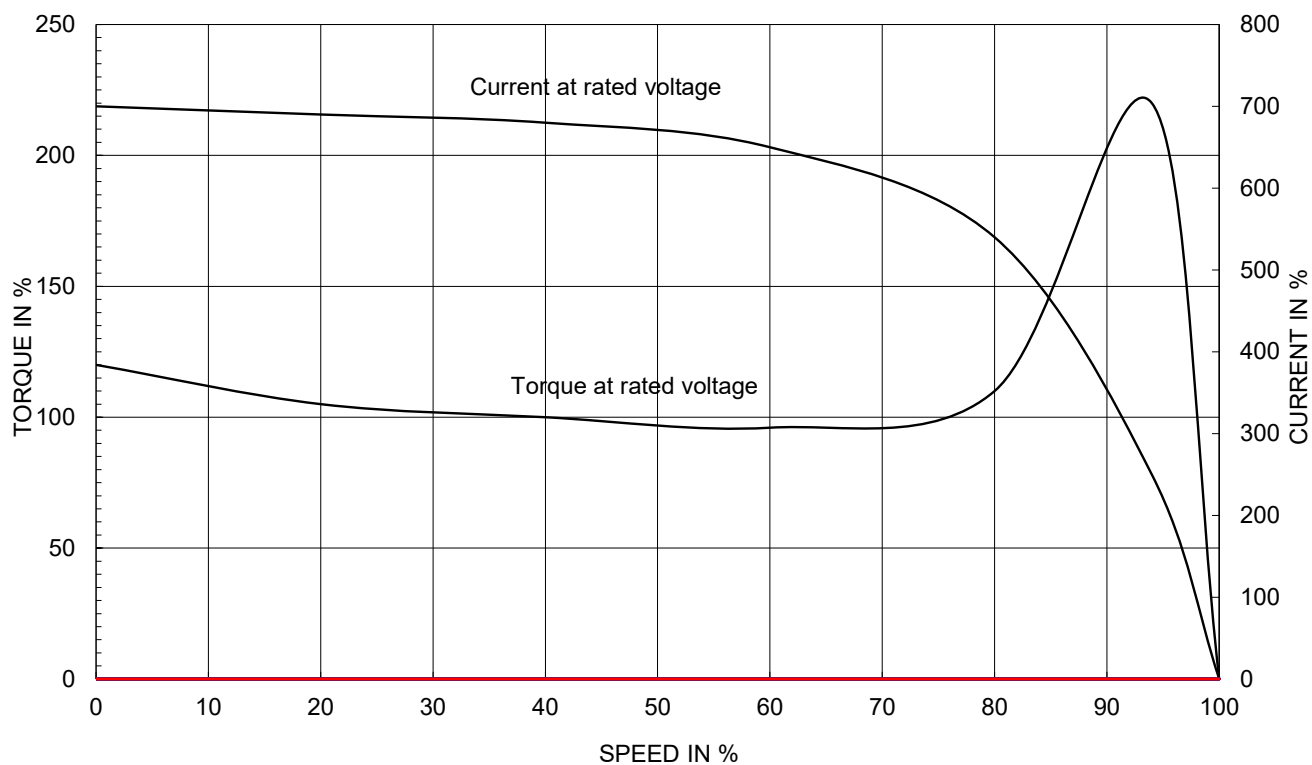
D.O.L (INVERTER & SOFT STARTER)	WYE-DELTA (Y-D)
WARNING IMPROPER INSTALLATION, CONNECTION, OPERATION, GROUNDING OF THIS MOTOR MAY CAUSE SERIOUS INJURY TO PERSONNEL OR MOTOR FAILURE. READ INSTRUCTIONS CAREFULLY. GROUNDING SHOULD BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AND APPLICABLE LOCAL SOUND PRACTICES.  KEEP FINGERS AND FOREIGN OBJECTS AWAY FROM OPENINGS AND ROTATING PARTS DISCONNECT ALL POWER SOURCES BEFORE TOUCHING INTERNAL PARTS TO AVOID ELECTRICAL SHOCK. 4M-129326	WARNING IMPROPER INSTALLATION, CONNECTION, OPERATION, GROUNDING OF THIS MOTOR MAY CAUSE SERIOUS INJURY TO PERSONNEL OR MOTOR FAILURE. READ INSTRUCTIONS CAREFULLY. GROUNDING SHOULD BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AND APPLICABLE LOCAL SOUND PRACTICES.  KEEP FINGERS AND FOREIGN OBJECTS AWAY FROM OPENINGS AND ROTATING PARTS DISCONNECT ALL POWER SOURCES BEFORE TOUCHING INTERNAL PARTS TO AVOID ELECTRICAL SHOCK. 4M-128852

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 Severe Duty (HHI, 364-449)	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			
				REF. NO	4M-135702 / 4M-129326	Sheet No. of
				DWG NO	NP-HHI250-36-449TS	Revision No. 0

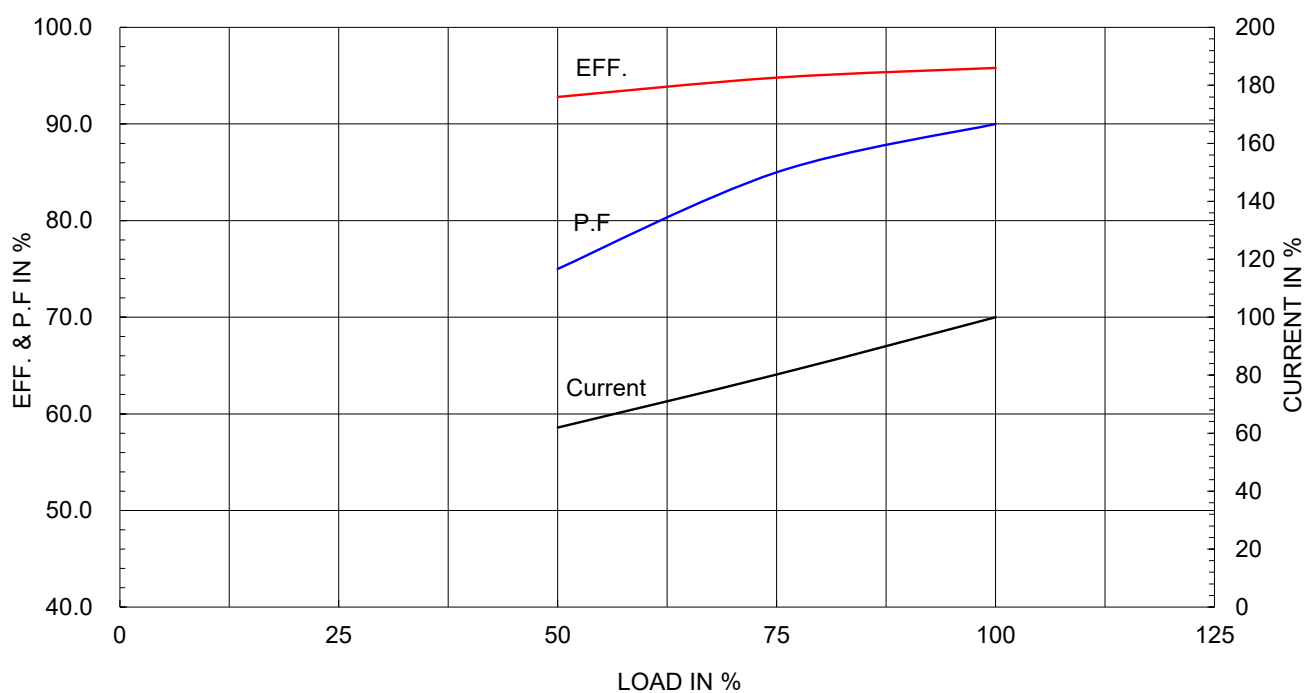
Type :	PJP	
Full Load Torque :	374.94	lb.ft
Load moment of Inertia (J) :	463.931	lb.ft2
Motor moment of Inertia (J) :	58.330	lb.ft2

190kW	250HP	2 P	60 Hz
Speed at Full Load :		3570 RPM	
Rated Voltage	575V	460V	230V
Full Load Current	221.3A	276.6A	553.2A

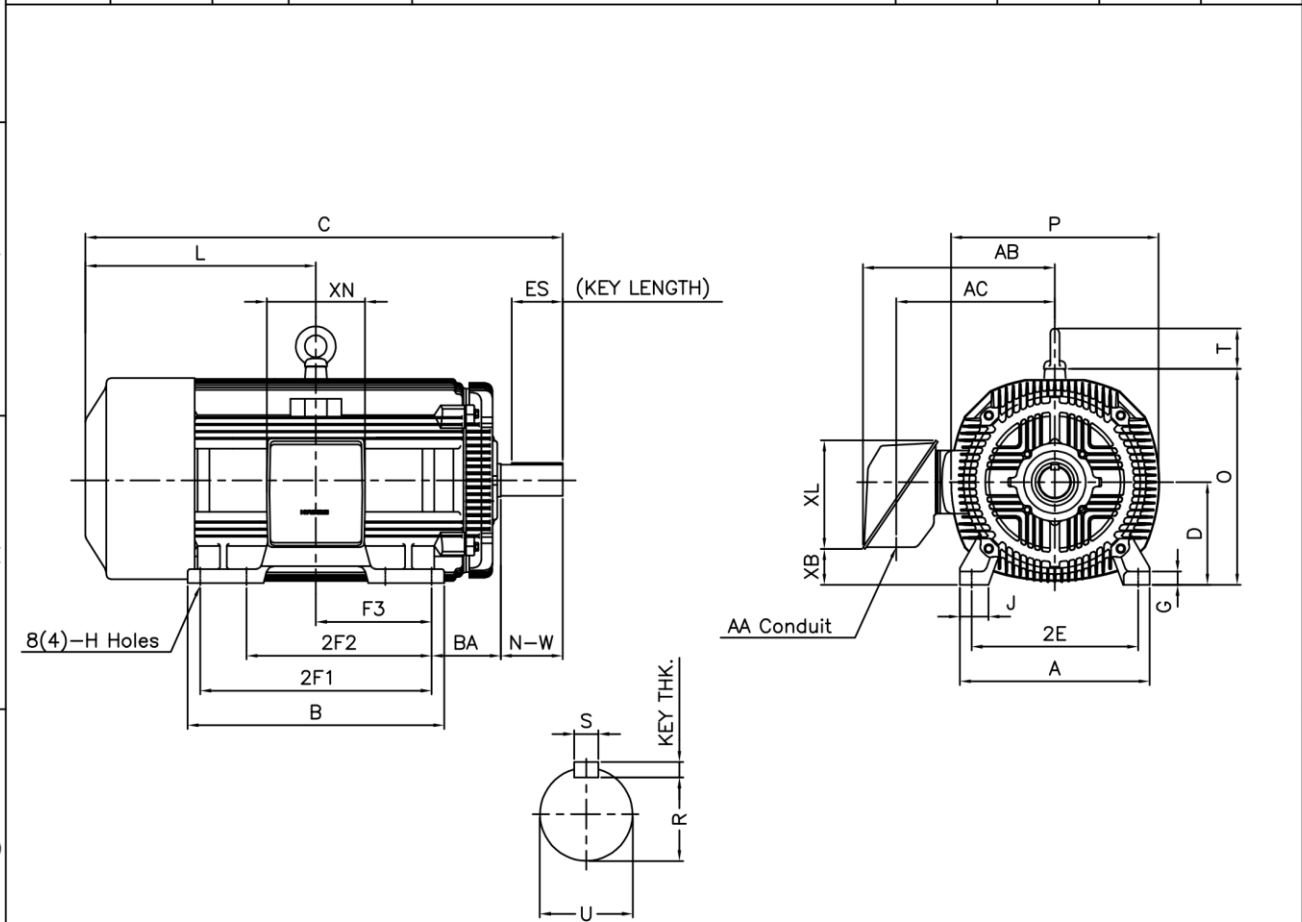
SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



1	2	3	4
▽	50S	REV	DATE
▽▽	12.5S		
▽▽▽	3.2S		
▽▽▽▽	0.4S		



DIMENSIONS

unit : inch

M O U N T I N G									C O N D U I T B O X						APPROX. WGT.(LB)
A	B	2E	2F1	2F2	F3	G	J	H	AA	AB	AC	XB	XL	XN	
20.51	27.72	18.00	25.00	(20.00)	12.500	1.42	3.07	0.81	3.00	21.26	18.03	3.83	11.65	10.63	2430

O V E R A L L									S H A F T			KEY	B E A R I N G	
BA	C	D	L	O	P	T	U	N-W	KEYWAY			THK.	DRIVE END	OPP. DRIVE END
									R	ES	S			
7.50	50.08	11.00	25.33	23.19	22.40	4.33	2.375	4.75	2.021	3.03	0.625	0.625	6314C3	6314C3

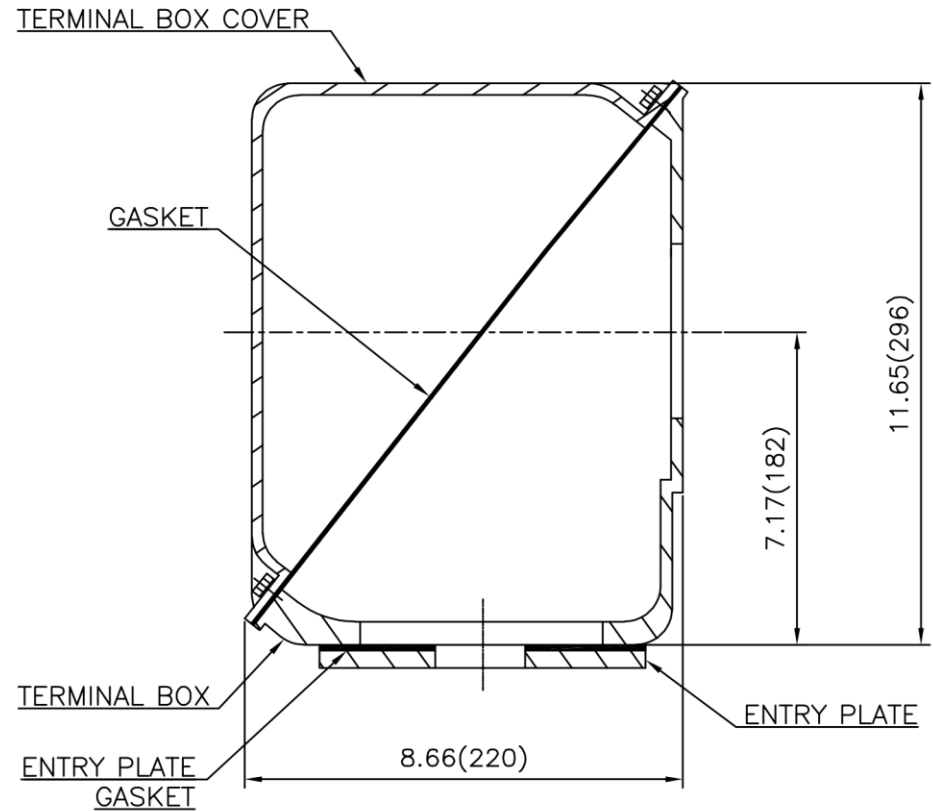
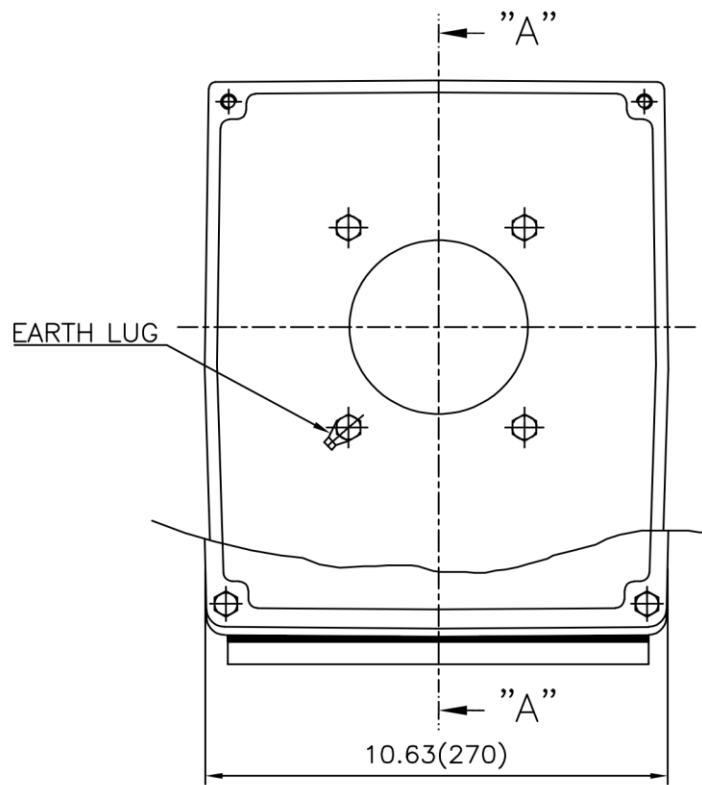
NOTE

1. Dimension "D" tolerance : +0.00inch - 0.03inch (143T-365T) ; +0.000inch - 0.06inch (404T-449T)
2. Dimension "U" tolerance : +0.000inch - 0.005inch (143T-215T), +0.000inch - 0.001inch (254T-449T)
3. Dimension "R" tolerance : +0.000inch - 0.015inch

APPD BY	S.K.HAN	UNIT	INCH	SUBJECT	449TS	DWG SIZE
Q.P CHK	I.K.KIM	SCALE	NONE	TITLE		A4 (1:1)
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle			
DSND BY	B.Y.KIM	DATE	2019.06.05			
				REF. NO	350A1120BA	Sheet No. of
				DWG NO	LM-T1449B3CL001	Revision No. 0

Cls. I&II, Div. 2

IEEE 841



SEC. "A" - "A"

▽	50S
▽▽	12.5S
▽▽▽	3.2S
▽▽▽▽	0.4S

REV	DATE	CONTENTS	REV'D BY	CHK'D BY	CHK'D BY	APP'D BY	일반기공표	일반계관표
1							1-4 ±0.1 6-30 ±0.5	
							4-18 ±0.2 30-120 ±0.8	
							18-63 ±0.3 120-315 ±1.2	
							63-250 ±0.5 315-1000 ±2.0	
							250- ±0.8 1000- ±3.0	

Q'TY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.
APPD BY	S.Y.KIM	UNIT	inch(mm)	SUBJECT	FR. 400-440 (CAST IRON)	DWG SIZE	
CHKD BY		SCALE	1/1.2	TITLE	MAIN TERMINAL BOX ASS'Y	A3 (1:1.2)	
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	REF. NO		Sheet No.	of
DSND BY	네슬피	DATE	2023-10-19	DWG NO	3M-248451	Revision No.	0

