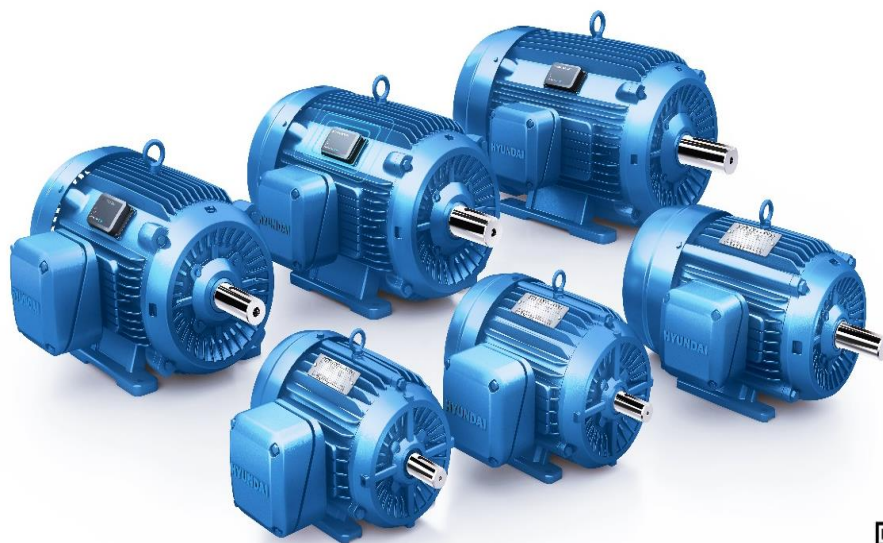


Customer :
Project Name :
Project No. :
Revision No. :

SPECIFICATION for INDUCTION MOTOR



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

AC INDUCTION MOTOR DATA SHEET

Catalog No.	HHI60-12-404T	Item No.				Rev. No.	[]		
Project Name		Project No.				Quantity	sets		
GENERAL SPECIFICATION					PERFORMANCE DATA				
Frame Size	404T		Rated Output	45 kW		60 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	56.9 A	71.2 A	142.3 A		
Insulation Class	F			Locked-rotor**	670 %	670 %	670 %		
Temp. Rise at full load (by resistance method)			Efficiency						
	at 1.0 S.F	80 deg. C							
Motor Location	☐ Indoor ☐ Outdoor		50% Load 91.5 %						
Altitude	Less than 1,000 meter		75% Load 93.5 %						
Relative Humidity	Less than 80 %		100% Load 94.5 %						
Ambient Temp.	40 deg. C (Max.)		Power Factor(p.u)						
Duty Type	Continuous (S1)		50% Load 0.690						
Service Factor	1.15		75% Load 0.790						
Mounting	B3		100% Load 0.840						
Bearing	Type	Anti-Friction	Speed at Full Load 1185 r.p.m						
	DE/N-DE	NU316 / 6313C3	Torque						
	Lubricant	Grease(Polyrex-EM)	Full Load 267.53 lb.ft						
External Thrust	Not applicable		Locked-rotor** 140 %						
Coupling Method	☒ Direct ☐ V-belt		Breakdown** 220 %						
Shaft Extension	Single		Moment of Inertia (J)						
Terminal	Main	Cast Iron	Load(Max.) 2,397.965 lb.ft2						
Box	Aux.	No	Motor 46.280 lb.ft2						
	Location	Refer to Outline Drawing	Sound Pressure Level (No-load & mean value at 1m from motor)						
Application			75 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-T1404B3PL001	1120 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 : T3B(165°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.

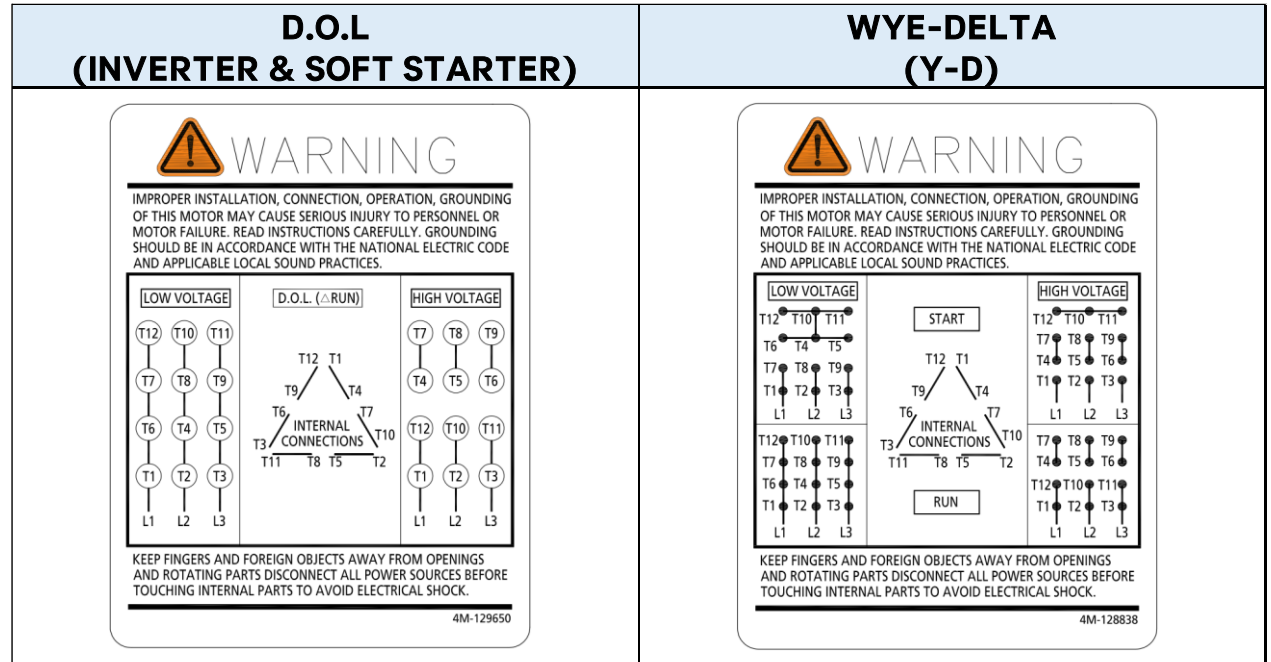
MAIN NAMEPLATE

4.72

2.36

CROWN TRITON											
Premium Efficiency AC 3 Phase Motor		C Energy Verified		US		CC038A					
60HP	6P	230/460V	Cat. No.	HHI60-12-404T							
Model	HLS404SR06U3		INS. Class	F	HD-F1	Amps	142.3/71.2A				
Type	HLS	Duty	CONT	Code	H	Amb.	40°C	Hertz	60Hz		
Frame	404T	Encl.	TEFC	S.F.	1.15	RPM	1185	NEMA Nom. Eff.	94.5%		
Bearing	Drive	NU316	S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)		3/4 Eff.		93.5%				
	Opp.	6313C3			NEMA Design		B Torque				
Usable at	50Hz 60HP 380V 86.5A 981rpm S.F.: 1.15 Eff.: 93.3% Code: F										
	50Hz 60HP 400/415V 82.5/80.1A 983/984rpm S.F.: 1.15 Eff.: 93.6/93.8% Code: G/G										
CSA Certified for	Model	LATER	Type	PJP	Temp. Code	Frame	140~320FR	360~400FR	440FR		
	CLASS I, Div. 2, Gr. A, B, C & D	CLASS II, Div. 2 Gr. E, F & G (Gr. E: Up to 320FR)			Amb. 40°C	T3C (160°C)	T3B (165°C)	T3A (180°C)			
	CLASS I, Zone 2, Gr. IIA, IIB, & IIC				Amb. 55°C	T3A (180°C)	T3A (180°C)	T3 (200°C)			
No.	-	Date	-	Weight	1120 lb						
4M-135702		Made in Korea H1									
MARINE DUTY IEEE45											

WIRING DIAGRAM

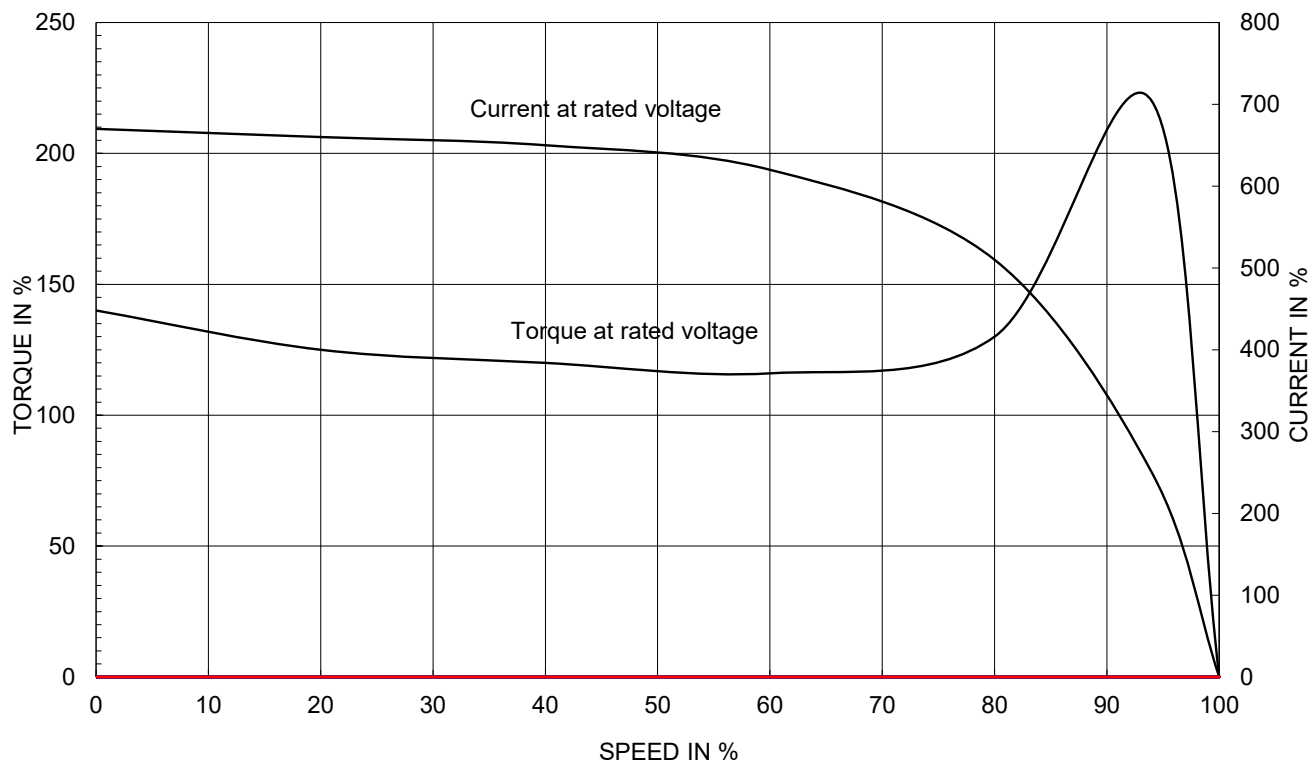


APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 Severe Duty (HHI, 364-449)	DWG SIZE	A4 (1:1)
CHKD BY	I.K.KIM	SCALE	NONE	NAMEPLATE DRAWING			
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle				
DSND BY	S.H.LEE	DATE	2024.06.07				
				REF. NO	4M-135702 / 4M-129650	Sheet No.	of
				DWG NO	NP-HHI60-12-404T	Revision No.	0

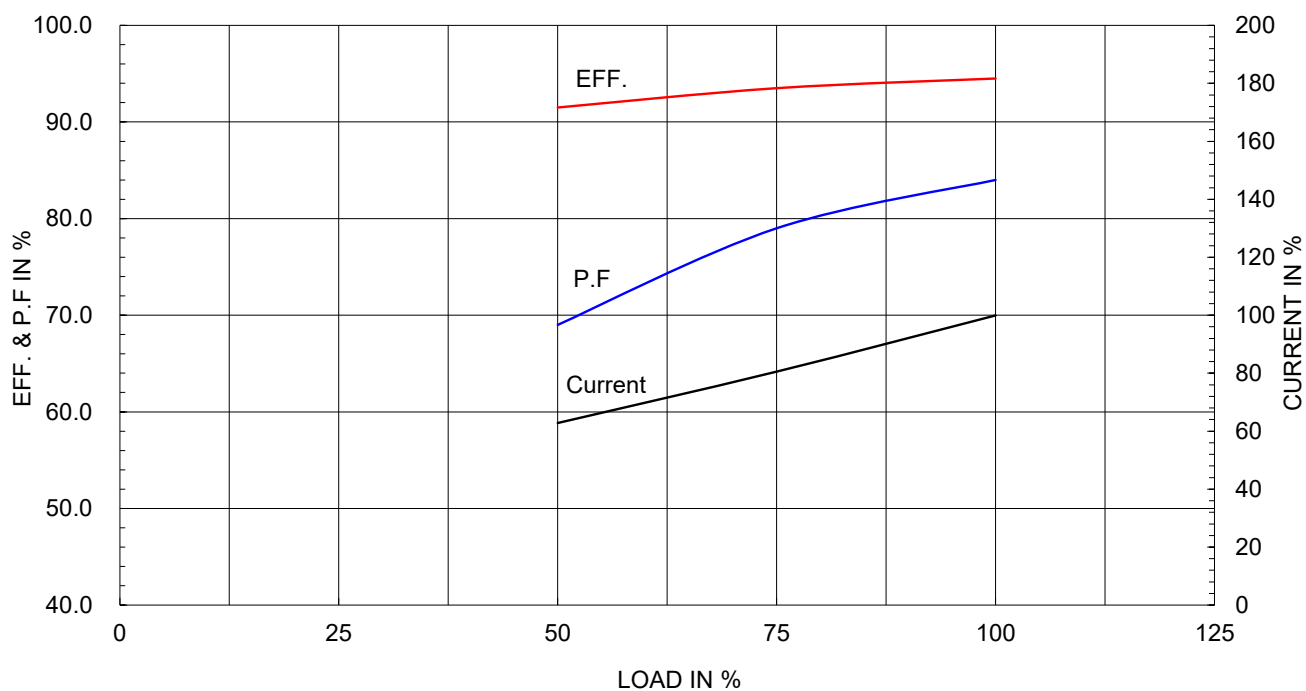
Type :	PJP	
Full Load Torque :	267.53	lb.ft
Load moment of Inertia (J) :	2397.965	lb.ft2
Motor moment of Inertia (J) :	46.280	lb.ft2

45kW	60HP	6 P	60 Hz
Speed at Full Load :			1185 RPM
Rated Voltage	575V	460V	230V
Full Load Current	56.9A	71.2A	142.3A

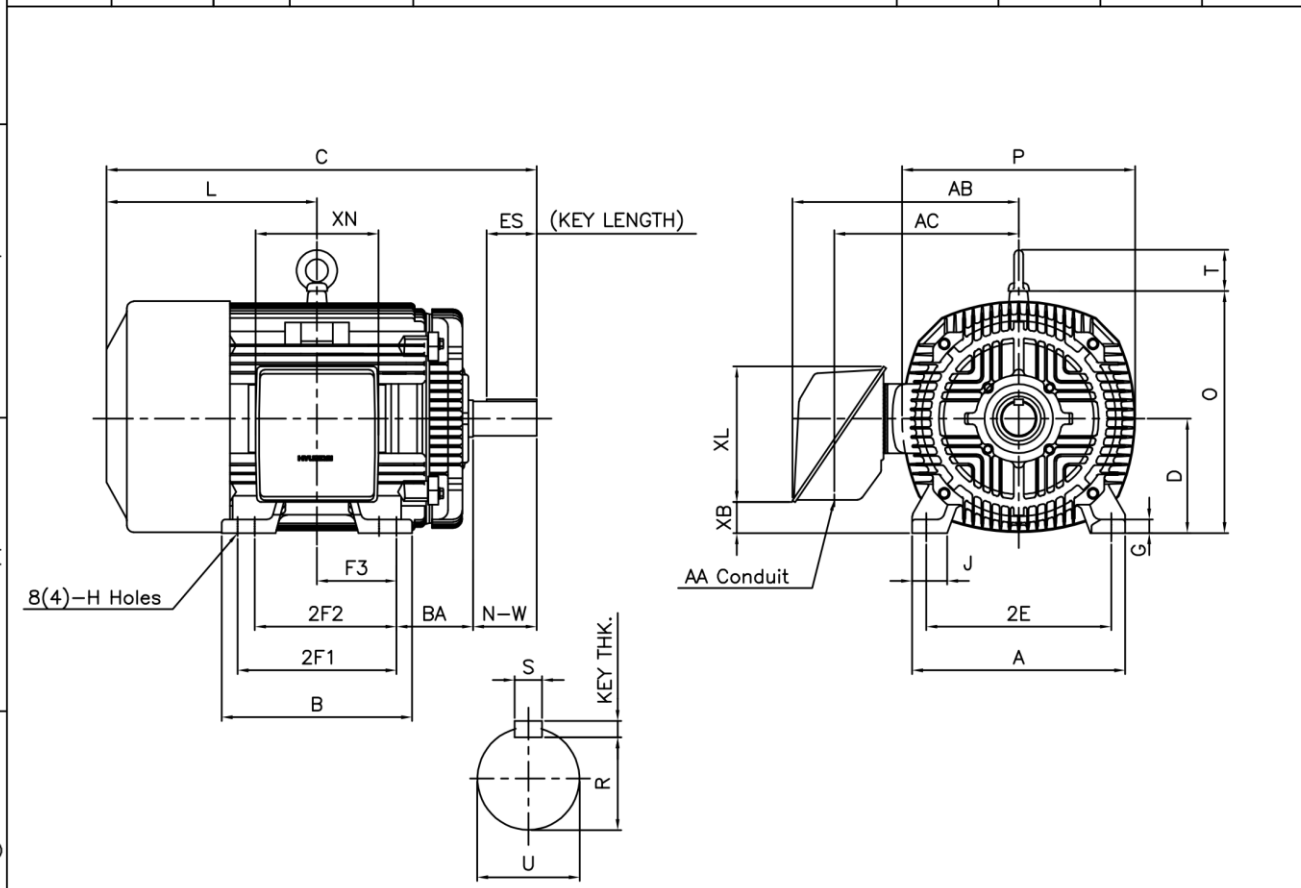
SPEED VS TORQUE & CURRENT CURVE



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	
18.43	16.46	16.00	(13.75)	12.25	6.870	1.18	3.03	0.81	3.00	20.28	14.85	2.83	11.65	10.63	1110

O V E R A L L									S H A F T			KEY	BEARING	
BA	C	D	L	O	P	T	U	N-W	KEYWAY			THK.	DRIVE END	OPP. DRIVE END
									R	ES	S			
6.62	39.42	10.00	18.68	20.79	20.16	3.55	2.875	7.25	2.450	5.65	0.750	0.750	6316C3 or NU316	6313C3

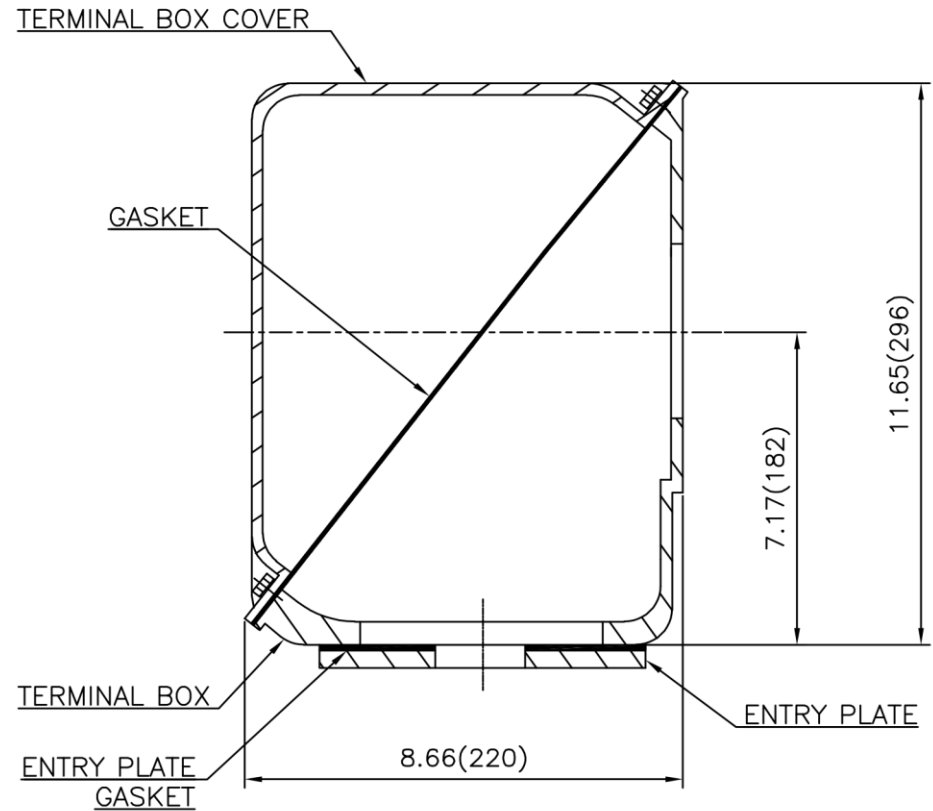
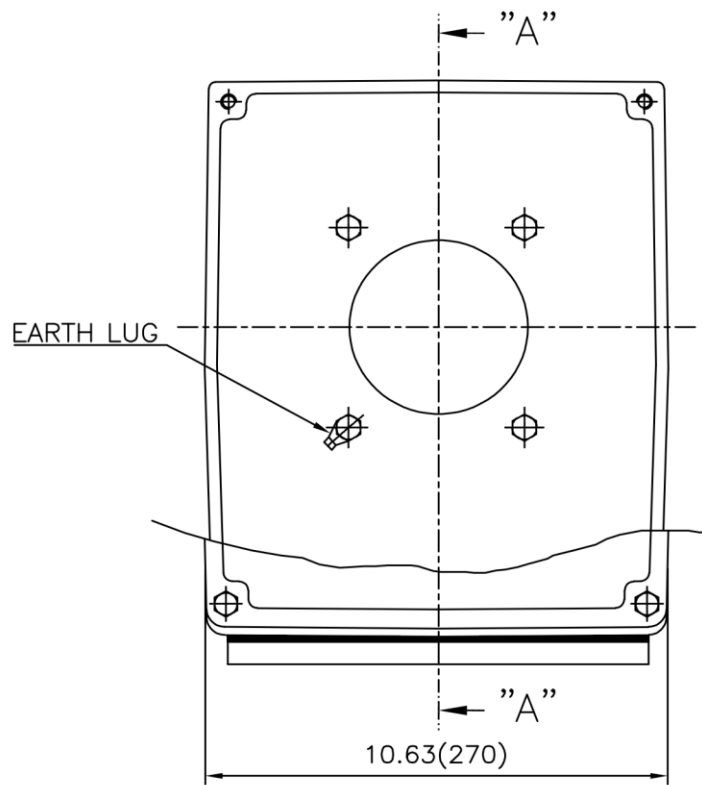
NOTE

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	404T	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	350A1115AA	Sheet No. of
				DWG NO	LM-T1404B3PL001	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	일반계관공표
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		
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

