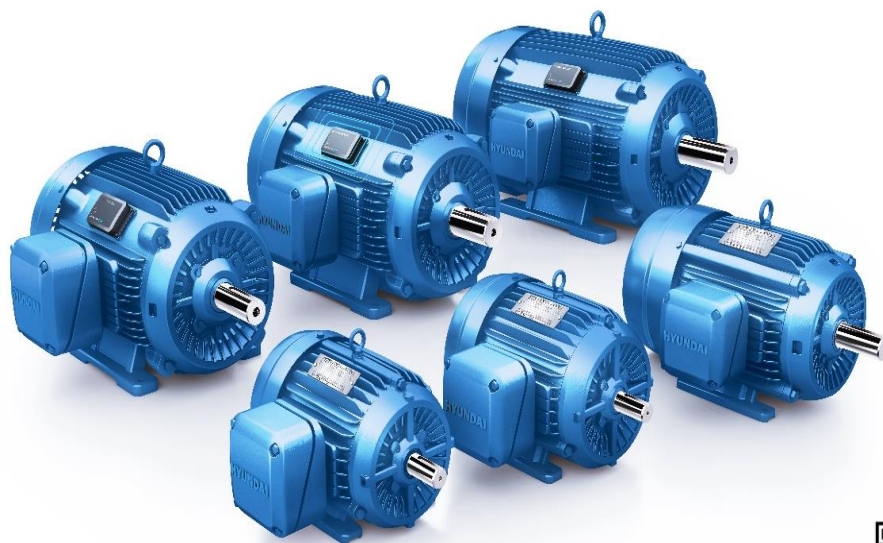


Customer :
Project Name :
Project No. :
Revision No. :

SPECIFICATION for INDUCTION MOTOR



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

AC INDUCTION MOTOR DATA SHEET

Catalog No.	HHI100-12-444T	Item No.			Rev. No.	[]	
Project Name		Project No.			Quantity	sets	
GENERAL SPECIFICATION				PERFORMANCE DATA			
Frame Size	444T		Rated Output	75 kW		100 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	93.3 A	116.6 A	233.1 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 92.0 %				
Motor Location	☐ Indoor ☐ Outdoor		75% Load 94.0 %				
Altitude	Less than 1,000 meter		100% Load 95.0 %				
Relative Humidity	Less than 80 %		Power Factor(p.u)				
Ambient Temp.	40 deg. C (Max.)		50% Load 0.700				
Duty Type	Continuous (S1)		75% Load 0.800				
Service Factor	1.15		100% Load 0.850				
Mounting	B3		Speed at Full Load	1185 r.p.m			
Bearing	Type	Anti-Friction	Torque				
	DE/N-DE	NU318 / 6316C3	Full Load 445.88 lb.ft				
	Lubricant	Grease(Polyrex-EM)	Locked-rotor** 140 %				
External Thrust	Not applicable		Breakdown** 220 %				
Coupling Method	☒ Direct ☐ V-belt		Moment of Inertia (J)				
Shaft Extension	Single		Load(Max.) 3,008.432 lb.ft2				
Terminal	Main	Cast Iron	Motor 73.410 lb.ft2				
Box	Aux.	No	Sound Pressure Level (No-load & mean value at 1m from motor)				
	Location	Refer to Outline Drawing	80 dB(A)				
Application			Vibration 3.8 mm/sec (peak)				
Area classification	Hazardous		Permissible number of Cold 3 times				
Type of Ex-Protection	Class I&II, Division 2		consecutive starts Hot 2 times				
Applicable Standard	NEMA MG1, CSA C390		Paint	Munsell No.	4.0PB5.4/5.5(VL-451)		
ACCESSORIES			SUBMITTAL DRAWING				
			Outline Dimension Drawing \ Motor Weight(Approx.)				
			B3		LM-T1444B3PL001	1530 lb.	
SPARE PARTS			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.

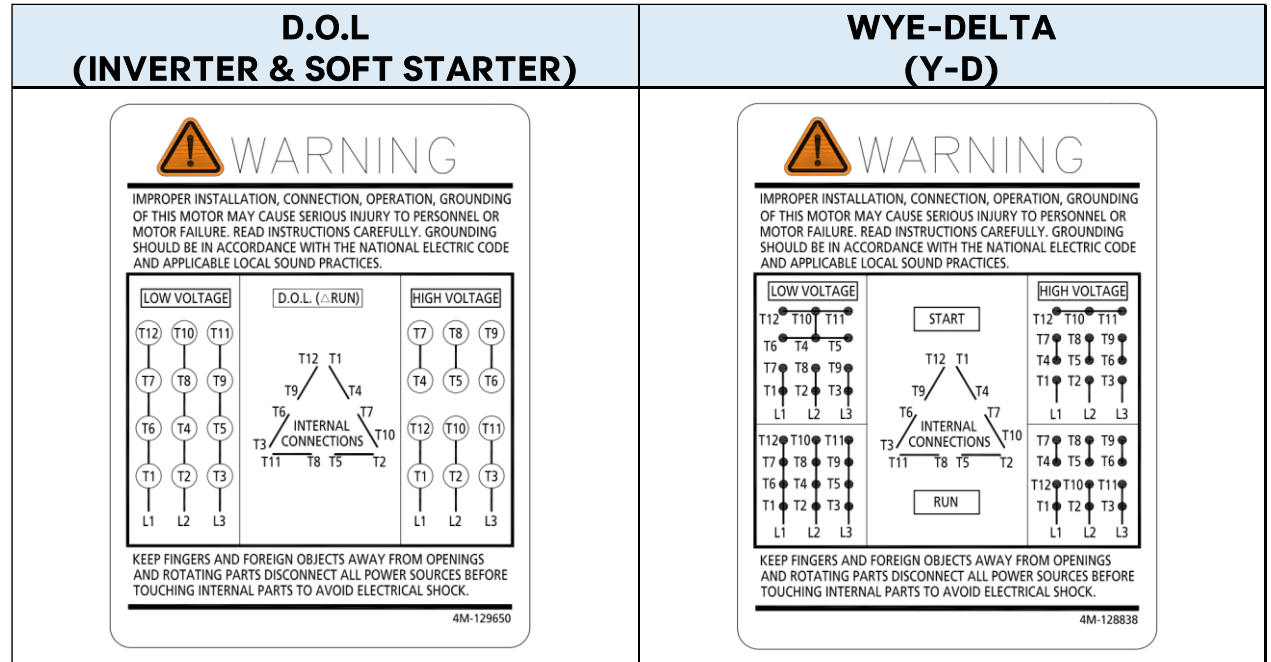
MAIN NAMEPLATE

4.72

2.36

CROWN TRITON												
Premium Efficiency AC 3 Phase Motor		C Energy Verified		US		CC038A						
100HP	6P	230/460V	Cat. No.		HHI100-12-444T							
Model	HLS444SR06U3		INS. Class	F		HD-F1	Amps	233.1/116.6A				
Type	HLS		Duty	CONT		Code	H	Amb.	40°C		Hertz	60Hz
Frame	444T		Encl.	TEFC		S.F.	1.15	RPM	1185		NEMA Nom. Eff.	95.0%
Bearing	Drive	NU318		S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)				3/4 Eff.	94.0%			
	Opp.	6316C3						NEMA Design	B Torque			
Usable at	50Hz 100HP 380V 141.8A 982rpm S.F.: 1.0 Eff.: 93.8% Code: F											
	50Hz 100HP 400/415V 135.2/131.3A 984/985rpm S.F.: 1.0 Eff.: 94.2/94.4% 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	1530 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	
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-135702 / 4M-129650	Sheet No. of	
				DWG NO	NP-HHI100-12-444T	Revision No. 0	

Type : PJP

75kW 100HP 6 P 60 Hz

Full Load Torque : 445.88 lb.ft

Speed at Full Load : 1185 RPM

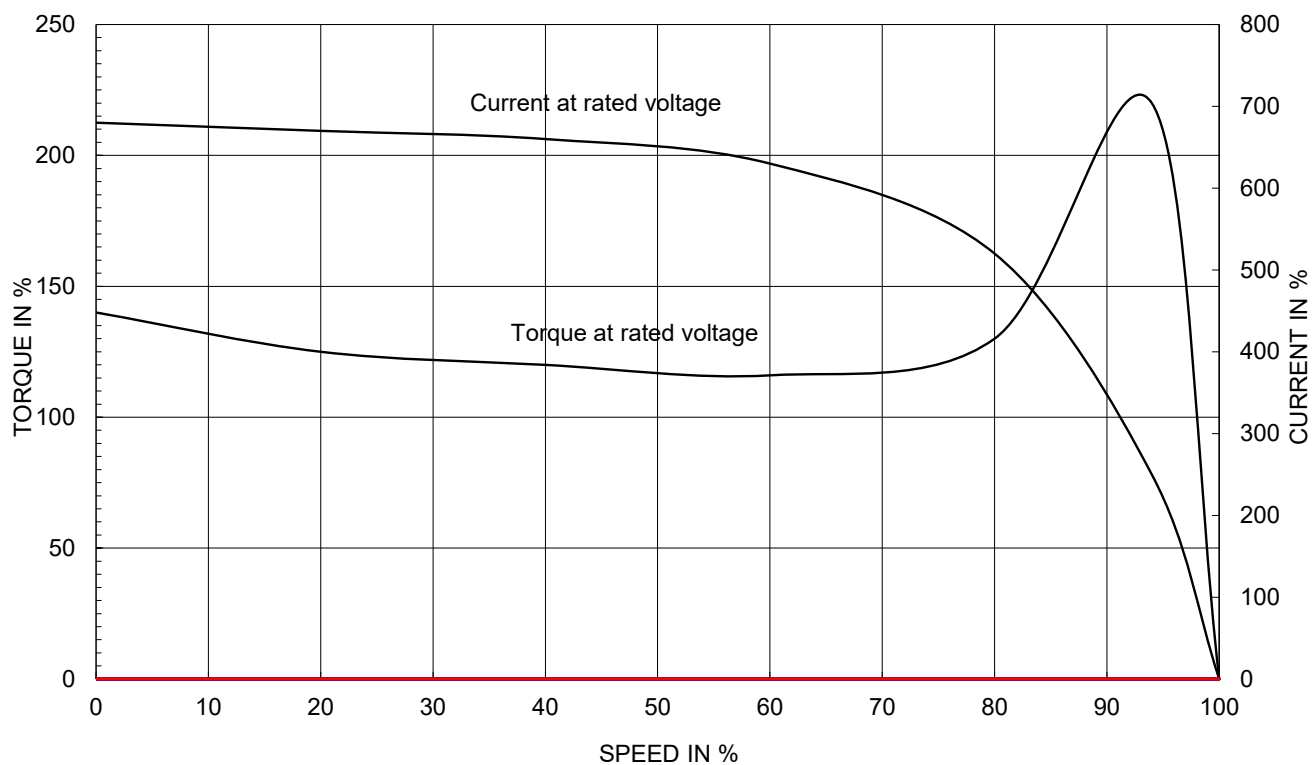
Load moment of Inertia (J) : 3008.432 lb.ft2

Rated Voltage	575V	460V	230V
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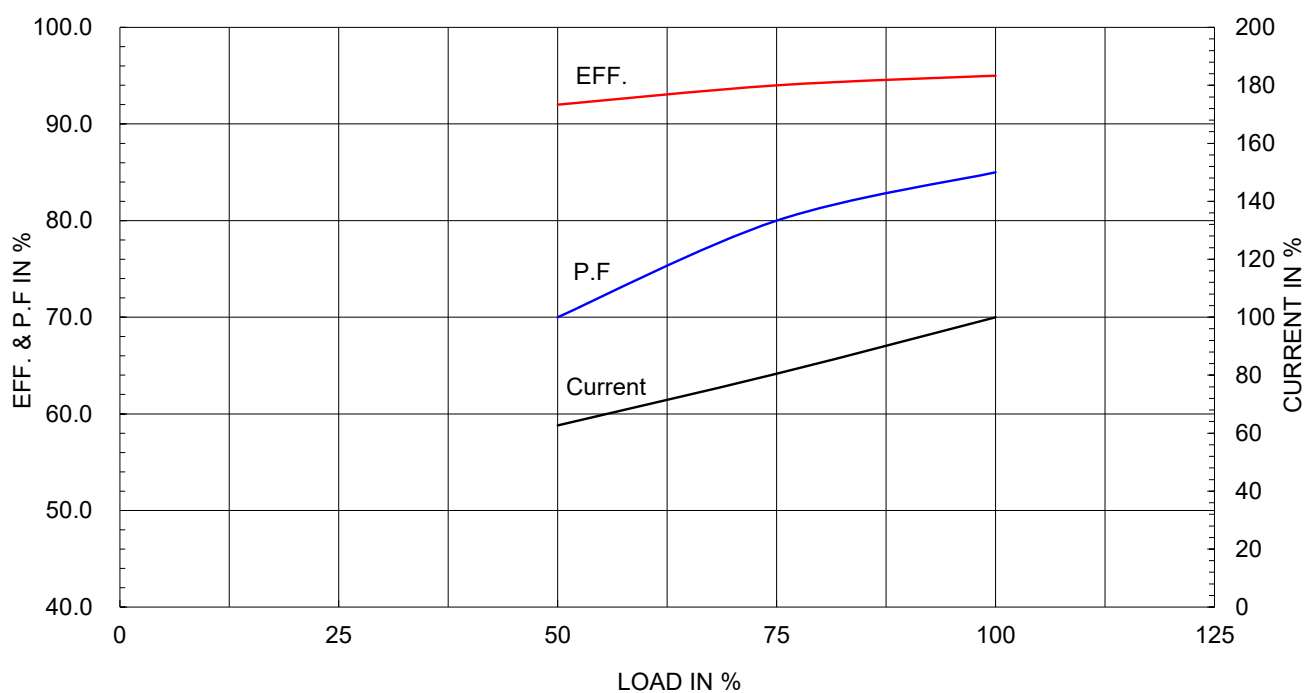
Motor moment of Inertia (J) : 73.410 lb.ft2

Full Load Current	93.3A	116.6A	233.1A
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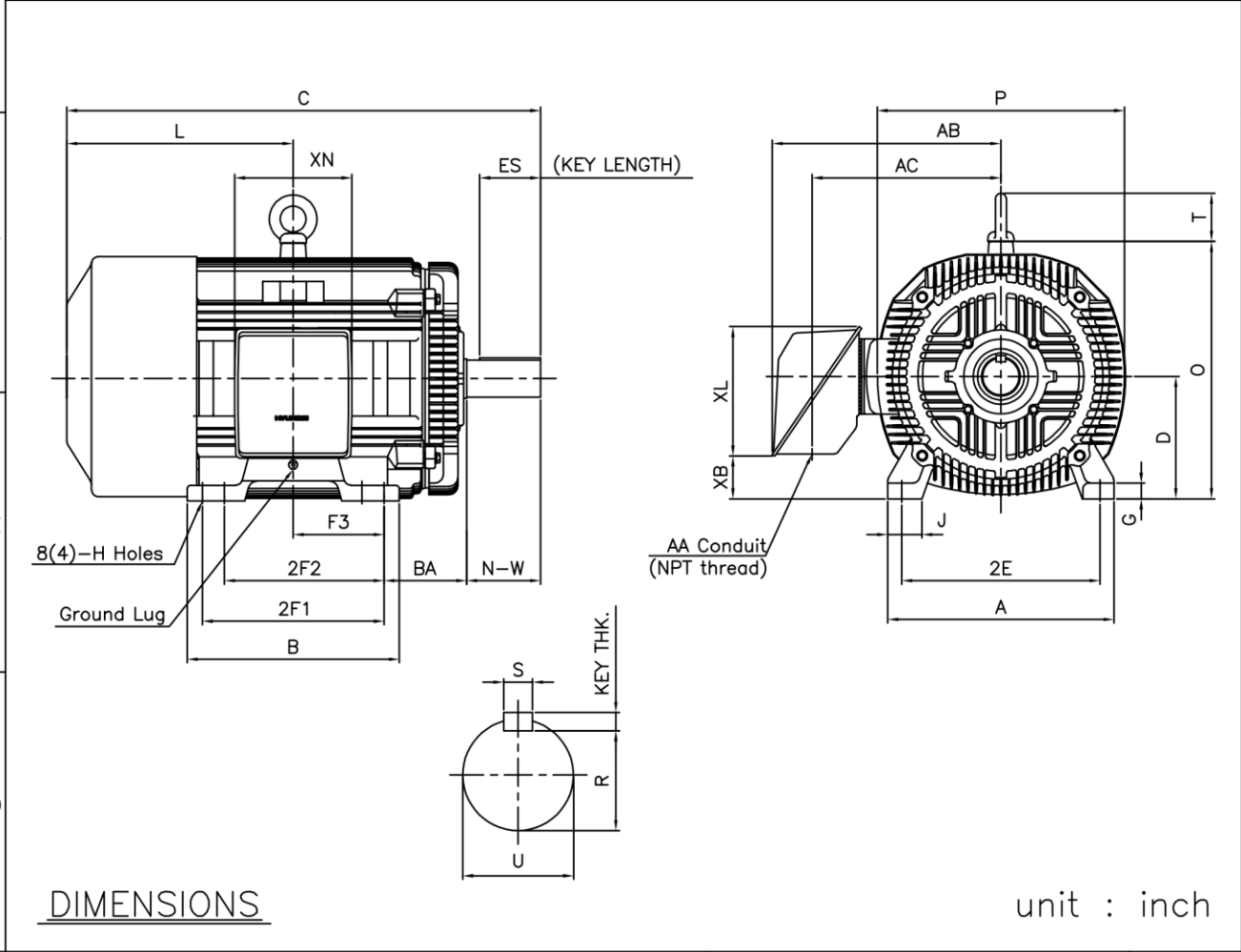
SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



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



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	19.21	18.00	(16.50)	14.50	8.248	1.42	3.07	0.81	3.00	21.26	18.03	3.83	11.65	10.63	1530

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			
7.50	45.21	11.00	20.96	23.19	22.40	4.33	3.375	8.50	2.880	6.93	0.875	0.875	6318C3 or NU318	6316C3

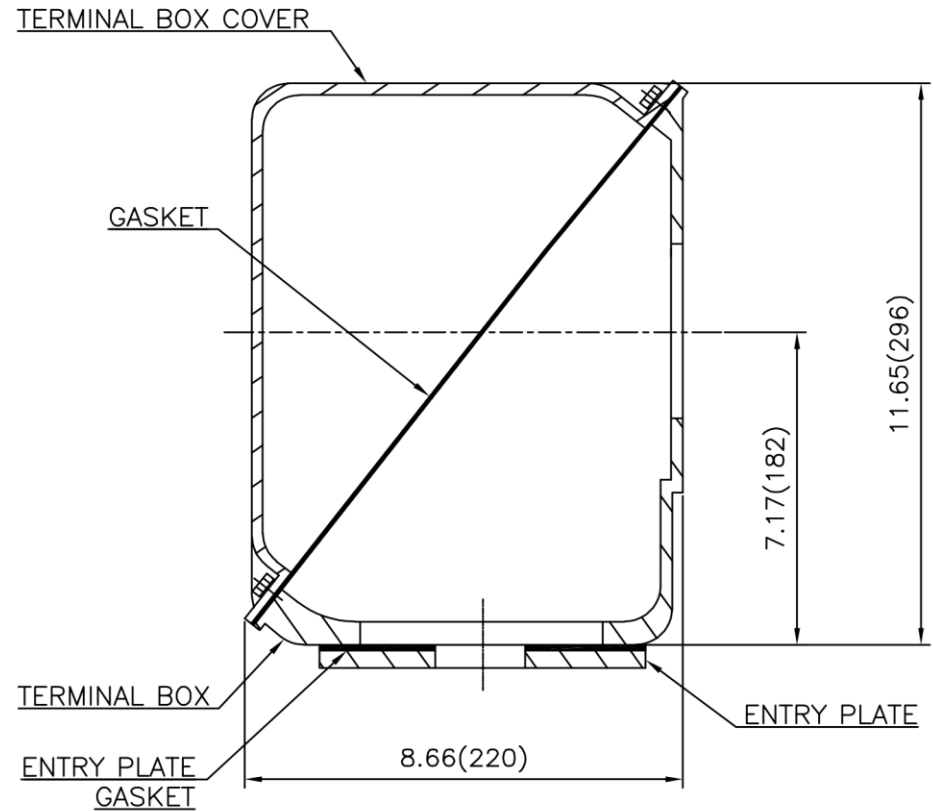
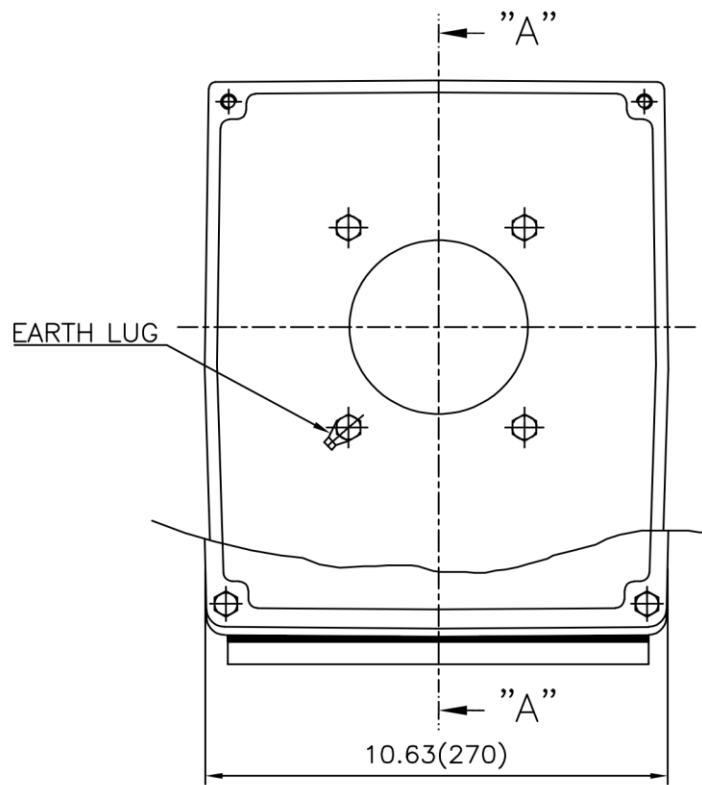
NOTE

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	444T	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	350A1117AA	Sheet No. of
				DWG NO	LM-T1444B3PL001	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

