

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.	HHI125-18-444T	Item No.		Rev. No.	[]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA			
Frame Size	444T	Rated Output	93 kW	125 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	111.2 A	139.0 A	278.1 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	50% Load	92.4 %		
Motor Location	☐ Indoor ☐ Outdoor		75% Load	94.4 %		
Altitude	Less than 1,000 meter		100% Load	95.4 %		
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	B3	Speed at Full Load	1785 r.p.m			
Bearing	Type	Anti-Friction	Torque			
	DE/N-DE	NU318 / 6316C3	Full Load	367.05 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.)	1,507.479 lb.ft2			
Terminal	Main	Motor	52.510 lb.ft2			
Box	Aux.	No	Sound Pressure Level (No-load & mean value at 1m from motor)			
	Location	Refer to Outline Drawing	85 dB(A)			
Application		Vibration	3.8 mm/sec (peak)			
Area classification	Hazardous	Permissible number of consecutive starts	Cold 3 times			
Type of Ex-Protection	Class I&II, Division 2		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.

	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				
SPARE PARTS					
	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.

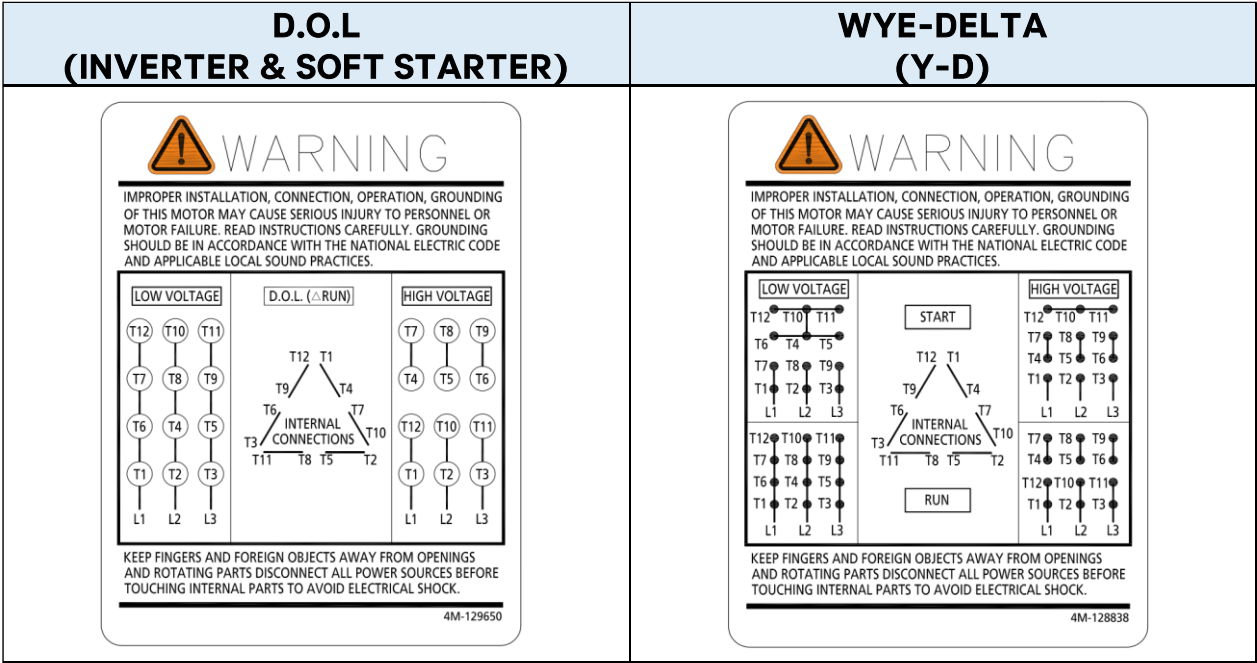
** Data is based on rated voltage & frequency and is expressed as a percentage of full-load value.

MAIN NAMEPLATE

4.72

CROWN TRITON													
Premium Efficiency AC 3 Phase Motor		C Energy Verified		US		CC038A							
125HP	4P	230/460V	Cat. No.		HHI125-18-444T								
Model	HLS444SR04U3		INS. Class	F		HD-F1	Amps	278.1/139.0A					
Type	HLS		Duty	CONT		Code	G	Amb.	40°C		Hertz	60Hz	
Frame	444T		Encl.	TEFC		S.F.	1.15	RPM	1785		NEMA Nom. Eff.	95.4%	
Bearing	Drive	NU318		S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)				3/4 Eff.	94.4%				
	Opp.	6316C3						NEMA Design	B				
Usable at	50Hz 125HP 380V 168.6A 1480rpm S.F.: 1.0 Eff.: 94.7% Code: E												
	50Hz 125HP 400/415V 160.9/156.6A 1482/1484rpm S.F.: 1.0 Eff.: 95.0/95.2% 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 II, Div. 2 Gr. E, F & G (Gr. E: Up to 320FR)				Amb. 40°C	T3C (160°C)	T3B (165°C)	T3A (180°C)		T3 (200°C)		
No.	-		Date	-		Weight		1530 lb					
4M-135702		MARINE DUTY IEEE45		Made in Korea H1									

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-HHI125-18-444T	Revision No. 0	

Type : PJP

93kW 125HP

4 P

60 Hz

Full Load Torque : 367.05 lb.ft

Speed at Full Load : 1785 RPM

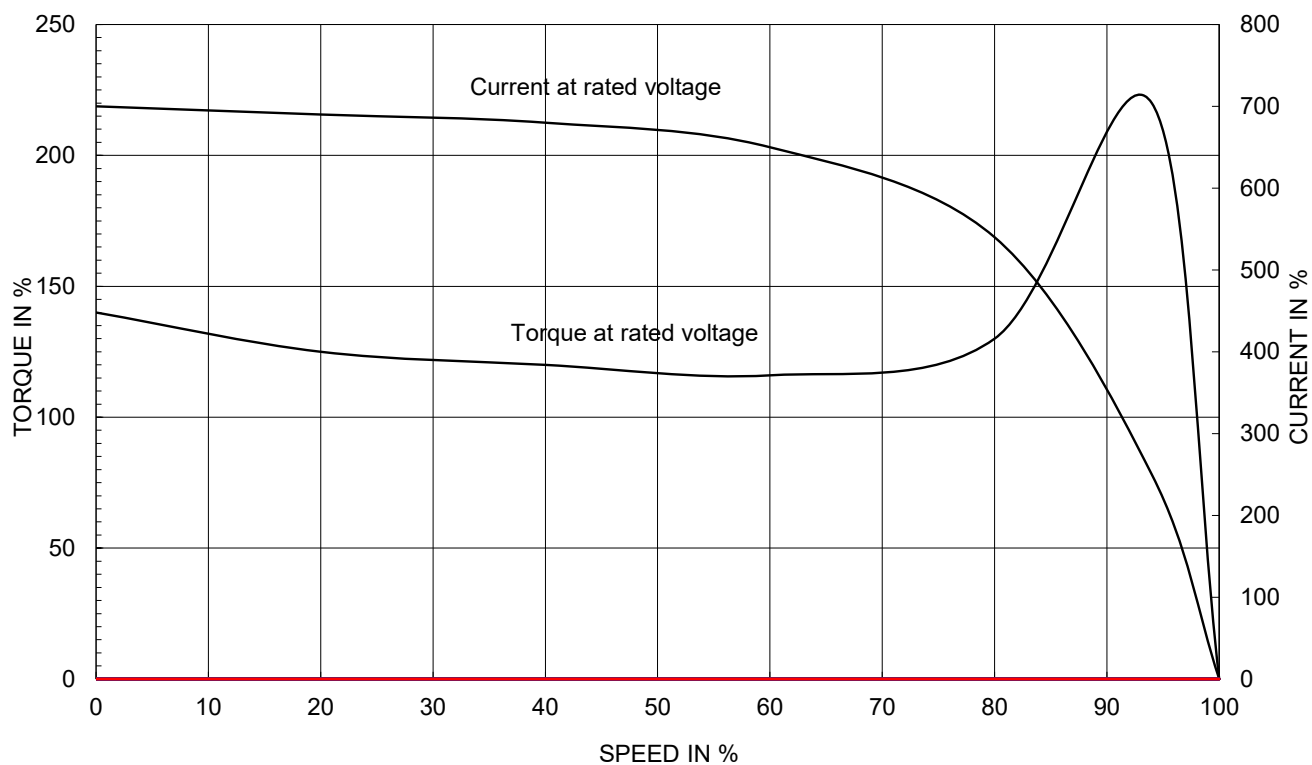
Load moment of Inertia (J) : 1507.479 lb.ft2

Rated Voltage	575V	460V	230V
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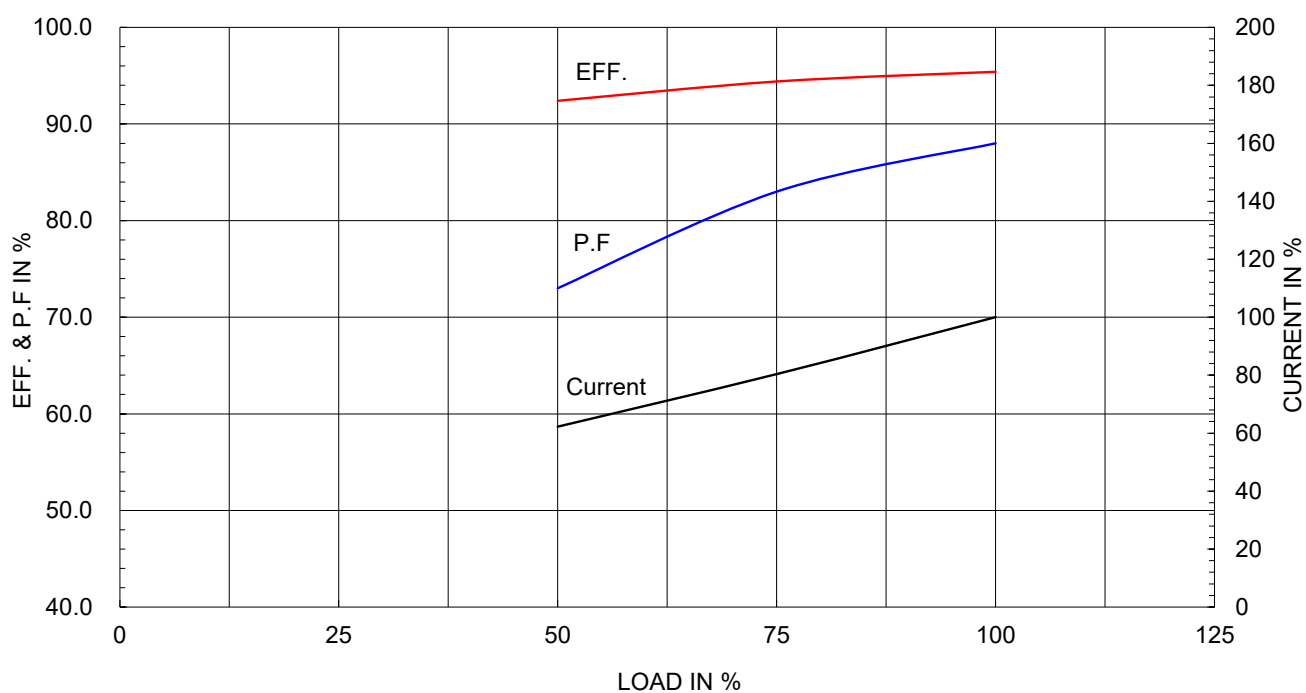
Motor moment of Inertia (J) : 52.510 lb.ft2

Full Load Current	111.2A	139.0A	278.1A
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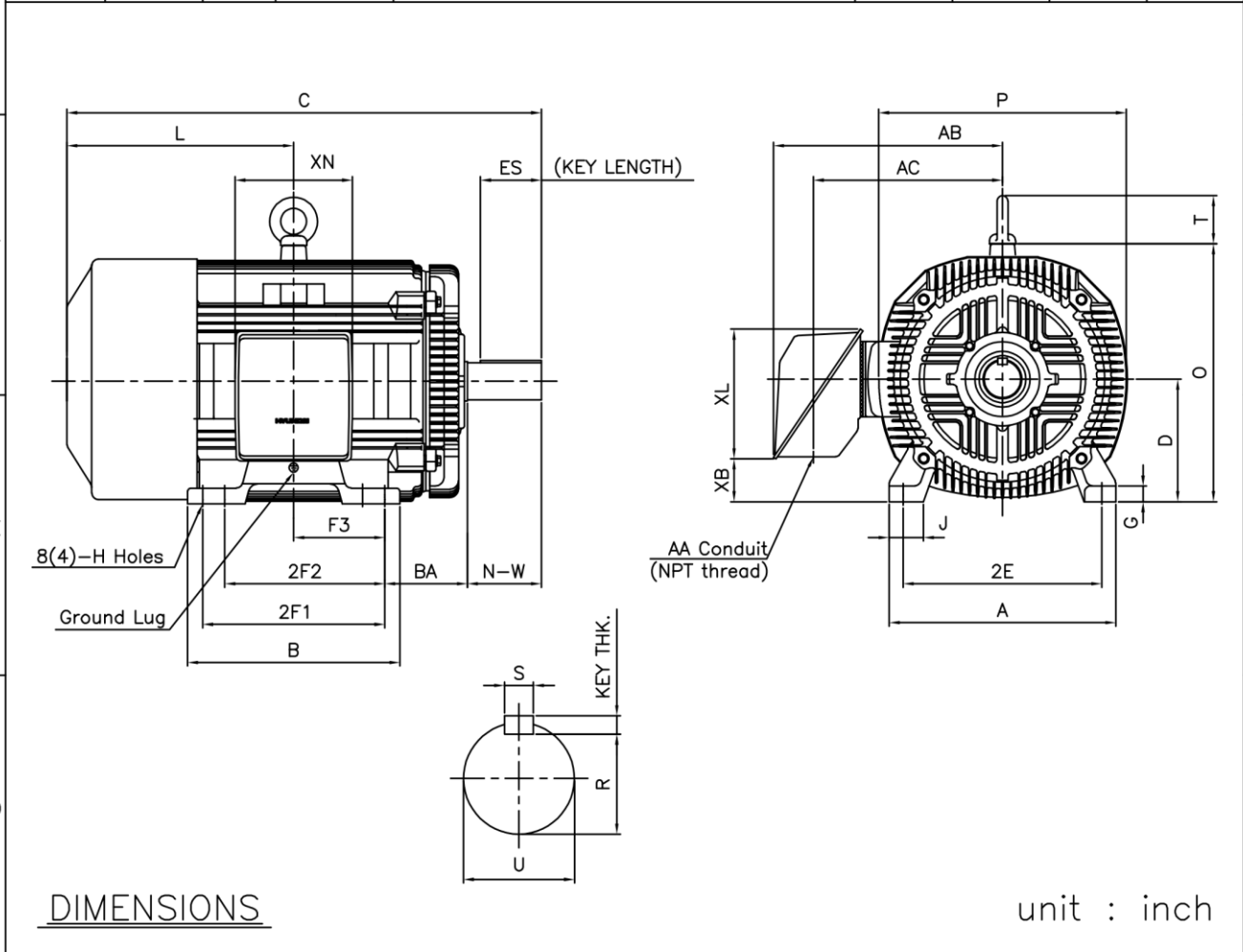
SPEED VS TORQUE & CURRENT CURVE



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

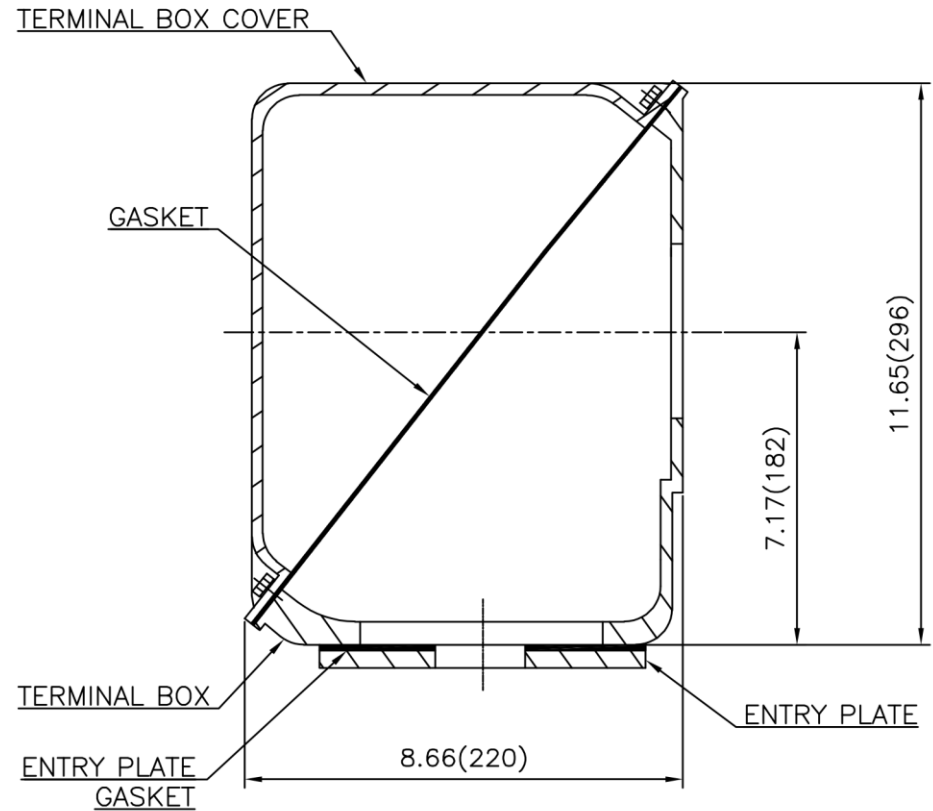
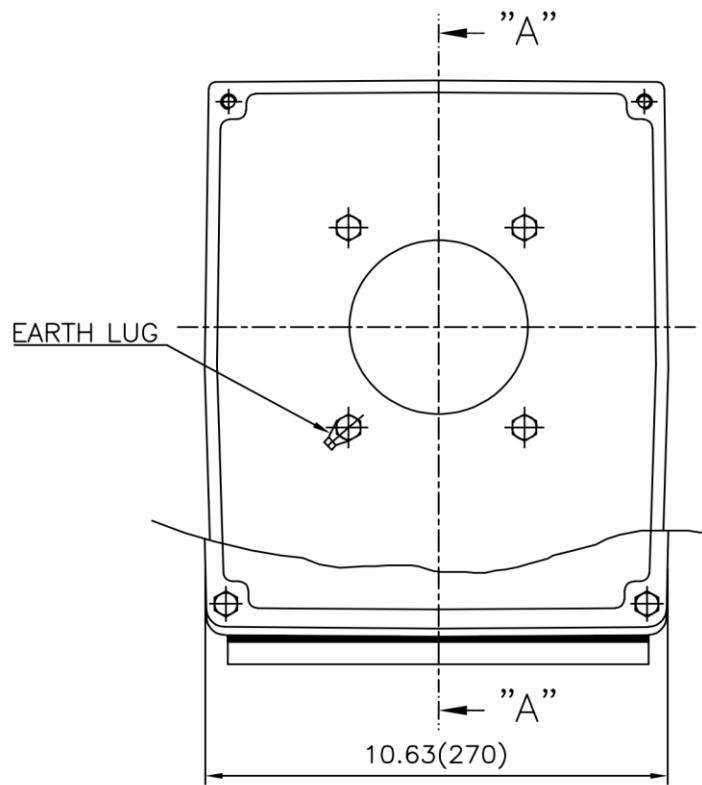
NOTE

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.
APP'D BY	S.Y.KIM	UNIT	inch(mm)	SUBJECT	FR. 400-440 (CAST IRON)	DWG SIZE	
CHK'D BY		SCALE	1/1.2	TITLE	MAIN TERMINAL BOX ASS'Y		
CHK'D 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

