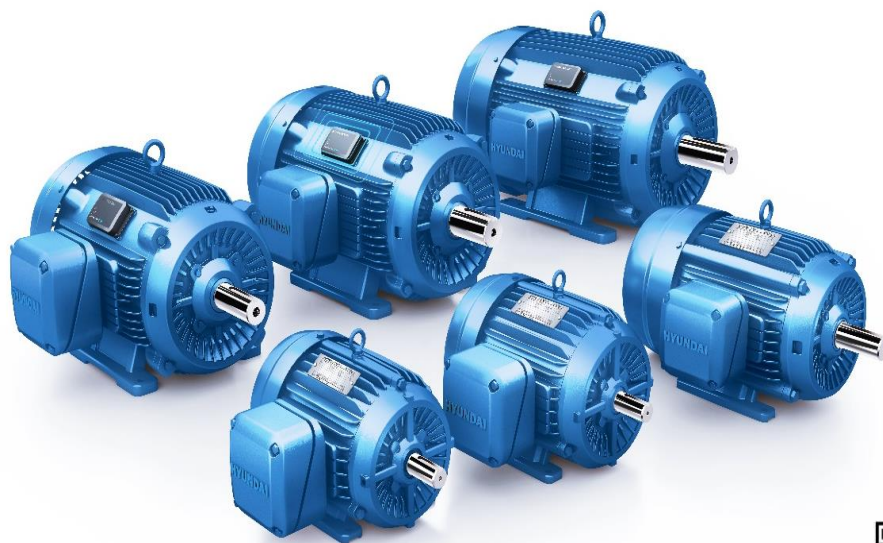


Customer :
Project Name :
Project No. :
Revision No. :

SPECIFICATION for INDUCTION MOTOR



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

AC INDUCTION MOTOR DATA SHEET

Catalog No.	HHI150-18-445T	Item No.				Rev. No.	[]		
Project Name		Project No.				Quantity	sets		
GENERAL SPECIFICATION					PERFORMANCE DATA				
Frame Size	445T		Rated Output	110 kW		150 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	131.0 A	163.8 A	327.5 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		0.730				
Service Factor	1.15		75% Load		0.830				
Mounting	B3		100% Load		0.880				
Bearing	Type	Anti-Friction	Speed at Full Load		1785 r.p.m				
	DE/N-DE	NU318 / 6316C3	Torque						
	Lubricant	Grease(Polyrex-EM)	Full Load		434.14 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.)		1,855.724 lb.ft2				
Box	Aux.	No	Motor		67.430 lb.ft2				
	Location	Refer to Outline Drawing	Sound Pressure Level (No-load & mean value at 1m from motor)						
Application			85 dB(A)						
Area classification	Hazardous		Vibration		3.8 mm/sec (peak)				
Type of Ex-Protection	Class I&II, Division 2		Permissible number of consecutive starts		Cold		3 times		
Applicable Standard	NEMA MG1, CSA C390		Hot		2 times				
			Paint	Munsell No.	4.0PB5.4/5.5(VL-451)				
ACCESSORIES			SUBMITTAL DRAWING						
			Outline Dimension Drawing \ Motor Weight(Approx.)						
			B3	LM-T1445B3PL001	1640 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.

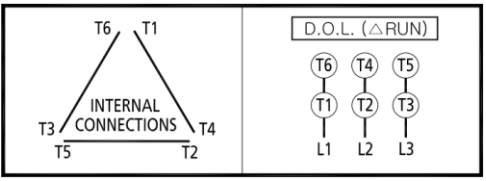
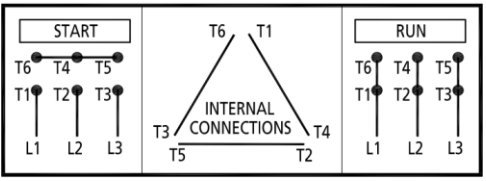
** Data is based on rated voltage & frequency and is expressed as a percentage of full-load value.

MAIN NAMEPLATE

4.72

CROWN TRITON													
Premium Efficiency AC 3 Phase Motor		C Energy Verified		US		CC038A							
150HP	4P	460V	Cat. No.		HHI150-18-445T								
Model	HLS445SR0408		INS. Class	F		HD-F1	Amps	163.8A					
Type	HLS		Duty	CONT		Code	G	Amb.	40°C		Hertz	60Hz	
Frame	445T		Encl.	TEFC		S.F.	1.15	RPM	1785		NEMA Nom. Eff.	95.8%	
Bearing	Drive	NU318		S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)				3/4 Eff.	94.8%				
	Opp.	6316C3						NEMA Design	B				
Usable at	50Hz 150HP 380V 197.9A 1480rpm S.F.: 1.0 Eff.: 95.2% Code: E												
	50Hz 150HP 400/415V 189.1/184.4A 1482/1484rpm S.F.: 1.0 Eff.: 95.5/95.6% 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		1640 lb					
4M-135702		MARINE DUTY IEEE45		Made in Korea H1									

WIRING DIAGRAM

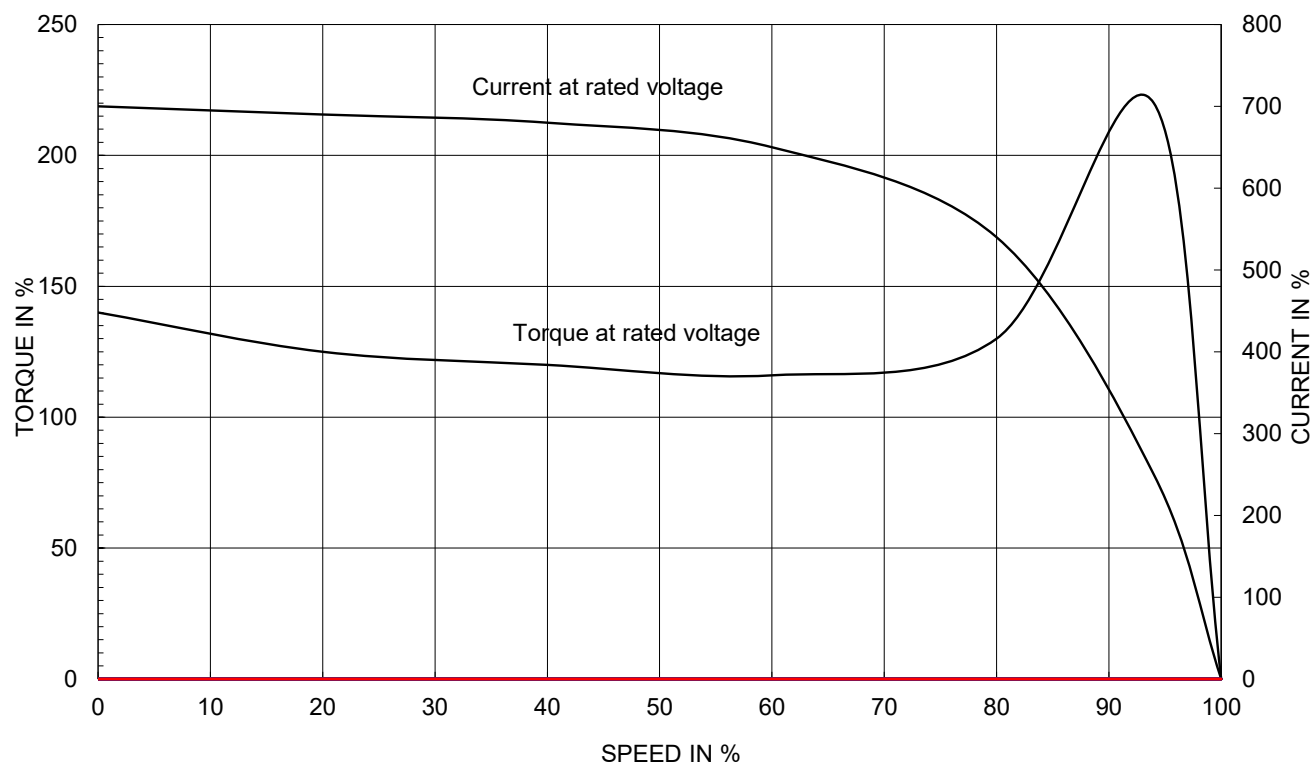
D.O.L (INVERTER & SOFT STARTER)	WYE-DELTA (Y-D)
 WARNING IMPROPER INSTALLATION, CONNECTION, OPERATION, GROUNDING OF THIS MOTOR MAY CAUSE SERIOUS INJURY TO PERSONNEL OR MOTOR FAILURE. READ INSTRUCTIONS CAREFULLY. GROUNDING SHOULD BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AND APPLICABLE LOCAL SOUND 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	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-129326	Sheet No.	of
				DWG NO	NP-HHI150-18-445T	Revision No.	0

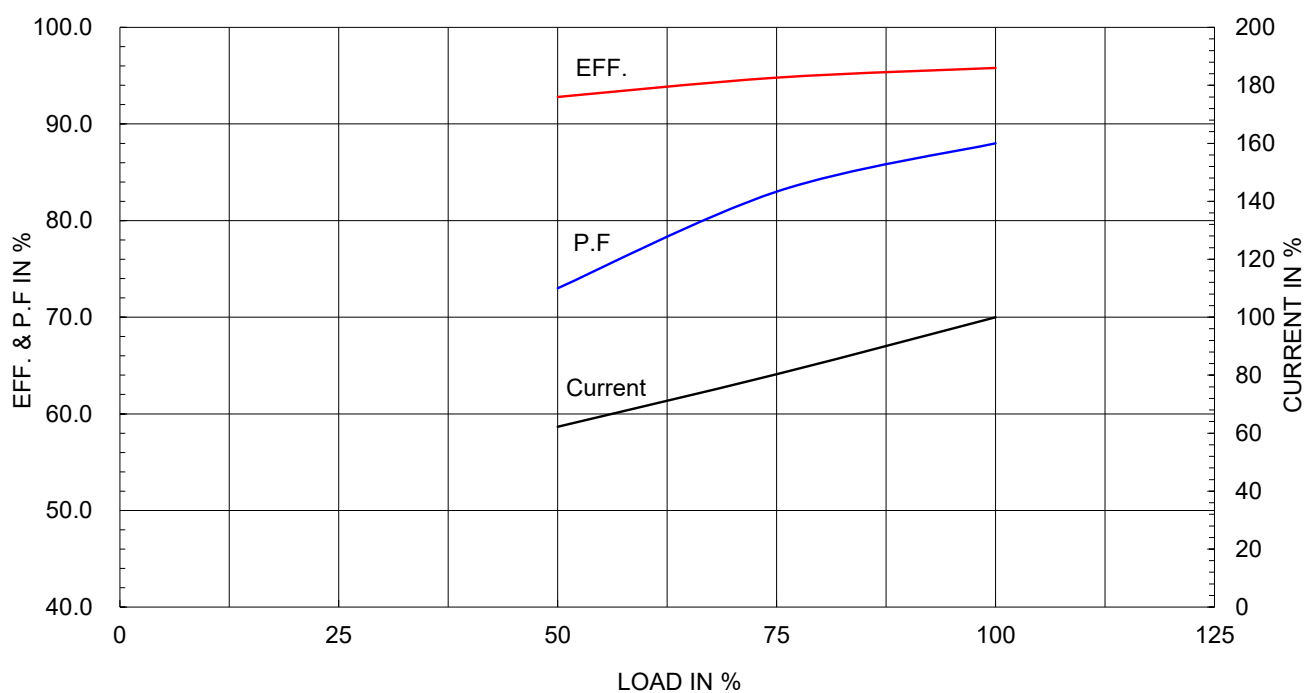
Type :	PJP	
Full Load Torque :	434.14	lb.ft
Load moment of Inertia (J) :	1855.724	lb.ft2
Motor moment of Inertia (J) :	67.430	lb.ft2

110kW	150HP	4 P	60 Hz
Speed at Full Load :			1785 RPM
Rated Voltage	575V	460V	230V
Full Load Current	131.0A	163.8A	327.5A

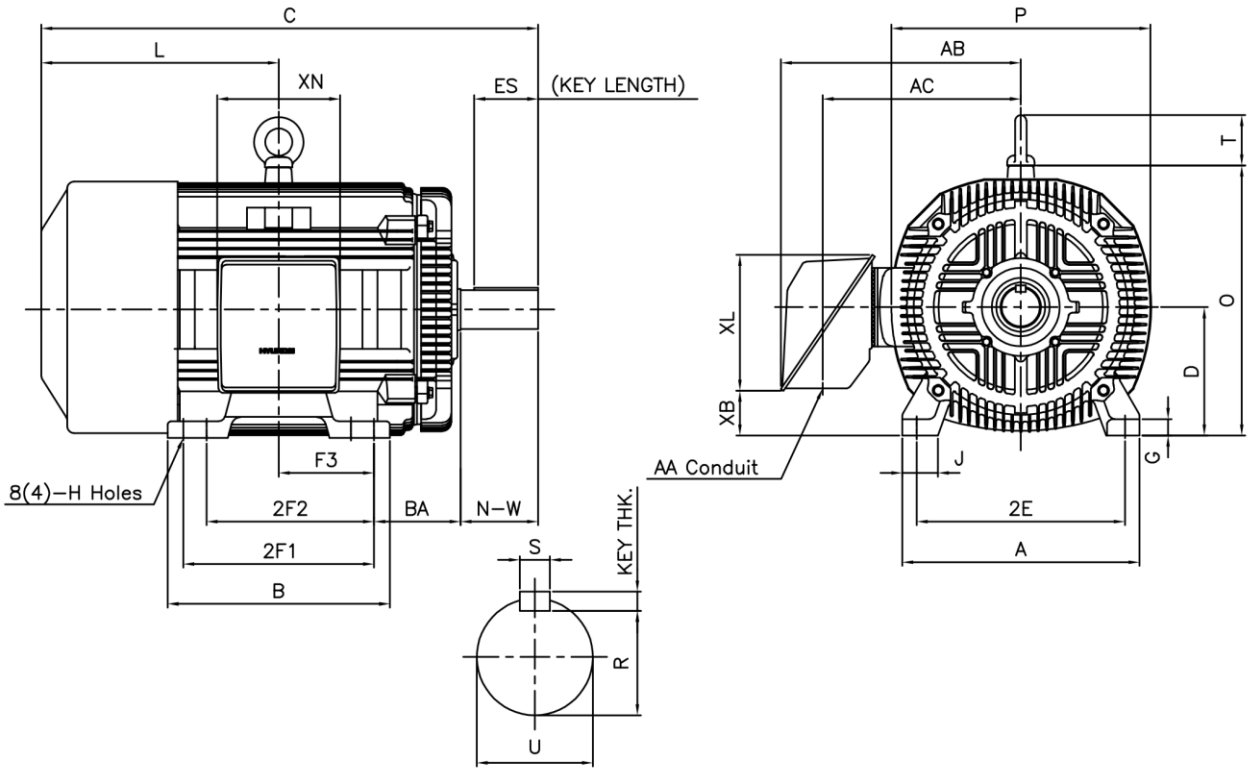
SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



1			2			3			4		
▽	50S	REV	DATE	CONTENTS			REVD BY	CHKD BY	CHKD BY	APPD BY	
▽▽	12.5S										
▽▽▽	3.2S										
▽▽▽▽	0.4S										



DIMENSIONS

unit : inch

M O U N T I N G									CONDUIT BOX						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	
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	

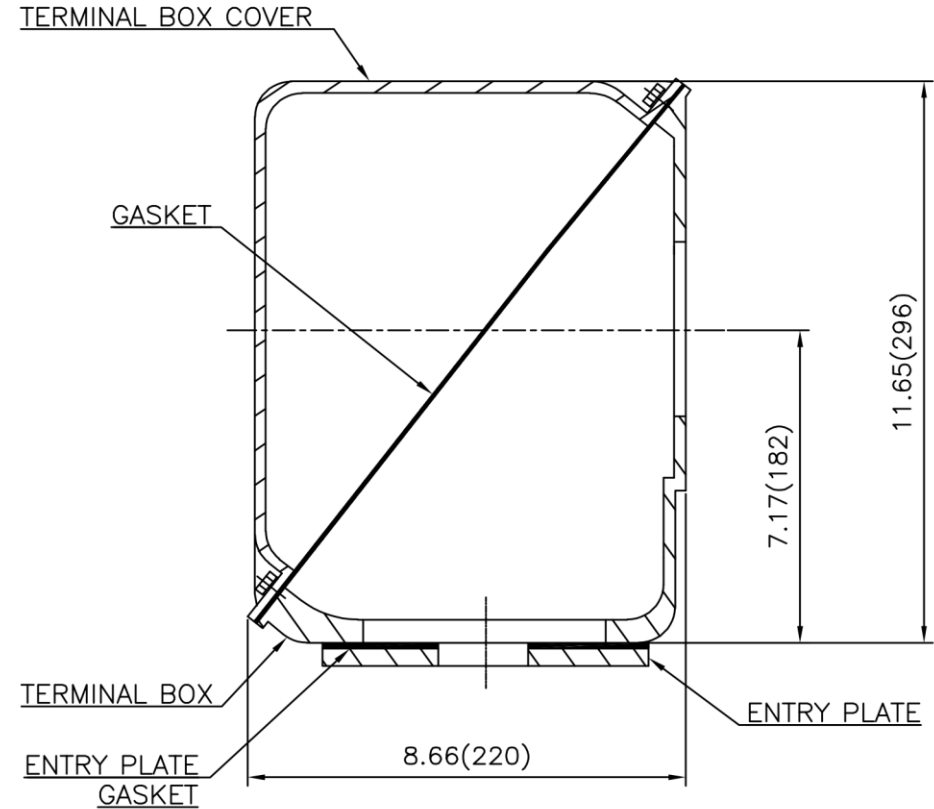
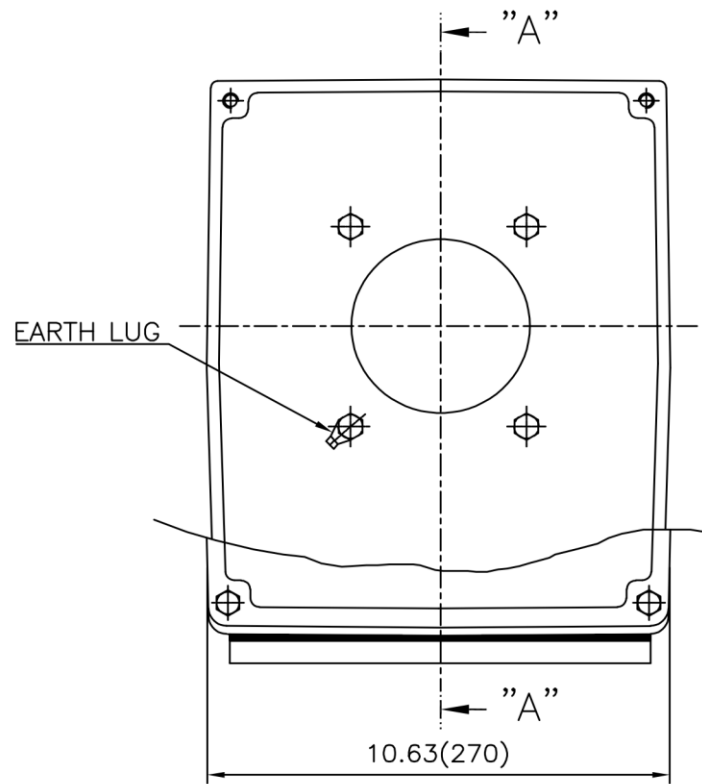
NOTE

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	445T	DWG SIZE	A4 (1:1)
Q.P CHK	I.K.KIM	SCALE	NONE	TITLE OUTLINE			
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle				
DSND BY	B.Y.KIM	DATE	2019.06.05				
				REF. NO	350A1118AA	Sheet No.	of
				DWG NO	LM-T1445B3PL001	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	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	

