

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

Explosion Proof type

Catalog No.	IXHHI200-36-447TS	Item No.	Rev. No.	[]
Project Name		Project No.	Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA			
Frame Size	447TS		Rated Output	150 kW 200 HP		
Type	XJP		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	175.4 A	219.3 A 438.5 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		50% Load		92.4 %	
Motor Location	<input type="checkbox"/> Indoor <input type="checkbox"/> 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		0.750	
Duty Type	Continuous (S1)		75% Load		0.850	
Service Factor	1.15		100% Load		0.900	
Mounting	B3		Speed at Full Load	3570 r.p.m		
Bearing	Type	Anti-Friction	Torque			
	DE/N-DE	6314C3 / 6314C3	Full Load		296.0 lb.ft	
	Lubricant	Grease(Polyrex-EM)	Locked-rotor**		120 %	
External Thrust	Not applicable		Breakdown**		220 %	
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt		Moment of Inertia (J)			
Shaft Extension	Single		Load(Max.)		341.126 lb.ft2	
Terminal Box	Main	Cast Iron	Motor		44.130 lb.ft2	
	Aux.	No	Sound Pressure Level (No-load & mean value at 1m from motor)			
	Location	Refer to Outline Drawing			92 dB(A)	
Application			Vibration		0.0 mm/sec (peak)	
Area classification	Hazardous		Permissible number of consecutive starts		Cold 0 times Hot 0 times	
Type of Ex-Protection	Class I, Division 1		Paint	Munsell No.	4.0PB5.4/5.5(VL-451)	

ACCESSORIES
*. W.T.D.(Thermostat, 145°C) : 1EA/Ph.

SUBMITTAL DRAWING		
Outline Dimension Drawing	Motor Weight(Approx.)	
B3	LM-U0447B3SL001	2690 lb.

SPARE PARTS

REMARK				
1. Premium efficiency according to NEMA MG1 2. Inverter Duty @ 1.0 Service Factor & Ambient max 45°C -. 4:1 CT (10:1 CT at 1hour Duty) -. 10:1 VT (20:1 VT at 50% load) -. CHP up to 1.5 times base speed, NEMA MG1 Part31 3. Temperature Code -. T3 at 40°C Ambient / T2D at 55°C Ambient -. T4 with Winding Temperature Detector @ 1.0 Service Factor				
Date	DSND	CHKD	CHKD	APPD
2024-07-14	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.


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REV	DATE	CONTENTS	REVD BY


4.72

CROWN TRITON
Premium Efficiency AC 3 Phase Motor

Explosion Proof









200HP	2P	460V	Cat. No.	IXHHI200-36-447TS	Amps	219.3	
Model	LATER		INS. Class	F HD-F1	Hertz	60Hz	
Type	XJP	Duty	CONT	Code	G	NEMA Nom. Eff.	95.4%
Frame	447TS	Encl.	TEFC	S.F.	1.15	on sine wave power	3/4 Eff. 94.4%
Bearing	Drive	6314C3	S.F.	1.00	on PWM or IGBT power	NEMA Design	B
	Opp.	6314C3	RPM	3570		Amb.	40°C
Usable at	50Hz 200HP 380V 267.2A 2962rpm S.F.: 1.0 Eff.: 95.1% Code: E						
	50Hz 200HP 400/415V 253/243.9A 2966/2969rpm S.F.: 1.0 Eff.: 95.3/95.4% Code: F/G						
UL Certified for	Class I, Div. 1, Group C&D / Class I, Zone 1, Group II A & II B				Temp. Code (sine wave)	T3 at 40°C Amb. / T2D at 55°C Amb.	
	10:1VT(20:1 at 50% load) 4:1CT(10:1 1hour duty at lowest RPM) CHP upto 1.5 time base speed, NEMA MGI part 31. Amb max 45°C for inverter duty.					T4 (S.F.:1.0) With Thermostat TH01 145°C TH02	
No.	-		Date	-		Weight	2689.640

4M-136016
(NEMA 445~449Fr.)

Made in Korea H1



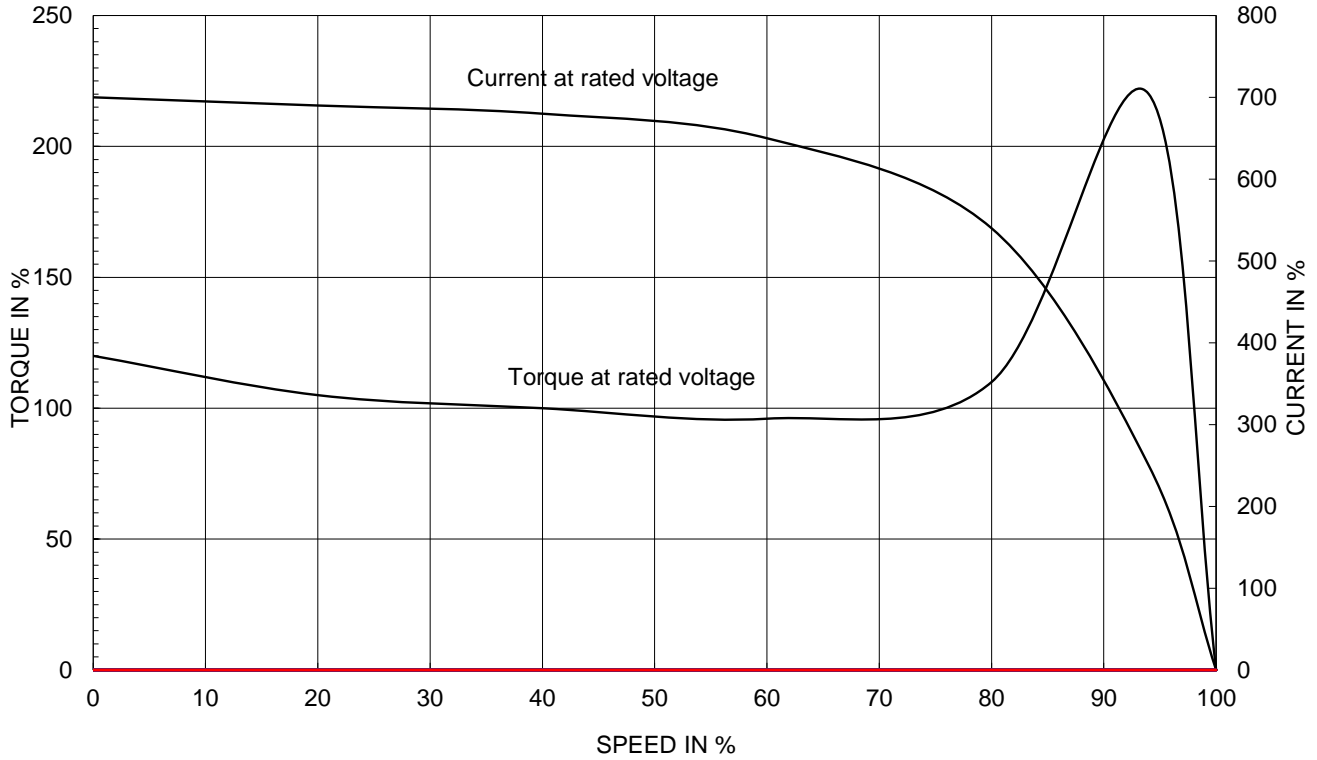
2.36

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	UL Class I, Division1 (IXHHI)	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-136016	Sheet No. of
				DWG NO	NP-IXHHI200-36-447TS	Revision No. 0

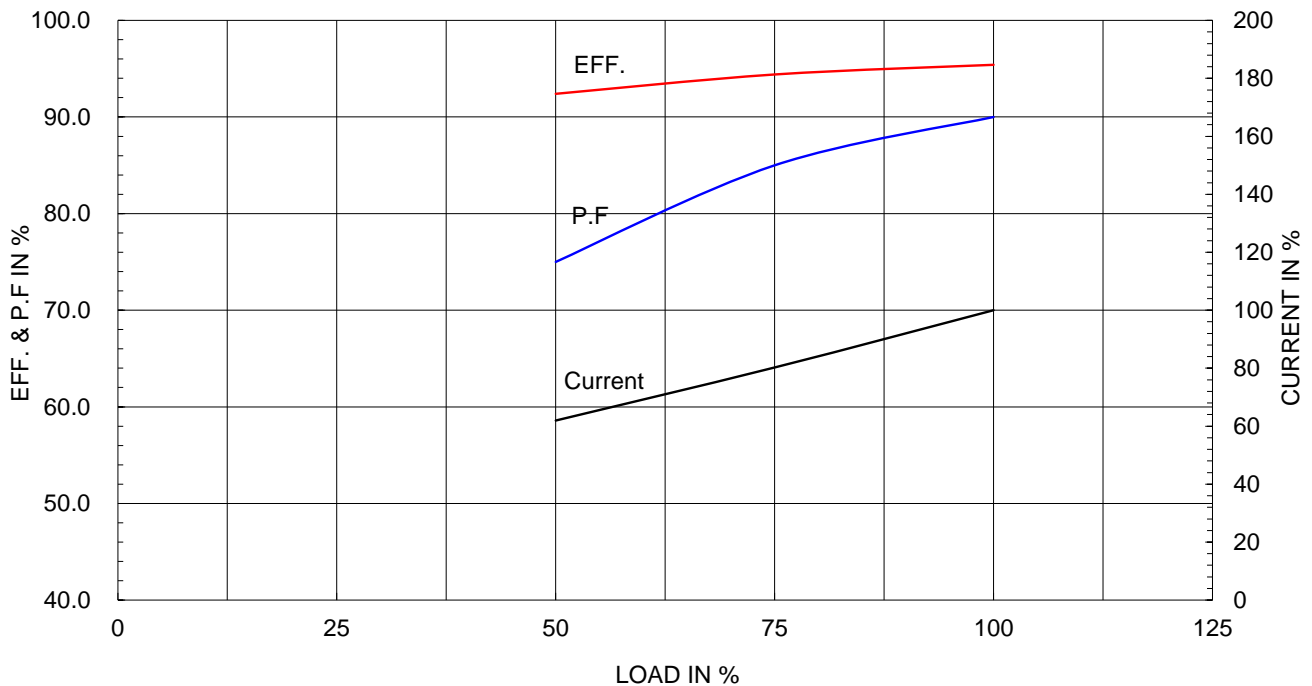
Type :	XJP
Full Load Torque :	296.0 lb.ft
Load moment of Inertia (J) :	341.126 lb.ft2
Motor moment of Inertia (J) :	44.130 lb.ft2

150kW	200HP	2 P	60 Hz
Speed at Full Load :			3570 RPM
Rated Voltage	575V	460V	230V
Full Load Current	175.4A	219.3A	438.5A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE

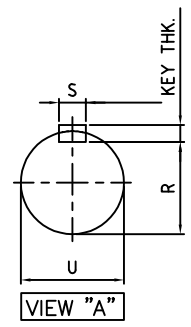
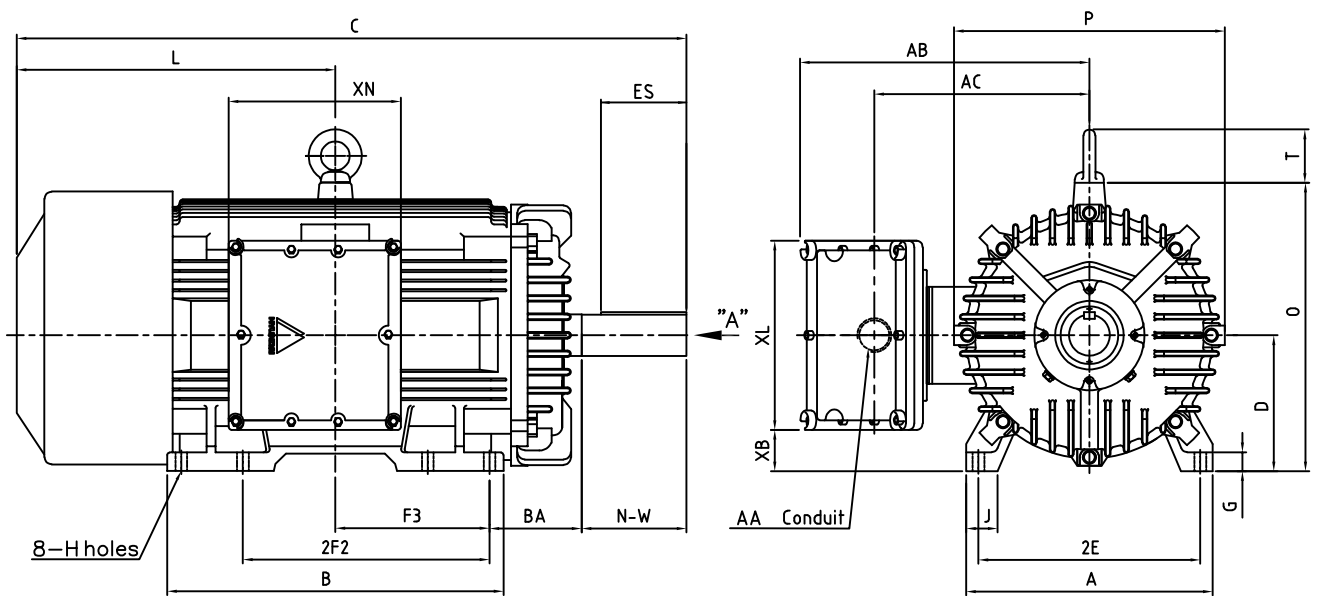


본 도면은 HD현대일렉트릭(주) 재산이며 허가없이 복사할 수 없음 (취급주의)

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

Class I Division 1



DIMENSIONS

MOUNTING									CONDUIT BOX						APPROX. WGT.(LB)
A	B	2E	2F1	2F2	F3	G	J	H	AA	AB	AC	XB	XL	XN	
20.00	27.28	18.00	-	20.00	12.50	1.53	2.56	0.81	3.00	24.01	18.30	3.34	15.35	13.97	

OVERALL							SHAFT					KEY	BEARING	
BA	C	D	L	O	P	T	U	N-W	KEYWAY			THK.	DRIVE END	OPP. DRIVE END
									R	ES	S			
7.50	50.57	11.00	25.84	23.38	21.97	4.33	2.375	4.75	2.021	3.03	0.625	0.625	6314C3	6314C3

NOTE

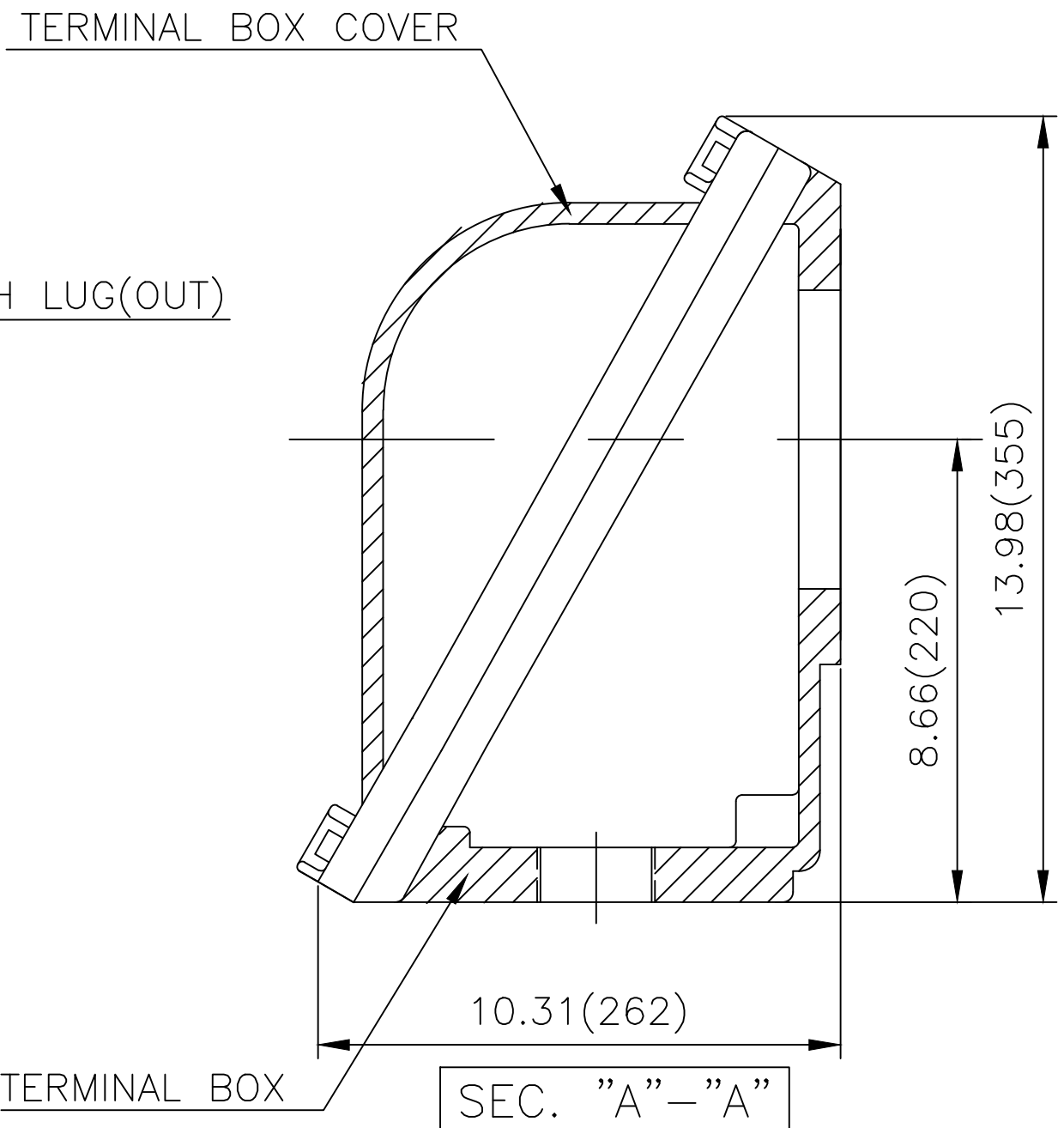
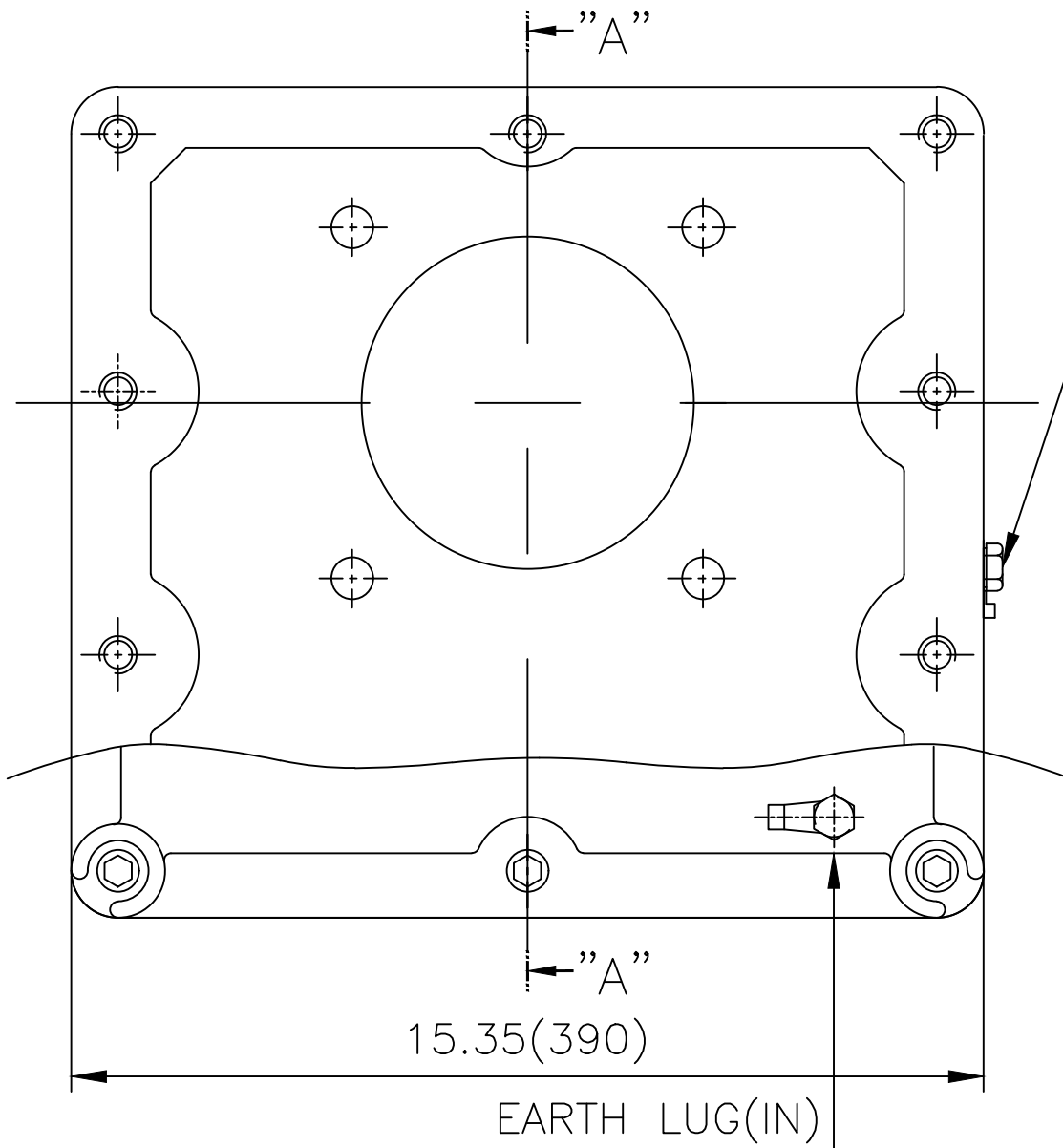
- Dimension "D" tolerance : +0.00inch - 0.03inch (143T-365T) ; +0.000inch - 0.06inch (404T-449T)
- Dimension "U" tolerance : +0.000inch - 0.005inch (143T-215T), +0.000inch - 0.001inch (254T-449T)
- Dimension "R" tolerance : +0.000inch - 0.015inch

APPD BY	S.Y.KIM	UNIT	inch	SUBJECT	447TS	DWG SIZE	A4 (1:16)
CHKD BY	R.G.KIM	SCALE	1/15	TITLE	OUTLINE		
CHKD BY		PROJEC'N	3rd Angle				
DSND BY	J.H.JEON	DATE	2021-04-19				



REF. NO		Sheet No.	of
DWG NO	LM-U0447B3SL001	Revision No.	0

Cls. I Div. 1



▽	50S
▽▽	12.5S
▽▽▽	3.2S
▽▽▽▽	0.4S

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

일반가공공차		일반제관공차	
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	NEMA FR. 400~440(CAST IRON)	DWG SIZE	A3 (1:3)
CHKD BY	R.G.KIM	SCALE	1/3	TITLE	MAIN TERMINAL BOX ASS'Y		
CHKD BY		PROJEC'N	3rd Angle	REF. NO		Sheet No.	of
DSND BY	김은진	DATE	2023-11-08	DWG NO	3M-248636	Revision No.	0

