

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.	IXHHI150-36-445TS	Item No.	Rev. No.	[]
Project Name		Project No.	Quantity	sets

GENERAL SPECIFICATION		PERFORMANCE DATA			
Frame Size	445TS	Rated Output	110 kW 150 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	129.2 A	161.5 A
Insulation Class	F		Locked-rotor**	700 %	700 %
Temp. Rise at full load (by resistance method)		Efficiency			
at 1.0 S.F	80 deg. C	50% Load		92.0 %	
Motor Location	<input type="checkbox"/> Indoor <input type="checkbox"/> 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		0.750	
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			
	DE/N-DE	6314C3 / 6314C3			
	Lubricant	Grease(Polyrex-EM)			
External Thrust	Not applicable				
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt	Torque			
Shaft Extension	Single	Full Load		217.1 lb.ft	
Terminal Box	Main	Locked-rotor**		120 %	
	Aux.	Breakdown**		220 %	
Box Location	Refer to Outline Drawing	Moment of Inertia (J)			
Application		Load(Max.)		293.072 lb.ft2	
Area classification	Hazardous	Motor		33.660 lb.ft2	
Type of Ex-Protection	Class I, Division 1	Sound Pressure Level (No-load & mean value at 1m from motor)			
Applicable Standard	NEMA MG1, CSA C390, UL674	92 dB(A)			
ACCESSORIES *. W.T.D.(Thermostat, 145°C) : 1EA/Ph.		SUBMITTAL DRAWING			
		Outline Dimension Drawing		Motor Weight(Approx.)	
		B3	LM-U0445B3SL001	2249 lb.	
		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			
SPARE PARTS		Date	DSND	CHKD	CHKD
		2024-07-14	S.H. Lee	I.K. Kim	R.G. Kim
				APPD	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.


1	2	3	4
REV	DATE	CONTENTS	REVD BY


4.72

CROWN TRITON
Premium Efficiency AC 3 Phase Motor

Explosion Proof








150HP	2P	460V	Cat. No.	IXHHI150-36-445TS	Amps	161.5		
Model	LATER		INS. Class	F HD-F1	Hertz	60Hz		
Type	XJP	Duty	CONT	Code	G	NEMA Nom. Eff.	95%	
Frame	445TS	Encl.	TEFC	S.F.	1.15	on sine wave power	3/4 Eff. 94%	
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 150HP 380V 196.5A 2962rpm S.F.: 1.0 Eff.: 94.7% Code: E							
	50Hz 150HP 400/415V 186.5/179.8A 2966/2969rpm S.F.: 1.0 Eff.: 94.9/95% Code: F/G							
UL Certified for	Class I, Div. 1, Group C&D / Class I, Zone 1, Group II A & II B				Temp. Code	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)				(sine wave)	T4 (S.F.:1.0) With Thermostat TH01 145°C TH02		
No.	-		Date	-		Weight	2248.715	

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-IXHHI150-36-445TS	Revision No.	0



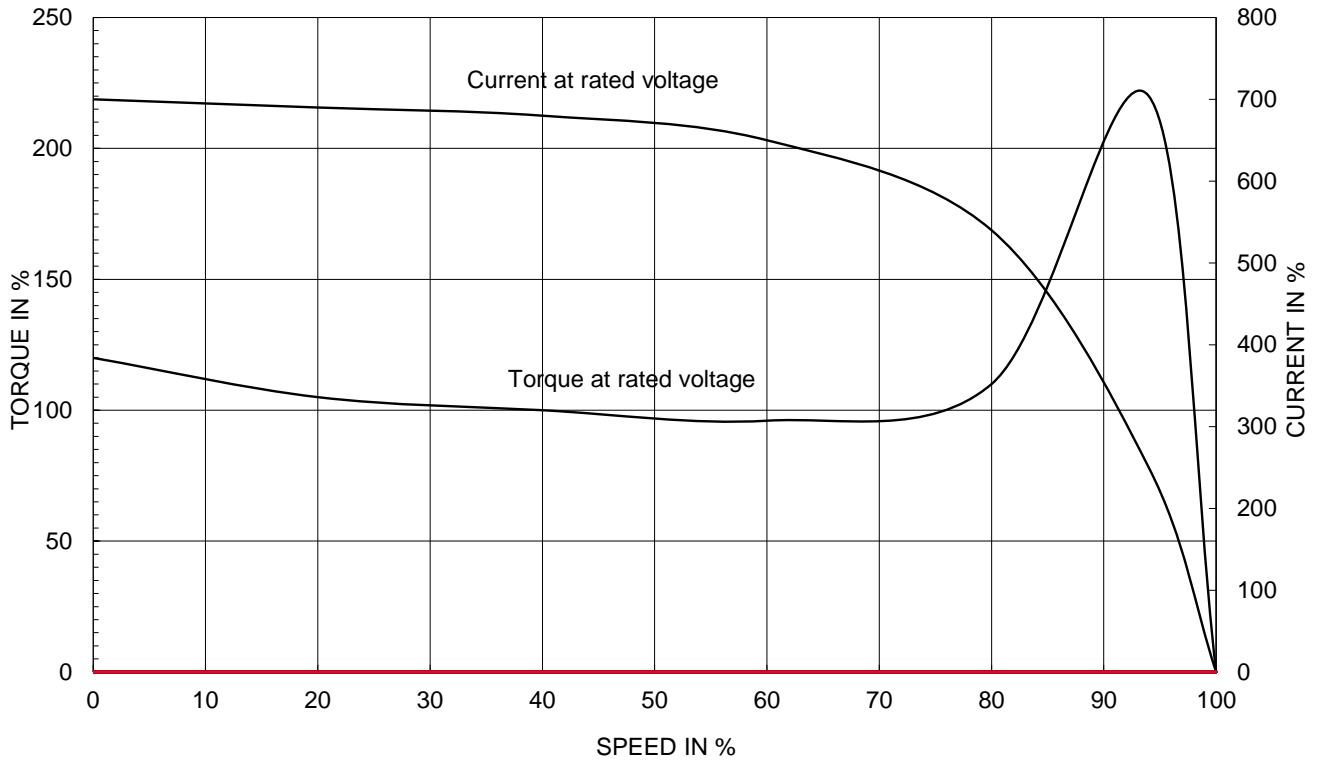
PERFORMANCE CURVE

CURVE NO.
PC-IXHHI150-36-445TS

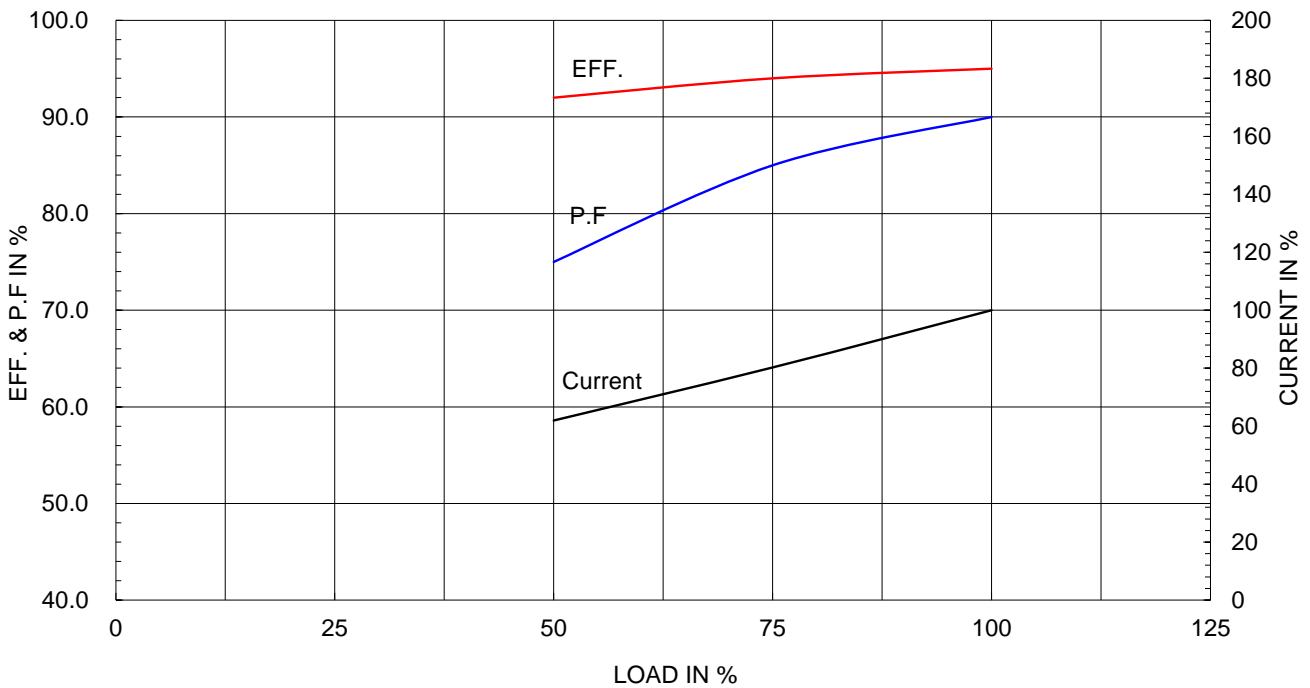
Type :	XJP
Full Load Torque :	217.1 lb.ft
Load moment of Inertia (J) :	293.072 lb.ft2
Motor moment of Inertia (J) :	33.660 lb.ft2

110kW 150HP	2 P	60 Hz
Speed at Full Load :		3570 RPM
Rated Voltage	575V	460V 230V
Full Load Current	129.2A	161.5A 323.0A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE

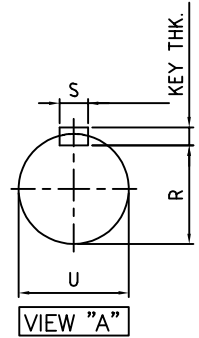
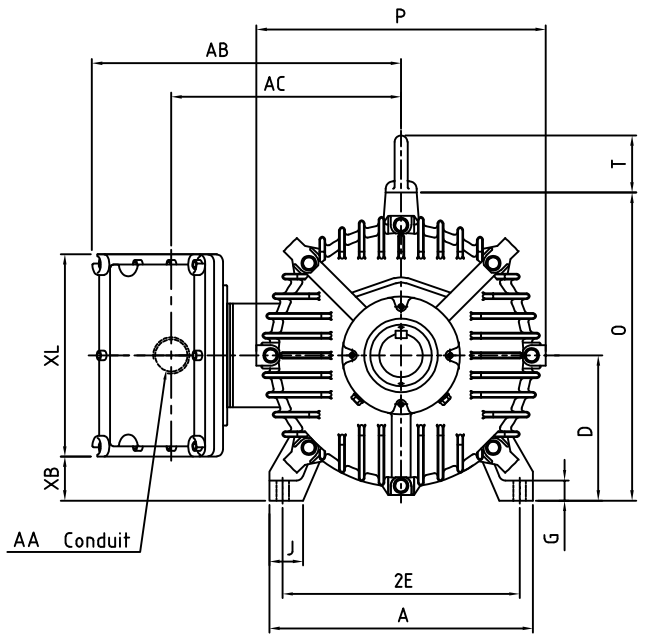
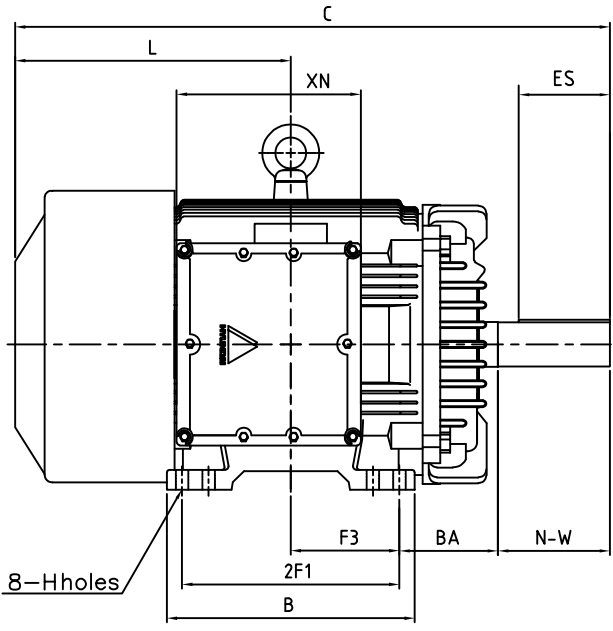


본 도면은 HD현대일렉트릭(주) 재산이며 허가없이 복사할 수 없음 (취급주의)

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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	18.81	18.00	16.50	-	8.248	1.53	2.56	0.81	3.00	24.01	18.30	3.34	15.35	13.97	2P: 2249 or 4P: 2293 or 6P: 2293

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	41.40	11.00	20.92	23.38	21.97	4.33	2.375	4.75	2.021	3.03	0.625	0.625	6314C3	6314C3

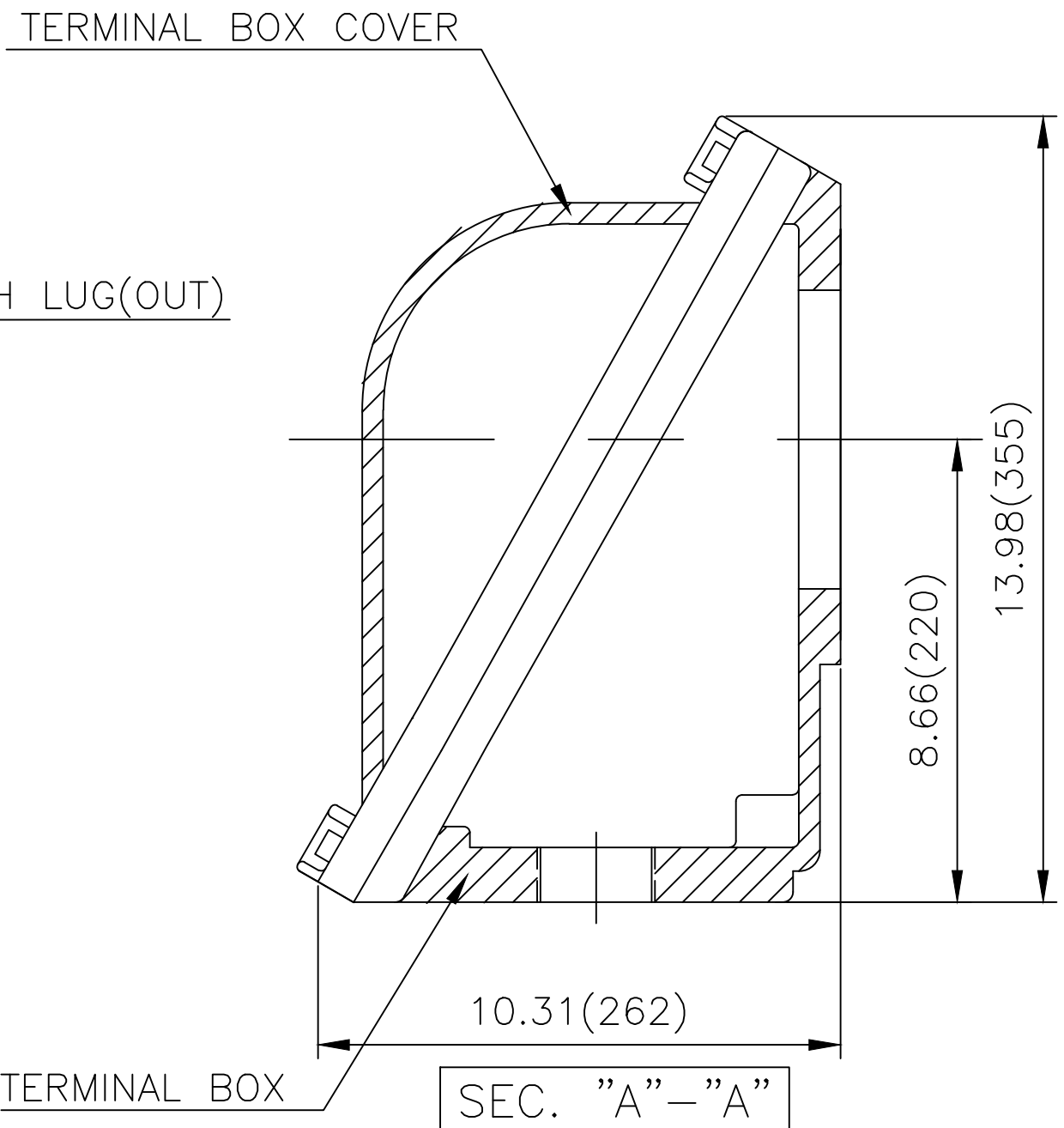
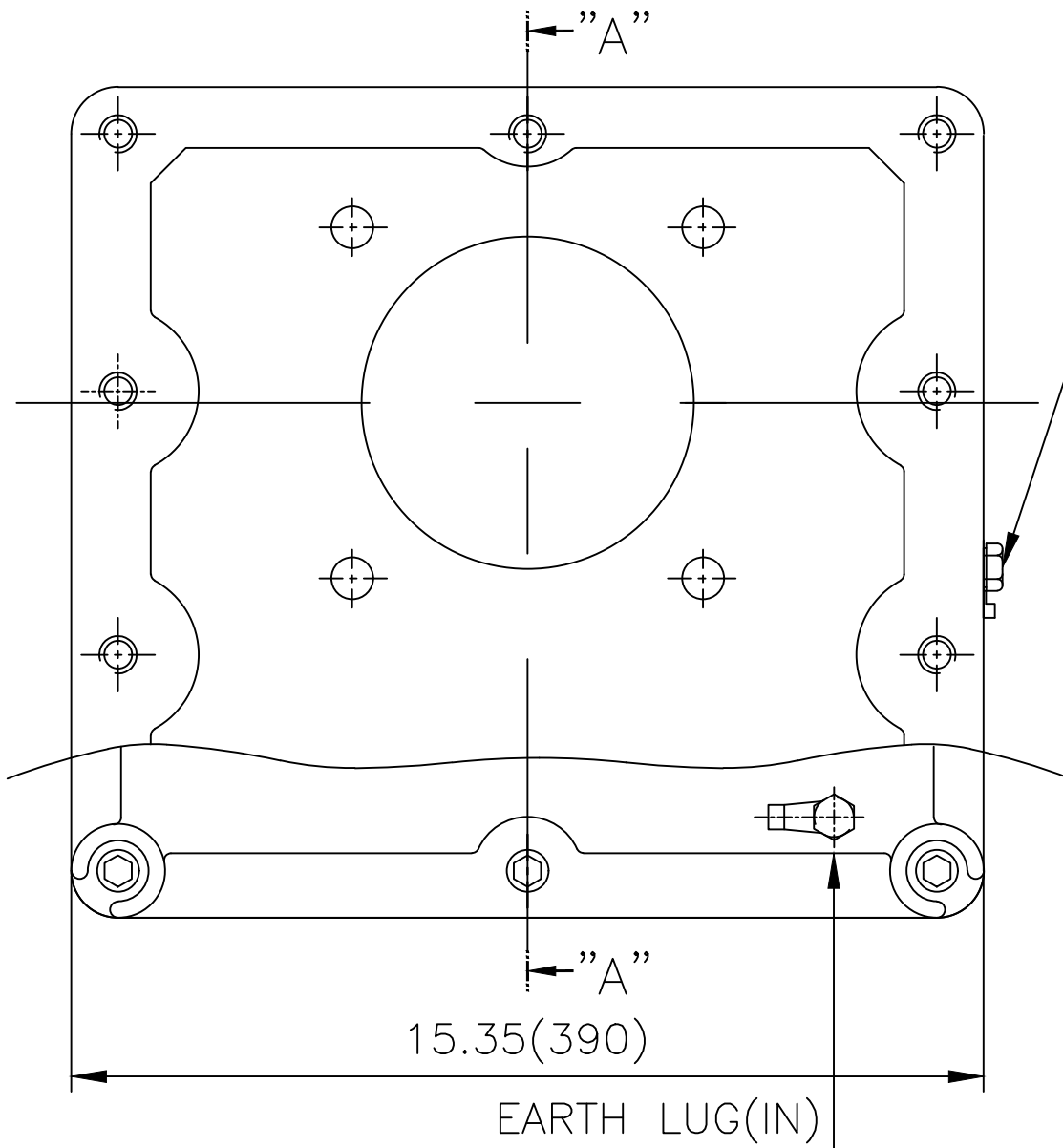
NOTE

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.Y.KIM	UNIT	inch	SUBJECT	445TS	DWG SIZE	
CHKD BY	R.G.KIM	SCALE	1/15	TITLE	OUTLINE	A4 (1:15)	
CHKD BY		PROJEC'N	3rd Angle	REF. NO		Sheet No. of	
DSND BY	J.H.JEON	DATE	2021-04-19	DWG NO		LM-U0445B3SL001	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

