

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.	IXHHI30-36-286TS	Item No.	Rev. No. [      ]
Project Name		Project No.	Quantity                      sets

GENERAL SPECIFICATION		PERFORMANCE DATA		
Frame Size	286TS	Rated Output	22 kW	30 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	27.1 A      33.8 A      67.7 A
Insulation Class	F		Locked-rotor**	685 %      685 %      685 %
Temp. Rise at full load (by resistance method)		Efficiency		
at 1.0 S.F	80 deg. C	50% Load      88.7 %		
Motor Location	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor	75% Load      90.7 %		
Altitude	Less than 1,000 meter	100% Load      91.7 %		
Relative Humidity	Less than 80 %	Power Factor(p.u)		
Ambient Temp.	40 deg. C (Max.)	50% Load      0.740		
Duty Type	Continuous ( S1 )	75% Load      0.840		
Service Factor	1.15	100% Load      0.890		
Mounting	B3	Speed at Full Load	3560 r.p.m	
Bearing	Type	Anti-Friction	Torque	
	DE/N-DE	6310ZC3 / 6310ZC3	Full Load	43.5 lb.ft
	Lubricant	Grease(Polyrex-EM)	Locked-rotor**	160 %
External Thrust	Not applicable		Breakdown**	230 %
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt	Moment of Inertia (J)		
Shaft Extension	Single	Load(Max.)      28.400 lb.ft2		
Terminal Box	Main	Cast Iron	Motor      2.089 lb.ft2	
	Aux.	No	Sound Pressure Level (No-load & mean value at 1m from motor)	
Location	Refer to Outline Drawing	86 dB(A)		
Application		Vibration      0.0 mm/sec (peak)		
Area classification	Hazardous	Permissible number of consecutive starts	Cold	0 times
Type of Ex-Protection	Class I&II, Division 1		Hot	0 times
Applicable Standard	NEMA MG1, CSA C390, UL674	Paint	Munsell No.	4.0PB5.4/5.5(VL-451)

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

SPARE PARTS

SUBMITTAL DRAWING		
Outline Dimension Drawing	Motor Weight(Approx.)	
B3	LM-U0286B3SL001	480 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. Class I, Division 1, Group C&D
  - . Temp.Code(Sine wave) : T2D at 40°C Amb./T2C at 55°C Amb. T4 with Winding Temperature Detector
4. Class II, Division 1, Group F&G
  - . Temp.Code(Sine wave) : T3B

Date	DSND	CHKD	CHKD	APPD
2024-08-08	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.

1	2	3	4
REV	DATE	CONTENTS	REVD BY
CHKD BY	CHKD BY	CHKD BY	APPD BY

# 4.72

## CROWN TRITON

Premium Efficiency AC 3 Phase Motor

**Explosion Proof**

US Energy Verified Only

CC038A

US LISTED

30HP	2P	230/460V	Cat. No. IXHHI30-36-286TS	Amps	67.7/33.8
Model	LATER		INS. Class F HD-F1	Hertz	60Hz
Type	XJP	Duty	CONT	Code	G
Frame	286TS	Encl.	TEFC	S.F. 1.15	on sine wave power
Bearing	Drive	6310ZC3		S.F. 1.00	on PWM or IGBT power
	Opp.	6310ZC3		RPM	3560
Usable at	50Hz 25HP 380V 39.3A 2960rpm S.F.: 1.0 Eff.: 90.9% Code: H				
	50Hz 25HP 400/415V 37.9/37.1A 2960/2965rpm S.F.: 1.0 Eff.: 90.9/90.9% Code: J/J				
UL Certified for	Class I, Div. 1, Group C&D / Class I, Zone 1, Group II A & II B			Temp. Code T4 With Thermostat	T2D at 40°C Amb. / T2C at 55°C Amb.
	10:1VT(20:1 at 50% load) 4:1CT(10:1 1hour duty at lowest RPM)				
No.	-		Date	-	
			Weight	480 lb	

4M-136066  
(NEMA 250~280Fr.)

Made in Korea H1

APPD BY	S.Y.KIM	UNIT	INCH
CHKD BY	I.K.KIM	SCALE	NONE
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle
DSND BY	S.H.LEE	DATE	2024.06.07

SUBJECT	UL Class I, Division1 (IXHHI)	DWG SIZE	A4 ( 1:1 )
TITLE	NAMEPLATE DRAWING		
REF. NO	4M-136066	Sheet No.	of
DWG NO	NP-IXHHI30-36-286TS	Revision No.	0



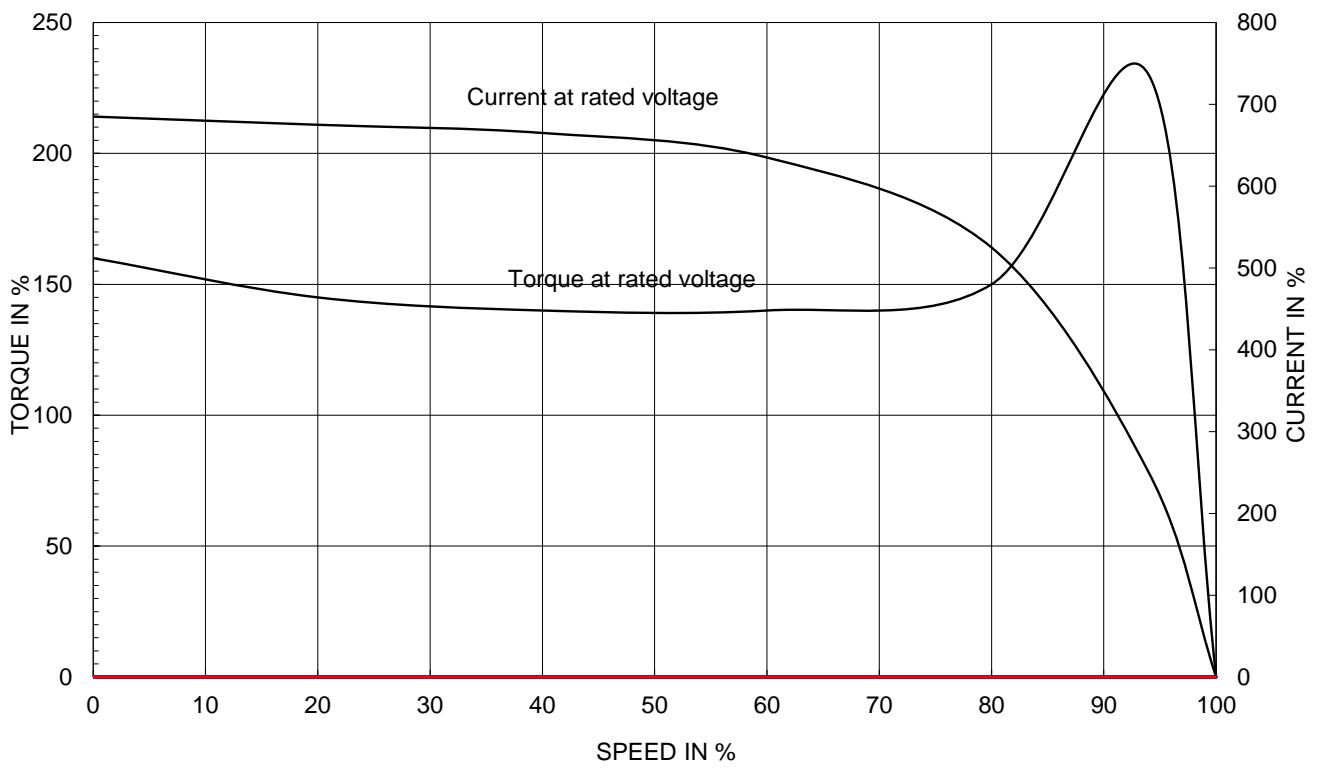
# PERFORMANCE CURVE

CURVE NO.  
PC-IXHHI30-36-286TS

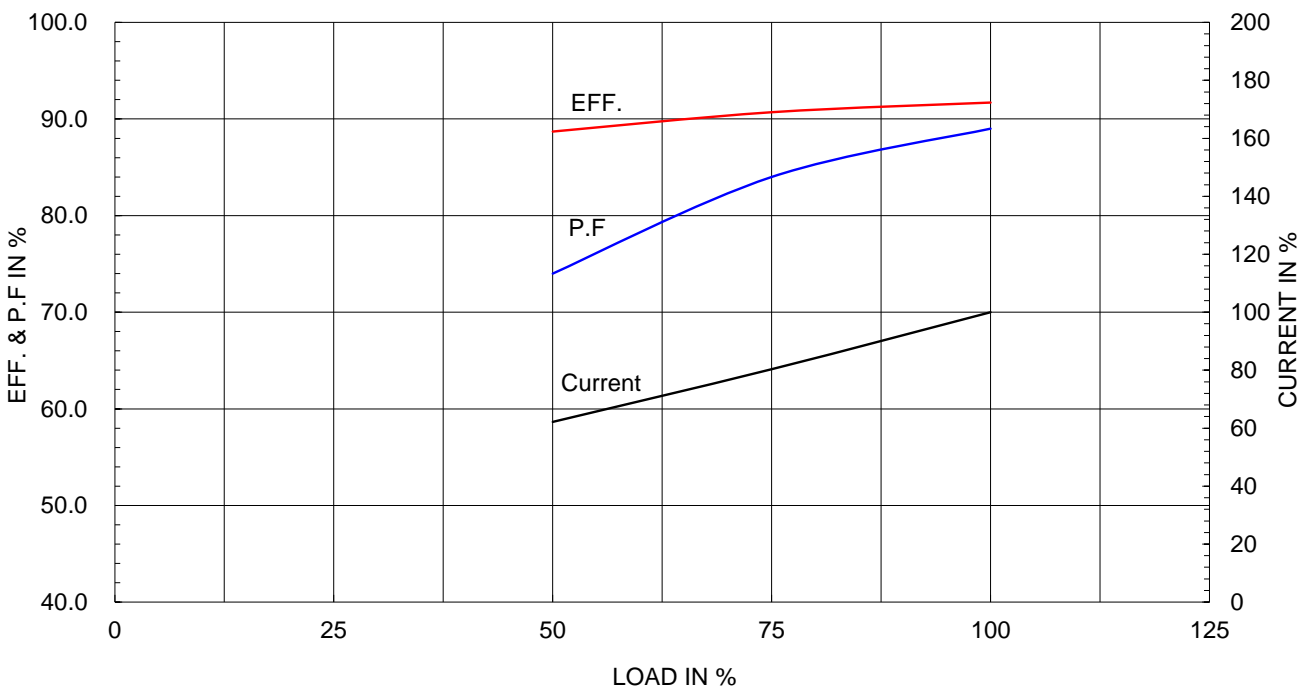
Type :	XJP
Full Load Torque :	43.5 lb.ft
Load moment of Inertia (J) :	28.400 lb.ft2
Motor moment of Inertia (J) :	2.089 lb.ft2

22kW	30HP	2 P	60 Hz
Speed at Full Load :			3560 RPM
Rated Voltage	575V	460V	230V
Full Load Current	27.1A	33.8A	67.7A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE

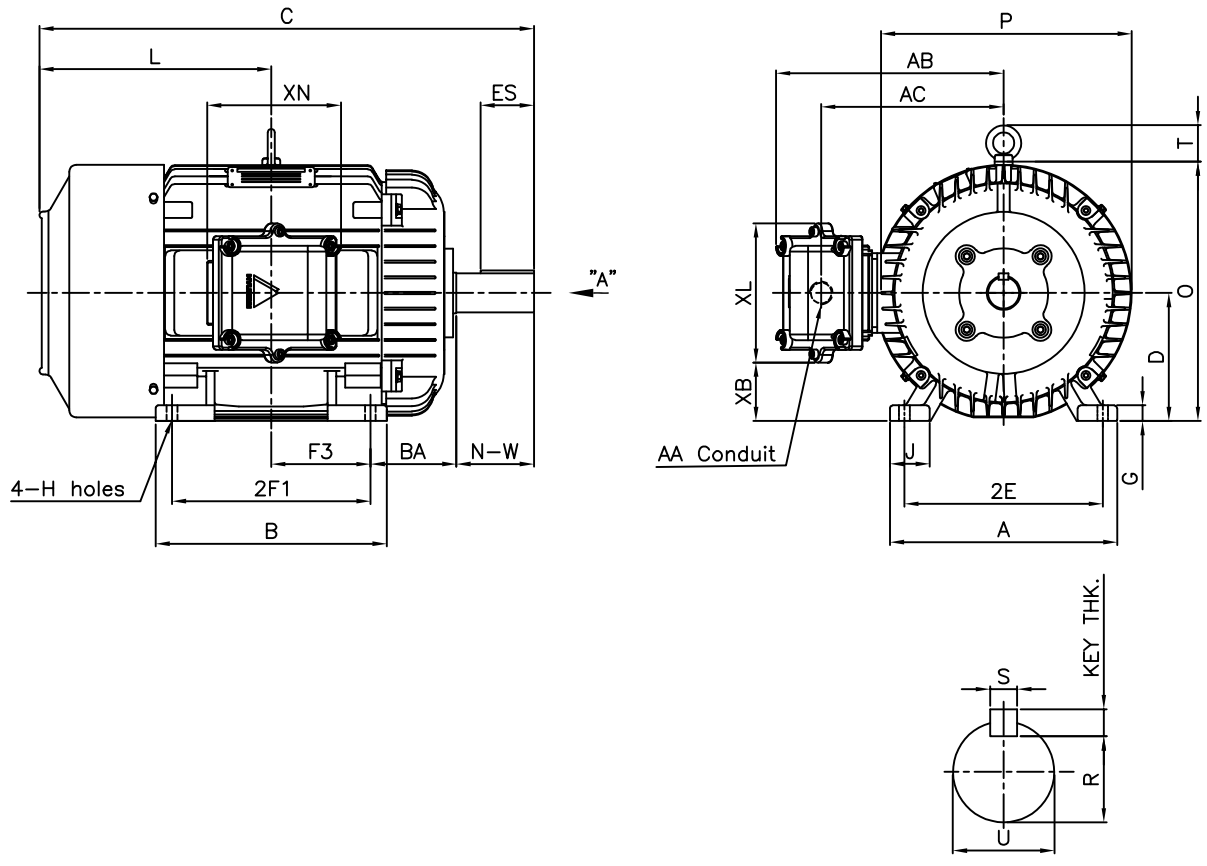


본 도면은 HD현대일렉트릭(주) 재산이며 허가없이 복사할 수 없음 (최급유익)

THIS DRAWING IS PROPRIETARY TO HYUNDAI ELECTRIC. NO PART OF THIS DRAWING MAYBE REPRODUCED WITHOUT THE PERMISSION OF HYUNDAI ELECTRIC.

▽	50S	REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY
▽▽	12.5S							
▽▽▽	3.2S							
▽▽▽▽	0.4S							

**Class I Division 1**



DIMENSIONS

VIEW "A"

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	286TS
12.60	12.68	11.00	11.00	-	5.50	0.78	2.20	0.53	1.50	12.60	10.10	3.14	7.72	7.32	480

O V E R A L L									S H A F T			KEY THK.	B E A R I N G	
BA	C	D	L	O	P	T	U	N-W	KEYWAY				DRIVE END	OPP. DRIVE END
									R	ES	S			
4.75	26.34	7.00	12.84	14.28	14.19	2.01	1.625	3.25	1.416	1.91	0.375	0.375	6310ZC3	6310ZC3

NOTE

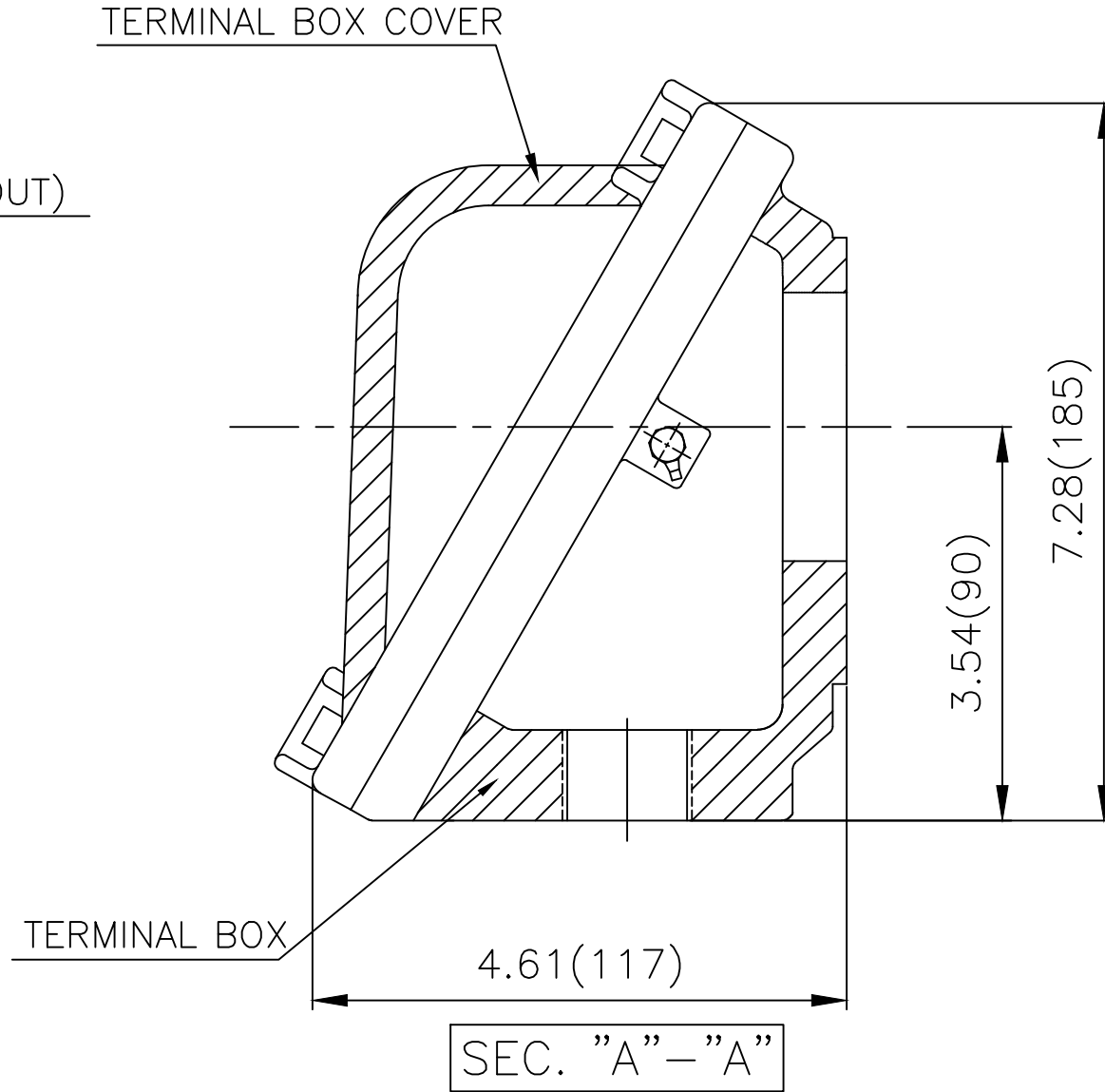
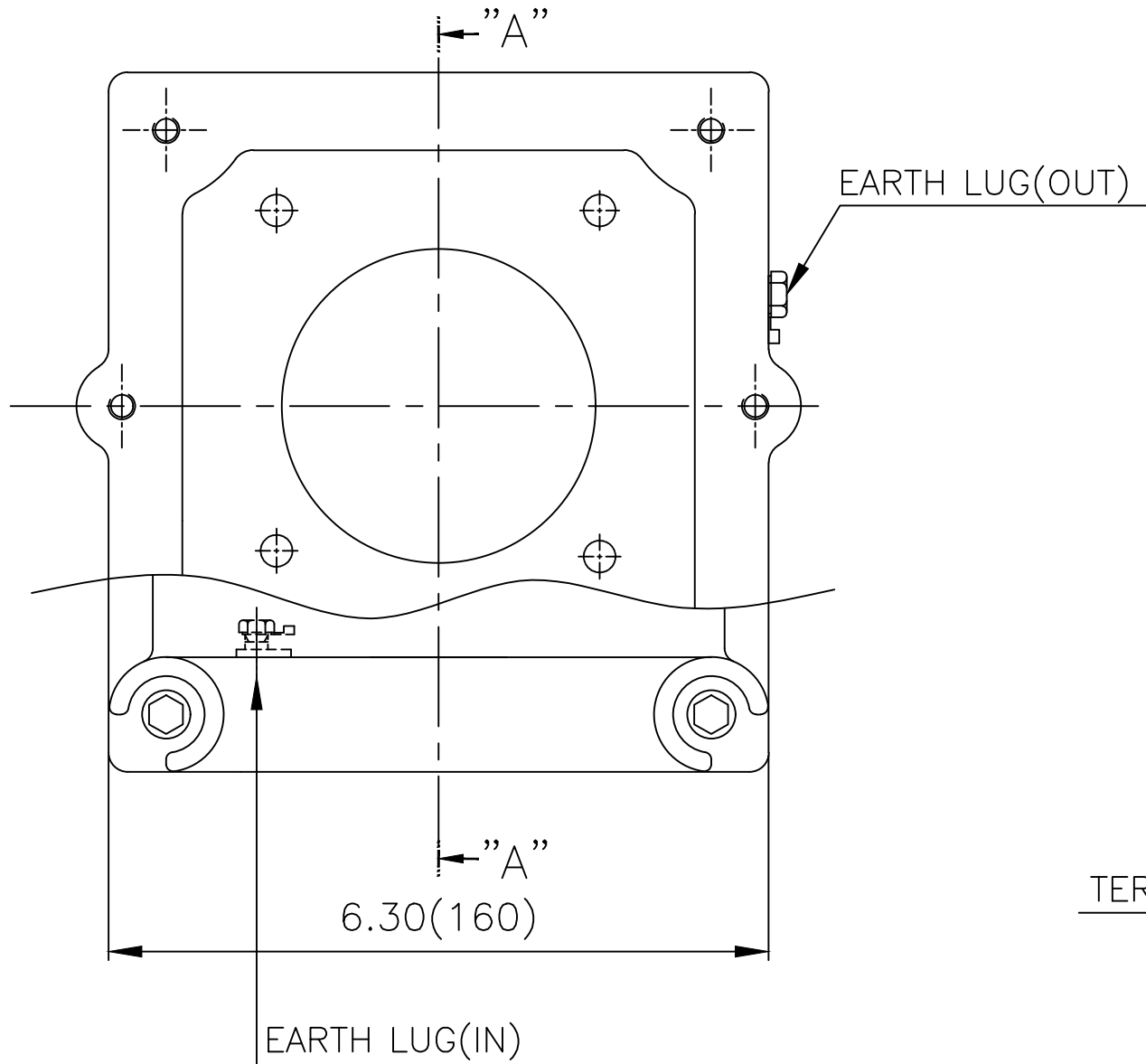
1. Dimension "D" tolerance : +0.00inch - 0.03inch (143T-365T) ; +0.000inch - 0.06inch (404T-449T)
2. Dimension "U" tolerance : +0.000inch - 0.005inch (143T-215T), +0.000inch - 0.001inch (254T-449T)
3. Dimension "R" tolerance : +0.000inch - 0.015inch

APPD BY	S.Y.KIM	UNIT	inch	SUBJECT	NEMA 286TS	DWG SIZE	
CHKD BY	R.G.KIM	SCALE	1/10	TITLE	<b>OUTLINE</b>	A4 ( 1:11 )	
CHKD BY		PROJEC'N	3rd Angle				
DSND BY	J.H.JEON	DATE	2021-04-15				



REF. NO	.	Sheet No.	of
DWG NO	LM-U0286B3SL001	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. 250~280(CAST IRON)	DWG SIZE	A3 (1:1.5)
CHKD BY	R.G.KIM	SCALE	1/1.5	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-248637	Revision No.	0

