

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.	IXHHI25-18-284T	Item No.		Rev. No.	[]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA			
Frame Size	284T		Rated Output	18.5 kW		25 HP
Type	XJP		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	24.5 A	30.6 A
Insulation Class	F			Locked-rotor**	790 %	790 %
Temp. Rise at full load (by resistance method)			Efficiency			
at 1.0 S.F			80 deg. C			
Motor Location	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor		50% Load		90.6 %	
Altitude	Less than 1,000 meter		75% Load		92.6 %	
Relative Humidity	Less than 80 %		100% Load		93.6 %	
Ambient Temp.	40 deg. C (Max.)		Power Factor(p.u)			
Duty Type	Continuous (S1)		50% Load		0.660	
Service Factor	1.15		75% Load		0.760	
Mounting	B3		100% Load		0.810	
Bearing	Type	Anti-Friction	Speed at Full Load			
	DE/N-DE	6310ZC3 / 6310ZC3	1775 r.p.m			
	Lubricant	Grease(Polyrex-EM)	Torque			
External Thrust	Not applicable		Full Load		73.4 lb.ft	
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt		Locked-rotor**		170 %	
Shaft Extension	Single		Breakdown**		220 %	
Terminal Box	Main	Cast Iron	Moment of Inertia (J)			
	Aux.	No	Load(Max.)		141.396 lb.ft2	
Location	Refer to Outline Drawing		Motor		3.940 lb.ft2	
			Sound Pressure Level (No-load & mean value at 1m from motor)			
Application			77 dB(A)			
Area classification	Hazardous		Vibration			
Type of Ex-Protection	Class I&II, Division 1		0.0 mm/sec (peak)			
Applicable Standard	NEMA MG1, CSA C390, UL674		Permissible number of consecutive starts		Cold 0 times	
			Hot		0 times	
			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-U0284B3TL001	440 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


4.72

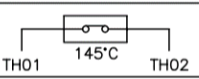
CROWN TRITON
Premium Efficiency AC 3 Phase Motor

Explosion Proof








25HP	4P	230/460V	Cat. No.	IXHHI25-18-284T	Amps	61.3/30.6		
Model	LATER		INS. Class	F HD-F1	Hertz	60Hz		
Type	XJP	Duty	CONT	Code	J	NEMA Nom. Eff.	93.6%	
Frame	284T	Encl.	TEFC	S.F.	1.15	on sine wave power	3/4 Eff. 92.6%	
Bearing	Drive	6310ZC3		S.F.	1.00	on PWM or IGBT power	NEMA Design	B Torque
	Opp.	6310ZC3		RPM	1775		Amb.	40°C
Usable at	50Hz 20HP 380V 33.8A 1475rpm S.F.: 1.0 Eff.: 90.6% Code: J							
	50Hz 20HP 400/415V 33.4/33.5A 1480/1480rpm S.F.: 1.0 Eff.: 90.6/90.6% Code: K/L							
UL Certified for	Class I, Div. 1, Group C&D / Class I, Zone 1, Group II A & II B				Temp. Code	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)					T4 With Thermostat		
No.	-		Date	-		Weight	440 lb	

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

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-136066	Sheet No. of
				DWG NO	NP-IXHHI25-18-284T	Revision No. 0



PERFORMANCE CURVE

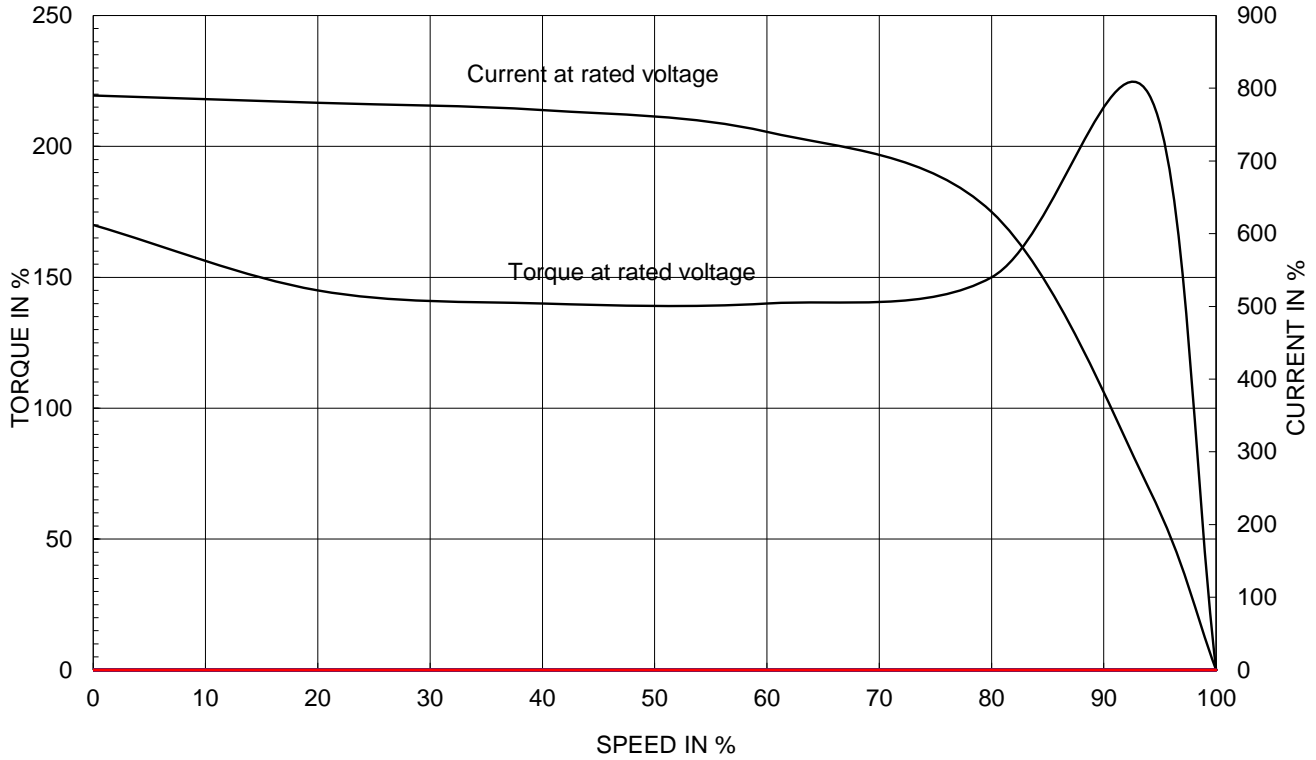
CURVE NO.

PC-IXHHI25-18-284T

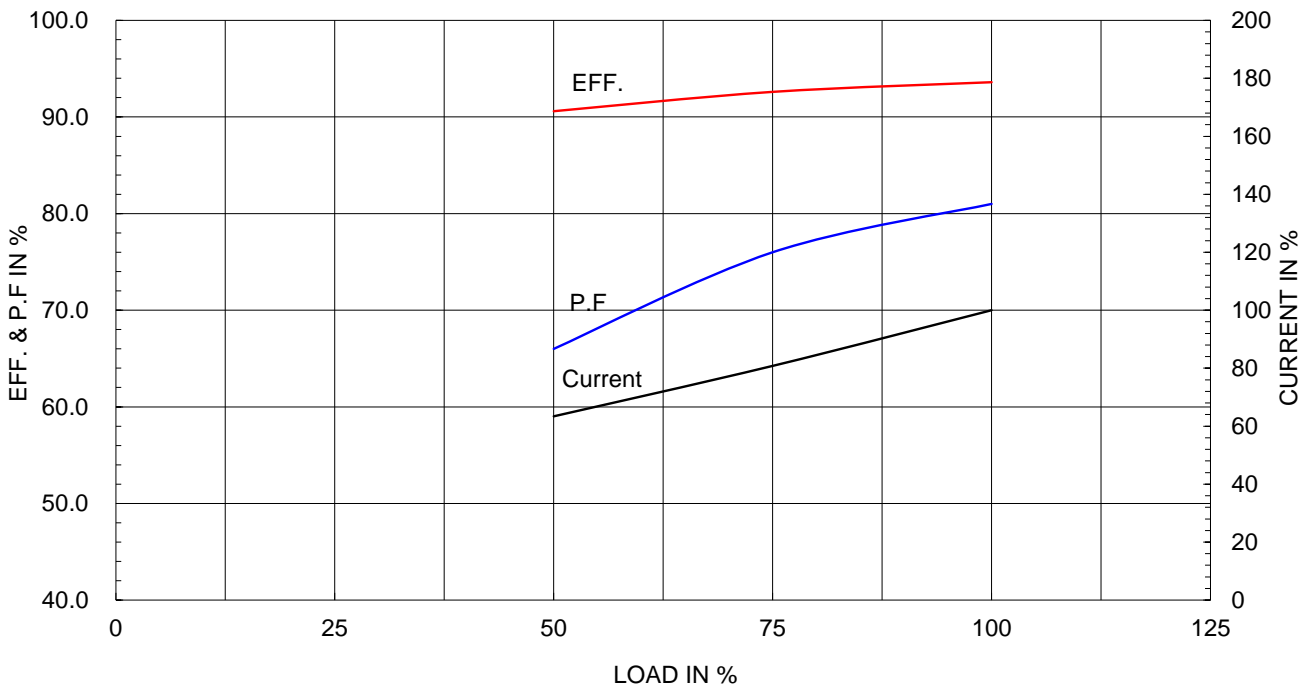
Type :	XJP
Full Load Torque :	73.4 lb.ft
Load moment of Inertia (J) :	141.396 lb.ft ²
Motor moment of Inertia (J) :	3.940 lb.ft ²

18.5kW 25HP	4 P	60 Hz
Speed at Full Load :		1775 RPM
Rated Voltage	575V	460V 230V
Full Load Current	24.5A	30.6A 61.3A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE

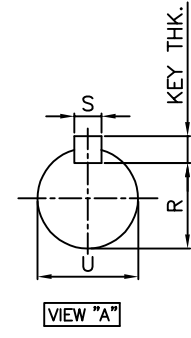
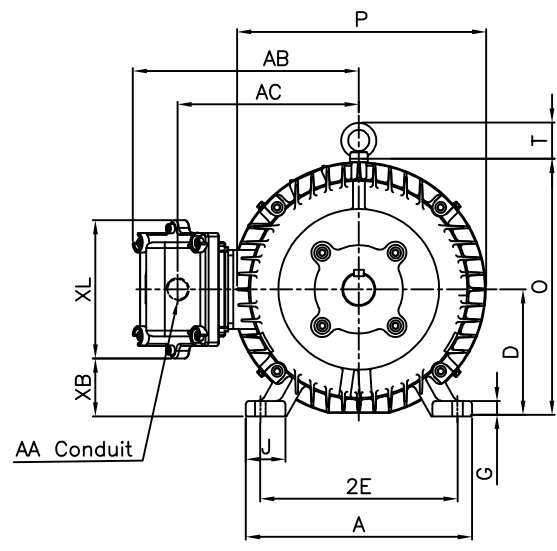
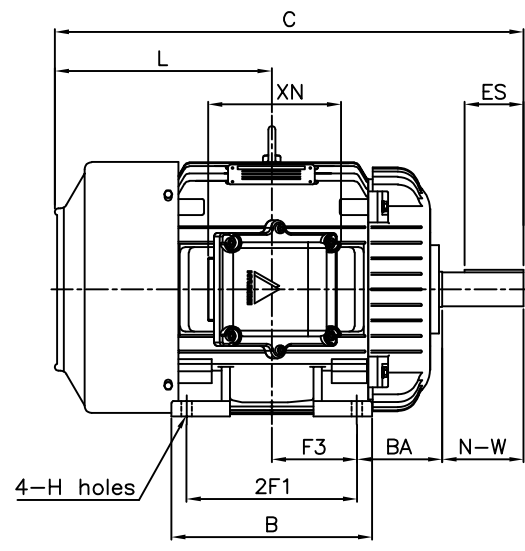


본 도면은 HD현대일렉트릭(주) 재산이며
허가없이 복사할 수 없음 (취급주의)

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

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

Class I Division 1



DIMENSIONS

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	284T
12.60	11.18	11.00	9.50	-	4.75	0.78	2.20	0.53	1.50	12.60	10.10	3.14	7.72	7.32	440

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
4.75	26.21	7.00	12.09	14.28	14.19	2.01	1.875	4.62	1.591	3.28	0.500	0.500	6310ZC3	6310ZC3

NOTE

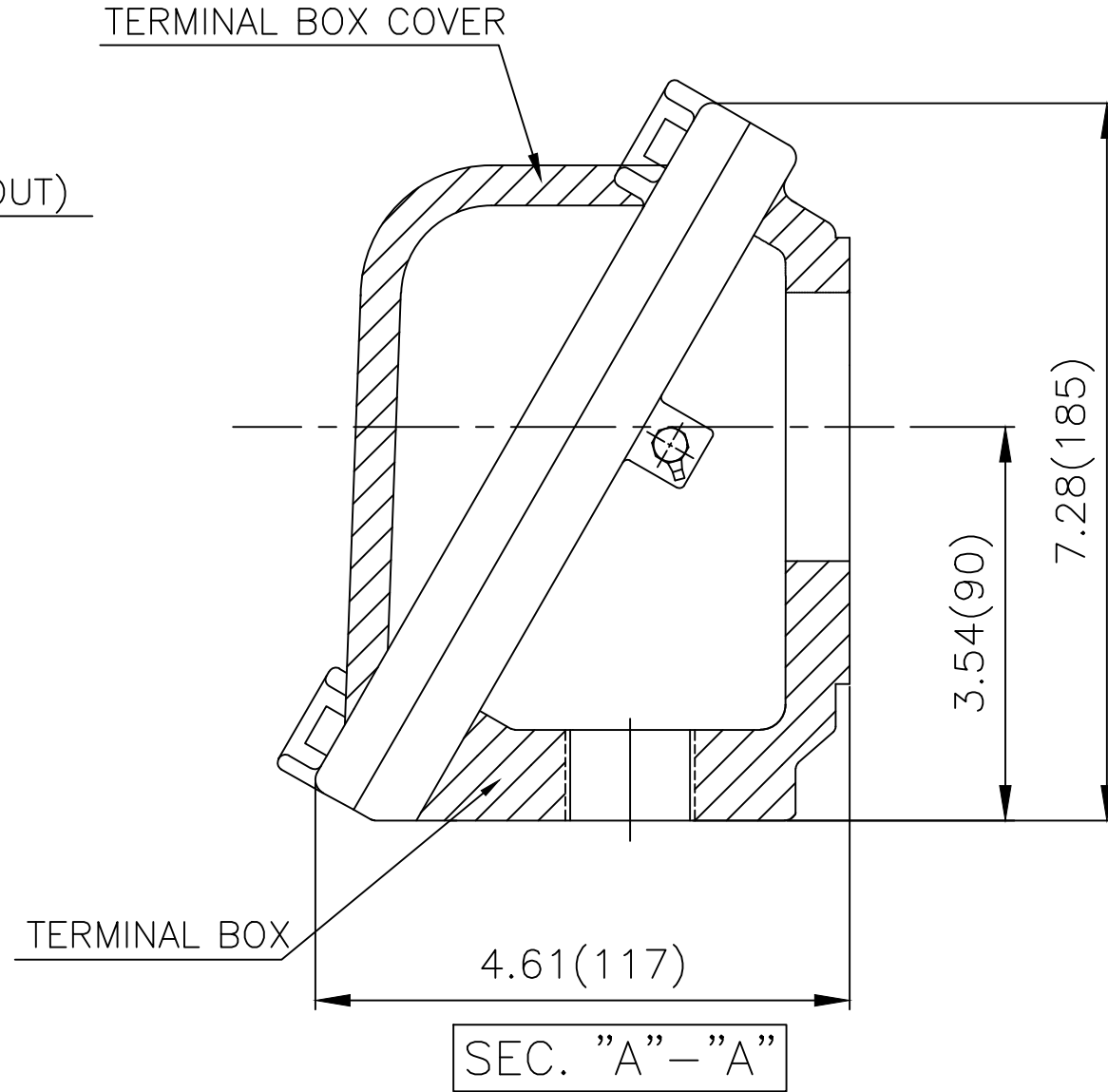
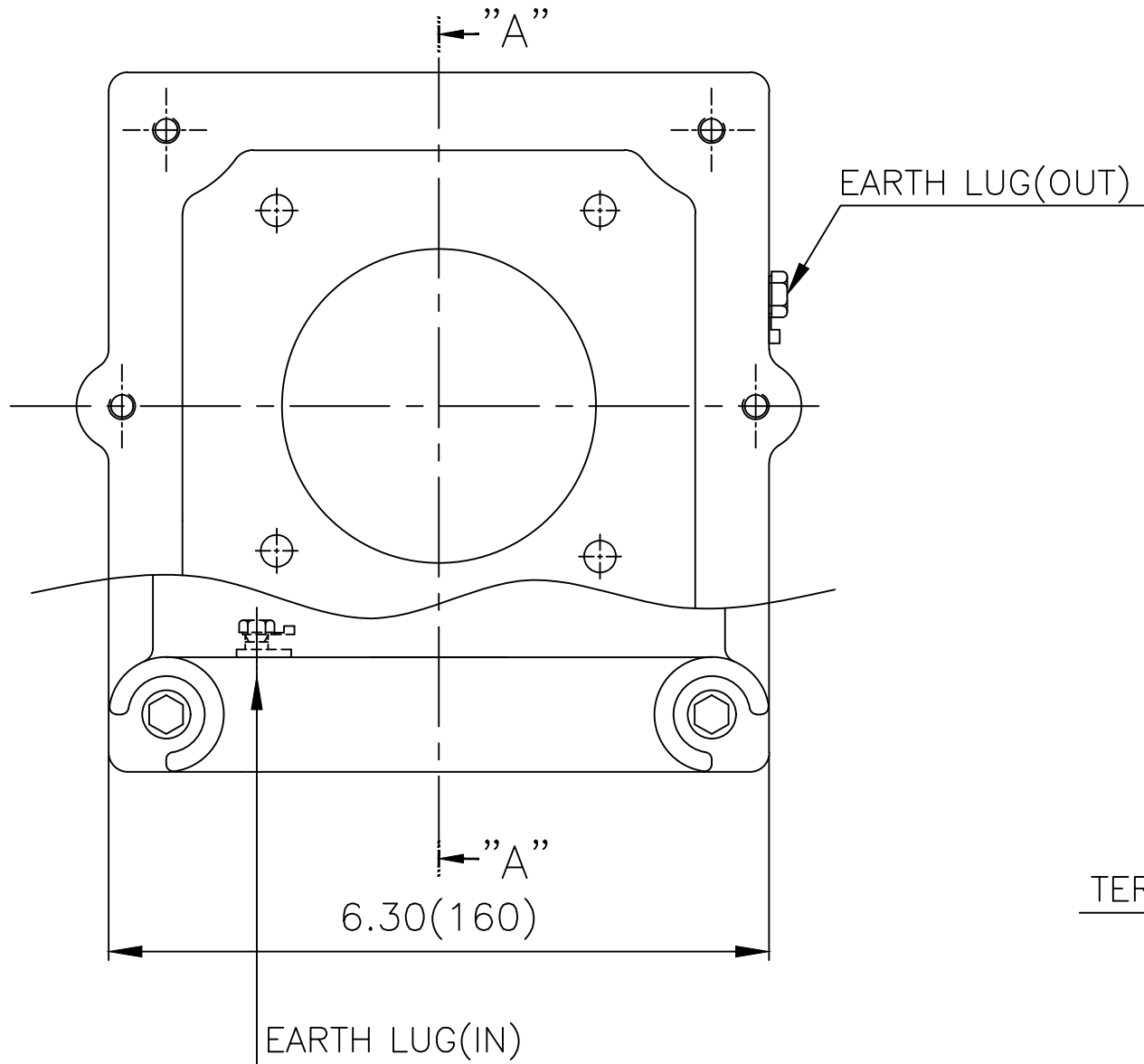
1. Dimension "D" tolerance : +0.00inch - 0.03inch (143T-365T) ; +0.000inch - 0.06inch (404T-449T)
2. Dimension "U" tolerance : +0.000inch - 0.005inch (143T-215T), +0.000inch - 0.001inch (254T-449T)
3. Dimension "R" tolerance : +0.000inch - 0.015inch

APPD BY	S.Y.KIM	UNIT	inch	SUBJECT	NEMA 284T	DWG SIZE	A4 (1:11)
CHKD BY	R.G.KIM	SCALE	1/10	TITLE	OUTLINE	Sheet No.	of
CHKD BY		PROJEC'N	3rd Angle				
DSND BY	J.H.JEON	DATE	2021-04-15				



REF. NO	.	Sheet No.	of
DWG NO	LM-U0284B3TL001	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
CHKD BY	R.G.KIM	SCALE	1/1.5	TITLE	MAIN TERMINAL BOX ASS'Y		A3 (1:1.5)
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

