

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.	IXHHI25-36-284TSC	Item No.	Rev. No.	[      ]
Project Name		Project No.	Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA			
Frame Size	284TSC		Rated Output	18.5 kW		25 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	22.8 A	28.5 A
Insulation Class	F			Locked-rotor**	670 %	670 %
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	B35		Speed at Full Load	3560 r.p.m		
Bearing	Type	Anti-Friction	Torque			
	DE/N-DE	6310ZC3 / 6310ZC3	Full Load		36.6 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.)		24.985 lb.ft2	
Terminal Box	Main	Cast Iron	Motor		1.899 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.)	
B35	LM-U0284C4SL001	380 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   APPD BY


4.72

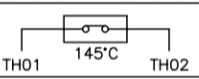
**CROWN TRITON**  
Premium Efficiency AC 3 Phase Motor

**Explosion Proof**









25HP	2P	230/460V	Cat. No.	IXHHI25-36-284TSC	Amps	56.9/28.5		
Model	LATER		INS. Class	F HD-F1	Hertz	60Hz		
Type	XJP	Duty	CONT	Code	G	NEMA Nom. Eff.	91.7%	
Frame	284TSC	Encl.	TEFC	S.F.	1.15	on sine wave power	3/4 Eff. 90.7%	
Bearing	Drive	6310ZC3		S.F.	1.00	on PWM or IGBT power	NEMA Design	B
	Opp.	6310ZC3		RPM	3560		Amb.	40°C
Usable at	50Hz 20HP 380V 31.7A 2960rpm S.F.: 1.0 Eff.: 90.3% Code: H							
	50Hz 20HP 400/415V 30.6/30.1A 2965/2965rpm S.F.: 1.0 Eff.: 90.3/90.3% Code: H/J							
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	380 lb	

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

Made in Korea H1



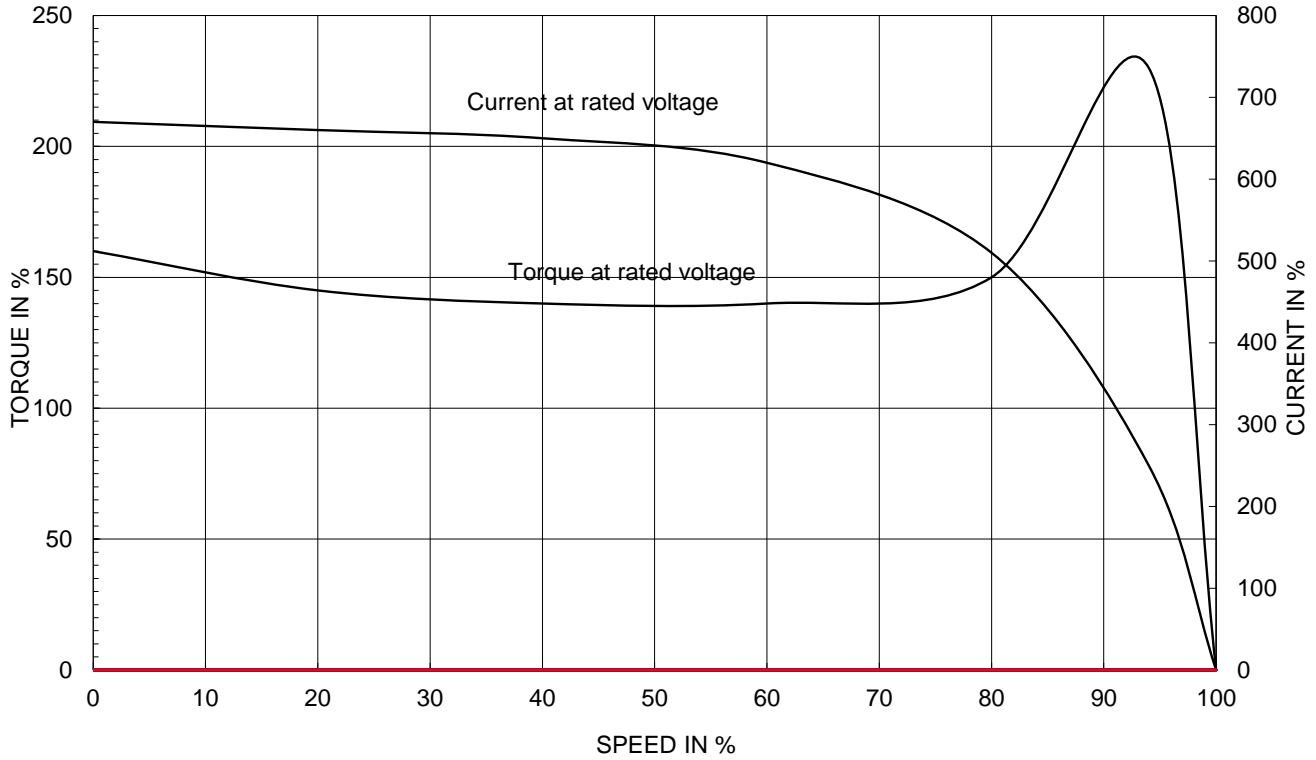
2.36

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	UL Class I, Division1 (IXHHI)	DWG SIZE	A4 ( 1:1 )
CHKD BY	I.K.KIM	SCALE	NONE				
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	TITLE <b>NAMEPLATE DRAWING</b>			
DSND BY	S.H.LEE	DATE	2024.06.07				
				REF. NO	4M-136066	Sheet No. of	
				DWG NO	NP-IXHHI25-36-284TSC	Revision No. 0	

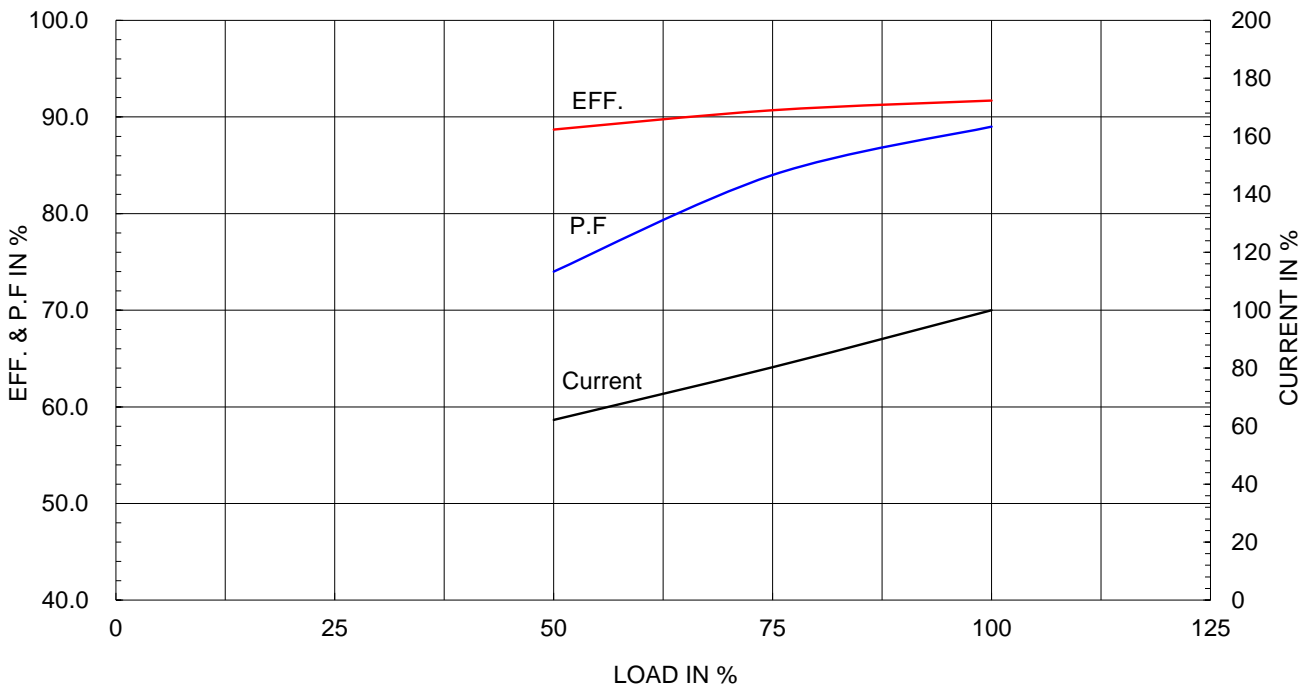
Type :	XJP
Full Load Torque :	36.6 lb.ft
Load moment of Inertia (J) :	24.985 lb.ft2
Motor moment of Inertia (J) :	1.899 lb.ft2

18.5kW 25HP	2 P	60 Hz
Speed at Full Load :		3560 RPM
Rated Voltage	575V	460V 230V
Full Load Current	22.8A	28.5A 56.9A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE

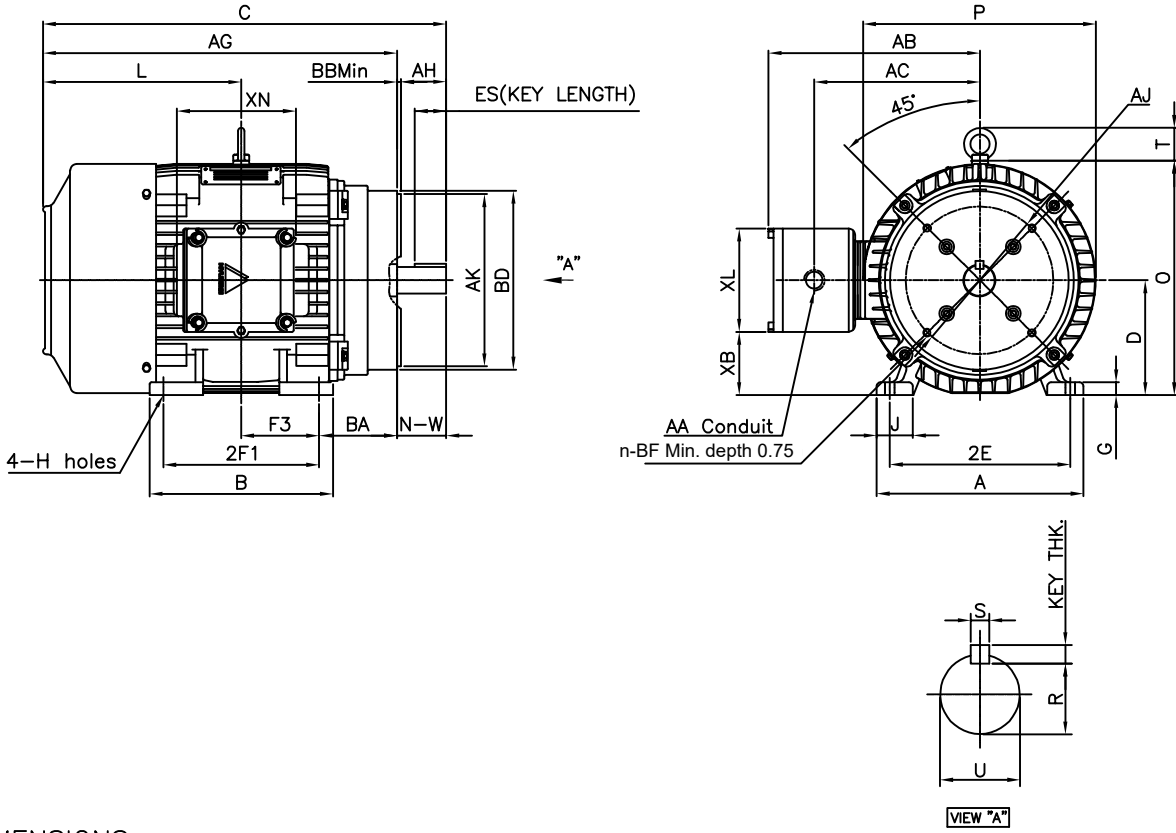


본 도면은 HD현대일렉트릭(주) 재산이며 허가없이 복사할 수 없음 (취급유의)

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▽	50S	REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY
▽▽	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	
12.60	11.18	11.00	9.50	-	4.75	0.78	2.20	0.53	1.50	12.60	10.10	3.94	6.30	7.32	380

OVERALL								SHAFT					KEY THK.	BEARING	
AG	BA	C	D	L	O	P	T	U	N-W	KEYWAY		DRIVE END		OPP. DRIVE END	
										R	ES	S			
21.40	4.75	24.65	7.00	12.12	14.28	14.19	2.01	1.625	3.25	1.416	1.91	0.375	0.375	6310ZC3	6310ZC3

C-FACE						
AJ	AK	BD	BB	BF	n	AH
9.00	10.50	10.90	0.25	1/2-13	4	3.00

NOTE

- 1.Dimension "D" tolerance : +0.00inch ~ -0.03inch (143TC-365TC) ; +0.000inch ~ -0.06inch (404TC-449TC)
- 2.Dimension "U" tolerance : +0.000inch ~ -0.0005inch (143TC-215TC); +0.000inch ~ -0.001inch (254TC-449TC)
- 3.Dimension "R" tolerance : +0.000inch ~ - 0.015inch
- 4.Dimension "AK" tolerance : +0.000inch ~ -0.003inch (143TC-286TC); +0.000inch ~ -0.005inch (324TC-449TC)

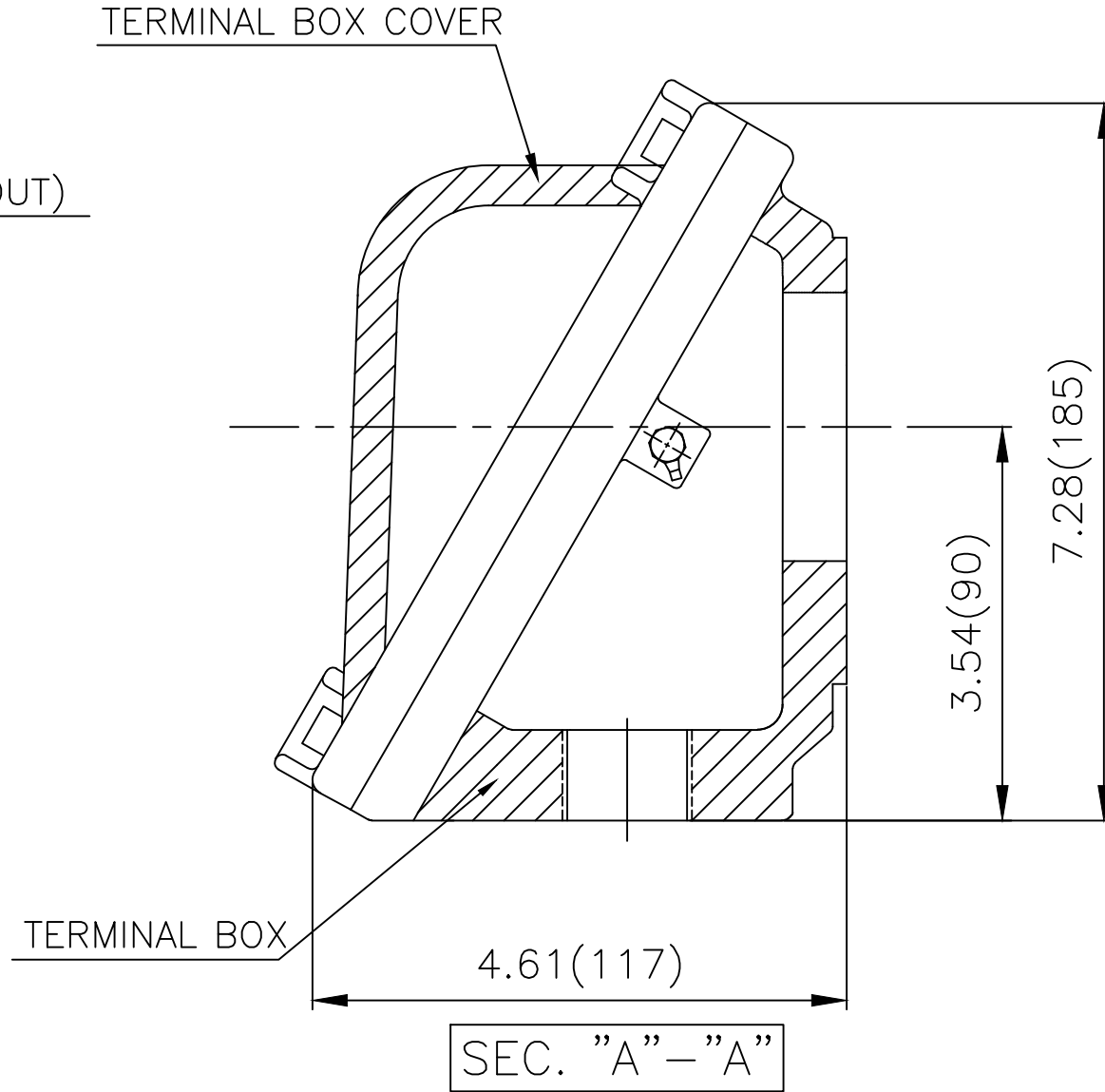
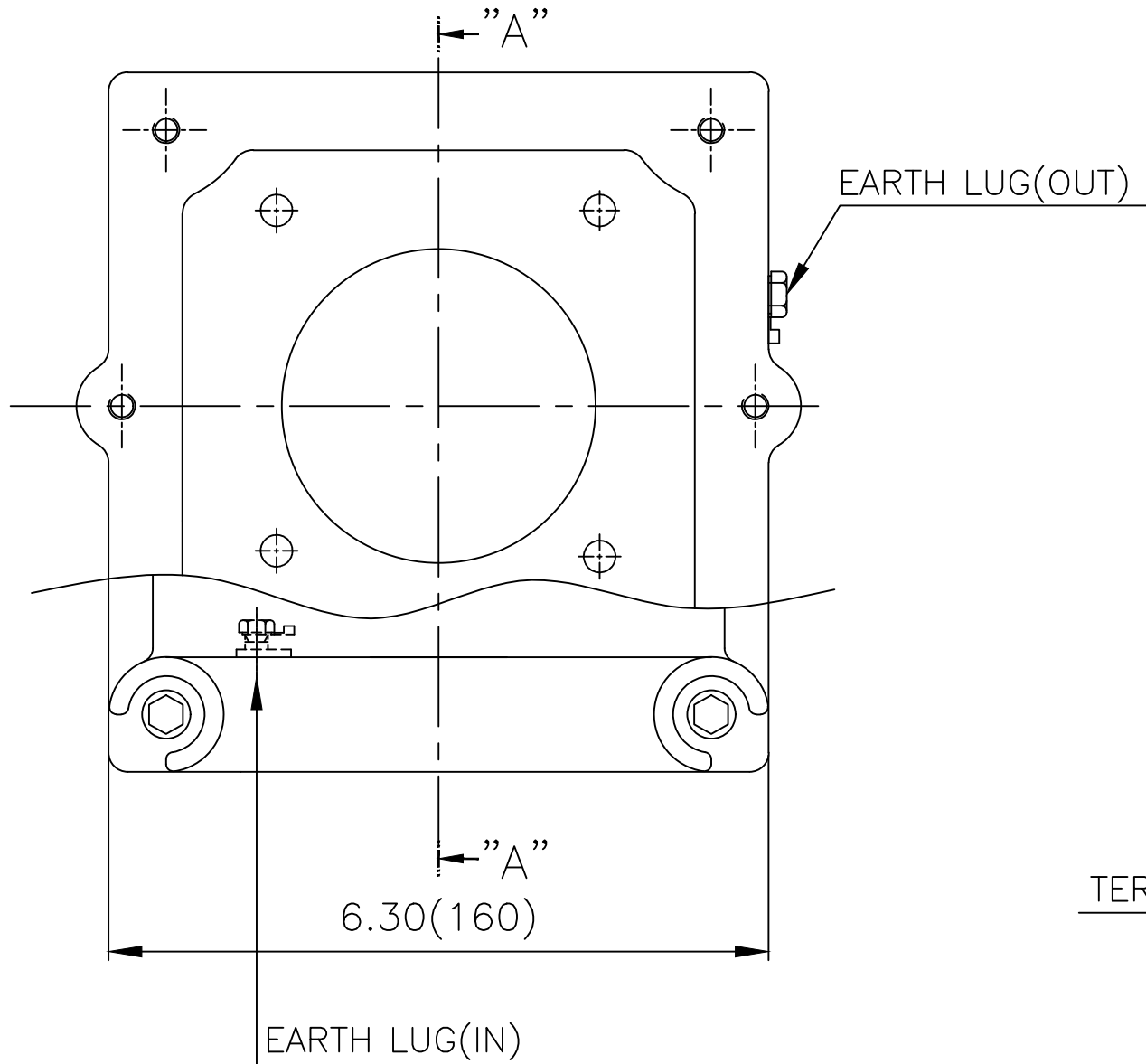
APPD BY	S.Y.KIM	UNIT	inch	SUBJECT	NEMA 284TSC	DWG SIZE	A4 ( 1:12 )
CHKD BY	R.G.KIM	SCALE	1/10	TITLE	OUTLINE	Sheet No.	of
CHKD BY		PROJEC'N	3rd Angle				
DSND BY	J.H.JEON	DATE	2021-04-15				



REF. NO	.	Sheet No.	of
DWG NO	LM-U0284C4SL001	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

