

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.	IXHHI25-12-324TC	Item No.	Rev. No.	[]
Project Name		Project No.	Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA			
Frame Size	324TC		Rated Output	18.5 kW		25 HP
Type	XJP		Number of Poles	6		
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	25.0 A	31.2 A
Insulation Class	F			Locked-rotor**	720 %	720 %
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		90.0 %	
Altitude	Less than 1,000 meter		75% Load		92.0 %	
Relative Humidity	Less than 80 %		100% Load		93.0 %	
Ambient Temp.	40 deg. C (Max.)		Power Factor(p.u)			
Duty Type	Continuous (S1)		50% Load		0.650	
Service Factor	1.15		75% Load		0.750	
Mounting	B35		100% Load		0.800	
Bearing	Type	Anti-Friction	Speed at Full Load			
	DE/N-DE	6313ZC3 / 6211ZC3	1175 r.p.m			
	Lubricant	Grease(Polyrex-EM)	Torque			
External Thrust	Not applicable		Full Load		110.9 lb.ft	
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt		Locked-rotor**		170 %	
Shaft Extension	Single		Breakdown**		210 %	
Terminal Box	Main	Cast Iron	Moment of Inertia (J)			
	Aux.	No	Load(Max.)		389.183 lb.ft2	
Location	Refer to Outline Drawing		Motor		8.094 lb.ft2	
			Sound Pressure Level (No-load & mean value at 1m from motor)			
Application			70 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.)	
B35	LM-U0324C4TL001	550 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) : T3 at 40°C Amb./T2D 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

4.72

CROWN TRITON
Premium Efficiency AC 3 Phase Motor

Explosion Proof

25HP	6P	230/460V	Cat. No. IXHHI25-12-324TC	Amps	62.4/31.2	
Model	LATER		INS. Class F HD-F1	Hertz	60Hz	
Type	XJP	Duty	CONT	Code	J	
Frame	324TC	Encl.	TEFC	S.F. 1.15	on sine wave power	
Bearing	Drive	6313ZC3	S.F. 1.00	on PWM or IGBT power	NEMA Design	
	Opp.	6211ZC3	RPM	1175	Amb.	40°C
Usable at	50Hz 20HP 380V 34.7A 980rpm S.F.: 1.0 Eff.: 89.7% Code: J					
	50Hz 20HP 400/415V 33.8/33.4A 980/985rpm S.F.: 1.0 Eff.: 89.7/89.7% Code: K/L					
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)				T4 With Thermostat	
No.	-		Date	-		
			Weight	550 lb		

4M-136067
(NEMA 320~444Fr.)

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	TITLE	NAMEPLATE DRAWING		
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle				
DSND BY	S.H.LEE	DATE	2024.06.07				
				REF. NO	4M-136067	Sheet No.	of
				DWG NO	NP-IXHHI25-12-324TC	Revision No.	0

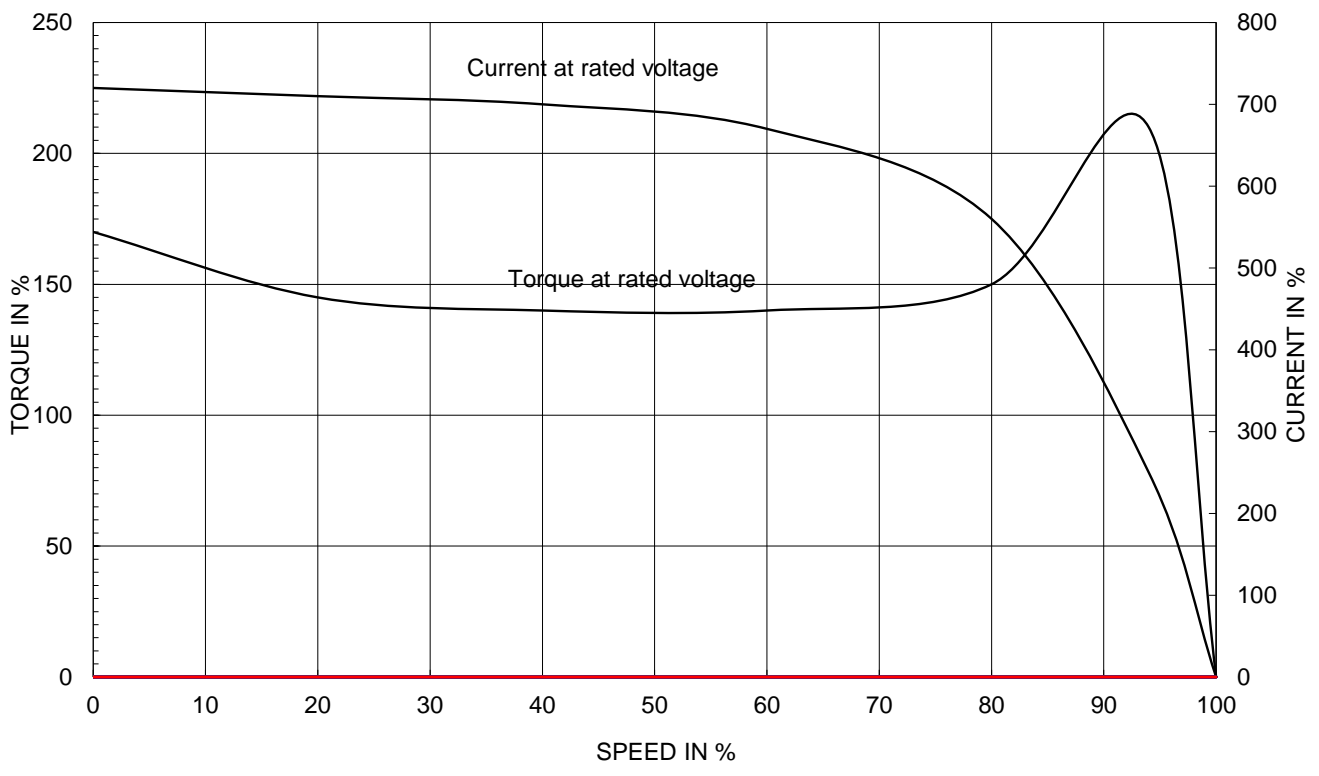


PERFORMANCE CURVE

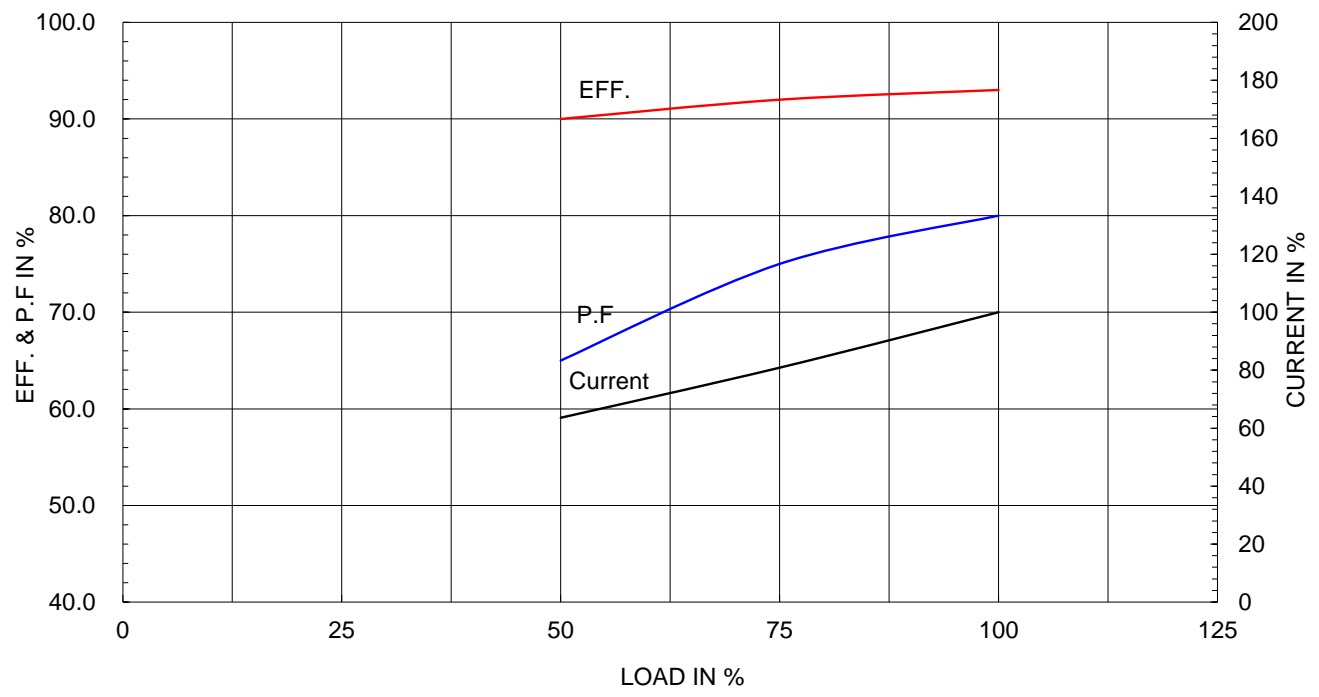
CURVE NO.
PC-IXHHI25-12-324TC

Type :	XJP	18.5kW	25HP	6 P	60 Hz								
Full Load Torque :	110.9 lb.ft	Speed at Full Load : 1175 RPM											
Load moment of Inertia (J) :	389.183 lb.ft2	<table border="1"> <tr> <td>Rated Voltage</td> <td>575V</td> <td>460V</td> <td>230V</td> </tr> <tr> <td>Full Load Current</td> <td>25.0A</td> <td>31.2A</td> <td>62.4A</td> </tr> </table>				Rated Voltage	575V	460V	230V	Full Load Current	25.0A	31.2A	62.4A
Rated Voltage	575V	460V	230V										
Full Load Current	25.0A	31.2A	62.4A										
Motor moment of Inertia (J) :	8.094 lb.ft2												

SPEED VS TORQUE & CURRENT CURVE

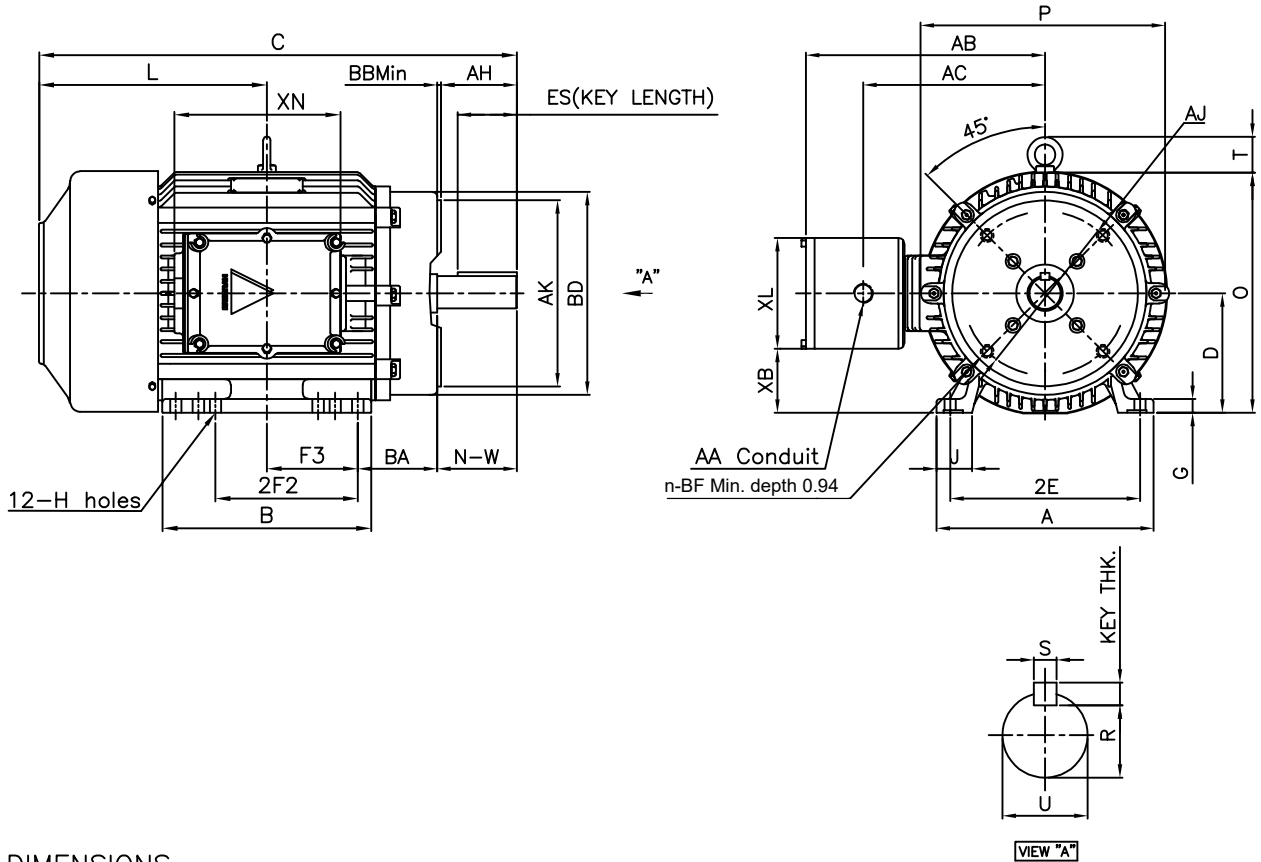


OUTPUT VS EFF., P.F & CURRENT CURVE



▽	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	
14.33	13.78	12.50	-	10.50	6.99	1.11	2.36	0.66	2.00	15.27	11.02	3.94	7.87	11.26	550

OVERALL							SHAFT					KEY THK.	BEARING	
BA	C	D	L	O	P	T	U	N-W	KEYWAY				DRIVE END	OPP. DRIVE END
									R	ES	S			
5.25	33.03	8.00	15.55	16.19	15.84	2.41	2.125	5.25	1.845	3.91	0.500	0.500	6313ZC3	6211ZC3

C-FACE						
AJ	AK	BD	BB	BF	n	AH
11.00	12.50	13.27	0.25	5/8-11	4	5.00

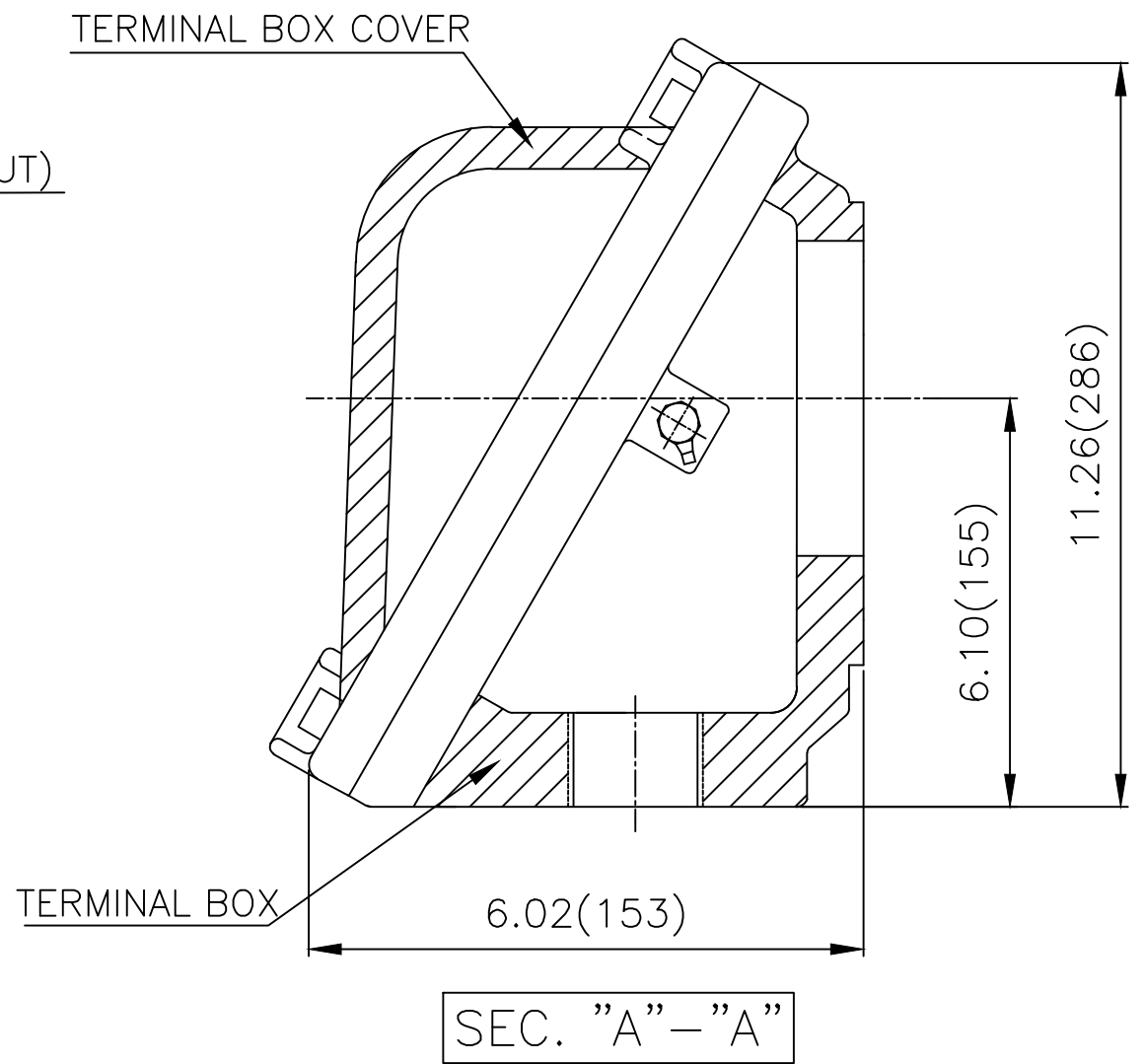
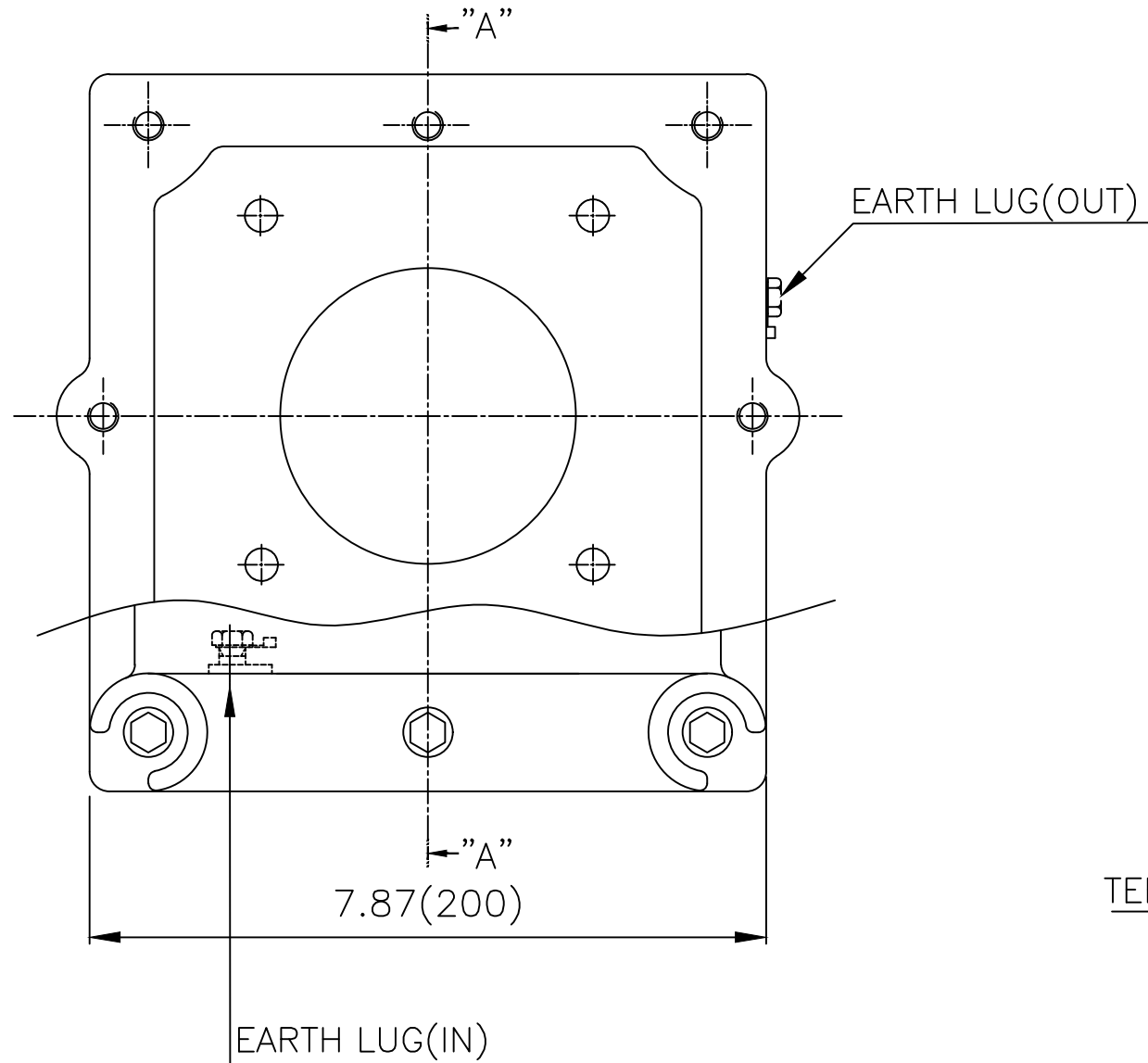
NOTE

- 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 324TC	DWG SIZE	A4 (1:13)
CHKD BY	R.G.KIM	SCALE	1/10	TITLE	OUTLINE	REF. NO	Sheet No. of
CHKD BY		PROJEC'N	3rd Angle				
DSND BY	J.H.JEON	DATE	2021-04-15				
				DWG NO	LM-U0324C4TL001	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		일반재공공차	
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. 320(CAST IRON)	DWG SIZE	A3 (1:2)
CHKD BY	R.G.KIM	SCALE	1/2	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-248631	Revision No.	0

