

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.	IXHHI40-18-324T	Item No.		Rev. No.	[]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA			
Frame Size	324T		Rated Output	30 kW		40 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	39.0 A	48.8 A
Insulation Class	F			Locked-rotor**	850 %	850 %
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		91.1 %	
Altitude	Less than 1,000 meter		75% Load		93.1 %	
Relative Humidity	Less than 80 %		100% Load		94.1 %	
Ambient Temp.	40 deg. C (Max.)		Power Factor(p.u)			
Duty Type	Continuous (S1)		50% Load		0.670	
Service Factor	1.15		75% Load		0.770	
Mounting	B3		100% Load		0.820	
Bearing	Type	Anti-Friction	Speed at Full Load			
	DE/N-DE	6313ZC3 / 6211ZC3	1780 r.p.m			
	Lubricant	Grease(Polyrex-EM)	Torque			
External Thrust	Not applicable		Full Load		118.7 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.)		218.553 lb.ft2	
Location	Refer to Outline Drawing		Motor		7.121 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-U0324B3TL001	820 lb.	

REMARK

- Premium efficiency according to NEMA MG1
- 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
- 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
- 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








40HP	4P	230/460V	Cat. No.	IXHHI40-18-324T	Amps	97.6/48.8	
Model	LATER		INS. Class	F HD-F1	Hertz	60Hz	
Type	XJP	Duty	CONT	Code	K	NEMA Norm. Eff.	94.1%
Frame	324T	Encl.	TEFC	S.F.	1.15	3/4 Eff.	93.1%
Bearing	Drive	6313ZC3	S.F.	1.00	on sine wave power	NEMA Design	B Torque
	Opp.	6211ZC3	RPM	1780	on PWM or IGBT power	Amb.	40°C
Usable at	50Hz 30HP 380V 49.9A 1480rpm S.F.: 1.0 Eff.: 91.6% Code: L						
	50Hz 30HP 400/415V 48.7/48.1A 1485/1485rpm S.F.: 1.0 Eff.: 91.6/91.6% Code: L/L						
UL Certified for	Class I, Div. 1, Group C&D / Class I, Zone 1, Group IIA & IIB				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	820 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
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			

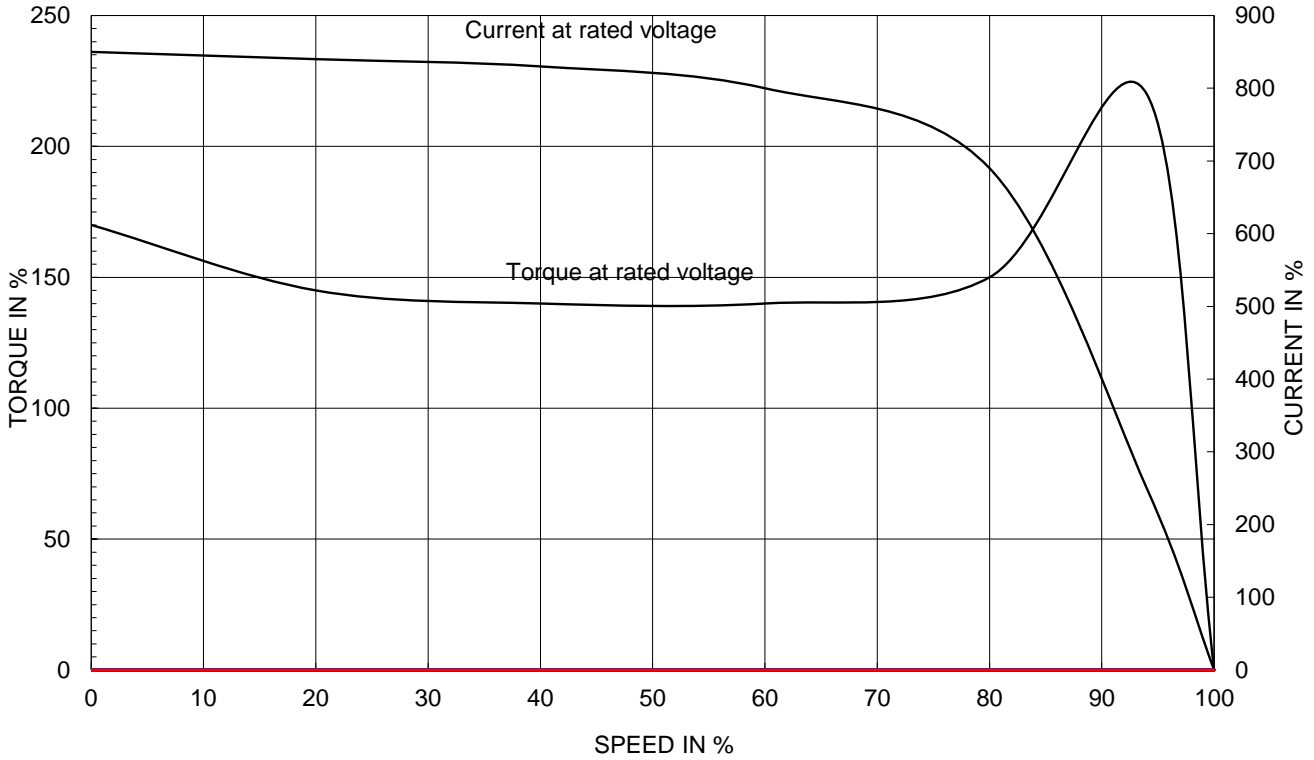


REF. NO	4M-136067	Sheet No.	of
DWG NO	NP-IXHHI40-18-324T	Revision No.	0

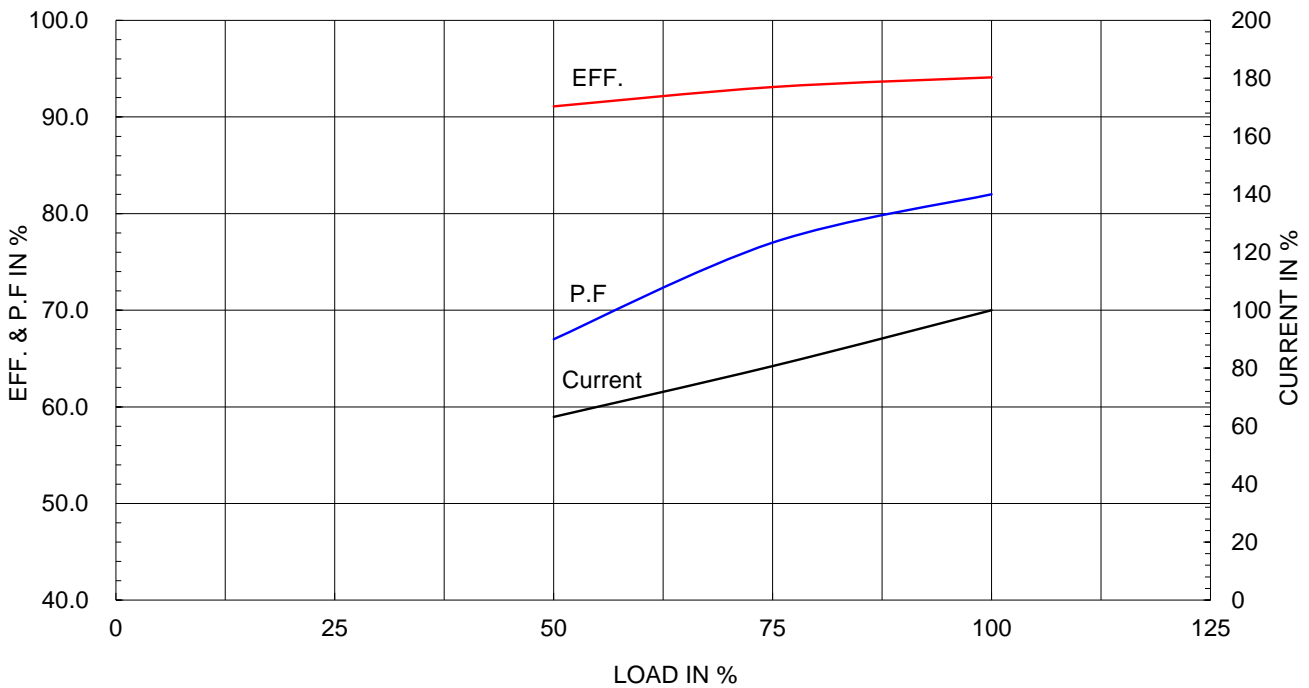
Type :	XJP
Full Load Torque :	118.7 lb.ft
Load moment of Inertia (J) :	218.553 lb.ft ²
Motor moment of Inertia (J) :	7.121 lb.ft ²

30kW	40HP	4 P	60 Hz
Speed at Full Load :			1780 RPM
Rated Voltage	575V	460V	230V
Full Load Current	39.0A	48.8A	97.6A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE

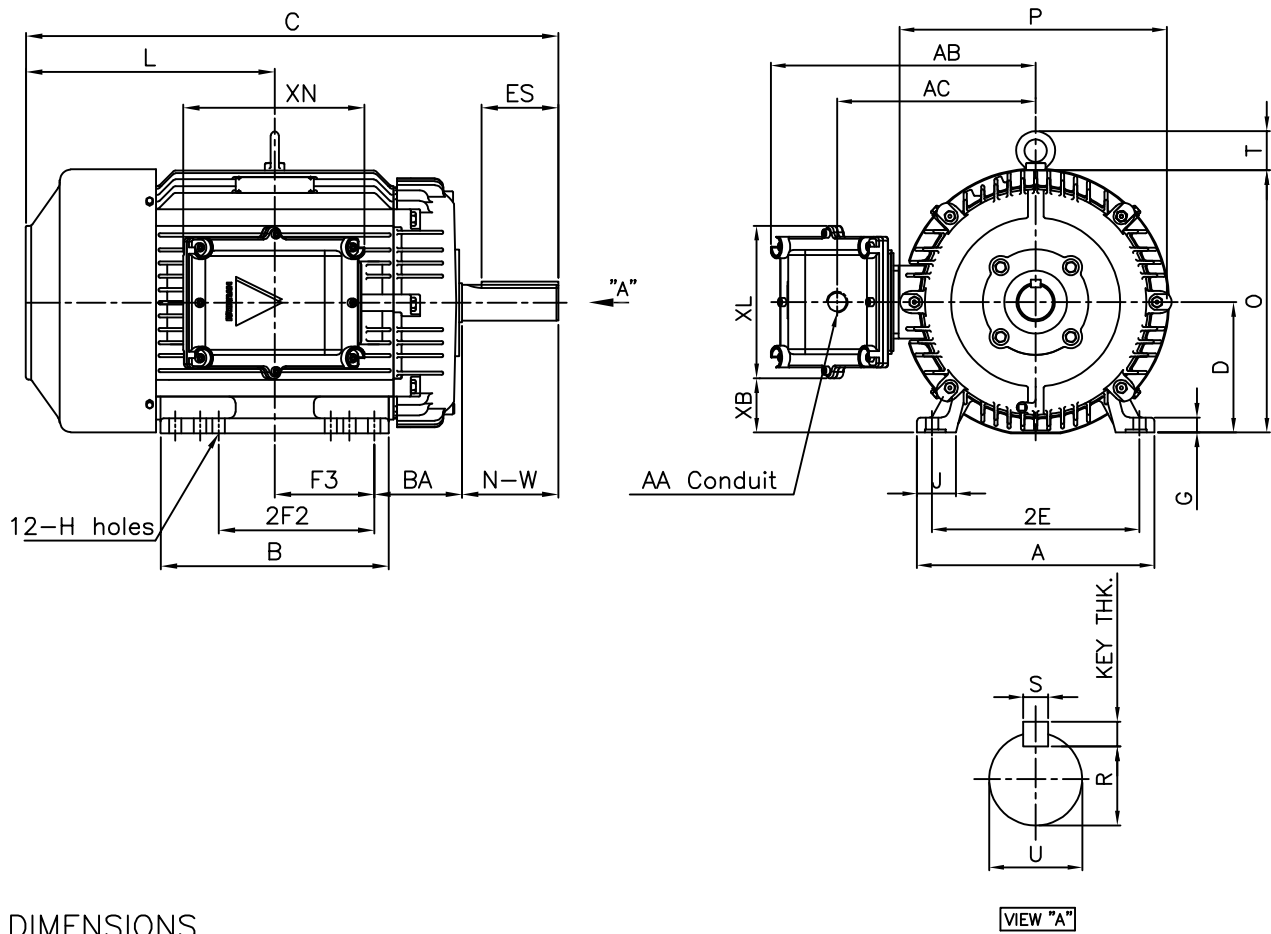


본 도면은 HD현대일렉트릭(주) 재산이며 허가없이 복사할 수 없음 (취급주의)

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▽	50S	REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY
▽▽	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	2F2 ⁴⁾	F3	G	J	H	AA	AB	AC	XB	XL	XN	324T
14.33	15.74	12.50	10.50	6.99	1.11	2.36	0.66	2.00	15.27	11.02	3.39	9.21	10.94	820

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			
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

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
4. Location of holes for 324T frame

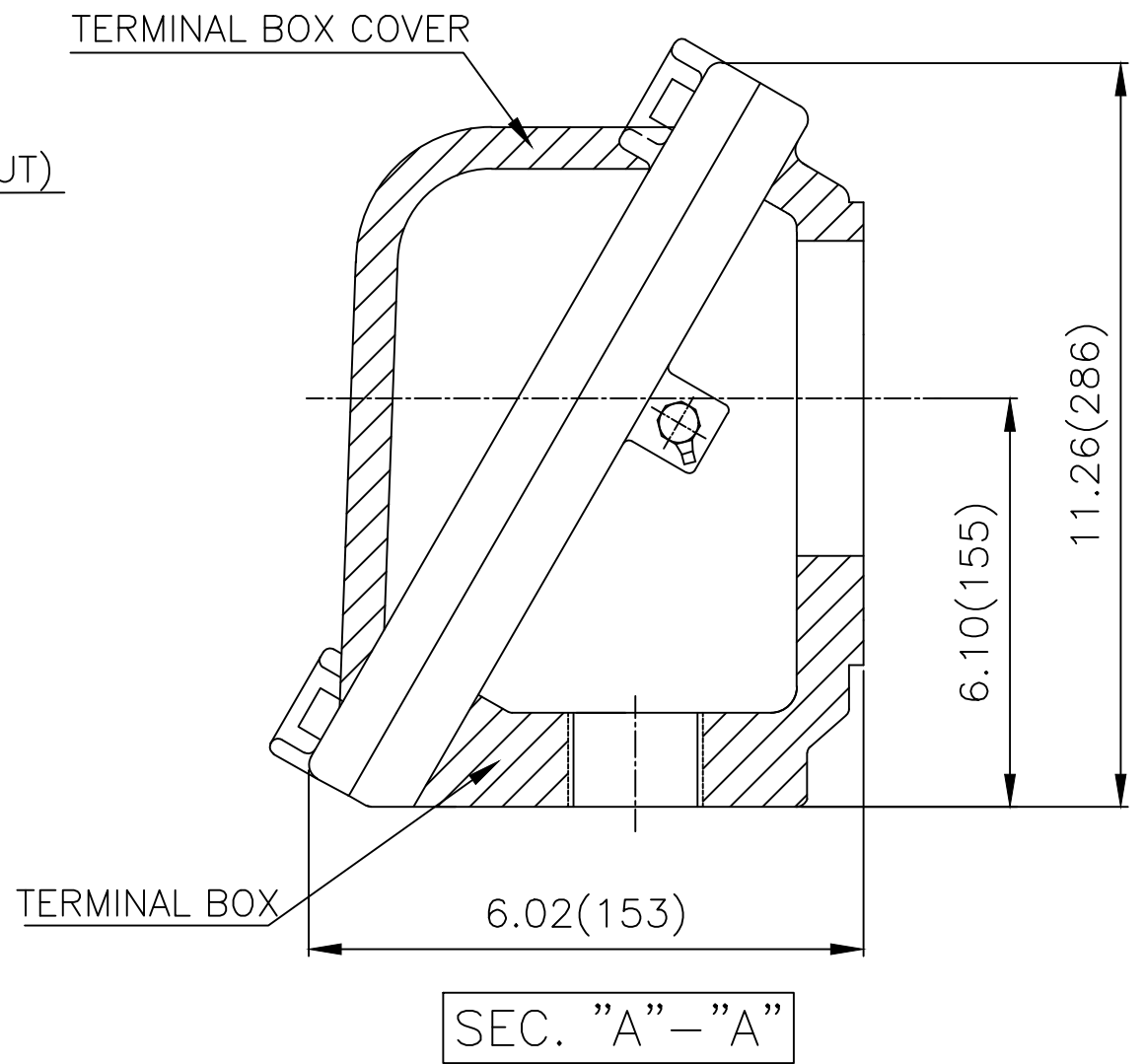
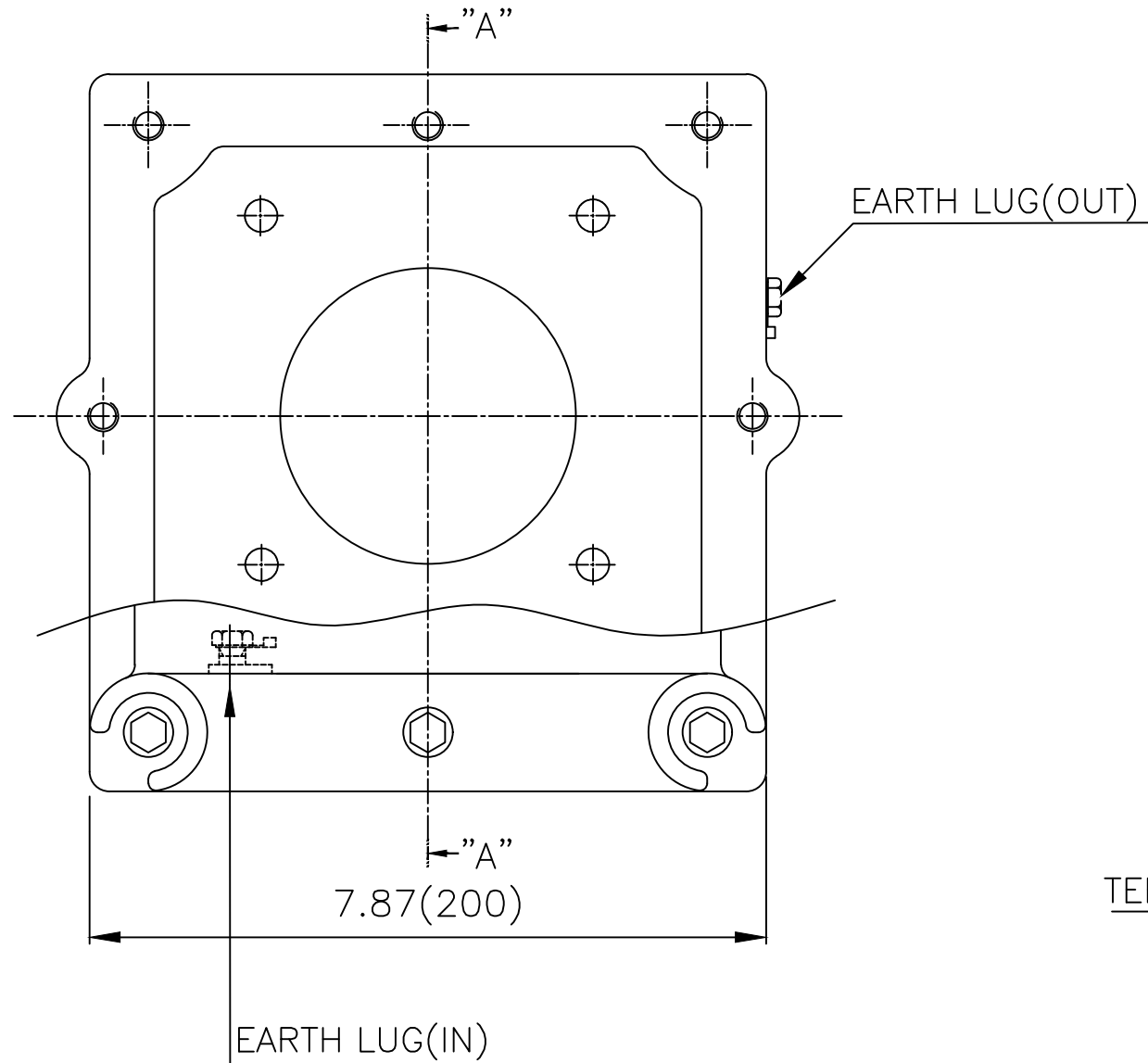
APPD BY	S.Y.KIM	UNIT	inch	SUBJECT	NEMA 324T	DWG SIZE	A4 (1:12)
CHKD BY	R.G.KIM	SCALE	1/10	TITLE	OUTLINE	REF. NO	Sheet No. of
CHKD BY		PROJEC'N	3rd Angle				
DSND BY	J.H.JEON	DATE	2021-04-15				



REF. NO	.	Sheet No. of
DWG NO	LM-U0324B3TL001	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. 320(CAST IRON)		DWG SIZE
CHKD BY	R.G.KIM	SCALE	1/2	TITLE	MAIN TERMINAL BOX ASS'Y		A3 (1:2)
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

