

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.	IXHHI30-12-326T	Item No.		Rev. No.	[]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA			
Frame Size	326T		Rated Output	22 kW		30 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	29.7 A	37.1 A
Insulation Class	F			Locked-rotor**	830 %	830 %
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	B3		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		131.9 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.)		442.185 lb.ft2	
Location	Refer to Outline Drawing		Motor		10.443 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.)		
B3	LM-U0326B3TL001	840 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.

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D	<div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>CROWN TRITON Premium Efficiency AC 3 Phase Motor</p> </div> <div style="text-align: center;"> <p>Explosion Proof</p> </div> <div style="text-align: center;"> </div> <div style="text-align: center;"> </div> <div style="text-align: center;"> </div> </div> <table border="1" style="width:100%; border-collapse: collapse; margin-top: 10px;"> <tr> <td style="width:15%;">30HP</td> <td style="width:15%;">6P</td> <td style="width:15%;">230/460V</td> <td style="width:15%;">Cat. No. IXHHI30-12-326T</td> <td style="width:15%;">Amps</td> <td style="width:15%;">74.2/37.1</td> </tr> <tr> <td>Model</td> <td>LATER</td> <td></td> <td>INS. Class F HD-F1</td> <td>Hertz</td> <td>60Hz</td> </tr> <tr> <td>Type</td> <td>XJP</td> <td>Duty</td> <td>CONT</td> <td>Code</td> <td>K</td> </tr> <tr> <td>Frame</td> <td>326T</td> <td>Encl.</td> <td>TEFC</td> <td>S.F. 1.15</td> <td>on sine wave power</td> </tr> <tr> <td rowspan="2">Bearing</td> <td>Drive</td> <td colspan="2">6313ZC3</td> <td>S.F. 1.00</td> <td>on PWM or IGBT power</td> </tr> <tr> <td>Opp.</td> <td colspan="2">6211ZC3</td> <td>RPM</td> <td>1175</td> </tr> <tr> <td rowspan="2">Usable at</td> <td colspan="5">50Hz 25HP 380V 42.8A 985rpm S.F.: 1.0 Eff.: 90.4% Code: K</td> </tr> <tr> <td colspan="5">50Hz 25HP 400/415V 41.8/41.4A 985/985rpm S.F.: 1.0 Eff.: 90.4/90.4% Code: L/L</td> </tr> <tr> <td rowspan="2">UL Certified for</td> <td colspan="3">Class I, Div. 1, Group C&D / Class I, Zone 1, Group IIA & IIB</td> <td rowspan="2">Temp. Code</td> <td colspan="2">T3 at 40°C Amb. / T2D at 55°C Amb.</td> </tr> <tr> <td colspan="3">10:1VT(20:1 at 50% load) 4:1CT(10:1 1hour duty at lowest RPM)</td> <td colspan="2">T4 With Thermostat</td> </tr> <tr> <td>No.</td> <td colspan="2">-</td> <td>Date</td> <td colspan="2">-</td> <td>Weight</td> <td>840 lb</td> </tr> </table> <div style="display: flex; justify-content: space-between; align-items: center; margin-top: 10px;"> <div style="text-align: center;"> <p>4M-136067 (NEMA 320~444Fr.)</p> </div> <div style="text-align: center;"> <p>Made in Korea H1</p> </div> <div style="text-align: center;"> </div> </div>						30HP	6P	230/460V	Cat. No. IXHHI30-12-326T	Amps	74.2/37.1	Model	LATER		INS. Class F HD-F1	Hertz	60Hz	Type	XJP	Duty	CONT	Code	K	Frame	326T	Encl.	TEFC	S.F. 1.15	on sine wave power	Bearing	Drive	6313ZC3		S.F. 1.00	on PWM or IGBT power	Opp.	6211ZC3		RPM	1175	Usable at	50Hz 25HP 380V 42.8A 985rpm S.F.: 1.0 Eff.: 90.4% Code: K					50Hz 25HP 400/415V 41.8/41.4A 985/985rpm S.F.: 1.0 Eff.: 90.4/90.4% 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	840 lb	C
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A	APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	UL Class I, Division1 (IXHHI)	DWG SIZE																																																																		
	CHKD BY	I.K.KIM	SCALE	NONE	TITLE NAMEPLATE DRAWING		A4 (1:1)																																																																		
	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																																																																			
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PERFORMANCE CURVE

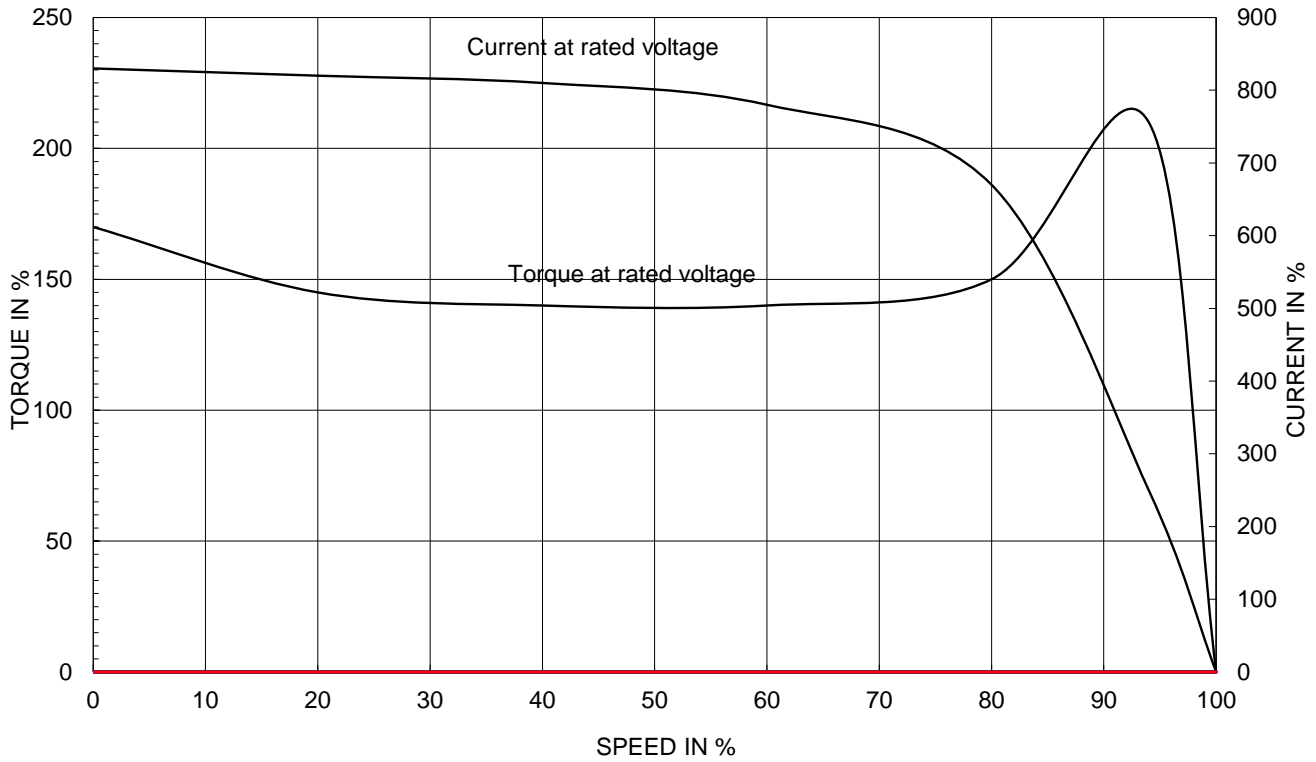
CURVE NO.

PC-IXHHI30-12-326T

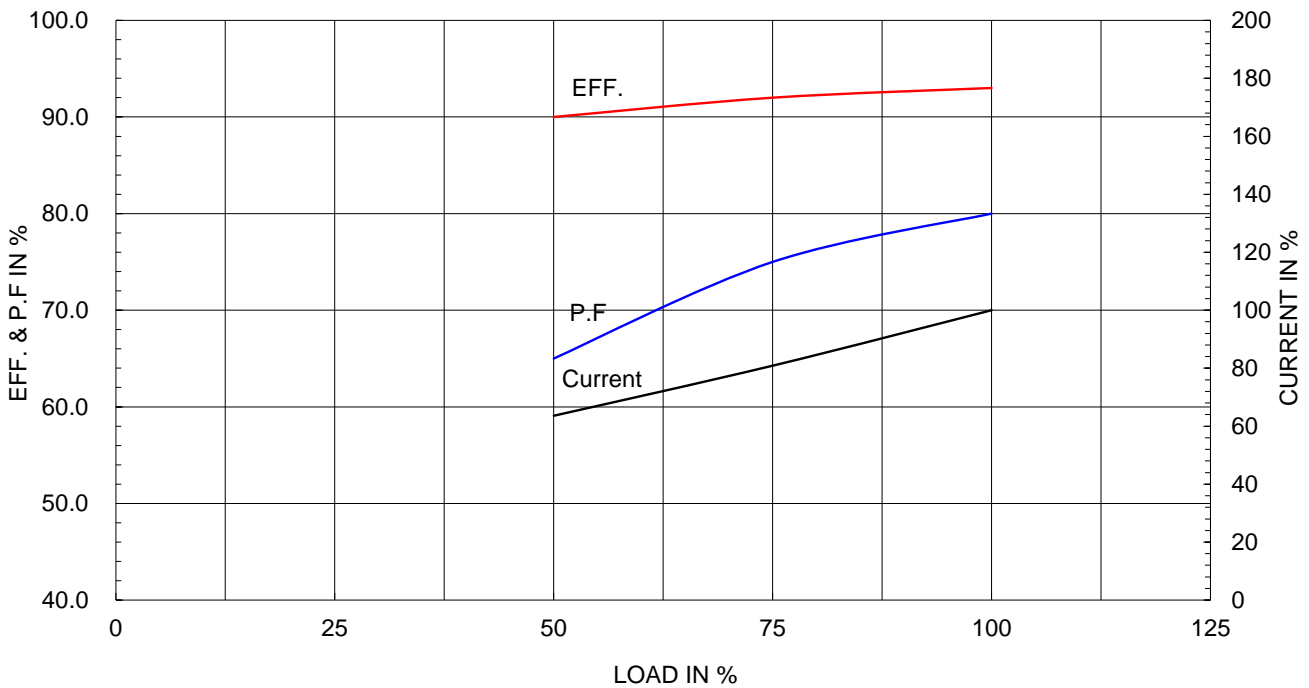
Type :	XJP
Full Load Torque :	131.9 lb.ft
Load moment of Inertia (J) :	442.185 lb.ft2
Motor moment of Inertia (J) :	10.443 lb.ft2

22kW 30HP	6 P	60 Hz
Speed at Full Load :		1175 RPM
Rated Voltage	575V	460V 230V
Full Load Current	29.7A	37.1A 74.2A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE

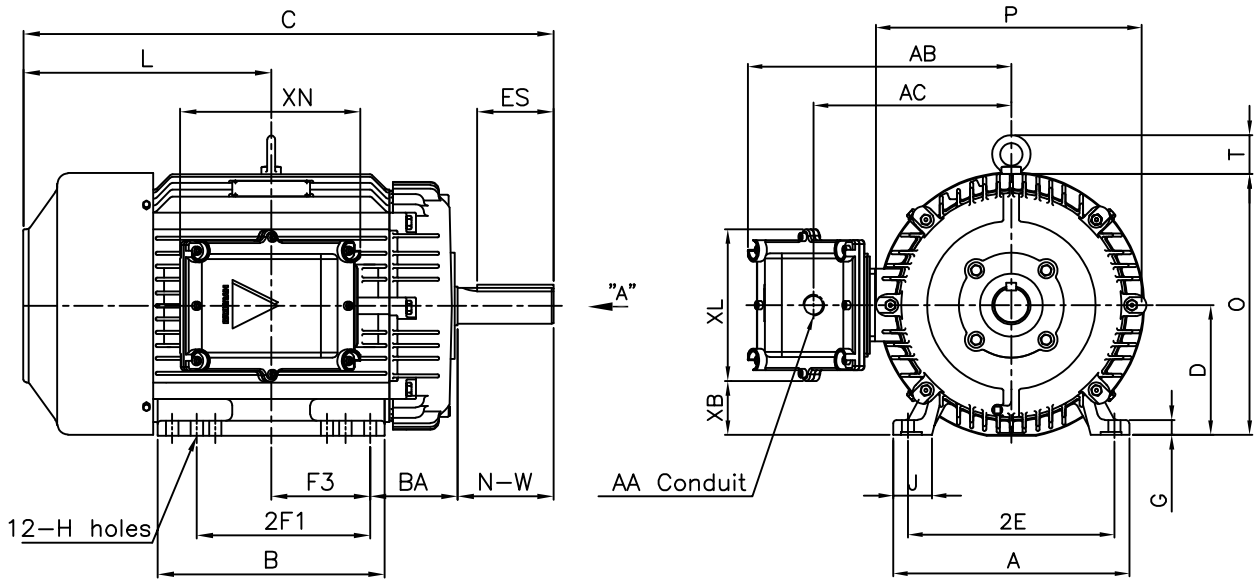


본 도면은 HD현대일렉트릭(주) 재산이며 허가없이 복사할 수 없음 (취급유의)

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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

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 ⁴⁾	F3	G	J	H	AA	AB	AC	XB	XL	XN	326T
14.33	15.74	12.50	12.00	6.99	1.11	2.36	0.66	2.00	15.27	11.02	3.39	9.21	10.94	840

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
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 326T frame

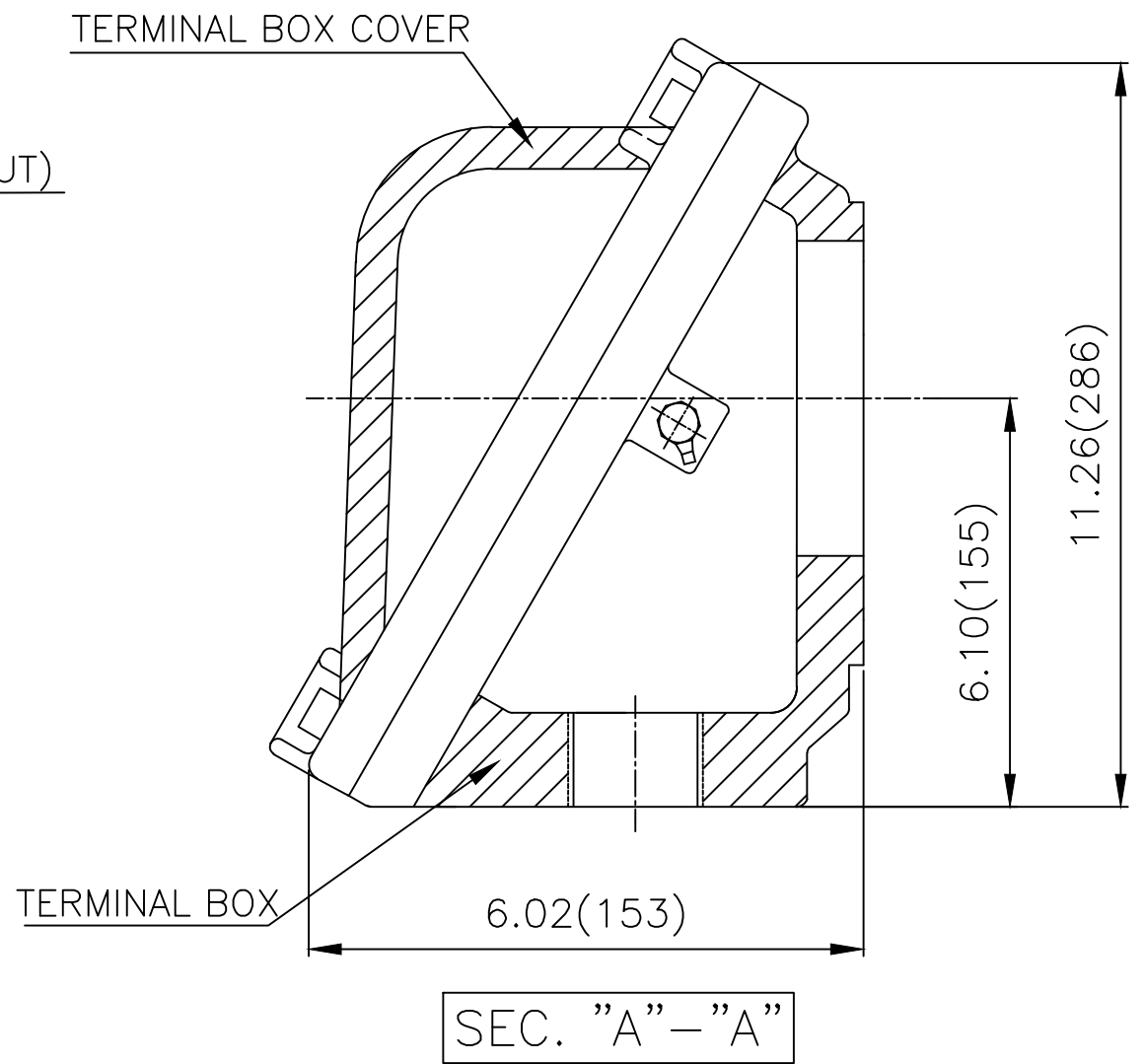
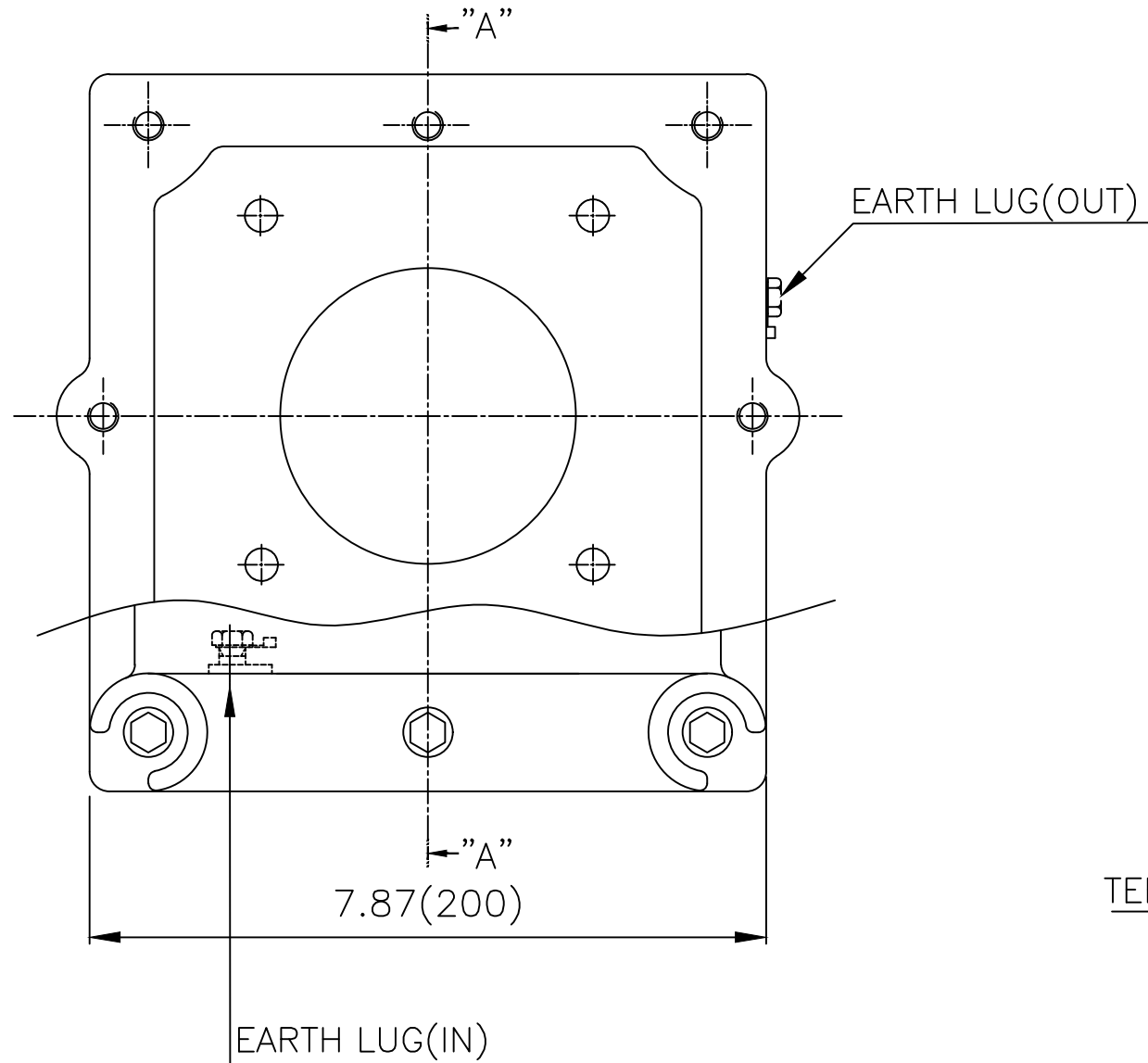
APPD BY	S.Y.KIM	UNIT	inch	SUBJECT	NEMA 326T	DWG SIZE	A4 (1:12)
CHKD BY	R.G.KIM	SCALE	1/10	TITLE	OUTLINE	Sheet No.	of
CHKD BY		PROJEC'N	3rd Angle				
DSND BY	J.H.JEON	DATE	2021-04-15				



REF. NO	.	Sheet No.	of
DWG NO	LM-U0326B3TL001	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	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

