

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.	IXHHI30-12-326TC	Item No.				Rev. No.	[          ]			
Project Name		Project No.				Quantity	sets			
GENERAL SPECIFICATION					PERFORMANCE DATA					
Frame Size	326TC				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	74.2 A
Insulation Class	F					Locked-rotor**		830 %	830 %	830 %
Temp. Rise at full load (by resistance method)					Efficiency					
at 1.0 S.F		80 deg. C			50% Load		90.0 %			
Motor Location		<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor			75% Load		92.0 %			
Altitude		Less than 1,000 meter			100% Load		93.0 %			
Relative Humidity		Less than 80 %			Power Factor(p.u)					
Ambient Temp.		40 deg. C (Max.)			50% Load		0.650			
Duty Type		Continuous ( S1 )			75% Load		0.750			
Service Factor		1.15			100% Load		0.800			
Mounting		B35			Speed at Full Load		1175 r.p.m			
Bearing	Type	Anti-Friction			Torque					
	DE/N-DE	6313ZC3 / 6211ZC3			Full Load		131.9 lb.ft			
	Lubricant	Grease(Polyrex-EM)			Locked-rotor**		170 %			
External Thrust		Not applicable			Breakdown**		210 %			
Coupling Method		<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt			Moment of Inertia (J)					
Shaft Extension		Single			Load(Max.)		442.185 lb.ft2			
Terminal Box	Main	Cast Iron			Motor		10.443 lb.ft2			
	Aux.	No			Sound Pressure Level (No-load & mean value at 1m from motor)					
	Location	Refer to Outline Drawing					70 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					SUBMITTAL DRAWING					
* W.T.D.(Thermostat, 145°C) : 1EA/Ph.					Outline Dimension Drawing \ Motor Weight(Approx.)					
					B35		LM-U0326C4TL001		560 lb.	
REMARK										
<ol style="list-style-type: none"> <li>1. Premium efficiency according to NEMA MG1</li> <li>2. Inverter Duty @ 1.0 Service Factor &amp; Ambient max 45°C <ul style="list-style-type: none"> <li>-. 4:1 CT (10:1 CT at 1hour Duty)</li> <li>-. 10:1 VT (20:1 VT at 50% load)</li> <li>-. CHP up to 1.5 times base speed, NEMA MG1 Part31</li> </ul> </li> <li>3. Class I, Division 1, Group C&amp;D <ul style="list-style-type: none"> <li>-. Temp.Code(Sine wave) : T3 at 40°C Amb./T2D at 55°C Amb.</li> <li style="padding-left: 40px;">T4 with Winding Temperature Detector</li> </ul> </li> <li>4. Class II, Division 1, Group F&amp;G <ul style="list-style-type: none"> <li>-. Temp.Code(Sine wave) : T3B</li> </ul> </li> </ol>										
Date		DSND	CHKD	CHKD	APPD					
2024-08-08		S.H. Lee	I.K. Kim	R.G. Kim	S.W. Kim					

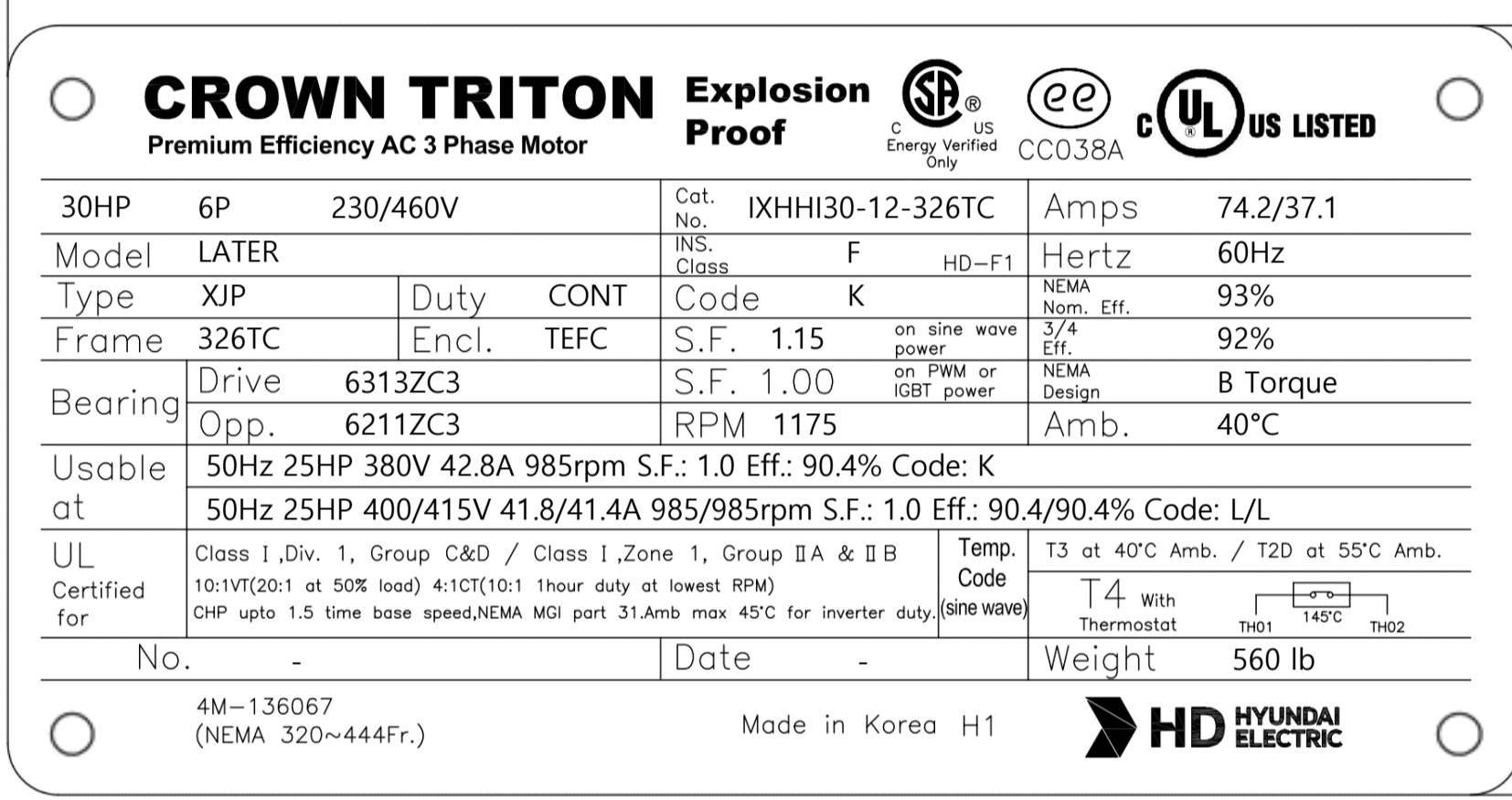

[Note] Others not mentioned in this data sheet shall be in accordance with maker standard.

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
<div style="display: flex; justify-content: space-between;"> <span>4.72</span> <span>2.36</span> </div> <div style="text-align: center;">  <p><b>CROWN TRITON</b> Explosion Proof Premium Efficiency AC 3 Phase Motor</p> <p>30HP 6P 230/460V Cat. No. IXHHI30-12-326TC Amps 74.2/37.1</p> <p>Model LATER INS. Class F HD-F1 Hertz 60Hz</p> <p>Type XJP Duty CONT Code K NEMA Nom. Eff. 93%</p> <p>Frame 326TC Encl. TEFC S.F. 1.15 on sine wave power 3/4 Eff. 92%</p> <p>Bearing Drive 6313ZC3 S.F. 1.00 on PWM or IGBT power NEMA Design B Torque</p> <p>Opp. 6211ZC3 RPM 1175 Amb. 40°C</p> <p>Usable at 50Hz 25HP 380V 42.8A 985rpm S.F.: 1.0 Eff.: 90.4% Code: K</p> <p>50Hz 25HP 400/415V 41.8/41.4A 985/985rpm S.F.: 1.0 Eff.: 90.4/90.4% Code: L/L</p> <p>UL Certified for Class I, Div. 1, Group C&amp;D / Class I, Zone 1, Group II A &amp; II B</p> <p>10:1VT(20:1 at 50% load) 4:1CT(10:1 1hour duty at lowest RPM)</p> <p>CHP upto 1.5 time base speed, NEMA MGI part 31. Amb max 45°C for inverter duty.</p> <p>No. - Date - Weight 560 lb</p> <p>4M-136067 (NEMA 320~444Fr.) Made in Korea H1</p>  </div>							



# PERFORMANCE CURVE

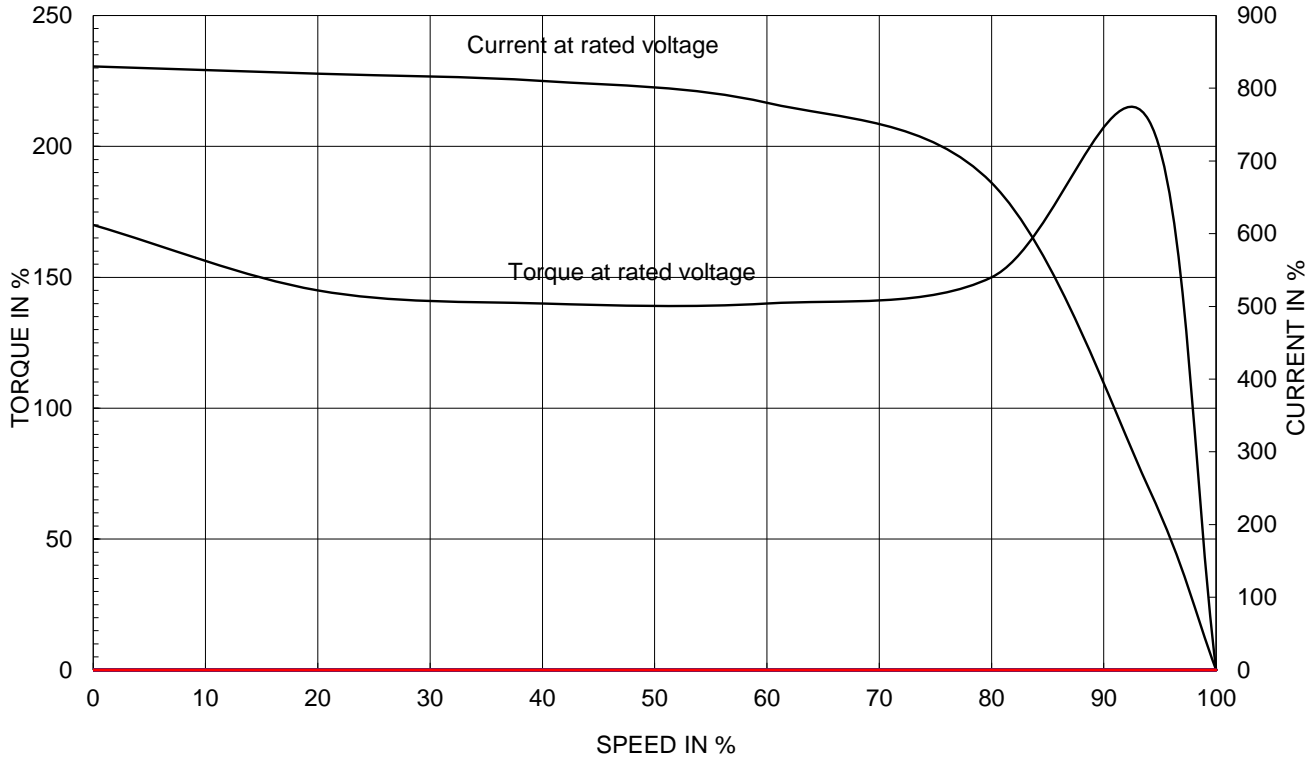
CURVE NO.

PC-IXHHI30-12-326TC

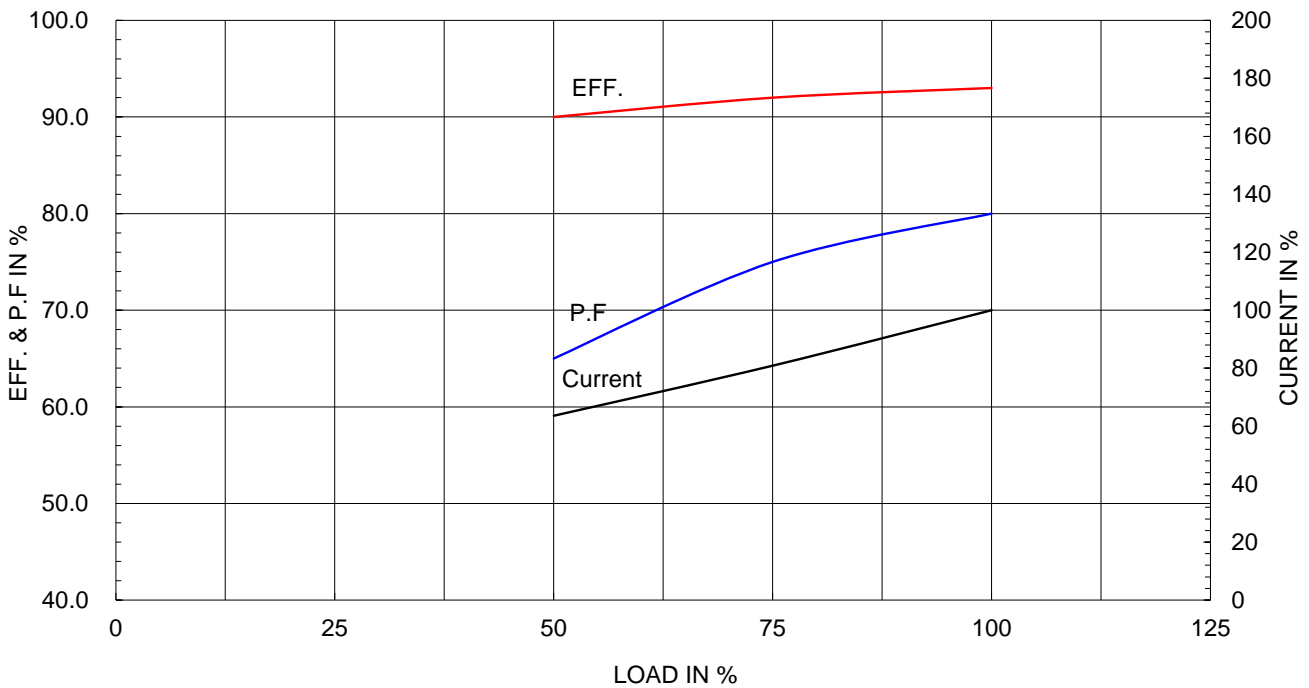
Type :	XJP
Full Load Torque :	131.9 lb.ft
Load moment of Inertia (J) :	442.185 lb.ft2
Motor moment of Inertia (J) :	10.443 lb.ft2

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

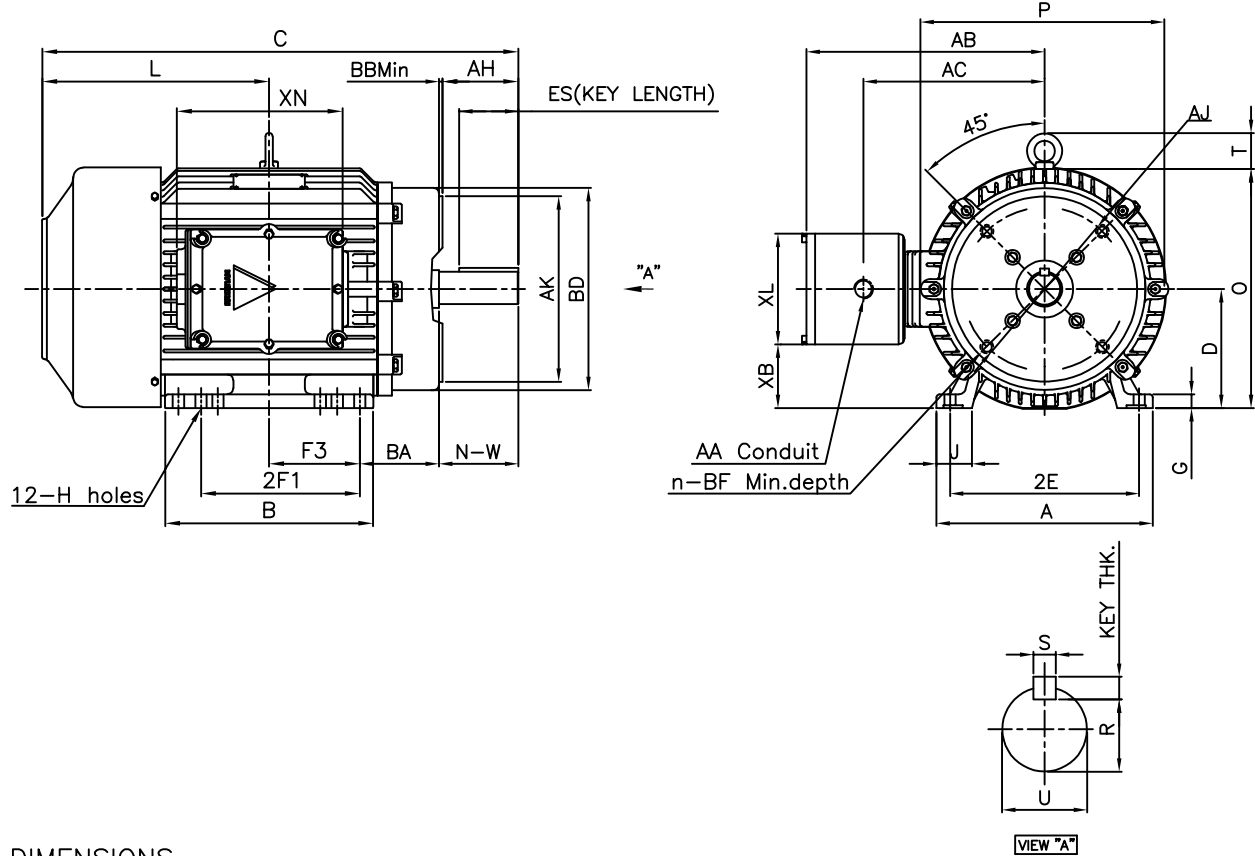


본 도면은 HD현대일렉트릭(주) 재산이며 허가없이 복사할 수 없음 (취급유의)

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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

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	12.00	-	6.99	1.11	2.36	0.66	2.00	15.27	11.02	3.94	7.87	11.26	560

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

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

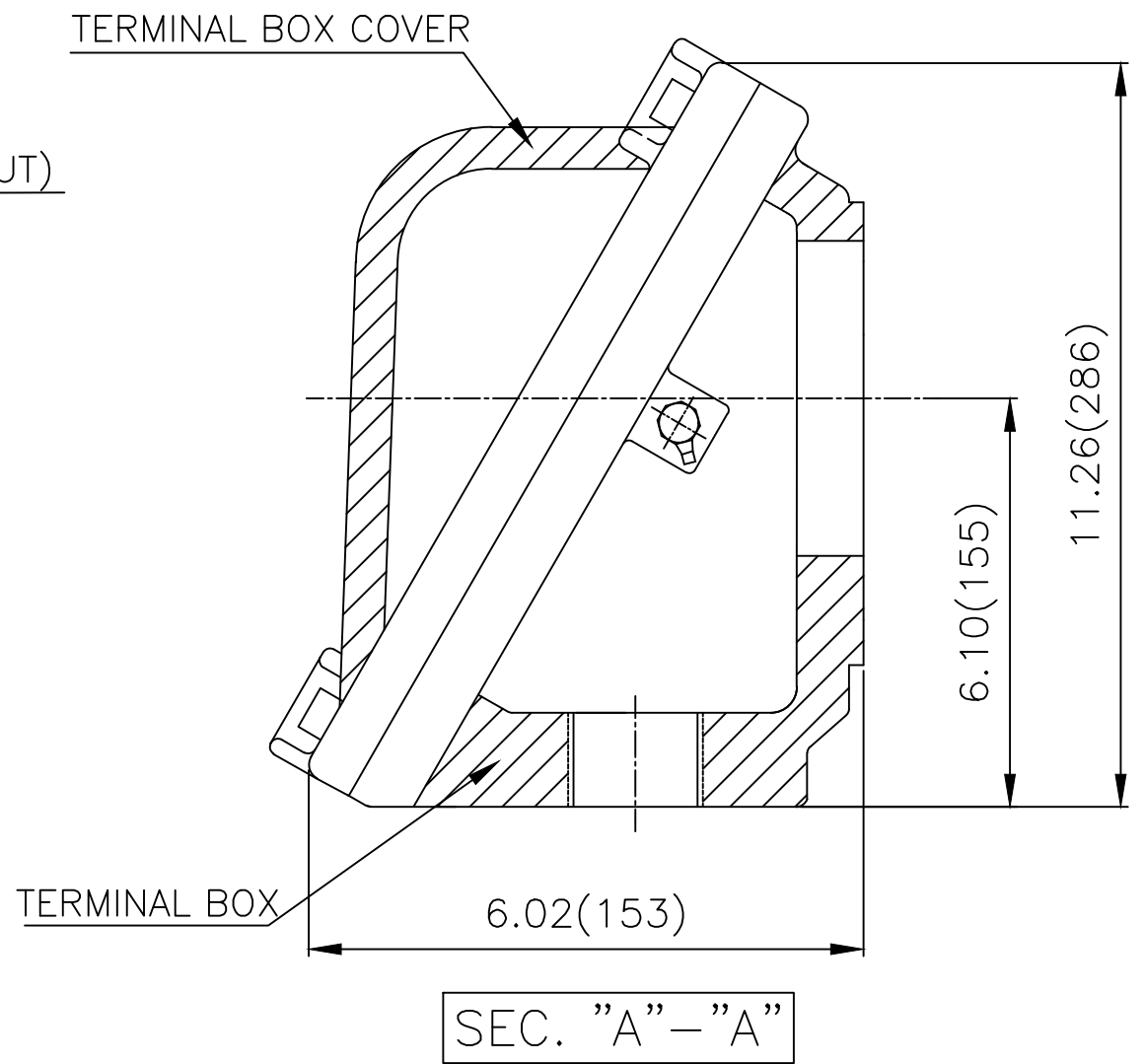
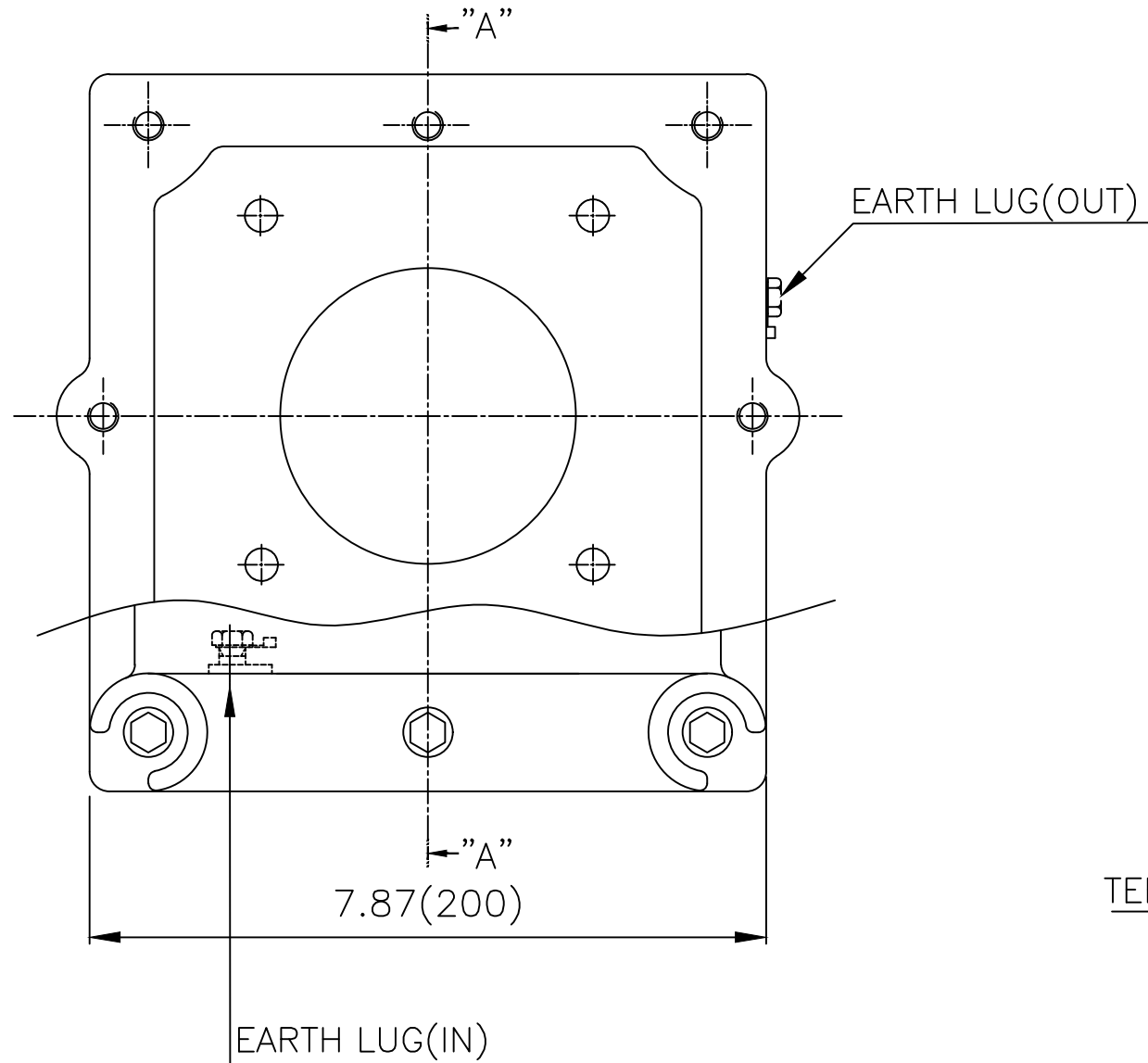
APPD BY	S.Y.KIM	UNIT	inch	SUBJECT	NEMA 326TC	DWG SIZE	A4 ( 1:13 )
CHKD BY	R.G.KIM	SCALE	1/10	TITLE	OUTLINE	REF. NO	Sheet No. of
CHKD BY		PROJEC'N	3rd Angle				
DSND BY	J.H.JEON	DATE	2021-04-15				



DWG NO	LM-U0326C4TL001	Revision No.	0
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# 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
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

