

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.		IXHHI5-18-184TC		Item No.		Rev. No. [      ]			
Project Name		Project No.		Quantity		sets			
GENERAL SPECIFICATION				PERFORMANCE DATA					
Frame Size		184TC		Rated Output		3.7 kW      5 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      5.19 A      6.49 A      12.97 A			
Insulation Class		F		Locked-rotor**		840 %      840 %      840 %			
Temp. Rise at full load (by resistance method)				Efficiency					
at 1.0 S.F		80 deg. C		50% Load		86.5 %			
Motor Location		<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor		75% Load		88.5 %			
Altitude		Less than 1,000 meter		100% Load		89.5 %			
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		1760 r.p.m			
Bearing		Type		Anti-Friction		Torque			
		DE/N-DE		6206ZZC3 / 6206ZZC3		Full Load			
		Lubricant		Grease(Polyrex-EM)		Locked-rotor**			
External Thrust		Not applicable		Breakdown**		260 %			
Coupling Method		<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt		Moment of Inertia (J)					
Shaft Extension		Single		Load(Max.)		35.061 lb.ft2			
Terminal Box		Main		Motor		0.309 lb.ft2			
		Aux.		No		Sound Pressure Level (No-load & mean value at 1m from motor)			
Location		Refer to Outline Drawing				64 dB(A)			
Application				Vibration		0.0 mm/sec (peak)			
Area classification		Hazardous		Permissible number of consecutive starts		Cold      0 times Hot      0 times			
Type of Ex-Protection		Class I&II, Division 1		Paint		Munsell No. 4.0PB5.4/5.5(VL-451)			
Applicable Standard		NEMA MG1, CSA C390, UL674							
ACCESSORIES				SUBMITTAL DRAWING					
* W.T.D.(Thermostat, 145°C) : 1EA/Ph.				Outline Dimension Drawing \ Motor Weight(Approx.)					
				B35		LM-U0184C4TL001		121 lb.	
				<b>REMARK</b>					
				1. Premium efficiency according to NEMA MG1					
				2. Inverter Duty @ 1.0 Service Factor & Ambient max 45°C					
				- CT 10.5Hz to 60Hz (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) : T2C at 40°C Amb./T2B at 55°C Amb. T4 with Winding Temperature Detector					
				4. Class II, Division 1, Group F&G					
				- Temp.Code(Sine wave) : T3B					
<b>SPARE PARTS</b>				Date		DSND		CHKD	
				2024-08-08		S.H. Lee		I.K. 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

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<b>CROWN TRITON</b>		Premium Efficiency AC 3 Phase Motor		Explosion Proof		cUL US LISTED	
5HP	4P	230/460V	Cat. No.	IXHHI5-18-184TC		Amb.	40°C
Frame	184TC	Duty	CONT	Amps	12.97/6.49	Type	XJP
RPM	1760	Hertz	60Hz	Encl.	TEFC	Model	LATER
Bearing	Drive	6206ZZC3	S.F.	1.15	on sine wave power	INS. Class	F
	Opp.	6206ZZC3	S.F.	1.00	on PWM or IGBT power	HD-F1	NEMA Design B Torque
Usable at	50Hz 3HP 380V 6.1A 1470rpm S.F.: 1.0 Eff.: 84.3% Code: L						
	50Hz 3HP 400/415V 6.4/6.7A 1475/1475rpm S.F.: 1.0 Eff.: 84.3/84.3% Code: L/L						
UL Certified for	CLASS I, Div. 1, Gr. C & D / CLASS I, Zone 1, Gr. IIA & IIB				Temp. Code	T2C at 40°C Amb. / T2B at 55°C Amb.	
	10:1VT(20:1 at 50% load) CT 10.5Hz to base Hz(10:1 1hour duty at lowest RPM) CHP upto 1.5 time base speed, NEMA MG1 part 31. Amb max 45°C for inverter duty.				(sine wave)	T4 With Thermostat	
No.	-		Date	-		Weight	121 lb
4M-136031 (NEMA 182~215Fr.)		Made in Korea H1		<b>HD HYUNDAI ELECTRIC</b>			

1.57

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			

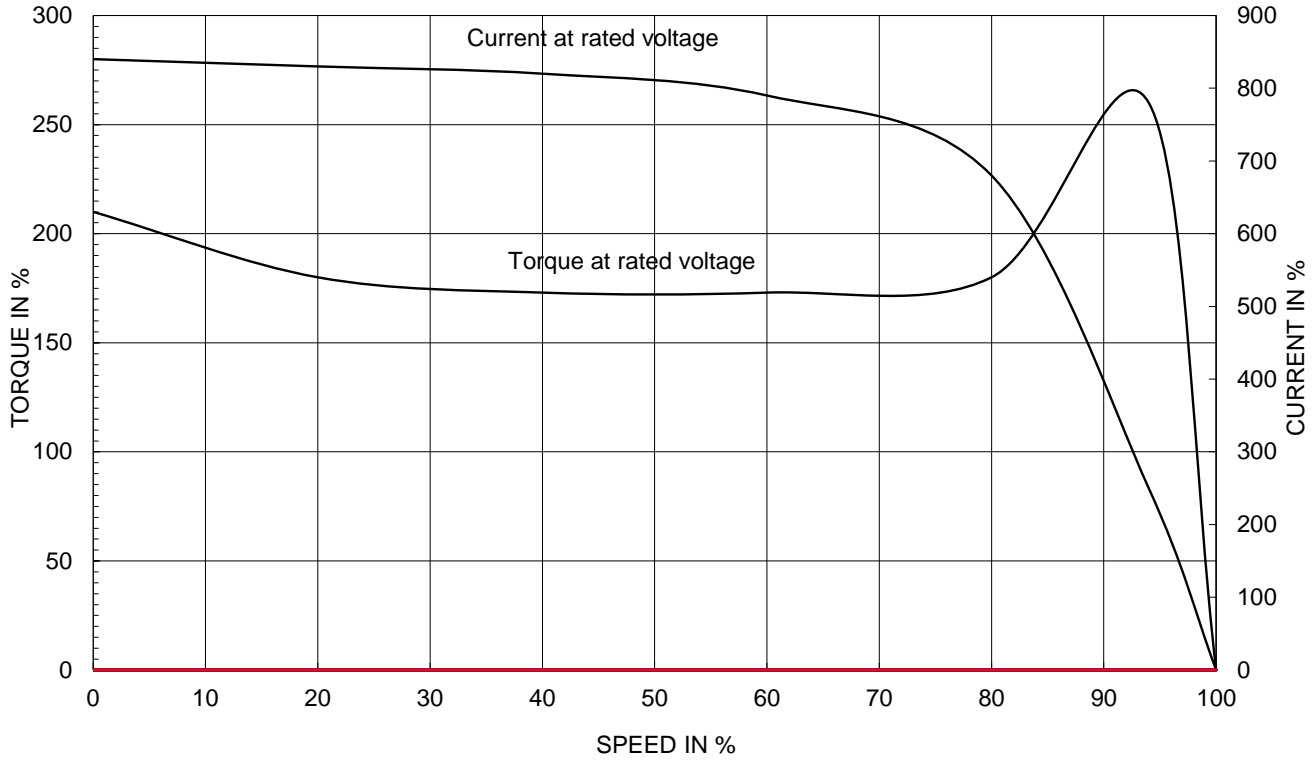


REF. NO	4M-136031	Sheet No.	of
DWG NO	NP-IXHHI5-18-184TC	Revision No.	0

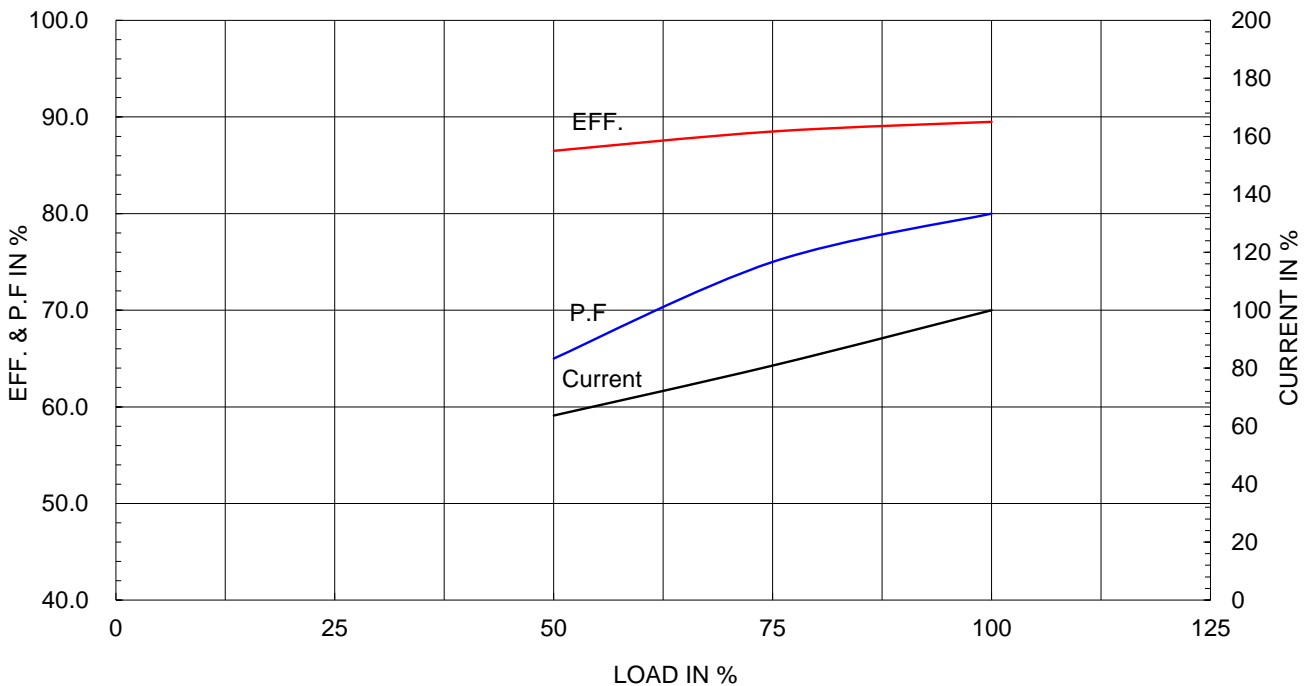
Type :	XJP
Full Load Torque :	14.8 lb.ft
Load moment of Inertia (J) :	35.061 lb.ft <sup>2</sup>
Motor moment of Inertia (J) :	0.309 lb.ft <sup>2</sup>

3.7kW 5HP	4 P	60 Hz
Speed at Full Load :		1760 RPM
Rated Voltage	575V	460V 230V
Full Load Current	5.2A	6.5A 13.0A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE

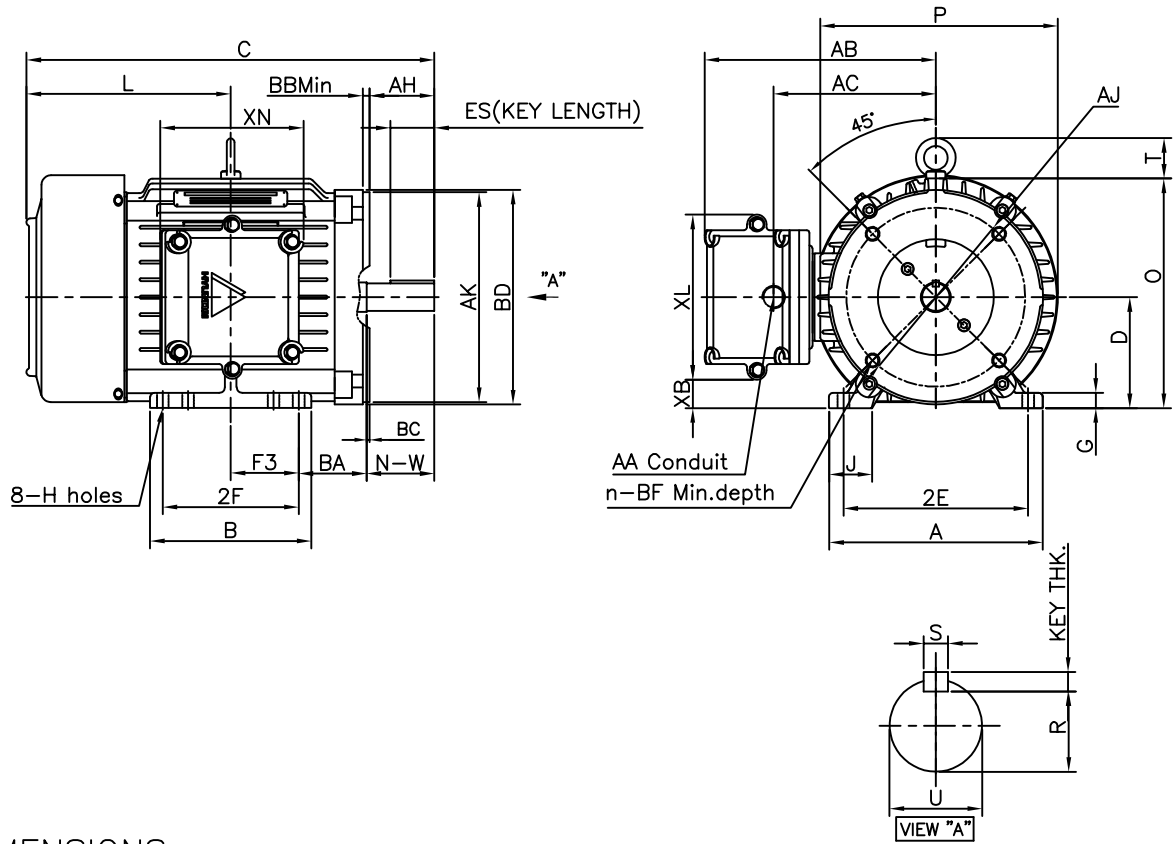


본 도면은 HD현대일렉트릭(주) 재산이며 허가없이 복사할 수 없음 (취급주의)

THIS DRAWING IS PROPRIETARY TO HYUNDAI ELECTRIC. NO PART OF THIS DRAWING MAYBE REPRODUCED WITHOUT THE PERMISSION OF HYUNDAI ELECTRIC.

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▽	50S	REV	DATE
▽▽	12.5S		
▽▽▽	3.2S		
▽▽▽▽	0.4S		

## Class I Division 1



### DIMENSIONS

MOUNTING									CONDUIT BOX						APPROX. WGT.(LB)
A	B	2E	-	2F	F3	G	J	H	AA	AB	AC	XB	XL	XN	
8.66	6.54	7.50	-	5.50	2.75	0.62	1.74	0.41	0.75	9.53	6.57	1.15	6.70	5.98	121

OVERALL						SHAFT				KEY THK.	BEARING			
BA	C	D	L	O	P	T	U	N-W	R		ES	S	DRIVE END	OPP. DRIVE END
2.75	16.55	4.50	8.29	9.32	9.64	1.63	1.125	2.75	0.986	1.78	0.250	0.250	6206ZZC3	6206ZZC3

C-FACE								
AJ	AK	BBmin	BC	BD	BF	BF Def.	n	AH
7.25	8.50	0.25	+0.12	8.70	1/2-13	0.75	4	2.62

### 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)

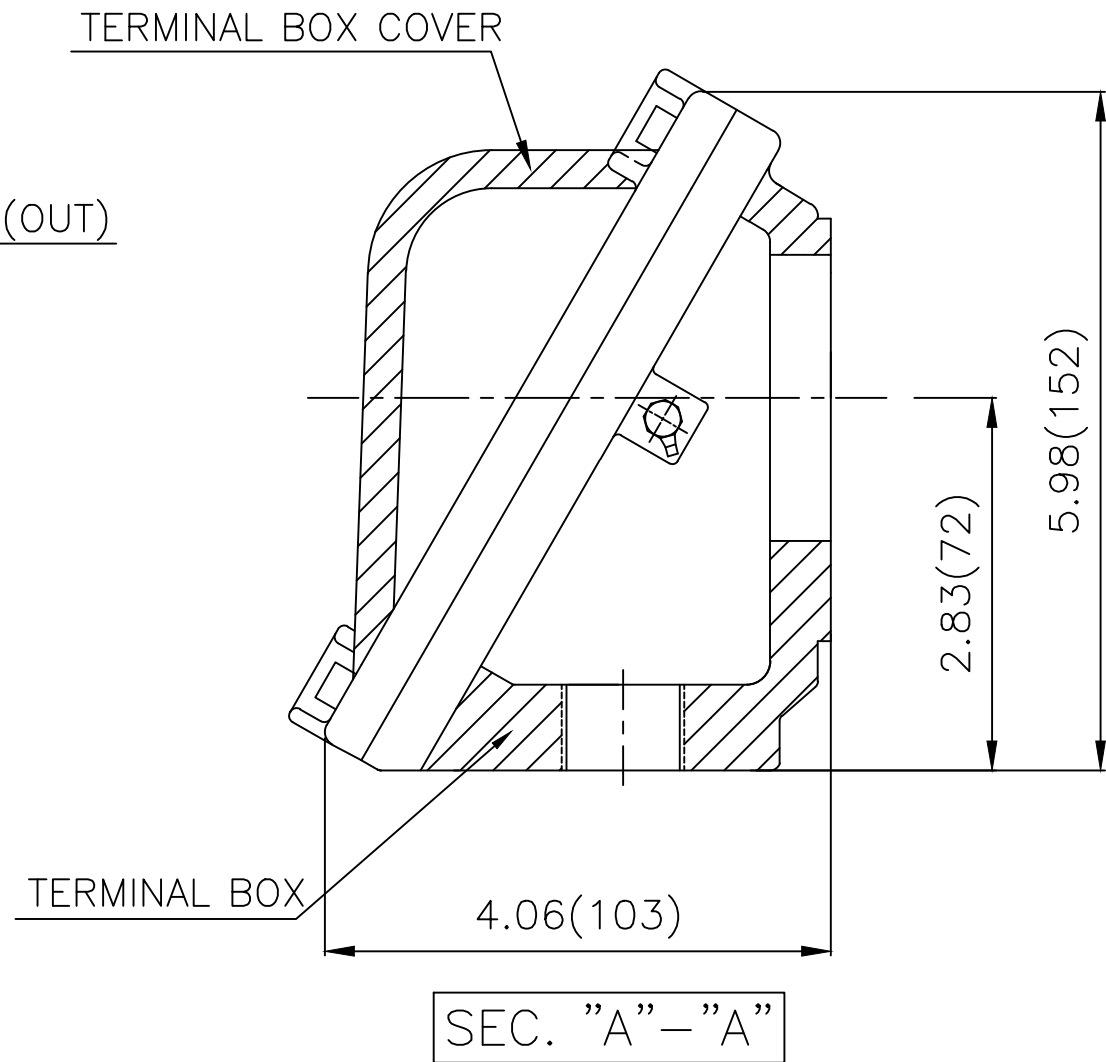
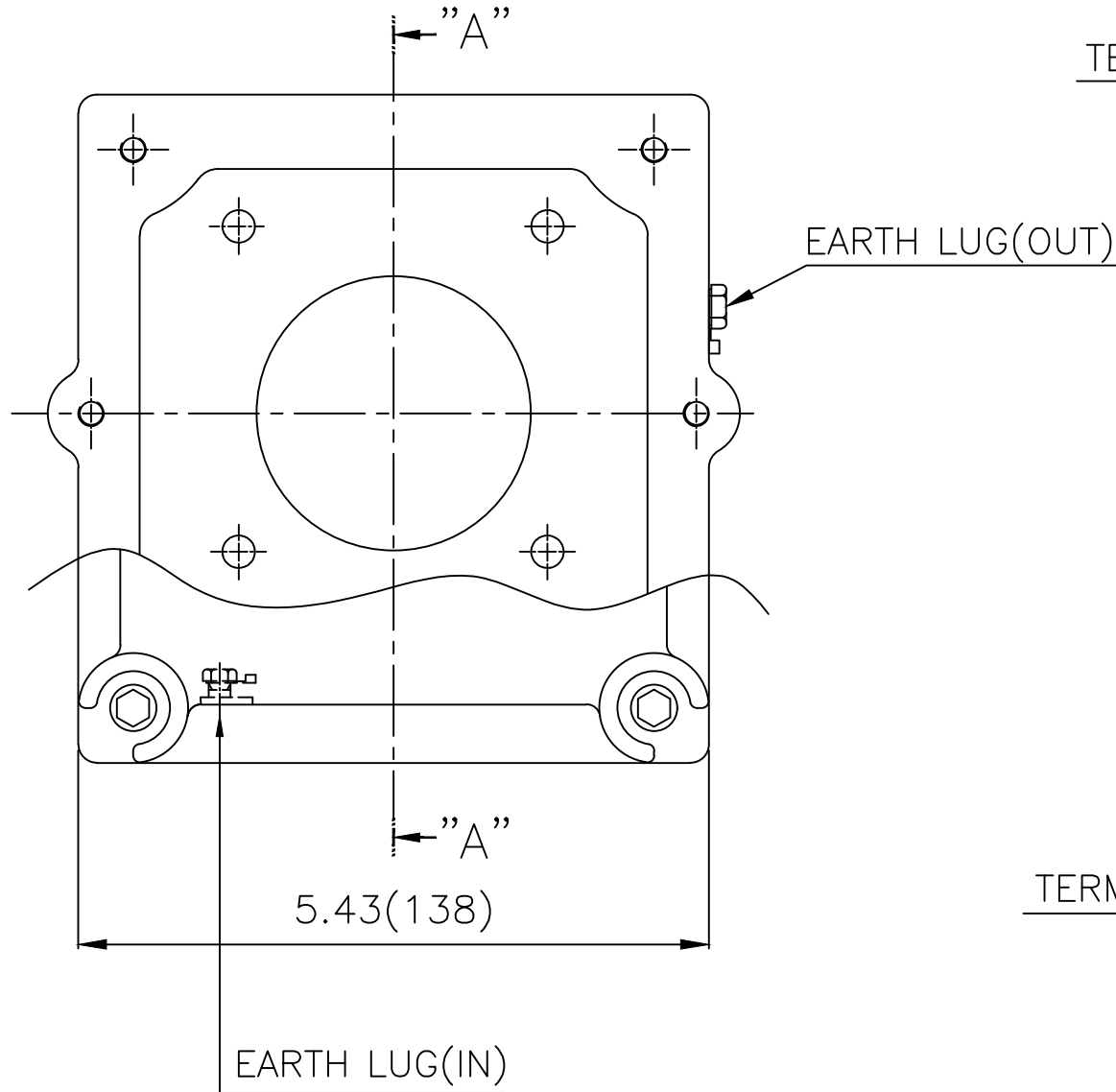
APPD BY	S.Y.KIM	UNIT	inch	SUBJECT	NEMA 184TC(KIT)	DWG SIZE	A4 ( 1:8 )
CHKD BY	R.G.KIM	SCALE	1/8	TITLE	OUTLINE		
CHKD BY		PROJEC'N	3rd Angle				
DSND BY	J.H.JEON	DATE	2021-06-08				



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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		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	lφφh(mm)	SUBJECT	NEMA FR. 180~210(CAST IRON)	DWG SIZE	A3 (1:1.5)
CHKD BY	R.G.KIM	SCALE	1/1.5	TITLE	MAIN TERMINAL BOX ASS'Y		
CHKD BY		PROJEC'N	3rd Angle	REF. NO		Sheet No.	of
DSND BY	김은진	DATE	2023-10-24	DWG NO	3M-248496	Revision No.	0

