

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.	IXHHI5-12-215TC		Item No.		Rev. No.	[]		
Project Name		Project No.			Quantity	sets		
GENERAL SPECIFICATION				PERFORMANCE DATA				
Frame Size	215TC		Rated Output	3.7 kW		5 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	6.10 A	7.63 A	15.26 A	
Insulation Class	F		Locked-rotor**	680 %	680 %	680 %		
Temp. Rise at full load (by resistance method) at 1.0 S.F	80 deg. C		Efficiency	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)	50% Load 0.530				
Ambient Temp.	40 deg. C (Max.)			75% Load 0.630				
Duty Type	Continuous (S1)			100% Load 0.680				
Service Factor	1.15		Speed at Full Load	1180 r.p.m				
Mounting	B35		Torque	Full Load 22.1 lb.ft				
Bearing	Type	Anti-Friction		Locked-rotor** 170 %				
	DE/N-DE	6307ZZC3 / 6307ZZC3		Breakdown** 220 %				
	Lubricant	Grease(Polyrex-EM)	Moment of Inertia (J)	Load(Max.) 96.700 lb.ft2				
External Thrust	Not applicable			Motor 1.234 lb.ft2				
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt		Sound Pressure Level (No-load & mean value at 1m from motor)	62 dB(A)				
Shaft Extension	Single		Vibration	0.0 mm/sec (peak)				
Terminal	Main	Cast Iron	Permissible number of consecutive starts	Cold	0 times			
Box	Aux.	No		Hot	0 times			
	Location	Refer to Outline Drawing	Paint	Munsell No.	4.0PB5.4/5.5(VL-451)			
Application			SUBMITTAL DRAWING					
Area classification	Hazardous		Outline Dimension Drawing	Motor Weight(Approx.)				
Type of Ex-Protection	Class I&II, Division 1		B35	LM-U0215C4TL001	180 lb.			
Applicable Standard	NEMA MG1, CSA C390, UL674							
ACCESSORIES			REMARK					
* . W.T.D.(Thermostat, 145°C) : 1EA/Ph.			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					
SPARE PARTS			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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REV	DATE	CONTENTS	REVD BY

3.94

CROWN TRITON		Premium Efficiency AC 3 Phase Motor		Explosion Proof		cUL US LISTED	
5HP	6P	230/460V	Cat. No. IXHHI5-12-215TC		Amb.	40°C	
Frame	215TC	Duty	CONT	Amps	15.26/7.63	Type	XJP
RPM	1180	Hertz	60Hz	Encl.	TEFC	Model	LATER
Bearing	Drive	6307ZZC3	S.F.	1.15	on sine wave power	INS. Class	F
	Opp.	6307ZZC3	S.F.	1.00	on PWM or IGBT power	HD-F1	NEMA Design B Torque
Usable at	50Hz 3HP 380V 8.1A 980rpm S.F.: 1.0 Eff.: 81.8% Code: L						
	50Hz 3HP 400/415V 9.1/10.2A 980/985rpm S.F.: 1.0 Eff.: 81.8/81.8% 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	180 lb
4M-136031 (NEMA 182~215Fr.)		Made in Korea H1			HD HYUNDAI ELECTRIC		

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-IXHHI5-12-215TC	Revision No.	0

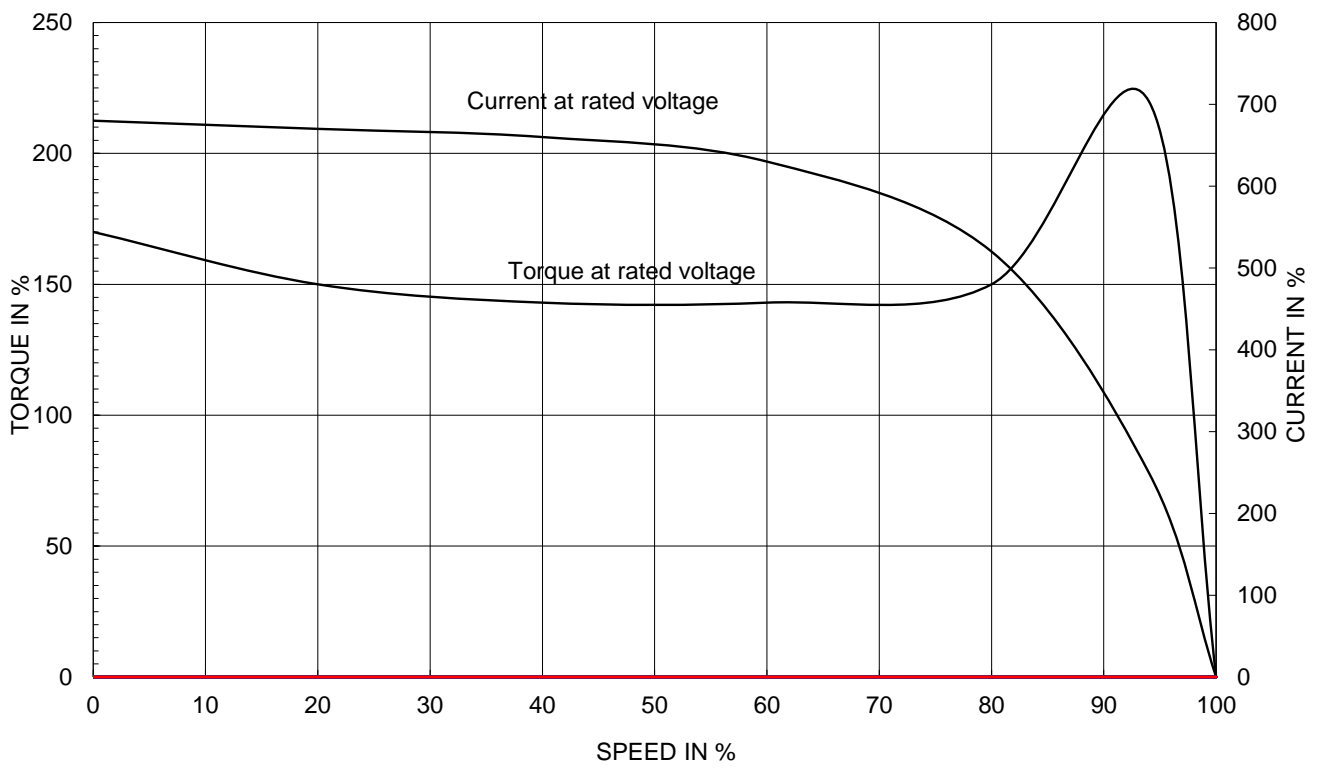


PERFORMANCE CURVE

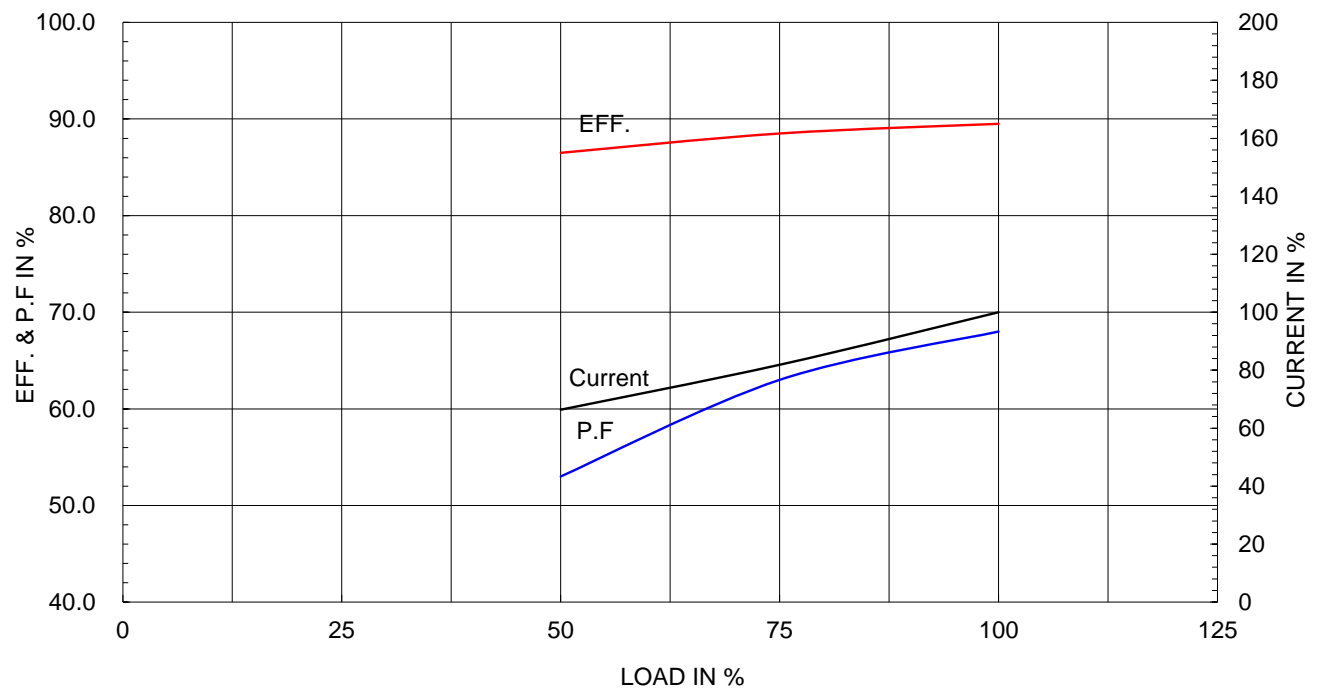
CURVE NO.
PC-IXHHI5-12-215TC

Type :	XJP	3.7kW	5HP	6 P	60 Hz	
Full Load Torque :	22.1 lb.ft	Speed at Full Load : 1180 RPM				
Load moment of Inertia (J) :	96.700 lb.ft2	Rated Voltage		575V	460V	230V
Motor moment of Inertia (J) :	1.234 lb.ft2	Full Load Current		6.1A	7.6A	15.3A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE

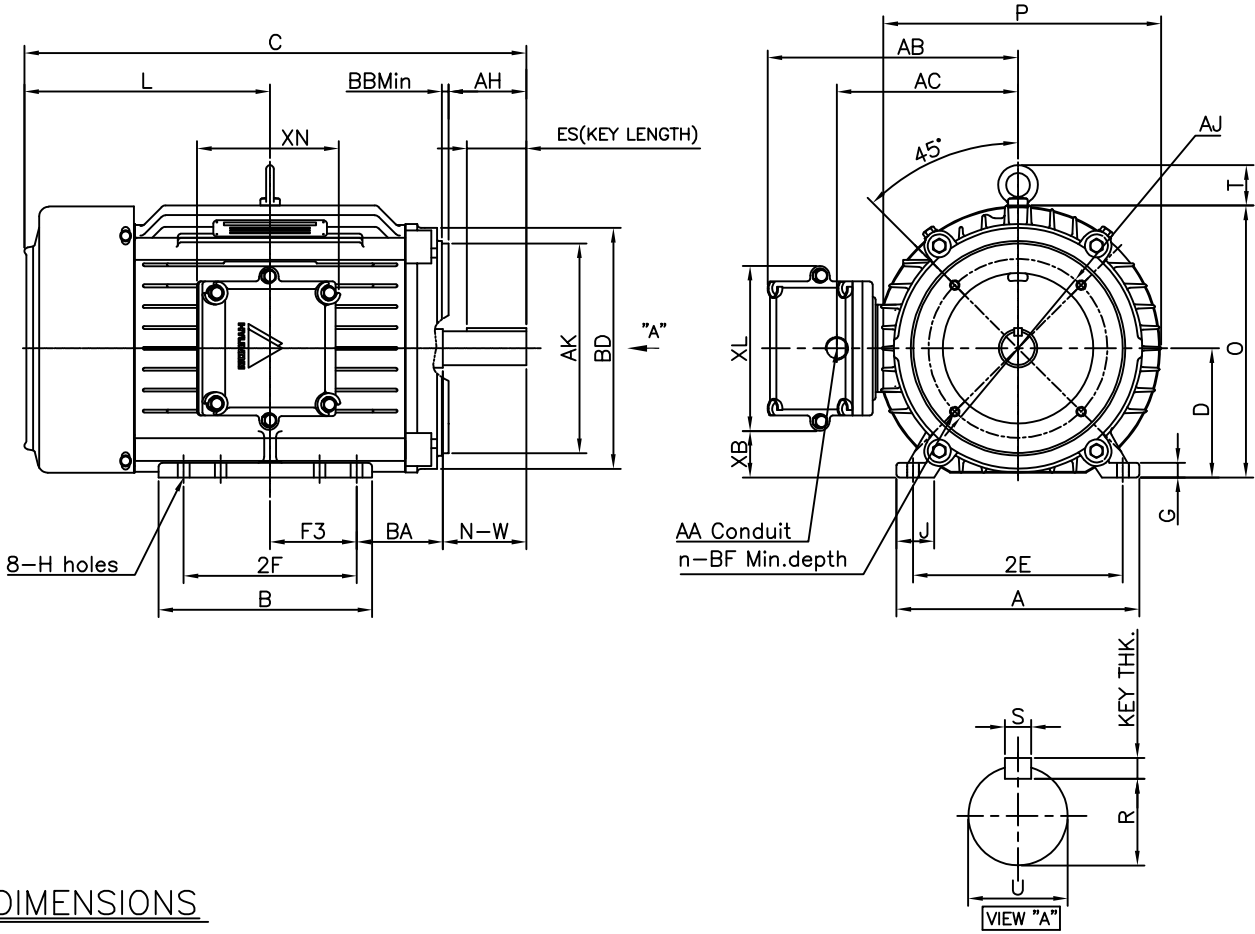


본 도면은 HD현대일렉트릭(주) 재산이며 허가없이 복사할 수 없음 (취급주의)

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

1	2	3	4
▽	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	
9.84	8.66	8.50	-	7.00	3.50	0.60	1.52	0.41	1.00	10.3	7.34	1.88	6.70	5.98	180

OVERALL							SHAFT				KEY	BEARING		
BA	C	D	L	O	P	T	U	N-W	KEYWAY			THK.	DRIVE END	OPP. DRIVE END
									R	ES	S			
3.50	20.36	5.25	9.97	11.02	11.26	1.63	1.375	3.38	1.201	2.41	0.312	0.312	6307ZZC3	6307ZZC3

C-FACE							
AJ	AK	BBmin	BD	BF	BF Def.	n	AH
7.25	8.50	0.25	9.00	1/2-13	0.75	4	3.12

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)

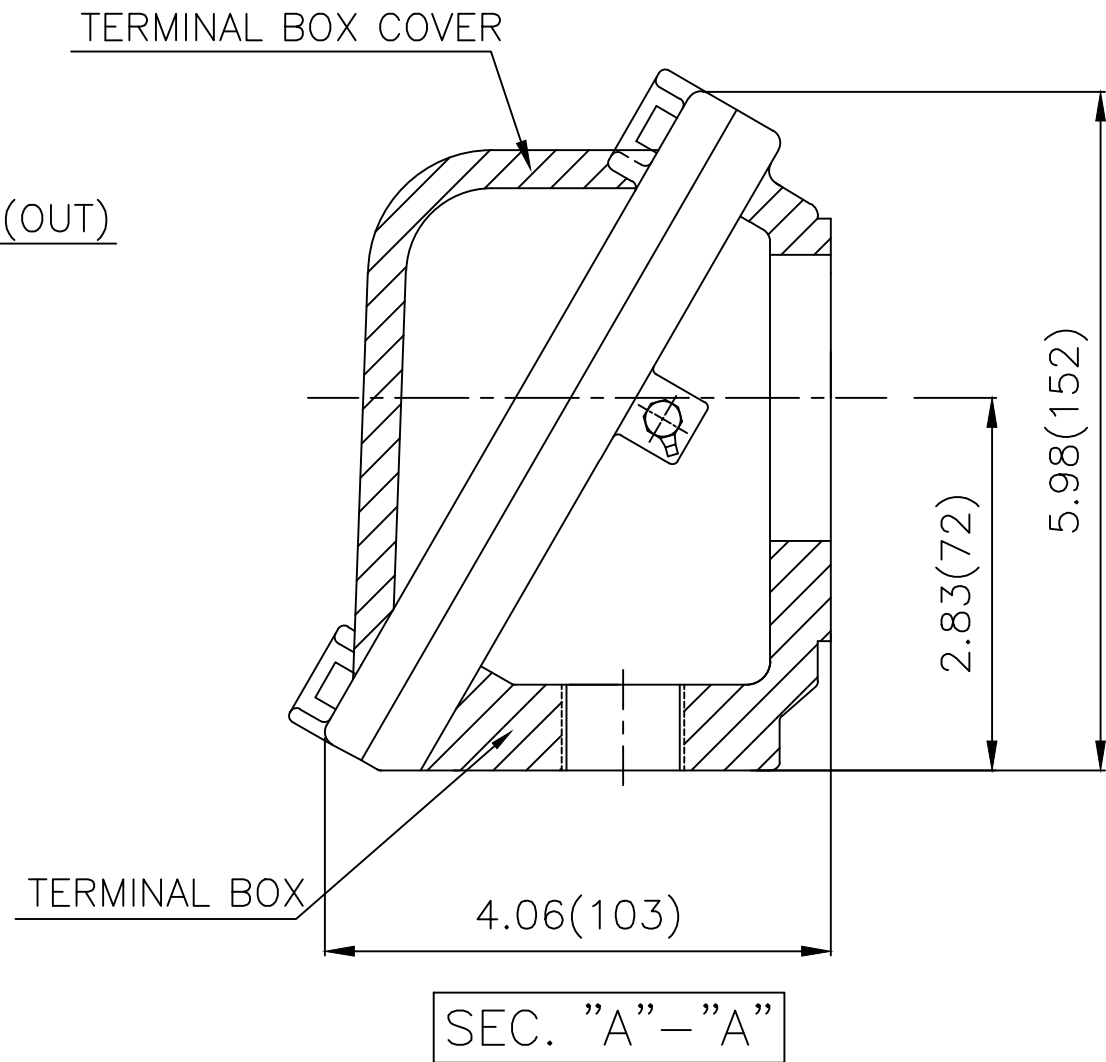
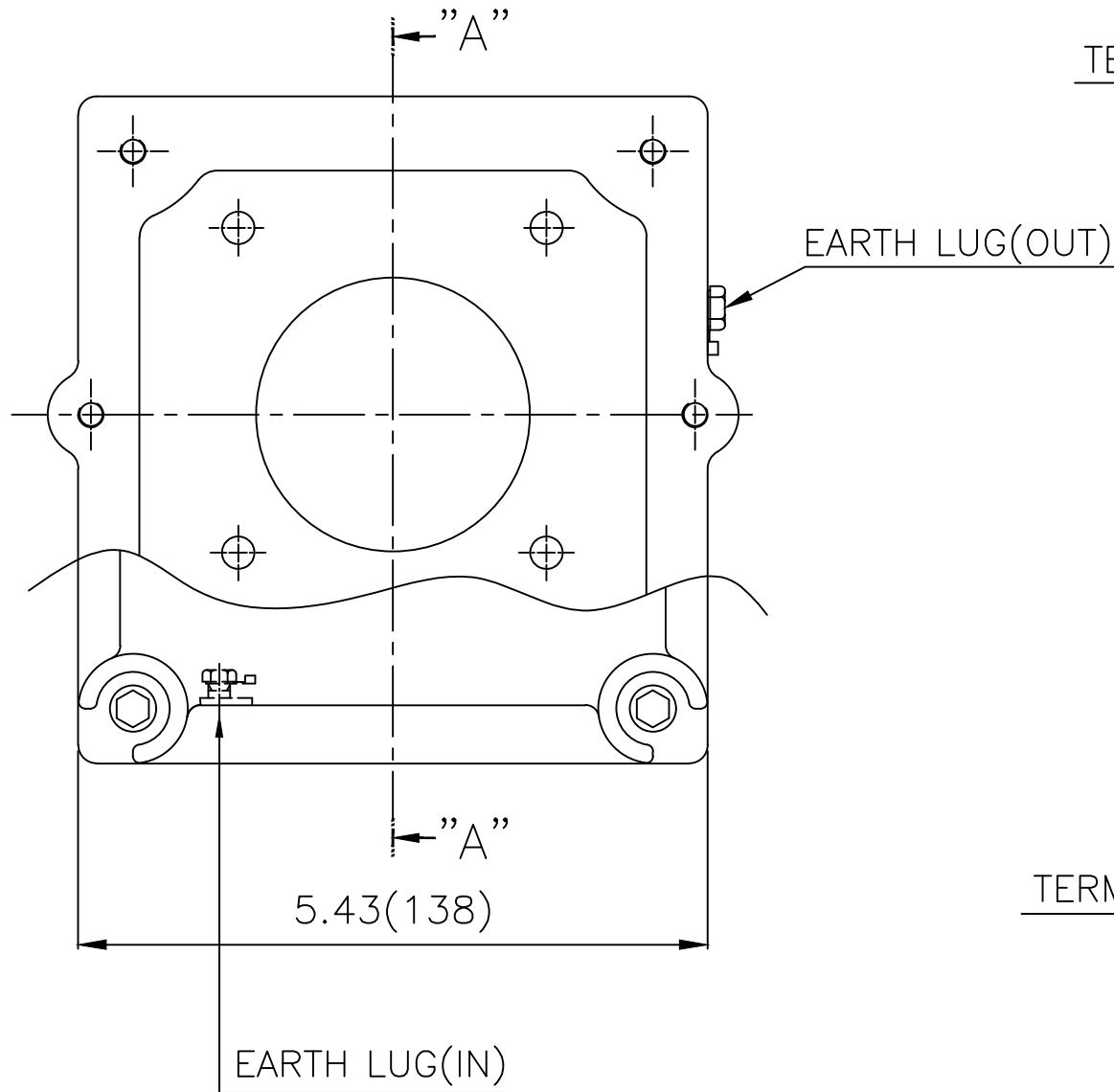
APPD BY	S.Y.KIM	UNIT	inch	SUBJECT	NEMA 215TC(KIT)	DWG SIZE	
CHKD BY	R.G.KIM	SCALE	1/8	TITLE	OUTLINE	A4 (1:8)	
CHKD BY	J.H.JEON	PROJEC'N	3rd Angle				
DSND BY	J.H.JEON	DATE	2021-06-08				



REF. NO		Sheet No.	of
DWG NO	LM-U0215C4TL001	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	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

