

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.	IXHHI20-18-256TC	Item No.		Rev. No.	[]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA			
Frame Size	256TC		Rated Output	15 kW		20 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	19.9 A	24.8 A
Insulation Class	F			Locked-rotor**	800 %	800 %
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		0.665	
Service Factor	1.15		75% Load		0.765	
Mounting	B35		100% Load		0.815	
Bearing	Type	Anti-Friction	Speed at Full Load			
	DE/N-DE	6309ZC3 / 6309ZC3	1775 r.p.m			
	Lubricant	Grease(Polyrex-EM)	Torque			
External Thrust	Not applicable		Full Load		59.5 lb.ft	
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt		Locked-rotor**		200 %	
Shaft Extension	Single		Breakdown**		240 %	
Terminal	Main	Cast Iron	Moment of Inertia (J)			
Box	Aux.	No	Load(Max.)		122.210 lb.ft2	
	Location	Refer to Outline Drawing	Motor		2.635 lb.ft2	
Application			Sound Pressure Level (No-load & mean value at 1m from motor)			
Area classification	Hazardous		74 dB(A)			
Type of Ex-Protection	Class I&II, Division 1		Vibration			
Applicable Standard	NEMA MG1, CSA C390, UL674		0.0 mm/sec (peak)			
ACCESSORIES			SUBMITTAL DRAWING			
			Outline Dimension Drawing		Motor Weight(Approx.)	
* . W.T.D.(Thermostat, 145°C) : 1EA/Ph.			B35	LM-U0256C4TL001	300 lb.	
			REMARK			
SPARE PARTS			1. Premium efficiency according to NEMA MG1			
			2. 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			
			3. Class I, Division 1, Group C&D			
			-. Temp.Code(Sine wave) : T2D at 40°C Amb./T2C at 55°C Amb.			
			T4 with Winding Temperature Detector			
			4. Class II, Division 1, Group F&G			
			-. Temp.Code(Sine wave) : T3B			
			Date	DSND	CHKD	CHKD
			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

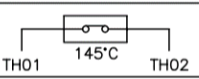
CROWN TRITON
Premium Efficiency AC 3 Phase Motor

Explosion Proof








20HP	4P	230/460V	Cat. No. IXHHI20-18-256TC	Amps	49.7/24.8	
Model	LATER		INS. Class F HD-F1	Hertz	60Hz	
Type	XJP	Duty	CONT	Code	J	
Frame	256TC	Encl.	TEFC	S.F. 1.15	on sine wave power	
Bearing	Drive	6309ZC3	S.F. 1.00	on PWM or IGBT power	NEMA Design	
	Opp.	6309ZC3	RPM	1775	Amb.	
Usable at	50Hz 15HP 380V 26.3A 1475rpm S.F.: 1.0 Eff.: 89.8% Code: L					
	50Hz 15HP 400/415V 26.4/27.1A 1480/1480rpm S.F.: 1.0 Eff.: 89.8/89.8% Code: L/L					
UL Certified for	Class I, Div. 1, Group C&D / Class I, Zone 1, Group II A & II B			Temp. Code T4 With Thermostat	T2D at 40°C Amb. / T2C at 55°C Amb.	
	10:1VT(20:1 at 50% load) 4:1CT(10:1 1hour duty at lowest RPM)					
No.	-		Date	-		
4M-136066 (NEMA 250~280Fr.)			Made in Korea H1		Weight	
					300 lb	

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-136066	Sheet No. of
				DWG NO	NP-IXHHI20-18-256TC	Revision No. 0



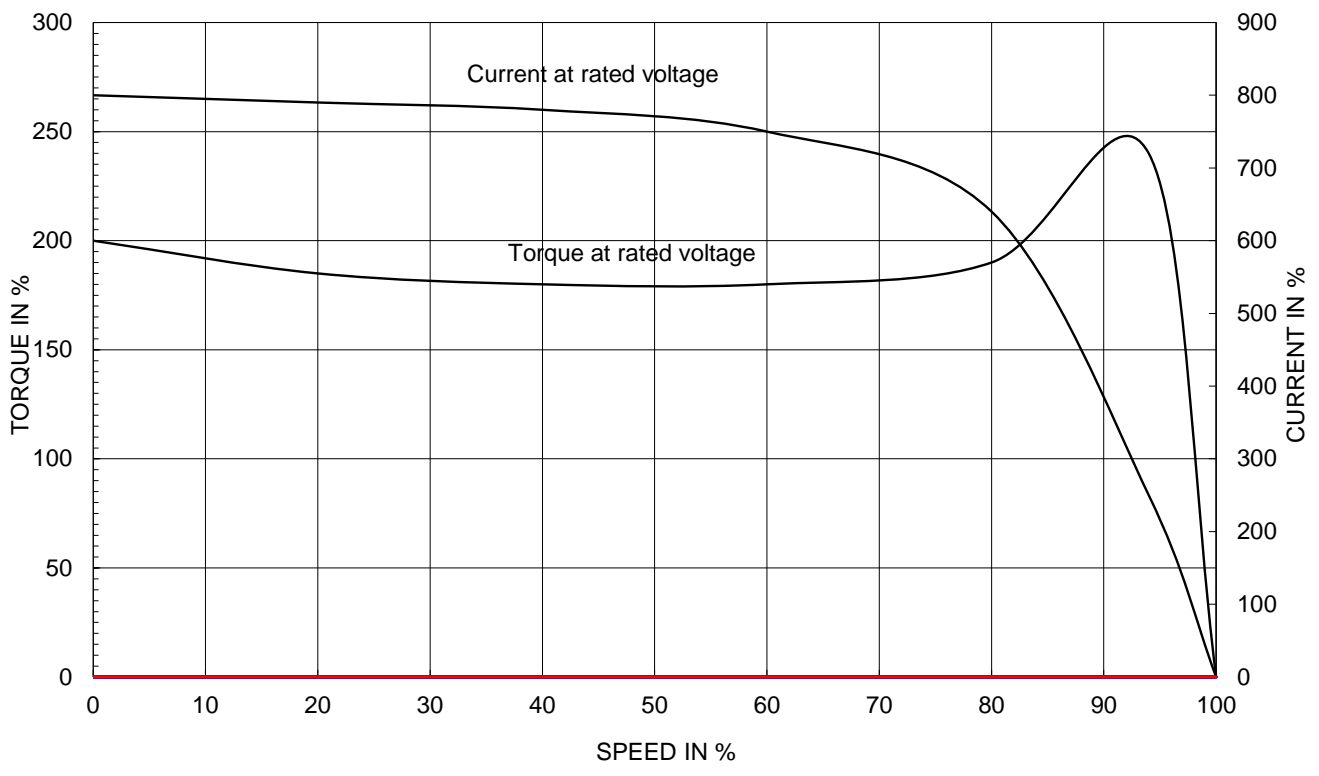
PERFORMANCE CURVE

CURVE NO.
PC-IXHHI20-18-256TC

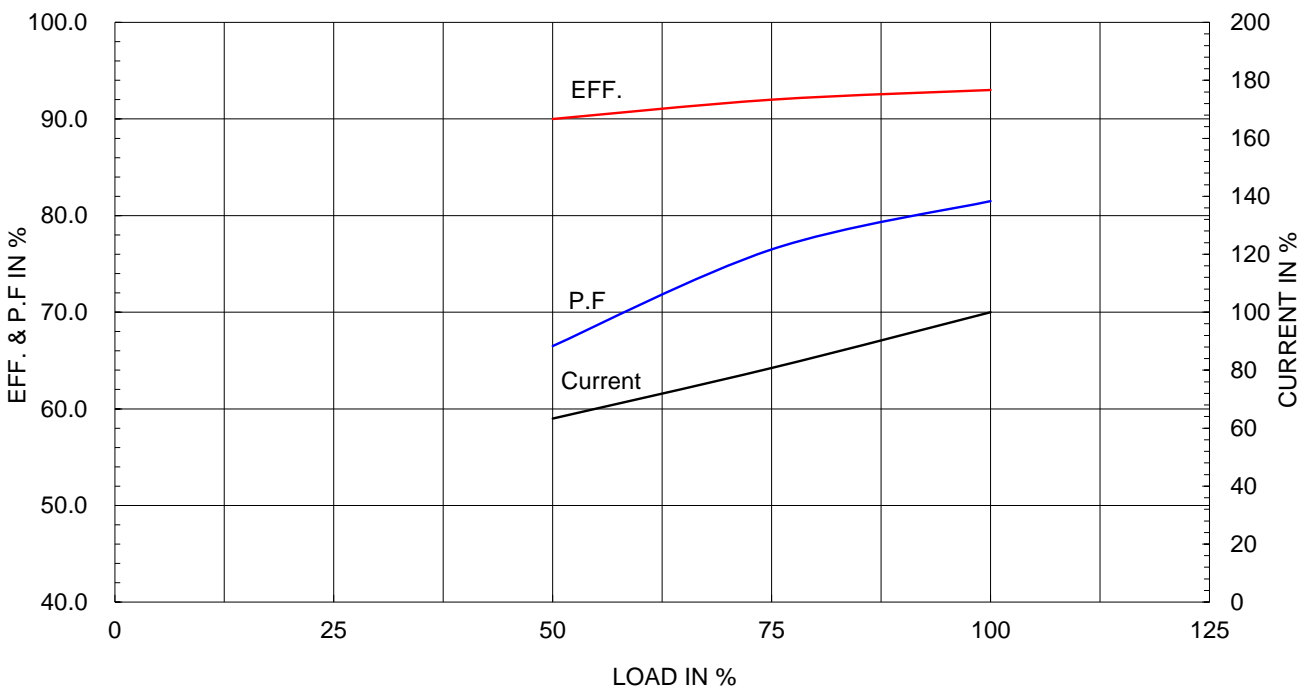
Type :	XJP
Full Load Torque :	59.5 lb.ft
Load moment of Inertia (J) :	122.210 lb.ft ²
Motor moment of Inertia (J) :	2.635 lb.ft ²

15kW	20HP	4 P	60 Hz
Speed at Full Load :			1775 RPM
Rated Voltage	575V	460V	230V
Full Load Current	19.9A	24.8A	49.7A

SPEED VS TORQUE & CURRENT CURVE

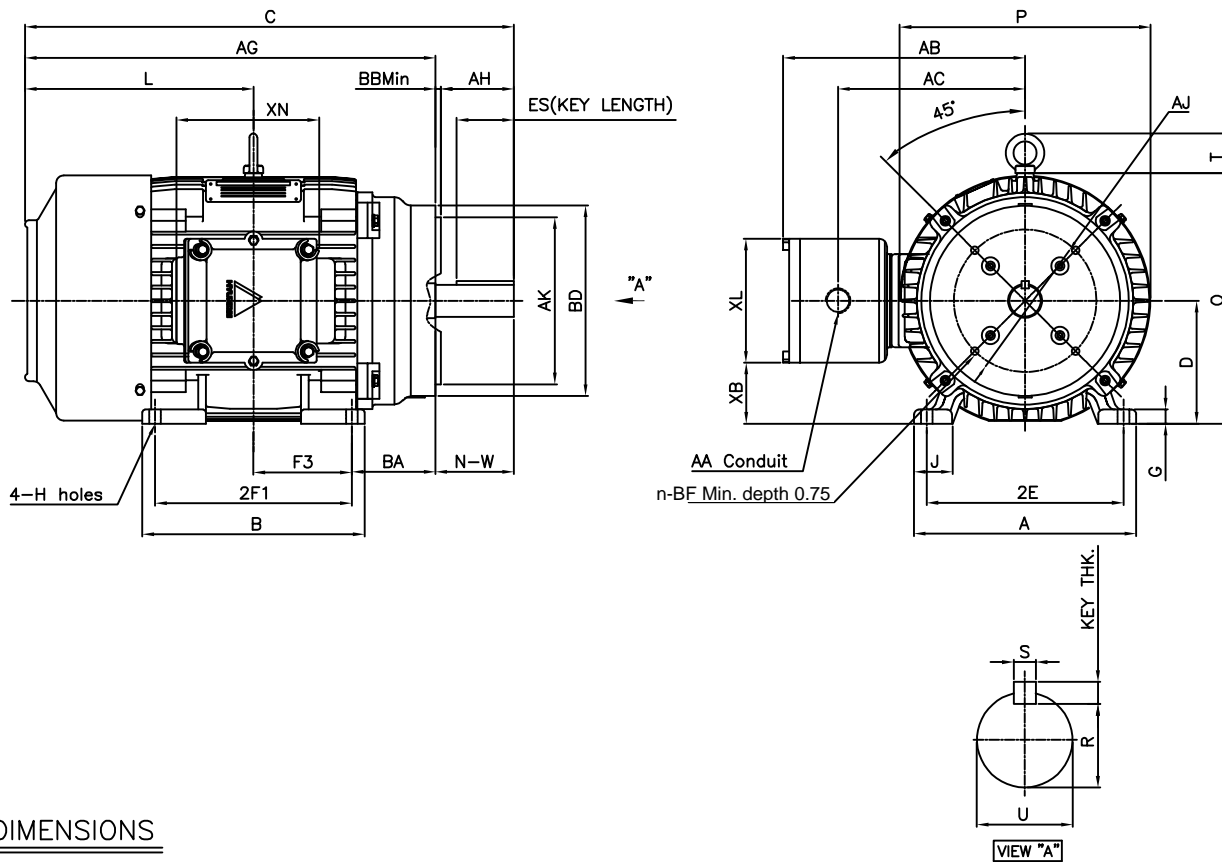


OUTPUT VS EFF., P.F & CURRENT CURVE



▽	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	
11.30	11.30	10.00	10.00	-	5.00	0.72	1.93	0.53	1.25	12.01	9.51	3.15	6.63	7.32	300

O V E R A L L								S H A F T					KEY THK.	BEARING	
AG	BA	C	D	L	O	P	T	U	N-W	KEYWAY		DRIVE END		OPP. DRIVE END	
										R	ES	S			
20.86	4.25	24.86	6.25	11.61	12.75	12.76	2.01	1.625	4.00	1.416	2.91	0.375	0.375	6309ZC3	6309ZC3

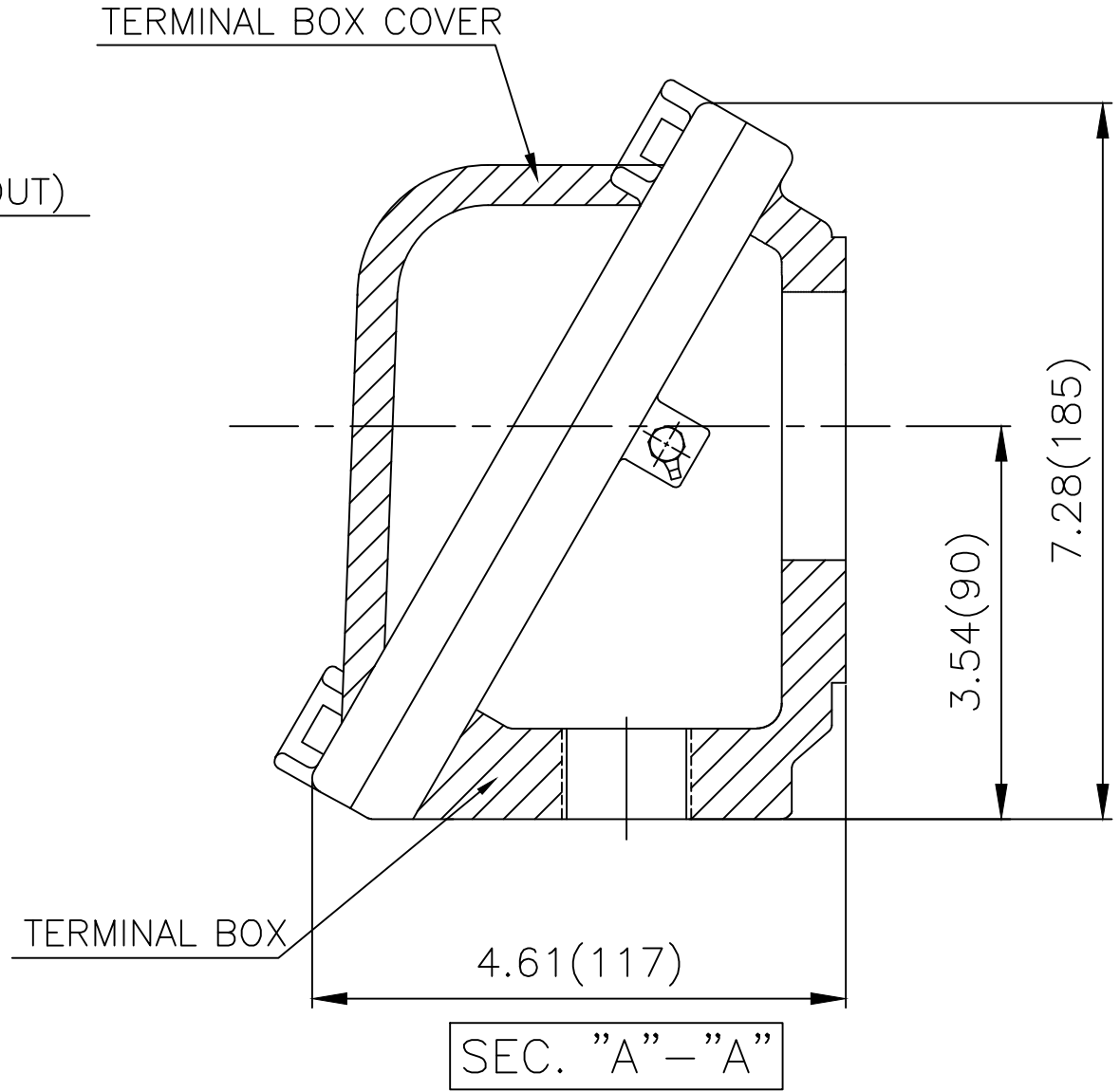
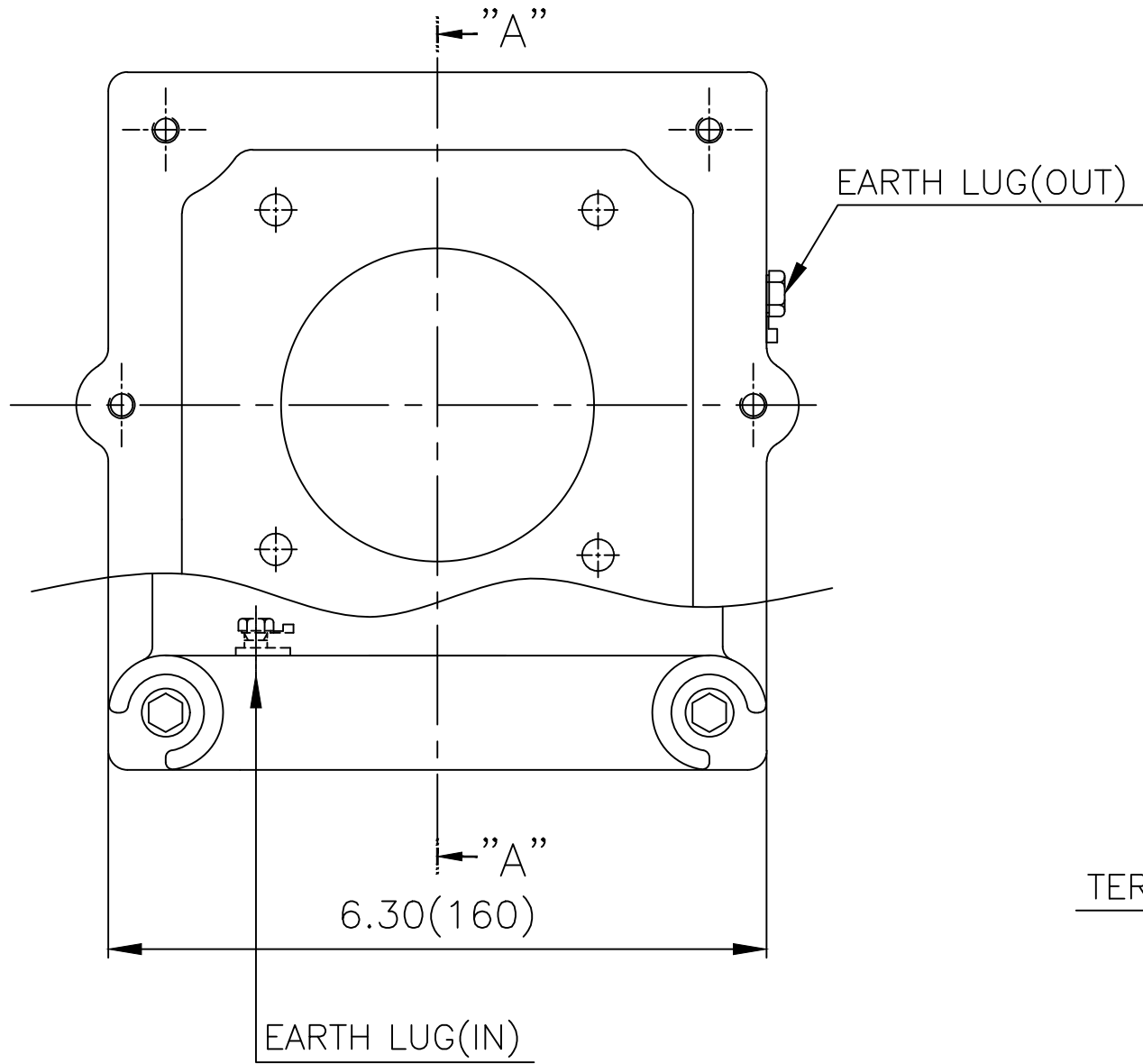
C-FACE						
AJ	AK	BD	BB	BF	n	AH
7.25	8.50	9.68	0.25	1/2-13	4	3.75

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 256TC(KIT)	DWG SIZE	A4 (1:10)
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-U0256C4TL001	REF. NO	.	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. 250~280(CAST IRON)		DWG SIZE
CHKD BY	R.G.KIM	SCALE	1/1.5	TITLE	MAIN TERMINAL BOX ASS'Y		A3 (1:1.5)
CHKD BY		PROJEC'N	3rd Angle	REF. NO		Sheet No.	of
DSND BY	김은진	DATE	2023-11-08	DWG NO	3M-248637	Revision No.	0

