

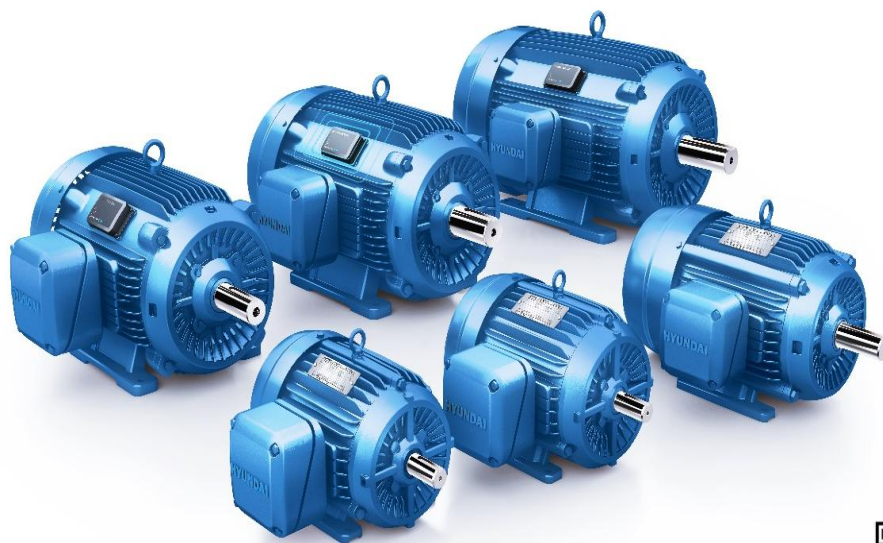
Customer :

Project Name :

Project No. :

Revision No. :

SPECIFICATION for INDUCTION MOTOR



0		For Bidding			
No.	DATE	DESCRIPTION	PREPARED BY	CHECKED BY	APPROVED BY

www.hd-hyundaielectric.com

AC INDUCTION MOTOR DATA SHEET

Catalog No.	HES7.5-12-254/6JP	Item No.		Rev. No.	[]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA				
Frame Size		256JP		Rated Output		5.5 kW 7.5 HP	
Type		PJP		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	8.09 A	10.1 A 20.2 A
Insulation Class		F			Locked-rotor**	640 %	640 % 640 %
Temp. Rise at full load (by resistance method)			Efficiency				
at 1.0 S.F		80 deg. C		50% Load		88.0 %	
Motor Location		☐ Indoor ☐ Outdoor		75% Load		90.0 %	
Altitude		Less than 1,000 meter		100% Load		91.0 %	
Relative Humidity		Less than 80 %		Power Factor(p.u)			
Ambient Temp.		40 deg. C (Max.)		50% Load		0.600	
Duty Type		Continuous (S1)		75% Load		0.700	
Service Factor		1.15		100% Load		0.750	
Mounting		B35		Speed at Full Load		1175 r.p.m	
Bearing	Type	Anti-Friction		Torque			
	DE/N-DE	6310ZC3 / 6309ZC3		Full Load		32.98 lb.ft	
	Lubricant	Grease(Polyrex-EM)		Locked-rotor**		170 %	
External Thrust		Not applicable		Breakdown**		250 %	
Coupling Method		☒ Direct ☐ V-belt		Moment of Inertia (J)			
Shaft Extension		Single		Load(Max.)		173.035 lb.ft2	
Terminal Box	Main	Cast Iron		Motor		3.086 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		3.8 mm/s (peak)	
Area classification		Hazardous		Permissible number of consecutive starts		Cold	3 times
Type of Ex-Protection		Class I&II, Division 2				Hot	2 times
Applicable Standard		NEMA MG1, CSA C390		Paint	Munsell No.	4.0PB5.4/5.5(VL-451)	

ACCESSORIES		SUBMITTAL DRAWING					
		Outline Dimension Drawing		\ Motor Weight(Approx.)			
		B35	LM-T2256C4JLV25	310 lb.			
		REMARK					
SPARE PARTS		1. Premium efficiency according to NEMA MG1					
		2. Inverter Duty @ 1.0 Service Factor & F Temperature rise					
		- 10:1 VT (20:1 VT at 50% load)					
		- 10:1 CT (1 hour duty, 4:1 continuous)					
		- CHP up to 1.5 times base speed, NEMA MG1 Part31					
		3. CSA Certification					
		- Class I, Division 2, Group A, B, C & D					
		- Class II, Division 2 Group E, F & G (Group E : up to 320Fr.)					
		4. Service Factor 1.15 and Temperature rise B are applicable under the condition of sine wave power.					
		5. Service Factor 1.25 is applicable to motors of 100HP or less with temperature rise F & Non-Hazardous.					
		6. Temp. code : T3C(160°C) at sine wave					
		Date		DSND	CHKD	CHKD	APPD
		2025-09-19		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.

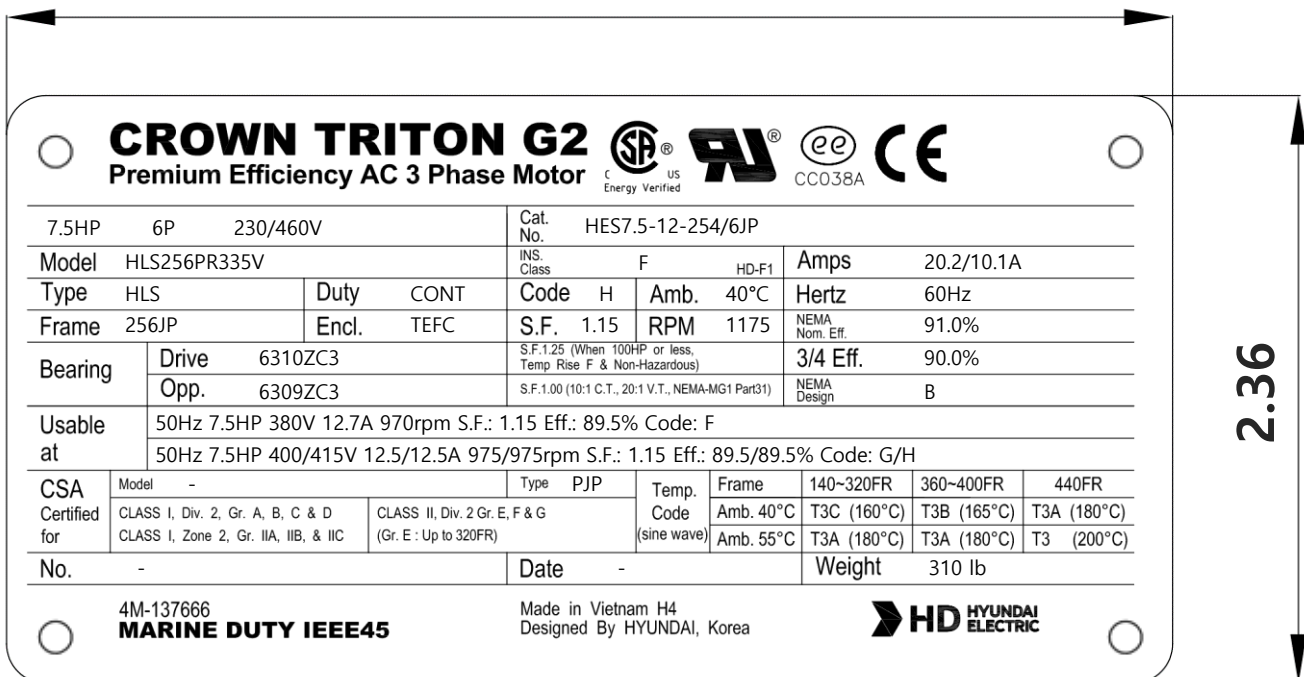
* In case of Inverter-Fed Motor, performance data is based on sine wave tests. It may be different from test data of Inverter combined motor.

** Data is based on rated voltage & frequency and is expressed as a percentage of full-load value.

		2	3	4			5
REV	DATE	CONTENTS		REVD BY	CHKD BY	CHKD BY	APPD BY

■ MAIN NAMEPLATE

4.72



■ WIRING DIAGRAM

D.O.L (INVERTER & SOFT STARTER)



WARNING

IMPROPER INSTALLATION, CONNECTION, OPERATION, GROUNDING OF THIS MOTOR MAY CAUSE SERIOUS INJURY TO PERSONNEL OR MOTOR FAILURE. READ INSTRUCTIONS CAREFULLY. GROUNDING SHOULD BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AND APPLICABLE LOCAL SOUND PRACTICES.

LOW VOLTAGE	D.O.L (△ RUN)	HIGH VOLTAGE
T12 ○ T7 ○ T6 ○ T1 ○ L1 T10 ○ T8 ○ T4 ○ T2 ○ L2 T11 ○ T9 ○ T5 ○ T3 ○ L3	T12 ○ T9 ○ T6 ○ T11 ○ T1 ○ T4 ○ T7 ○ T10 ○ INTERNAL CONNECTIONS T3 ○ T11 ○ T8 ○ T5 ○ T2 ○ T7 ○ T10 ○	T7 ○ T4 ○ T12 ○ T1 ○ L1 T8 ○ T5 ○ T10 ○ T2 ○ L2 T9 ○ T6 ○ T11 ○ T3 ○ L3

KEEP FINGERS AND FOREIGN OBJECTS AWAY FROM OPENINGS AND ROTATING PARTS DISCONNECT ALL POWER SOURCES BEFORE TOUCHING INTERNAL PARTS TO AVOID ELECTRICAL SHOCK.

WYE-DELTA (Y-D)



WARNING

IMPROPER INSTALLATION, CONNECTION, OPERATION, GROUNDING OF THIS MOTOR MAY CAUSE SERIOUS INJURY TO PERSONNEL OR MOTOR FAILURE. READ INSTRUCTIONS CAREFULLY. GROUNDING SHOULD BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AND APPLICABLE LOCAL SOUND PRACTICES.

LOW VOLTAGE	START	HIGH VOLTAGE
T12 ○ T6 ○ T7 ○ T1 ○ L1 T10 ○ T4 ○ T8 ○ T2 ○ L2 T11 ○ T5 ○ T9 ○ T3 ○ L3	T12 ○ T9 ○ T6 ○ T11 ○ T1 ○ T4 ○ T7 ○ T10 ○ INTERNAL CONNECTIONS T3 ○ T11 ○ T8 ○ T5 ○ T2 ○ T7 ○ T10 ○	T12 ○ T7 ○ T6 ○ T1 ○ L1 T10 ○ T8 ○ T5 ○ T2 ○ L2 T11 ○ T9 ○ T6 ○ T3 ○ L3

KEEP FINGERS AND FOREIGN OBJECTS AWAY FROM OPENINGS AND ROTATING PARTS DISCONNECT ALL POWER SOURCES BEFORE TOUCHING INTERNAL PARTS TO AVOID ELECTRICAL SHOCK.

4M-129650

4M-128838

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 Severe Duty (HES, JM/JP, 254-326)	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-137666 / 4M-129650	Sheet No.	of
				DWG NO	NP-HES7.5-12-254/6JP	Revision No.	0

Type : PJP

5.5kW 7.5HP

6 P

60 Hz

Full Load Torque : 32.98 lb.ft

Speed at Full Load : 1175 RPM

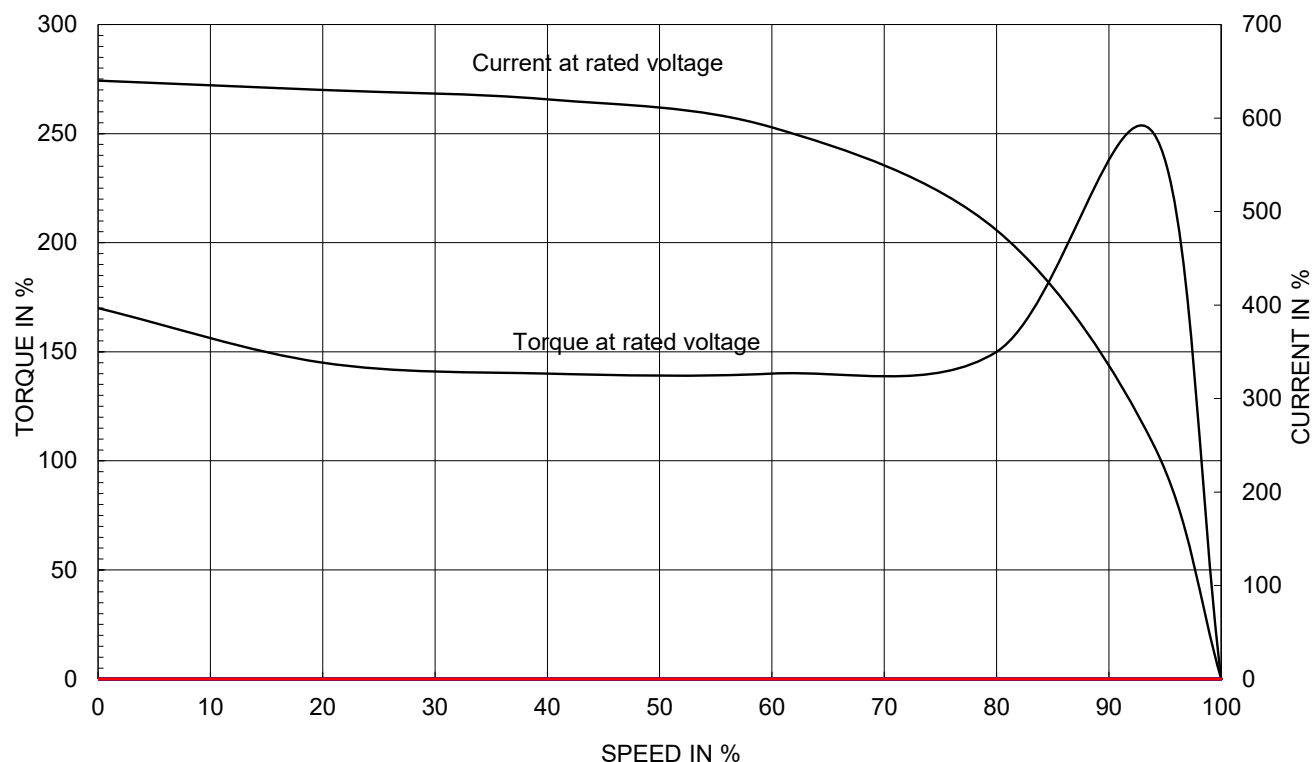
Load moment of Inertia (J) : 173.035 lb.ft²

Rated Voltage	575V	460V	230V
---------------	------	------	------

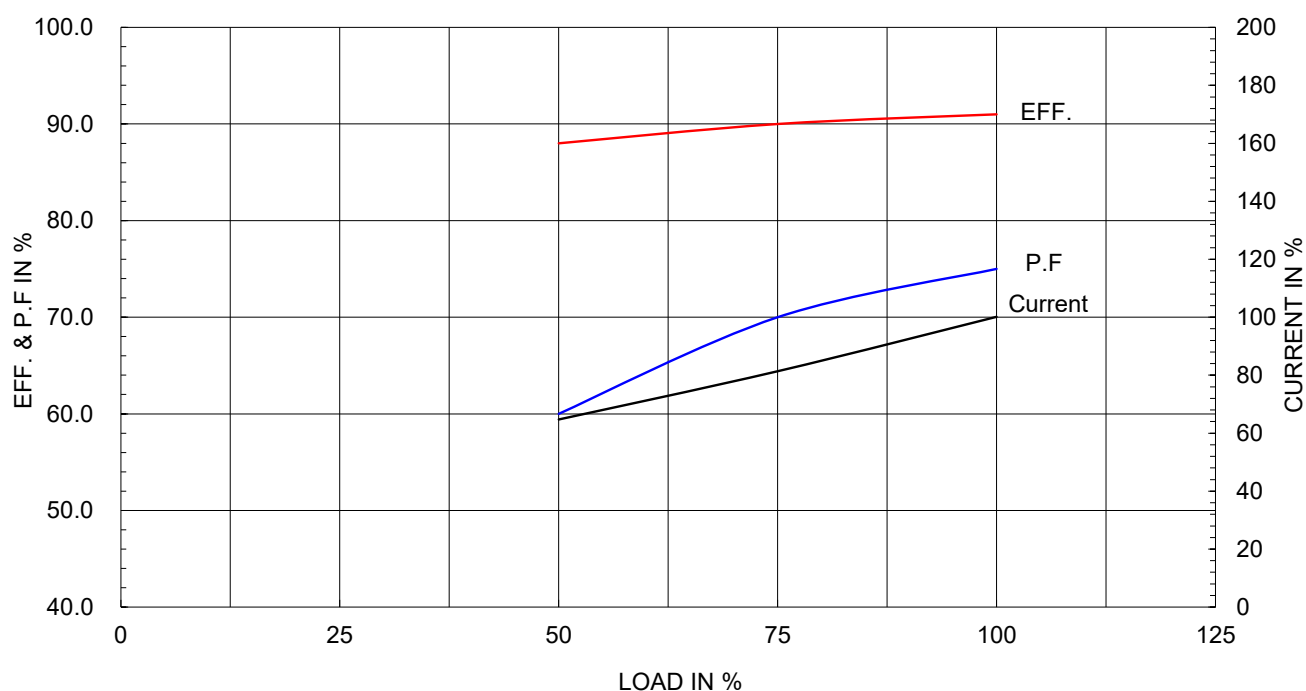
Motor moment of Inertia (J) : 3.086 lb.ft²

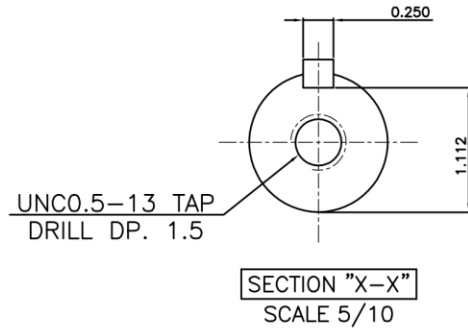
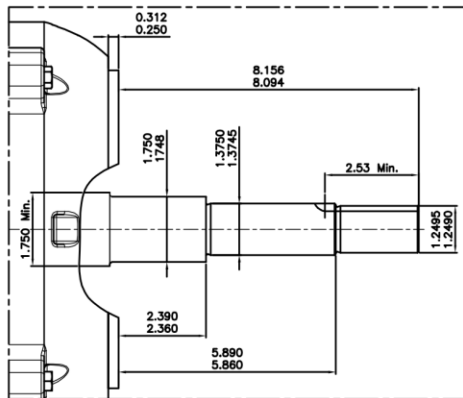
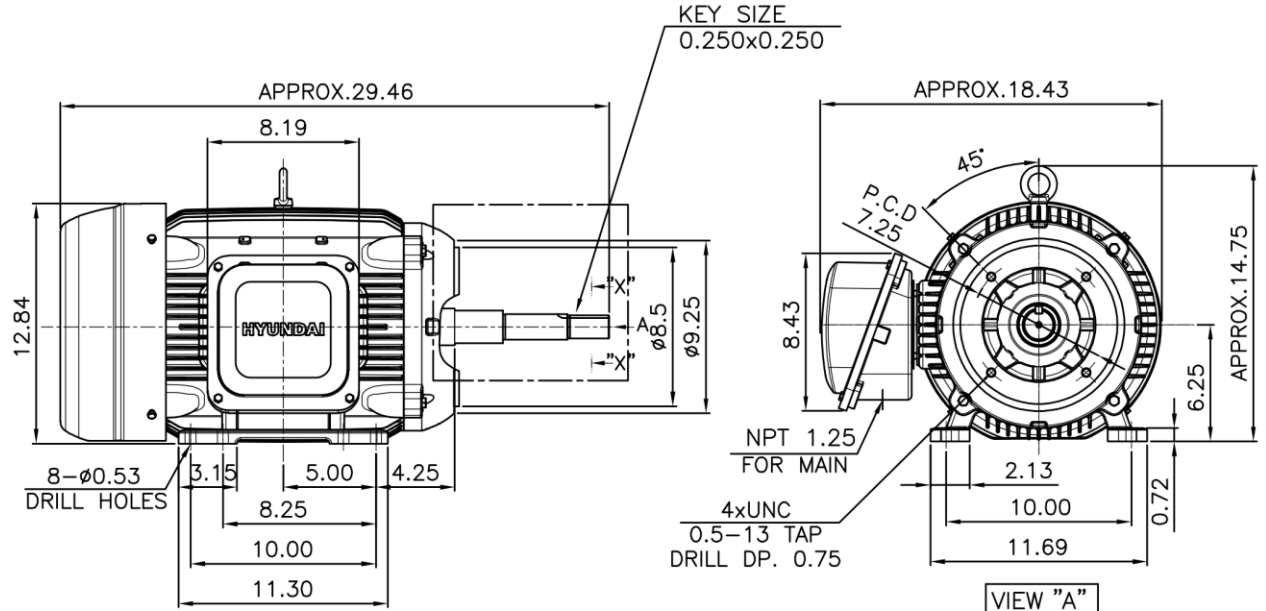
Full Load Current	8.09A	10.1A	20.2A
-------------------	-------	-------	-------

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



**NOTE**

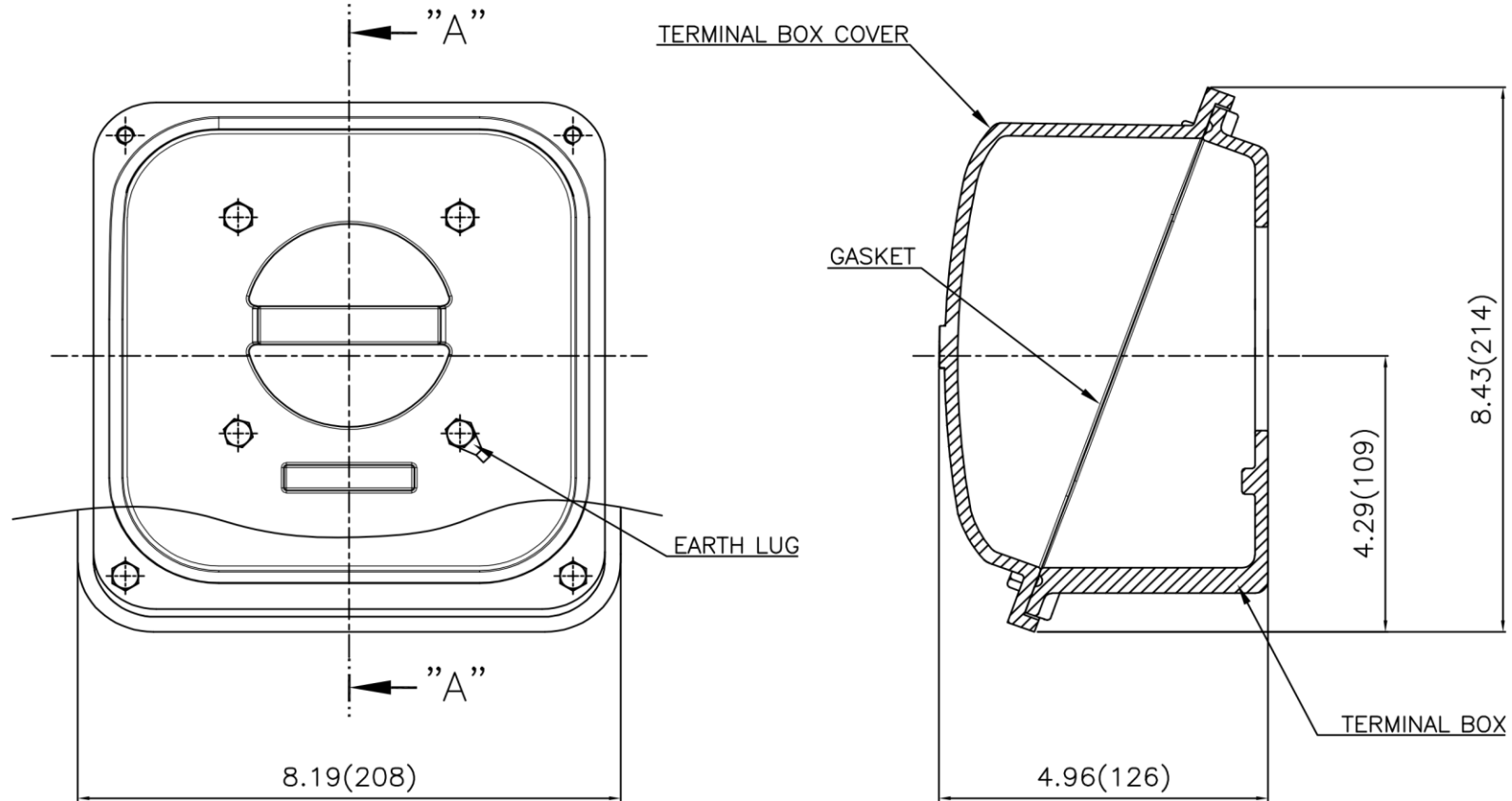
[TOLERANCE]

1. CENTER HEIGHT : +0.00inch - 0.03inch
2. SHAFT DIAMETER : +0.000inch - 0.001inch
3. KEYWAY DEPTH : +0.000inch - 0.015inch

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	NEMA 254/6TC (JP) (Dual hole)	DWG SIZE
CHKD BY	I.K.KIM	SCALE	1/10			A4 (1:10)
CHKD BY		PROJEC'N	3rd Angle	TITLE	OUTLINE	
DSND BY	S.H.LEE	DATE	2025.01.17			
 HD HYUNDAI ELECTRIC				REF. NO		Sheet No. of
				DWG NO	LM-T2256C4JLV25	Revision No. 1

Cls. I&II, Div. 2

IEEE 841



SEC. "A"-"A"

▽	50S
▽▽	12.5S
▽▽▽	3.2S
▽▽▽▽	0.4S

REV	DATE	CONTENTS	REV'D BY	CHK'D BY	CHK'D BY	APP'D BY
1						

일반가공공차		일반계관공차	
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	FR. 250-280 (CAST IRON)	DWG SIZE	
CHKD BY		SCALE	1/2	TITLE	TERMINAL BOX ASS'Y	A3 (1:2)	
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	REF. NO		Sheet No.	of
DSND BY	네슬의	DATE	2023-10-19	DWG NO	3M-248458	Revision No.	0

