

Customer :

Project Name :

Project No. :

Revision No. :

SPECIFICATION for INDUCTION MOTOR



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

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AC INDUCTION MOTOR DATA SHEET

Catalog No.	HES3-12-213/5JM	Item No.			Rev. No.	[]	
Project Name		Project No.			Quantity	sets	
GENERAL SPECIFICATION				PERFORMANCE DATA			
Frame Size	215JM		Rated Output	2.2 kW		3 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	3.68 A	4.60 A	9.21 A
Insulation Class	F			Locked-rotor**	770 %	770 %	770 %
Temp. Rise at full load (by resistance method)			Efficiency				
at 1.0 S.F			80 deg. C				
Motor Location	☐ Indoor ☐ Outdoor		50% Load		86.5 %		
Altitude	Less than 1,000 meter		75% Load		88.5 %		
Relative Humidity	Less than 80 %		100% Load		89.5 %		
Ambient Temp.	40 deg. C (Max.)		Power Factor(p.u)				
Duty Type	Continuous (S1)		50% Load		0.520		
Service Factor	1.15		75% Load		0.620		
Mounting	B35		100% Load		0.670		
Bearing	Type	Anti-Friction	Speed at Full Load		1185 r.p.m		
	DE/N-DE	6309ZZC3 / 6208ZZC3	Torque				
	Lubricant	Grease(Polyrex-EM)	Full Load		13.08 lb.ft		
External Thrust	Not applicable		Locked-rotor**		180 %		
Coupling Method	☒ Direct ☐ V-belt		Breakdown**		250 %		
Shaft Extension	Single		Moment of Inertia (J)				
Terminal	Main	Cast Iron	Load(Max.)		96.700 lb.ft2		
Box	Aux.	No	Motor		1.234 lb.ft2		
	Location	Refer to Outline Drawing	Sound Pressure Level (No-load & mean value at 1m from motor)				
Application			57 dB(A)				
Area classification	Hazardous		Vibration				
Type of Ex-Protection	Class I&II, Division 2		3.8 mm/s (peak)				
Applicable Standard	NEMA MG1, CSA C390		Permissible number of consecutive starts		Cold 3 times Hot 2 times		
			Paint	Munsell No.	4.0PB5.4/5.5(VL-451)		
ACCESSORIES			SUBMITTAL DRAWING				
			Outline Dimension Drawing \ Motor Weight(Approx.)				
			B35	LM-T2215C4MLV25	190 lb.		
			REMARK				
			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				
			-. 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.

MAIN NAMEPLATE

3.94

CROWN TRITON G2		Premium Efficiency AC 3 Phase Motor		Cat. No. HES3-12-213/5JM			
3HP	6P	230/460V	Amps	9.21/4.60A	Type HLS	Amb.	40°C
Frame	215JM	Duty	CONT	Encl.	TEFC	Model	HLS215PR335V
RPM	1185	Hertz	60Hz	S.F.	1.15	INS. Class	F HD-F1
Drive		6309ZZC3	S.F.1.25 (When 100HP or less, Temp Rise F & Non-Hazardous)			3/4 Eff. 88.5%	
Opp.		6208ZZC3	S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)			Code L	
Usable at		50Hz 3HP 380V 5.88A 980rpm S.F.: 1.15 Eff.: 87.5% Code: K					
Usable at		50Hz 3HP 400/415V 6.09/6.35A 980/985rpm S.F.: 1.15 Eff.: 87.5/87.5% Code: L/L					
CSA Certified for		Model -		Type	PJP	Temp. Code	Frame
CLASS I, Div. 2, Gr. A, B, C & D		CLASS II, Div. 2, Gr. E, F & G		(Gr. E : up to 320FR)		Amb. 40°C	140~320FR
CLASS I, Zone 2, Gr. IIA, IIB & IIC		(Gr. E : up to 320FR)				Amb. 55°C	T3C (160°C)
No. -		Date -		Weight		190 lb	
4M-137664		Made in Vietnam H4		Designed By HYUNDAI, Korea		HD HYUNDAI ELECTRIC	
CC038A		MARINE DUTY IEEE45					

WIRING DIAGRAM

D.O.L (INVERTER & SOFT STARTER)	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 INTERNAL CONNECTIONS HIGH VOLTAGE KEEP FINGERS AND FOREIGN OBJECTS AWAY FROM OPENINGS AND ROTATING PARTS DISCONNECT ALL POWER SOURCES BEFORE TOUCHING INTERNAL PARTS TO AVOID ELECTRICAL SHOCK. 4M-128845	N/A

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 Severe Duty (HES, JM/JP, 143-215)	DWG SIZE
CHKD BY	I.K.KIM	SCALE	NONE	A4 (1:1)		
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	TITLE		
DSND BY	S.H.LEE	DATE	2024.06.07	NAMEPLATE DRAWING		
				REF. NO	4M-137664 / 4M-128845	Sheet No. of
				DWG NO	NP-HES3-12-213/5JM	Revision No. 0

Type : PJP

2.2kW 3HP 6 P 60 Hz

Full Load Torque : 13.08 lb.ft

Speed at Full Load : 1185 RPM

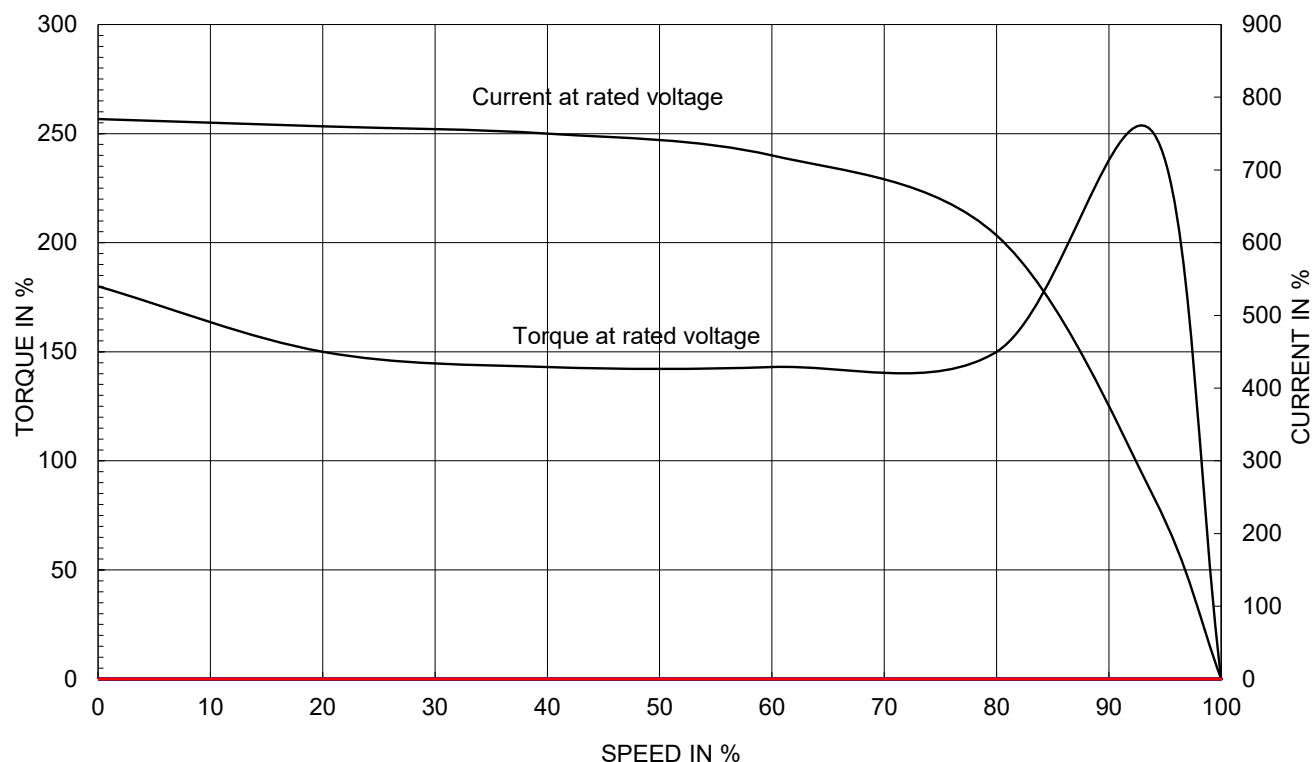
Load moment of Inertia (J) : 96.700 lb.ft²

Rated Voltage	575V	460V	230V
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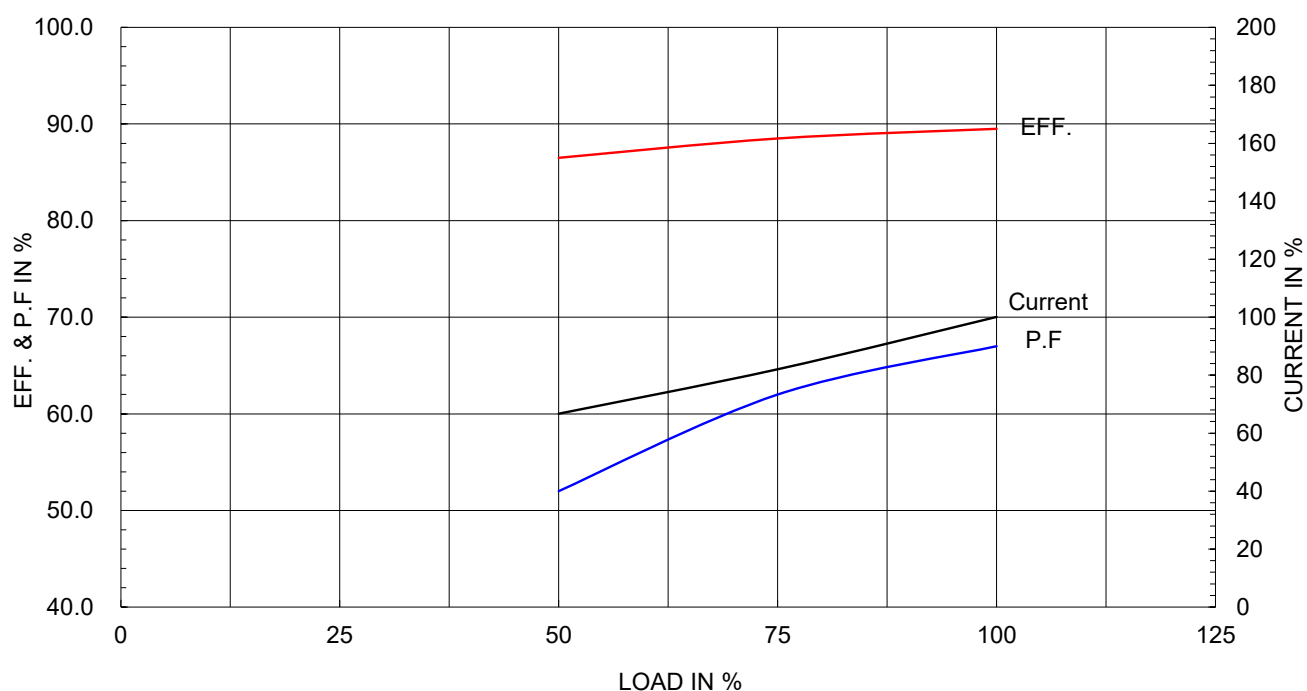
Motor moment of Inertia (J) : 1.234 lb.ft²

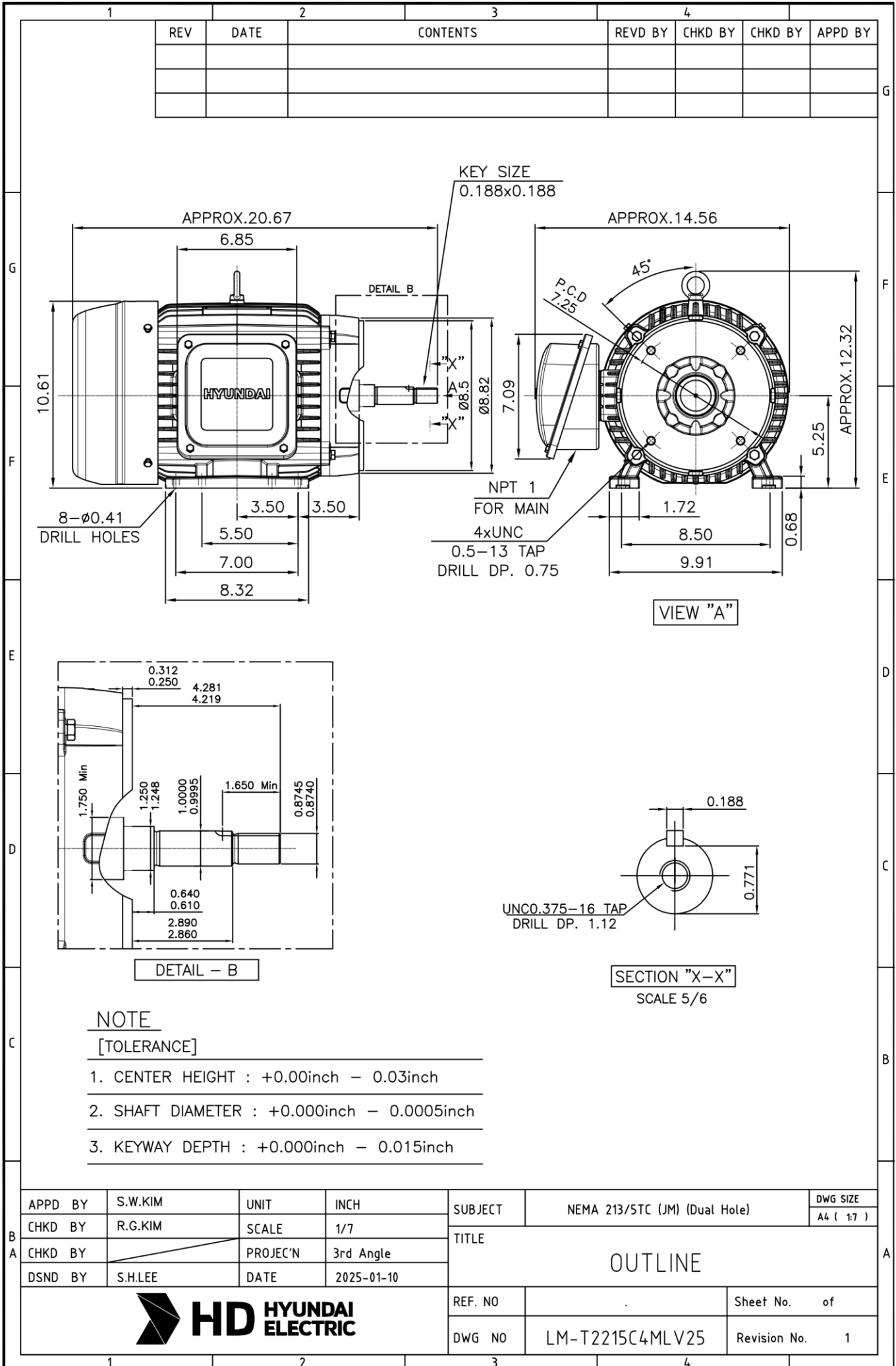
Full Load Current	3.68A	4.60A	9.21A
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SPEED VS TORQUE & CURRENT CURVE

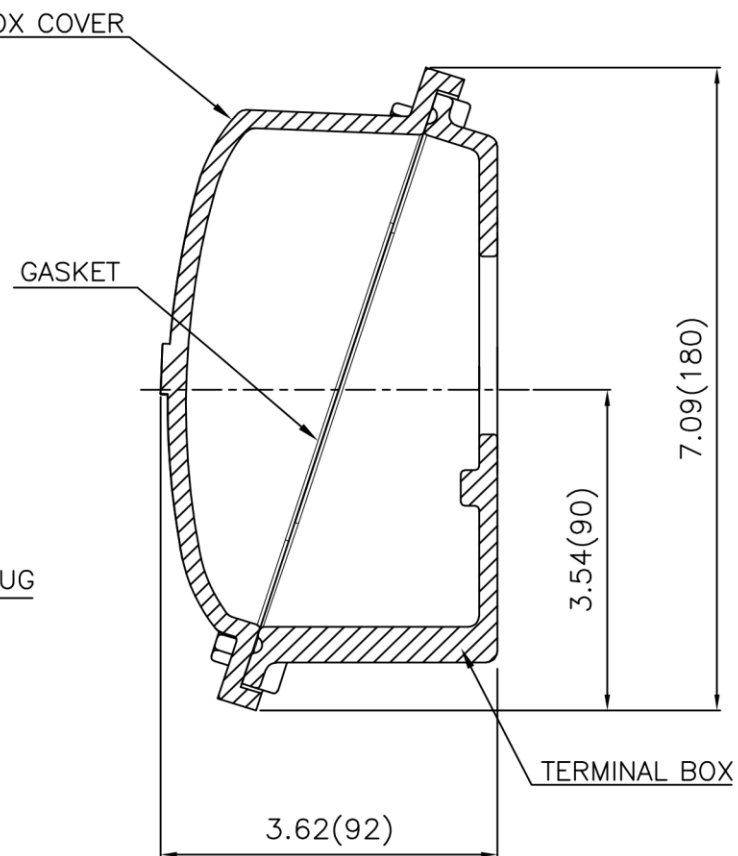
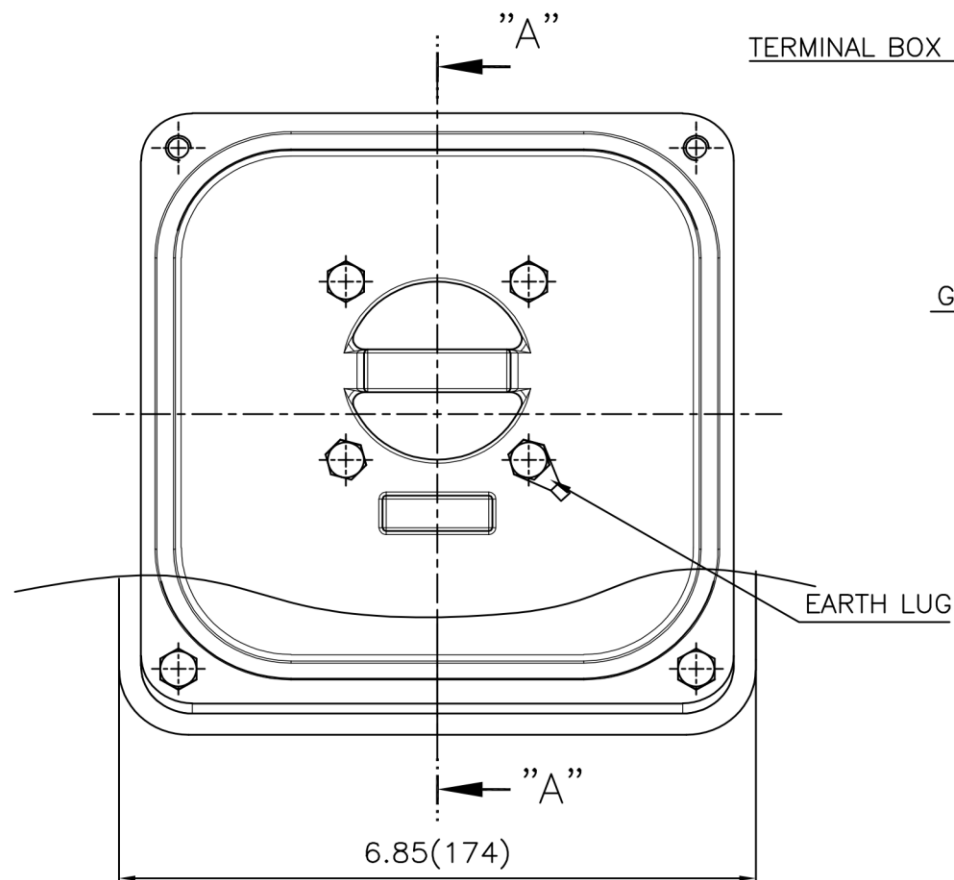


OUTPUT VS EFF., P.F & CURRENT CURVE





Cls. I&II, Div. 2
IEEE 841



SEC. "A"—"A"

A		50S
		12.5S
		3.2S
		0.4S

[illegible]

Q'TY		DESCRIPTION		MATERIAL	DIMENSION		WEIGHT	PART NO.	REMARK	NO.
APPD	BY	S.Y.KIM		UNIT	inch(mm)		SUBJECT	FR. 210 (CAST IRON)		DWG SIZE
CHKD	BY			SCALE	1/1.5		TITLE			A3 (1:1.5)
CHKD	BY	R.G.KIM		PROJEC'N	3rd Angle			TERMINAL BOX ASS'Y		
DSND	BY	네솔의		DATE	2023-10-19					
 HD HYUNDAI ELECTRIC							REF. NO			Sheet No. of
							DWG NO	3M-248457		Revision No. 0
6		7		8		9				