

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.	HES1.5-36-143/5JM	Item No.		Rev. No.	[]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA							
Frame Size		145JM		Rated Output		1.1 kW		1.5 HP		
Type		PJP		Number of Poles		2				
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		1.57 A		1.96 A 3.91 A	
Insulation Class		F			Locked-rotor**		1000 %		1,000 % 1,000 %	
Temp. Rise at full load (by resistance method)				Efficiency						
at 1.0 S.F		80 deg. C								
Motor Location		☐ Indoor ☐ Outdoor								
Altitude		Less than 1,000 meter								
Relative Humidity		Less than 80 %		Power Factor(p.u)						
Ambient Temp.		40 deg. C (Max.)								
Duty Type		Continuous (S1)								
Service Factor		1.15								
Mounting		B35		Speed at Full Load		3485 r.p.m				
Bearing	Type	Anti-Friction		Torque						
	DE/N-DE	6206ZZC3 / 6204ZZC3								
	Lubricant	Grease(Polyrex-EM)								
External Thrust		Not applicable		Full Load		2.22 lb.ft				
Coupling Method		☒ Direct ☐ V-belt		Locked-rotor**		185 %				
Shaft Extension		Single		Breakdown**		260 %				
Terminal Box	Main	Cast Iron		Moment of Inertia (J)						
	Aux.	No								
	Location	Refer to Outline Drawing								
Application				Load(Max.)		2.119 lb.ft2				
Area classification		Hazardous		Motor		0.033 lb.ft2				
Type of Ex-Protection		Class I&II, Division 2		Sound Pressure Level (No-load & mean value at 1m from motor)						
Applicable Standard		NEMA MG1, CSA C390								
						69 dB(A)				
				Vibration		3.8 mm/s (peak)				
				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-T2145C4MLV25	65 lb.	

REMARK

- Premium efficiency according to NEMA MG1
- 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
- CSA Certification
 - Class I, Division 2, Group A, B, C & D
 - Class II, Division 2 Group E, F & G (Group E : up to 320Fr.)
- Service Factor 1.15 and Temperature rise B are applicable under the condition of sine wave power.
- Service Factor 1.25 is applicable to motors of 100HP or less with temperature rise F & Non-Hazardous.
- 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.

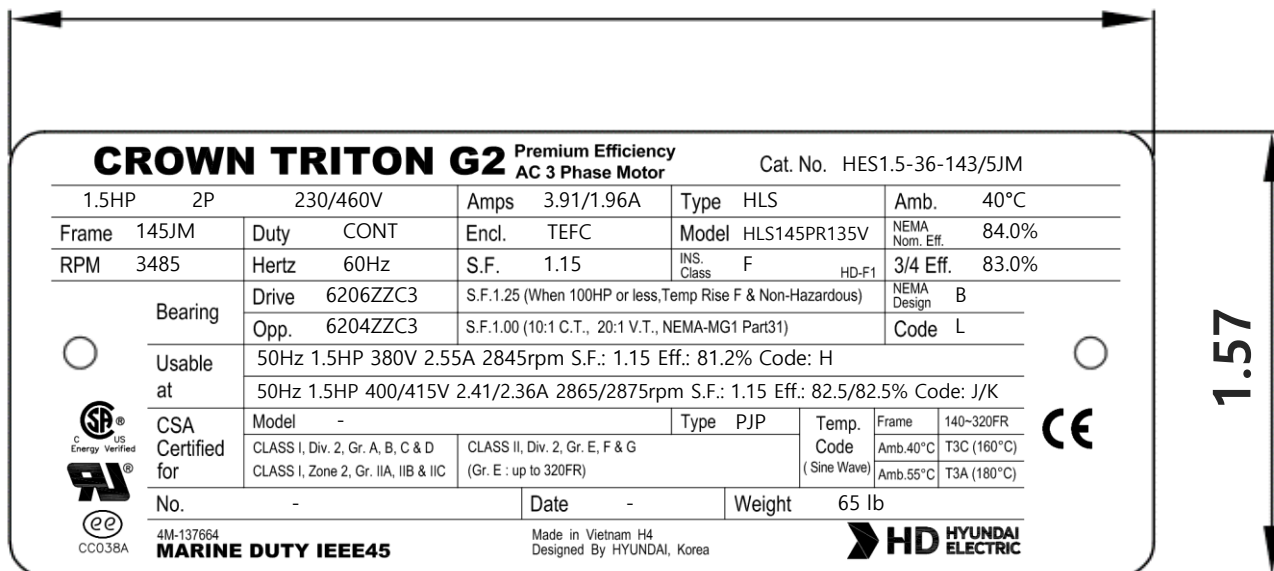
* In case of Inverter-Fed Motor, performance data is based on sine wave tests. It may be different from test data of Inverter combined motor.

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

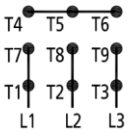
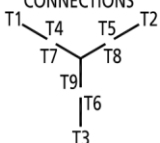
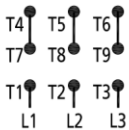
1		2	3	4			5
REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY	

■ MAIN NAMEPLATE

3.94



■ WIRING DIAGRAM

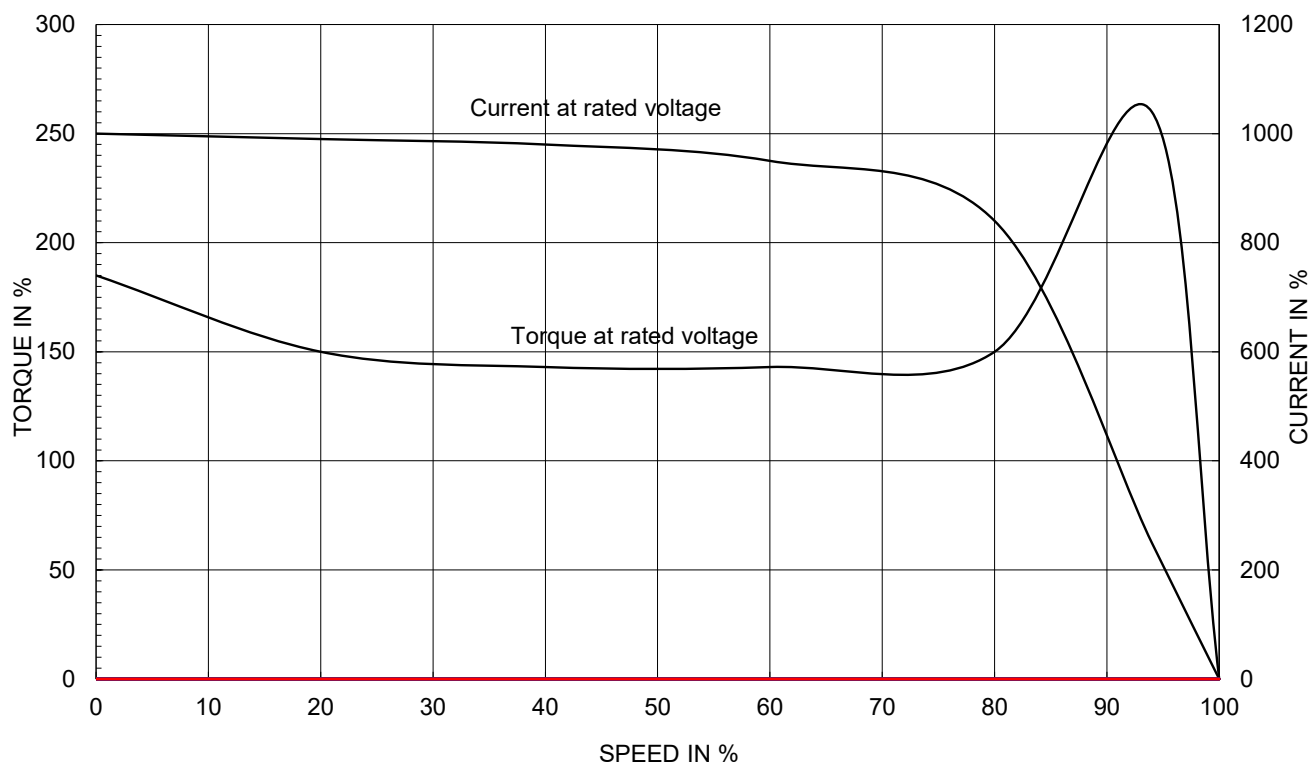
D.O.L (INVERTER & SOFT STARTER)	WYE-DELTA (Y-D)
 WARNING IMPROPER INSTALLATION, CONNECTION, OPERATION, GROUNDING OF THIS MOTOR MAY CAUSE SERIOUS INJURY TO PERSONNEL OR MOTOR FAILURE. READ INSTRUCTIONS CAREFULLY. GROUNDING SHOULD BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AND APPLICABLE LOCAL SOUND 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 NAMEPLATE DRAWING	
DSND BY	S.H.LEE	DATE	2024.06.07				
				REF. NO	4M-137664 / 4M-128845	Sheet No.	of
				DWG NO	NP-HES1.5-36-143/5JM	Revision No.	0

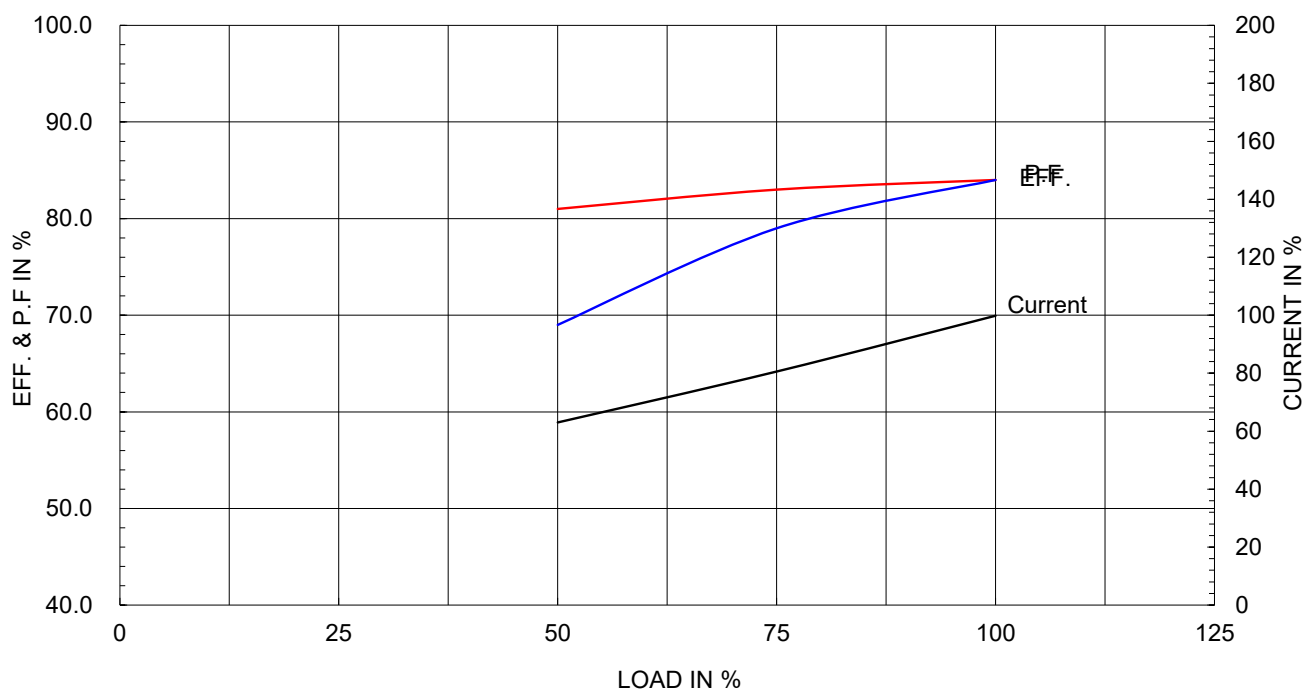
Type :	PJP	
Full Load Torque :	2.22	lb.ft
Load moment of Inertia (J) :	2.119	lb.ft2
Motor moment of Inertia (J) :	0.033	lb.ft2

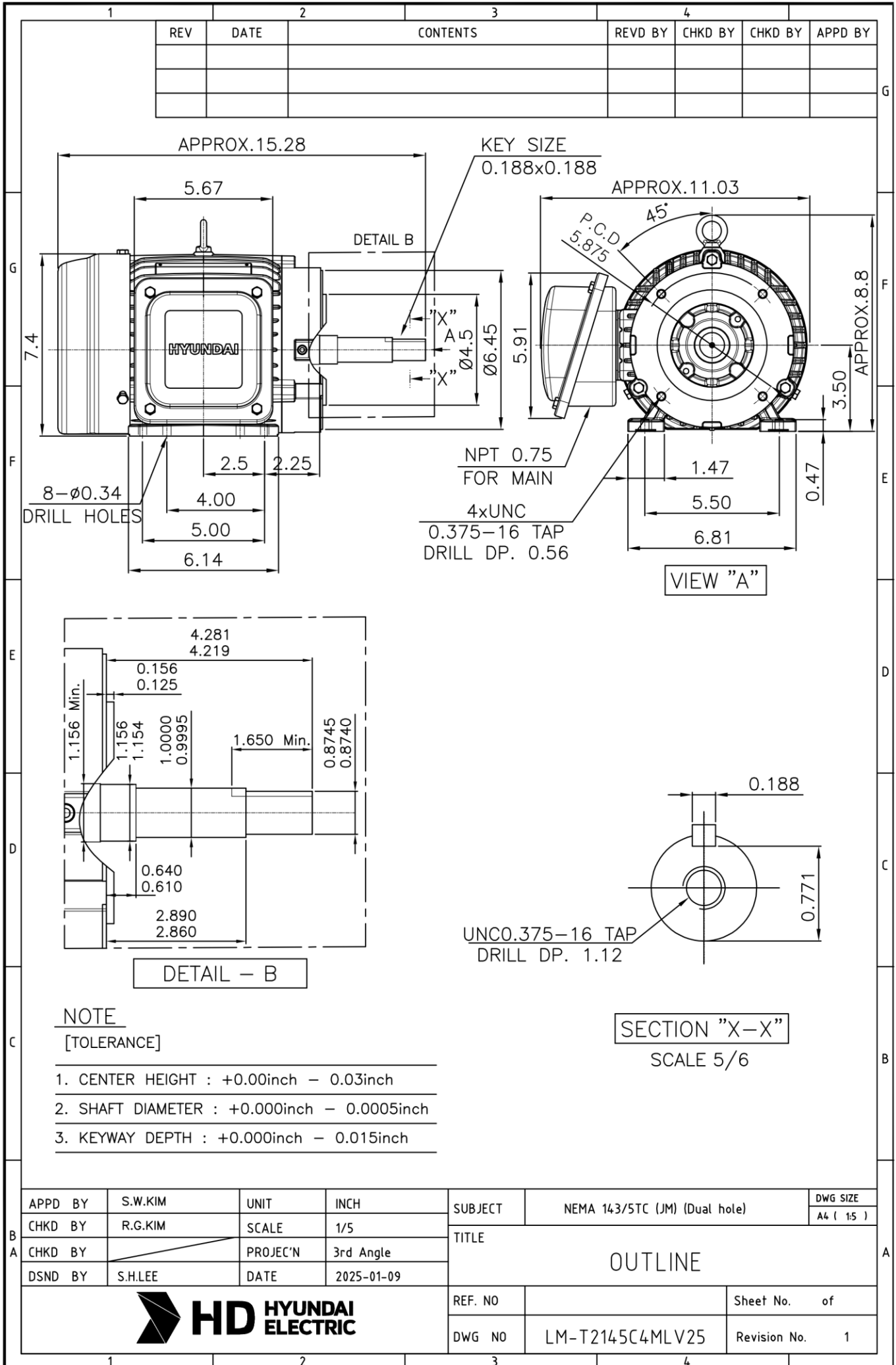
1.1kW	1.5HP	2 P	60 Hz
Speed at Full Load :			3485 RPM
Rated Voltage	575V	460V	230V
Full Load Current	1.57A	1.96A	3.91A

SPEED VS TORQUE & CURRENT CURVE

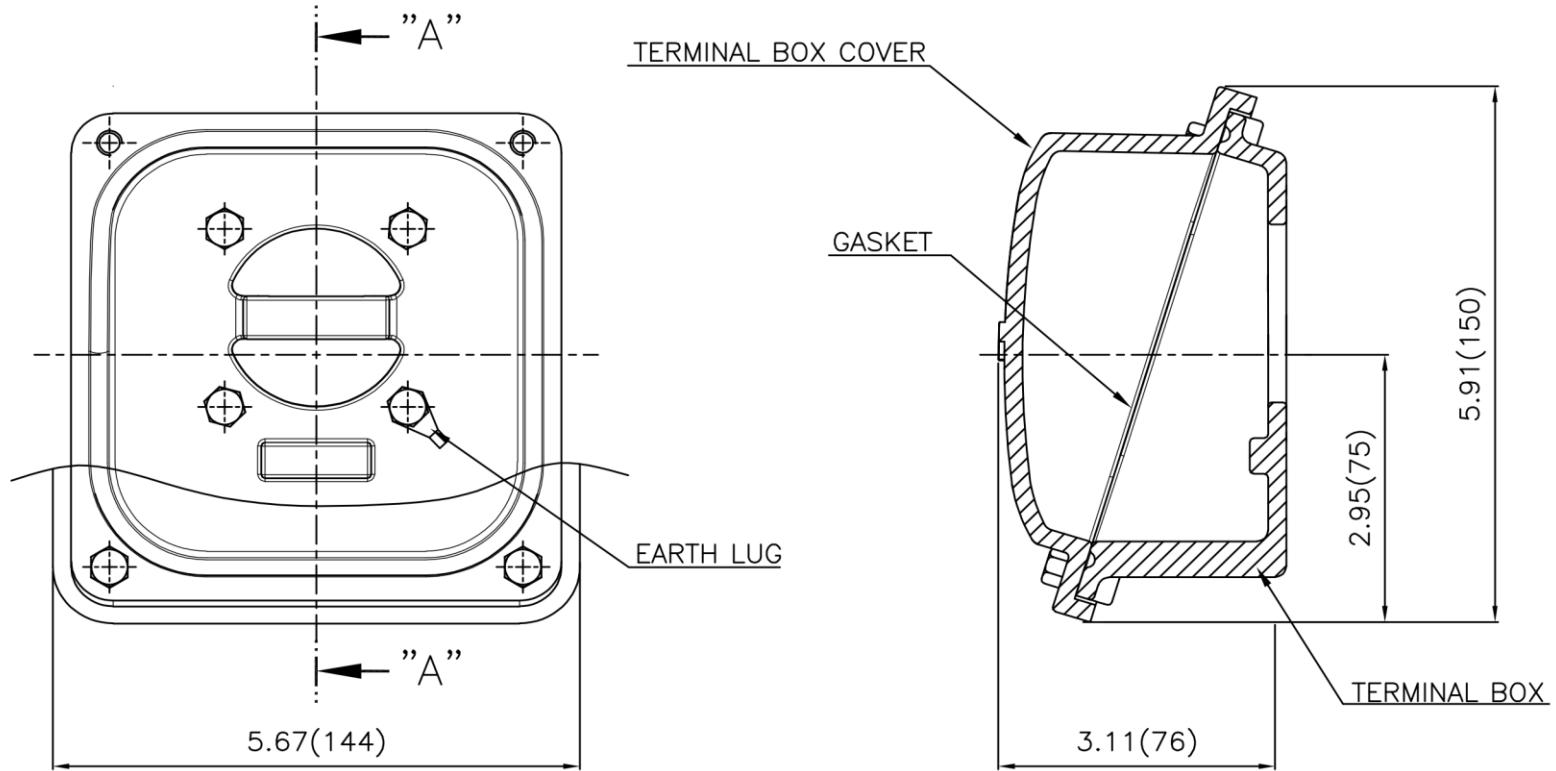


OUTPUT VS EFF., P.F & CURRENT CURVE





Cls. I&II, Div. 2 IEEE 841



▽	50S
▽▽	12.5S
▽▽▽	3.2S
▽▽▽▽	0.4S

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

일반가공공차		일반재공공차	
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. 140-180 (CAST IRON)	DWG SIZE	
CHKD BY		SCALE	1/1.5	TITLE	TERMINAL BOX ASS'Y	A3 (1:1.5)	
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	REF. NO		Sheet No.	of
DSND BY	네슬피	DATE	2023-10-19	DWG NO	3M-248456	Revision No.	0

