

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.	HES25-18-284/6JM	Item No.		Rev. No.	[]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA				
Frame Size		286JM	Rated Output		18.5 kW		25 HP
Type		PJP	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	24.5 A	30.6 A	61.3 A
Insulation Class		F		Locked-rotor**	790 %	790 %	790 %
Temp. Rise at full load (by resistance method)			Efficiency				
at 1.0 S.F		80 deg. C	50% Load		90.6 %		
Motor Location		☐ Indoor ☐ Outdoor	75% Load		92.6 %		
Altitude		Less than 1,000 meter	100% Load		93.6 %		
Relative Humidity		Less than 80 %	Power Factor(p.u)				
Ambient Temp.		40 deg. C (Max.)	50% Load		0.660		
Duty Type		Continuous (S1)	75% Load		0.760		
Service Factor		1.15	100% Load		0.810		
Mounting		B35	Speed at Full Load		1775 r.p.m		
Bearing	Type	Anti-Friction	Torque				
	DE/N-DE	6312ZC3 / 6310ZC3	Full Load		73.43 lb.ft		
	Lubricant	Grease(Polyrex-EM)	Locked-rotor**		170 %		
External Thrust		Not applicable	Breakdown**		220 %		
Coupling Method		☒ Direct ☐ V-belt	Moment of Inertia (J)				
Shaft Extension		Single	Load(Max.)		160.272 lb.ft2		
Terminal Box	Main	Cast Iron	Motor		5.578 lb.ft2		
	Aux.	No	Sound Pressure Level (No-load & mean value at 1m from motor)				
	Location	Refer to Outline Drawing			72 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-T2286C4MLV25	430 lb.
SPARE PARTS			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 (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
			2025-09-19	S.H. LEE	I.K. KIM
					CHKD
					APPD
					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.

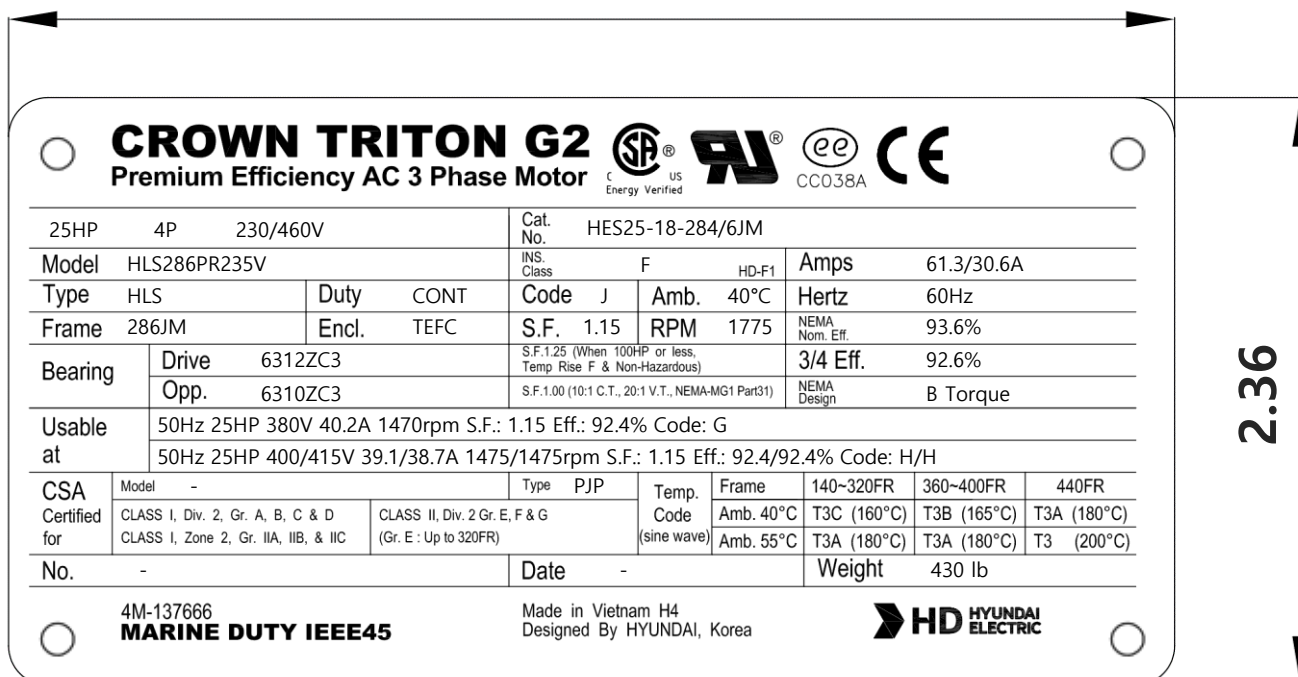
* In case of Inverter-Fed Motor, performance data is based on sine wave tests. It may be different from test data of Inverter combined motor.

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

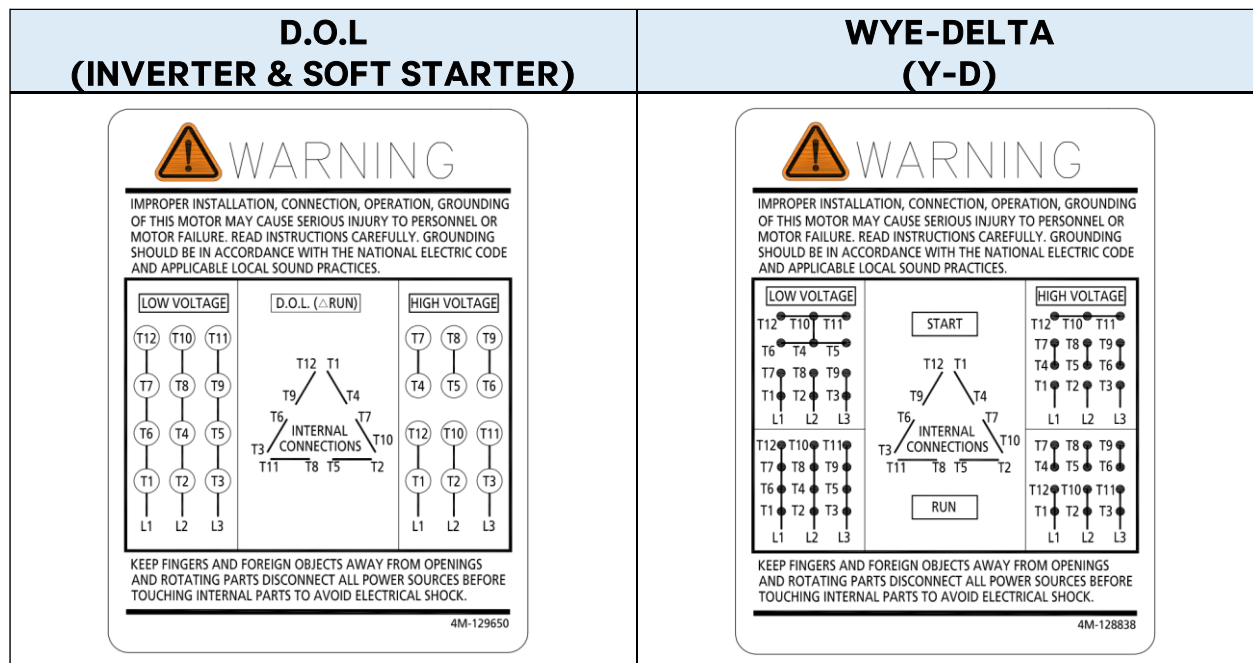
1		2		3		4		
REV	DATE	CONTENTS			REVD BY	CHKD BY	CHKD BY	APPD BY

■ MAIN NAMEPLATE

4.72



WIRING DIAGRAM



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-HES25-18-284/6JM	Revision No. 0	

Type : PJP

18.5kW 25HP

4 P

60 Hz

Full Load Torque : 73.43 lb.ft

Speed at Full Load : 1775 RPM

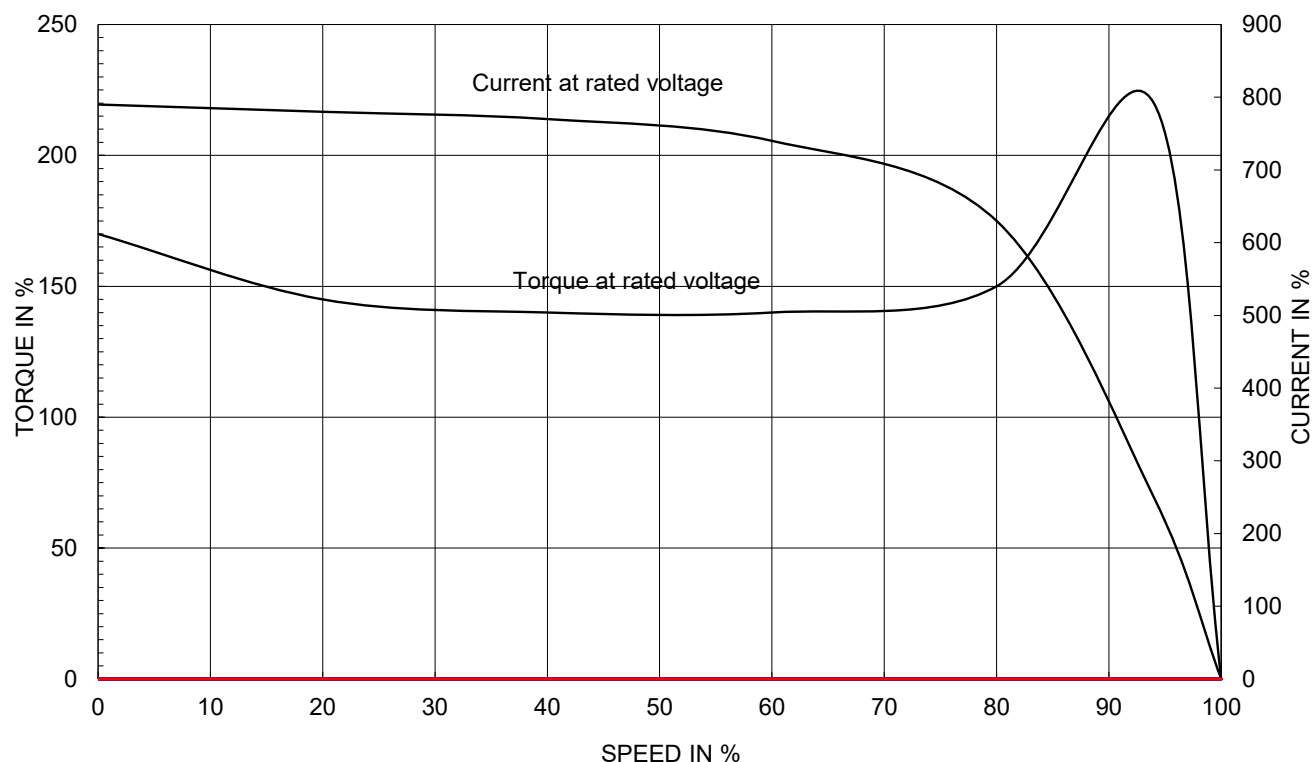
Load moment of Inertia (J) : 160.272 lb.ft2

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

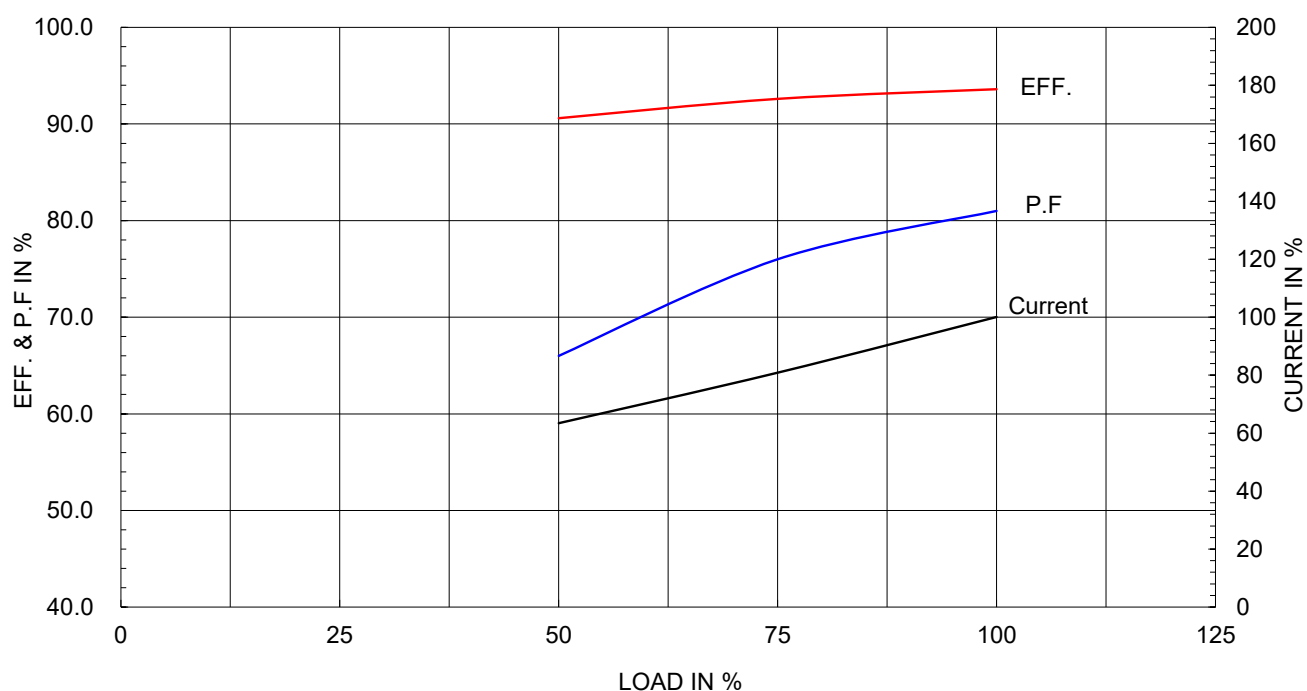
Motor moment of Inertia (J) : 5.578 lb.ft2

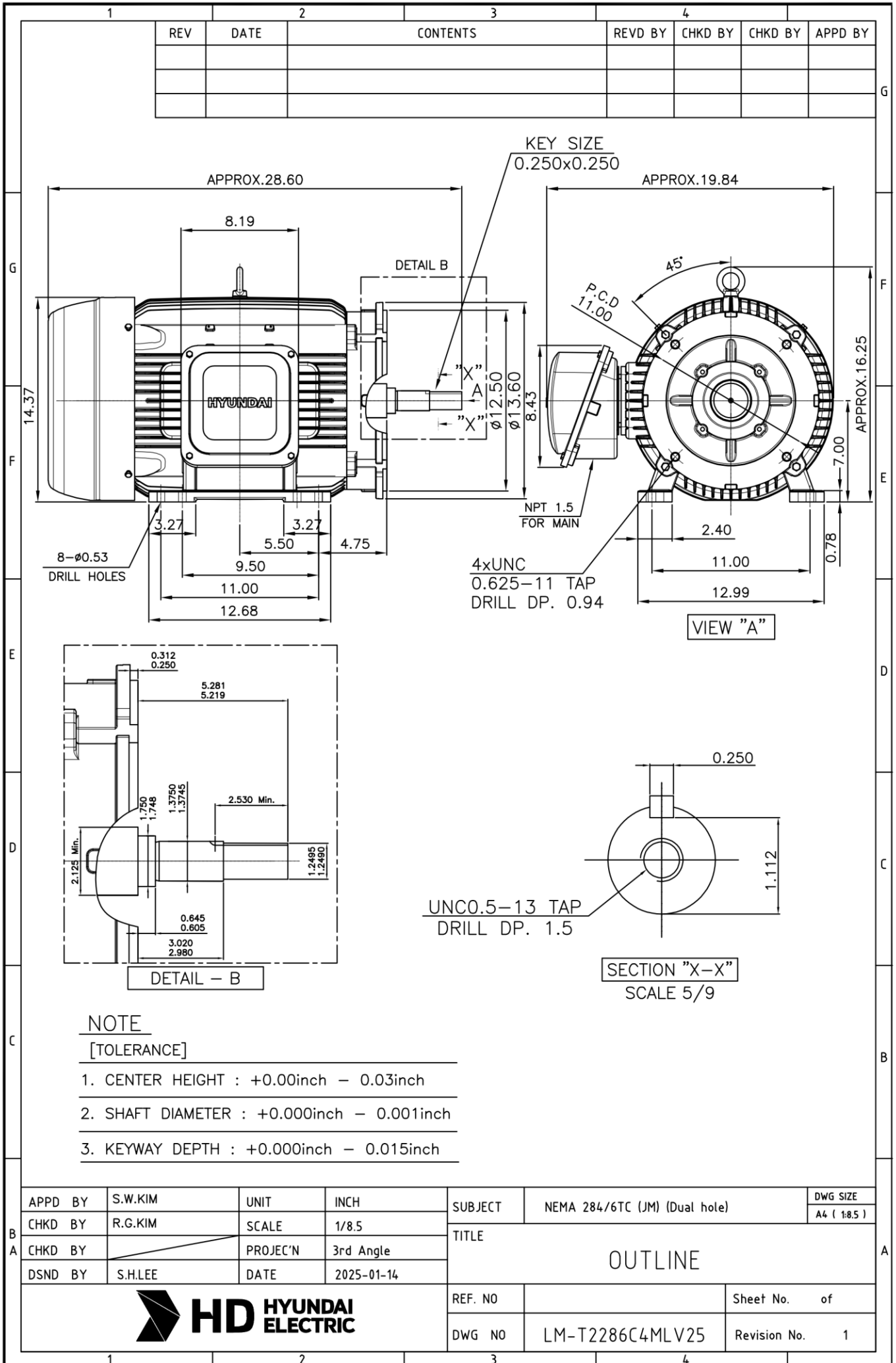
Full Load Current	24.5A	30.6A	61.3A
-------------------	-------	-------	-------

SPEED VS TORQUE & CURRENT CURVE



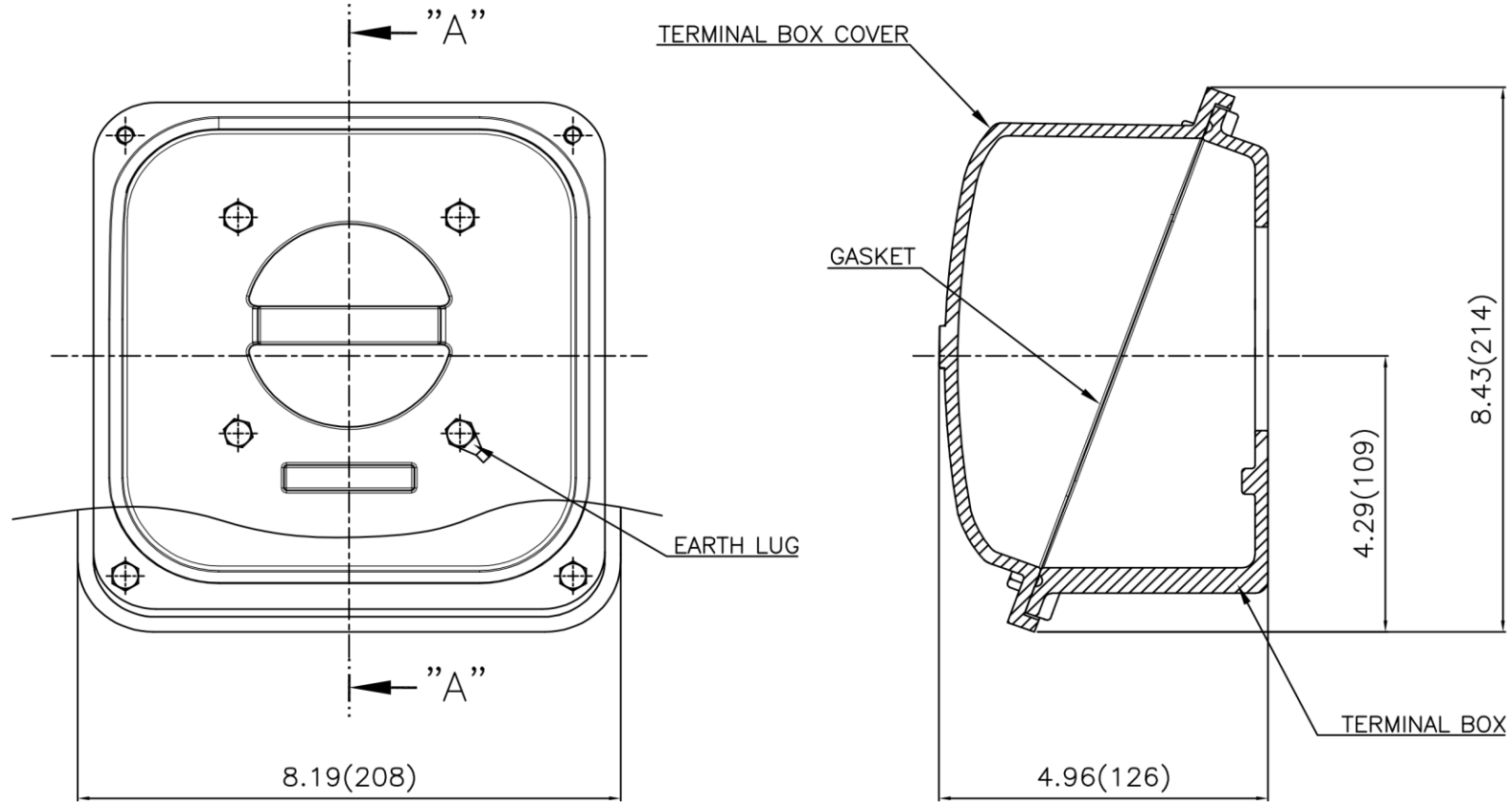
OUTPUT VS EFF., P.F & CURRENT CURVE





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

