

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

IEEE841 TYPE

Catalog No.	IEEEV7.5-18-213TCRD	Item No.		Rev. No.	[]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA			
Frame Size		213TC	Rated Output		5.5 kW 7.5 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	7.82 A	9.78 A 19.6 A
Insulation Class		F		Locked-rotor**	940 %	940 % 940 %
Temp. Rise at full load (by resistance method)			Efficiency			
at 1.0 S.F		80 deg. C		50% Load	88.7 %	
Motor Location		☐ Indoor ☐ Outdoor		75% Load	90.7 %	
Altitude		Less than 1,000 meter		100% Load	91.7 %	
Relative Humidity			Power Factor(p.u)			
Ambient Temp.		40 deg. C (Max.)		50% Load	0.620	
Duty Type		Continuous (S1)		75% Load	0.720	
Service Factor		1.15		100% Load	0.770	
Mounting		B5	Speed at Full Load		1775 r.p.m	
Bearing	Type	Anti-Friction	Torque			
	DE/N-DE	6208ZC3 / 6208ZC3		Full Load	21.83 lb.ft	
	Lubricant	Grease(Polyrex-EM)		Locked-rotor**	190 %	
External Thrust		Not applicable		Breakdown**	250 %	
Coupling Method		☒ Direct ☐ V-belt	Moment of Inertia (J)			
Shaft Extension		Single		Load(Max.)	46.042 lb.ft2	
Terminal	Main	Cast Iron		Motor	0.570 lb.ft2	
Box	Aux.	No	Sound Pressure Level (No-load & mean value at 1m from motor)			
	Location	Refer to Outline Drawing			62 dB(A)	
Application			Vibration		2.03 mm/s (peak)	
Area classification		Hazardous	Permissible number of		Cold 3 times	
Type of Ex-Protection		Class I&II, Division 2	consecutive starts		Hot 2 times	
Applicable Standard		IEEE841, NEMA MG1, CSA C390	Paint	Munsell No.	7.5BG6/1.5	

ACCESSORIES

SUBMITTAL DRAWING

Outline Dimension Drawing	\ Motor Weight(Approx.)		
B5	LM-I2213C5PLV23	160 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.

MAIN NAMEPLATE

3.94

1.57

CROWN TRITON G2 Premium Efficiency AC 3 Phase Motor				Cat. No. IEEEV7.5-18-213TCRD						
7.5HP	4P	460V	Amps	9.78A	Type	HLS	Amb.	40°C		
Frame	213TC	Duty	CONT	Encl.	TEFC	Model	HLS213PR238V	NEMA Nom. Eff.	91.7%	
RPM	1775	Hertz	60Hz	S.F.	1.15	INS. Class	F	3/4 Eff.	90.7%	
		Drive	6208ZC3	S.F.1.25 (When 100HP or less, Temp Rise F & Non-Hazardous)				NEMA Design	B Torque	
		Opp.	6208ZC3	S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)				Code	L	
Bearing	Usable at									
	50Hz 7.5HP 380V 13.0A 1470rpm S.F.: 1.15 Eff.: 89.5% Code: H									
	50Hz 7.5HP 400/415V 12.9/13.0A 1470/1475rpm S.F.: 1.15 Eff.: 89.5/89.5% Code: J/K									
CSA Certified for	Model	-	Type	PJP	Temp. Code	Frame	140~320FR	CE		
	CLASS I, Div. 2, Gr. A, B, C & D	CLASS II, Div. 2, Gr. E, F & G			(Sine Wave)	Amb.40°C	T3C (160°C)			
	CLASS I, Zone 2, Gr. IIA, IIB & IIC	(Gr. E : up to 320FR)				Amb.55°C	T3A (180°C)			
No.	-	Date	-	Weight	160 lb					
MARINE DUTY IEEE45 IEEE Std 841-2021		4M-138277	Made in Vietnam H4 Designed By HYUNDAI, Korea		HD HYUNDAI ELECTRIC					

WIRING DIAGRAM

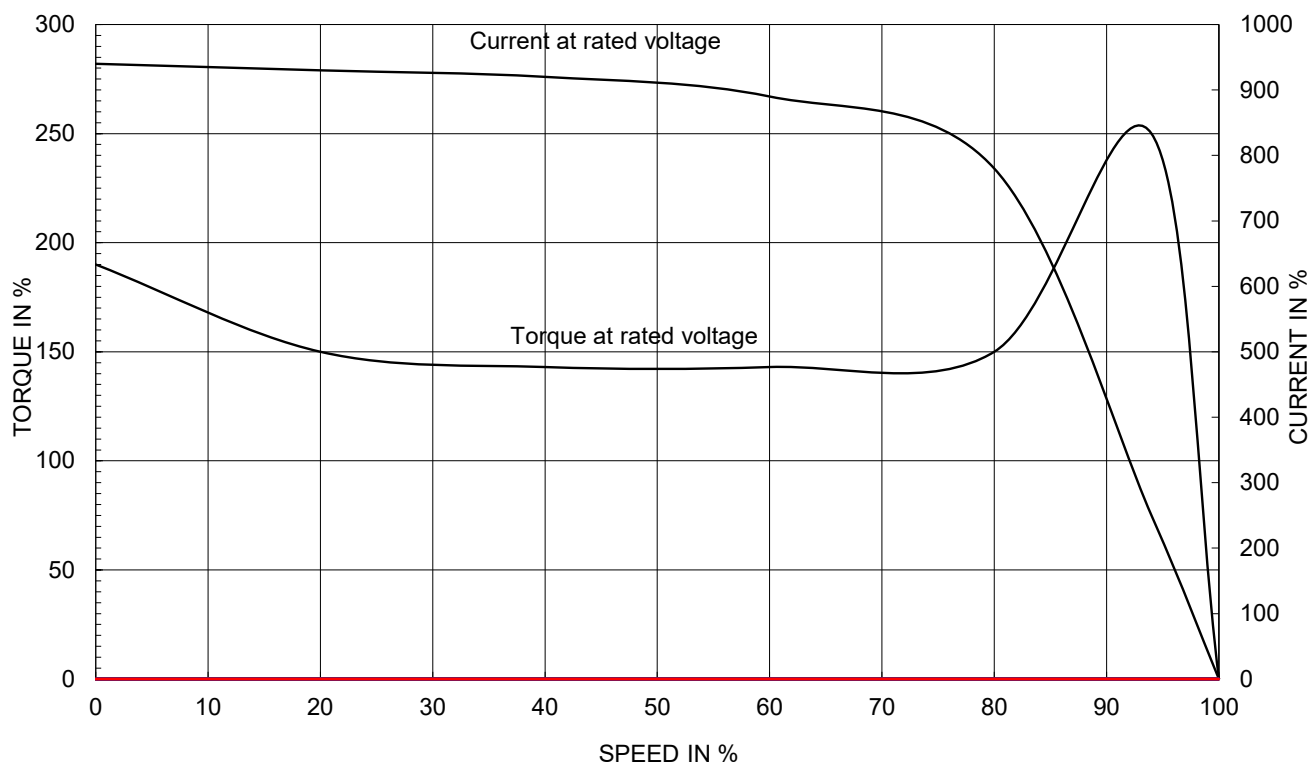
D.O.L (INVERTER & SOFT STARTER)	WYE-DELTA (Y-D)
WARNING IMPROPER INSTALLATION, CONNECTION, OPERATION, GROUNDING OF THIS MOTOR MAY CAUSE SERIOUS INJURY TO PERSONNEL OR MOTOR FAILURE. READ INSTRUCTIONS CAREFULLY. GROUNDING SHOULD BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AND APPLICABLE LOCAL SOUND PRACTICES. T1 L1 T2 L2 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-128796	N/A

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 IEEE841 (SSEN, 143-215)	DWG SIZE	A4 (1:1)
CHKD BY	I.K.KIM	SCALE	NONE	NAMEPLATE DRAWING			
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle				
DSND BY	S.H.LEE	DATE	2024.06.07				
				REF. NO	4M-138277 / 4M-128796	Sheet No.	of
				DWG NO	NP-IEEEV7.5-18-213TCRD	Revision No.	0

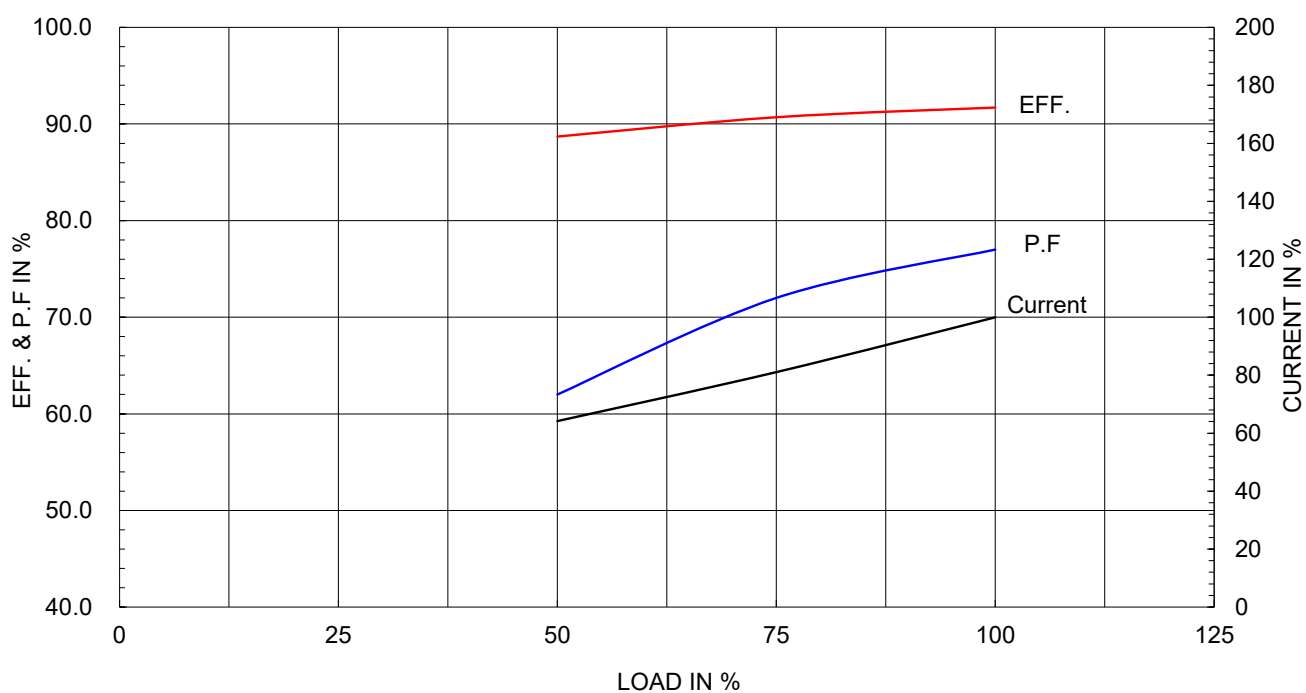
Type :	PJP	
Full Load Torque :	21.83	lb.ft
Load moment of Inertia (J) :	46.042	lb.ft2
Motor moment of Inertia (J) :	0.570	lb.ft2

5.5kW	7.5HP	4 P	60 Hz
Speed at Full Load :			1775 RPM
Rated Voltage	575V	460V	230V
Full Load Current	7.82A	9.78A	19.6A

SPEED VS TORQUE & CURRENT CURVE

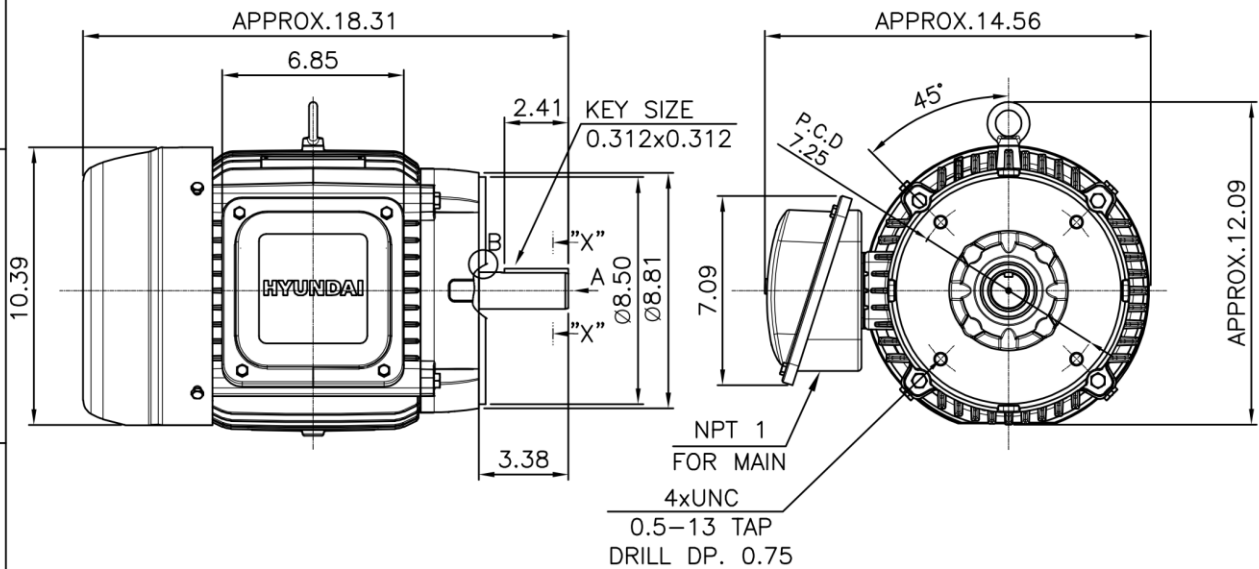


OUTPUT VS EFF., P.F & CURRENT CURVE

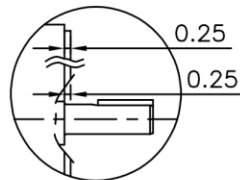


1	2	3	4	
▽	50S	REV	DATE	CONTENTS
▽▽	12.5S			REVD BY
▽▽▽	3.2S			CHKD BY
▽▽▽▽	0.4S			CHKD BY
				APPD BY

IEEE841



VIEW "A"

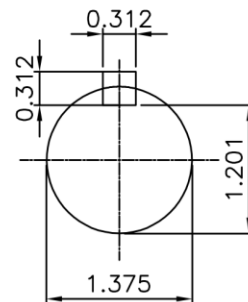


DETAIL - B

NOTE

[TOLERANCE]

1. CENTER HEIGHT : +0.00inch - 0.03inch
2. SHAFT DIAMETER : +0.000inch - 0.0005inch
3. KEYWAY DEPTH : +0.000inch - 0.015inch

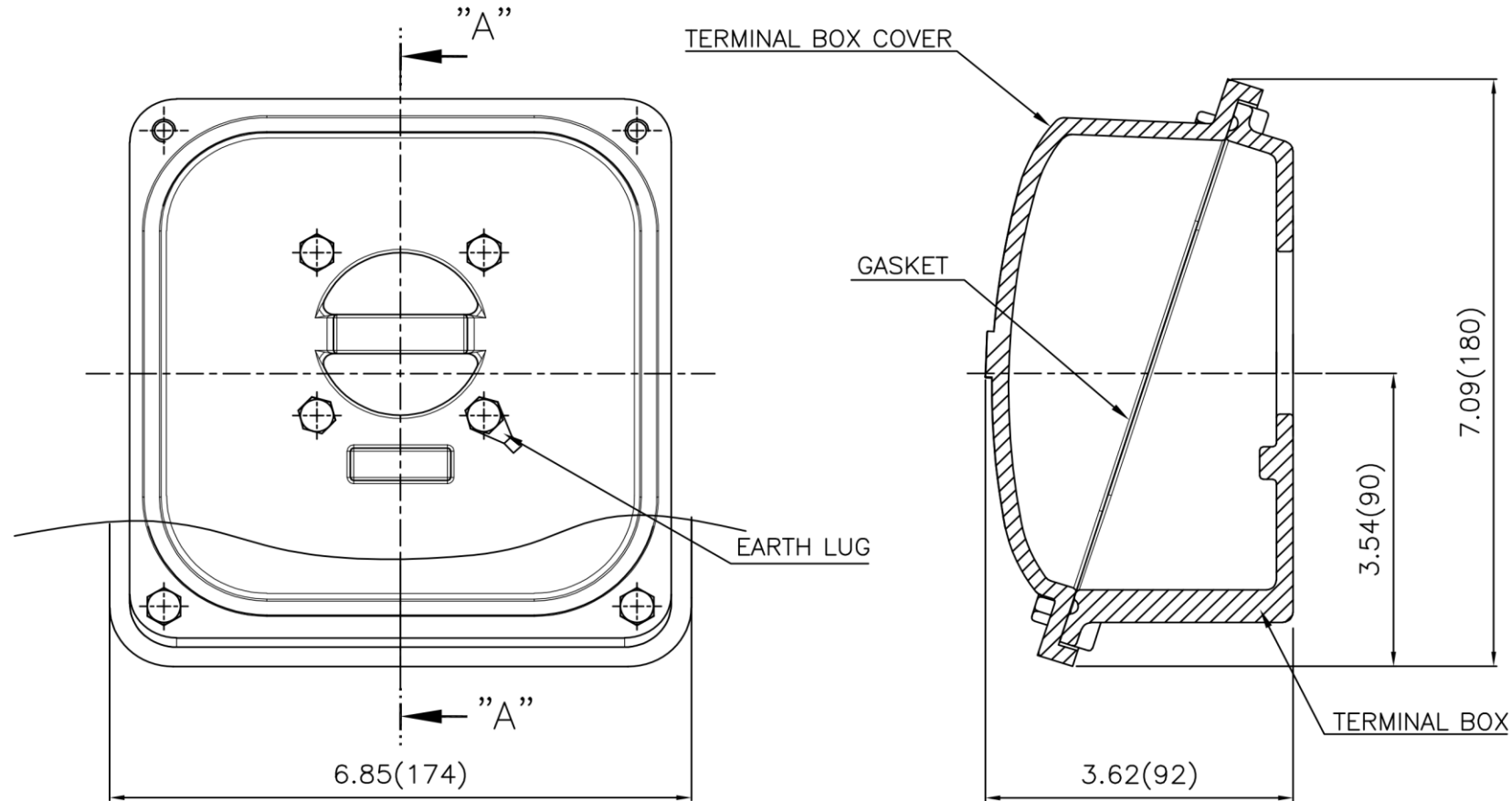


SECTION "X-X"
SCALE 4/7

APPD BY	S.Y.KIM	UNIT	inch	SUBJECT	NEMA 213TC	DWG SIZE
CHKD BY	R.G.KIM	SCALE	1/7			A4 (1/7)
CHKD BY		PROJEC'N	3rd Angle	TITLE	OUTLINE	
DSND BY	전지현	DATE	2021-04-28	REF. NO		Sheet No. of
				DWG NO	LM-I2213C5PLV23	Revision No. 0

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	일반기공차	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. 210 (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	네슬의	DATE	2023-10-19	DWG NO	3M-248457	Revision No. 0	