

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.	IEEEV5-12-215TCRD	Item No.		Rev. No.	[]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA			
Frame Size		215TC	Rated Output		3.7 kW 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	6.10 A	7.63 A 15.3 A
Insulation Class		F		Locked-rotor**	680 %	680 % 680 %
Temp. Rise at full load (by resistance method)			Efficiency			
at 1.0 S.F		80 deg. C	50% Load		86.5 %	
Motor Location		☐ Indoor ☐ Outdoor	75% Load		88.5 %	
Altitude		Less than 1,000 meter	100% Load		89.5 %	
Relative Humidity		Less than 80 %	Power Factor(p.u)			
Ambient Temp.		40 deg. C (Max.)	50% Load		0.530	
Duty Type		Continuous (S1)	75% Load		0.630	
Service Factor		1.15	100% Load		0.680	
Mounting		B5	Speed at Full Load		1180 r.p.m	
Bearing	Type	Anti-Friction	Torque			
	DE/N-DE	6208ZC3 / 6208ZC3	Full Load		22.09 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.)		96.700 lb.ft2	
Terminal	Main	Cast Iron	Motor		1.234 lb.ft2	
Box	Aux.	No	Sound Pressure Level (No-load & mean value at 1m from motor)			
	Location	Refer to Outline Drawing			57 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-I2215C5PLV23	180 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					
		- 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

1.57

CROWN TRITON G2 Premium Efficiency AC 3 Phase Motor				Cat. No. IEIEEV5-12-215TCRD						
5HP	6P	460V	Amps	7.63A	Type	HLS	Amb.	40°C		
Frame	215TC	Duty	CONT	Encl.	TEFC	Model	HLS215PR338V	NEMA Nom. Eff.	89.5%	
RPM	1180	Hertz	60Hz	S.F.	1.15	INS. Class	F	HD-F1	3/4 Eff.	88.5%
	Bearing	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	K	
	Usable at	50Hz 5HP 380V 9.68A 970rpm S.F.: 1.15 Eff.: 87.5% Code: H								
		50Hz 5HP 400/415V 10.2/10.8A 975/975rpm S.F.: 1.15 Eff.: 87.5/87.5% Code: K/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	180 lb				
	MARINE DUTY IEEE45 IEEE Std 841-2021		4M-138277		Made in Vietnam H4 Designed By HYUNDAI, Korea		HD HYUNDAI ELECTRIC			

WIRING DIAGRAM

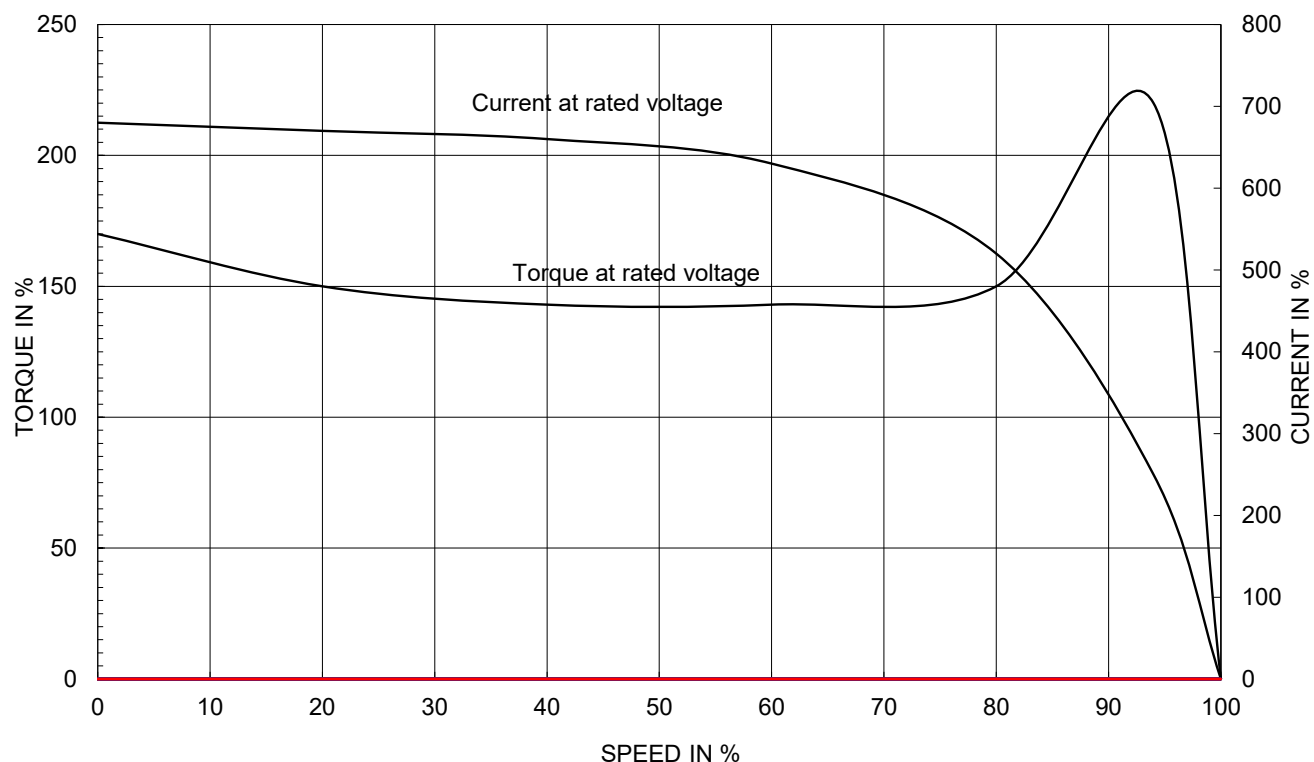
D.O.L (INVERTER & SOFT STARTER)	WYE-DELTA (Y-D)
WARNING IMPROPER INSTALLATION, CONNECTION, OPERATION, GROUNDING OF THIS MOTOR MAY CAUSE SERIOUS INJURY TO PERSONNEL OR MOTOR FAILURE. READ INSTRUCTIONS CAREFULLY. GROUNDING SHOULD BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AND APPLICABLE LOCAL SOUND 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-IEIEEV5-12-215TCRD	Revision No.	0

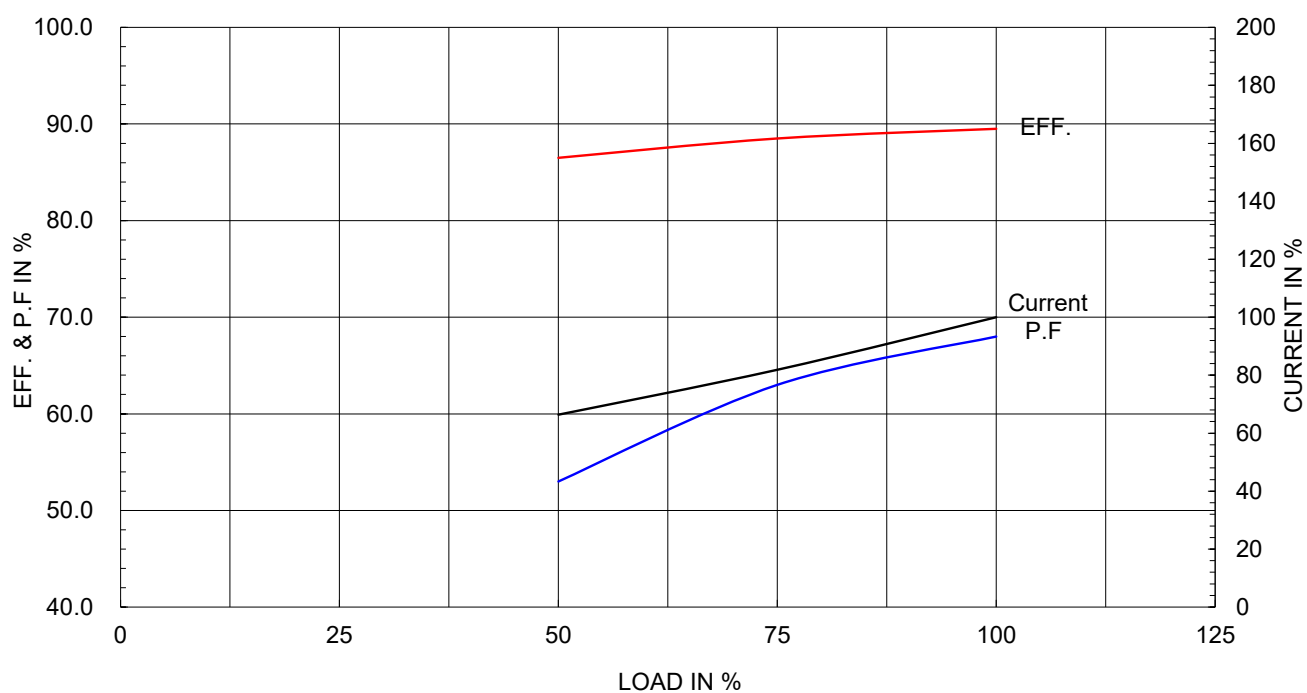
Type :	PJP	
Full Load Torque :	22.09	lb.ft
Load moment of Inertia (J) :	96.700	lb.ft2
Motor moment of Inertia (J) :	1.234	lb.ft2

3.7kW	5HP	6 P	60 Hz
Speed at Full Load :			1180 RPM
Rated Voltage	575V	460V	230V
Full Load Current	6.10A	7.63A	15.3A

SPEED VS TORQUE & CURRENT CURVE

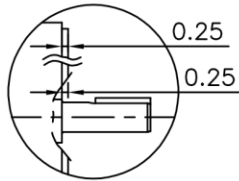
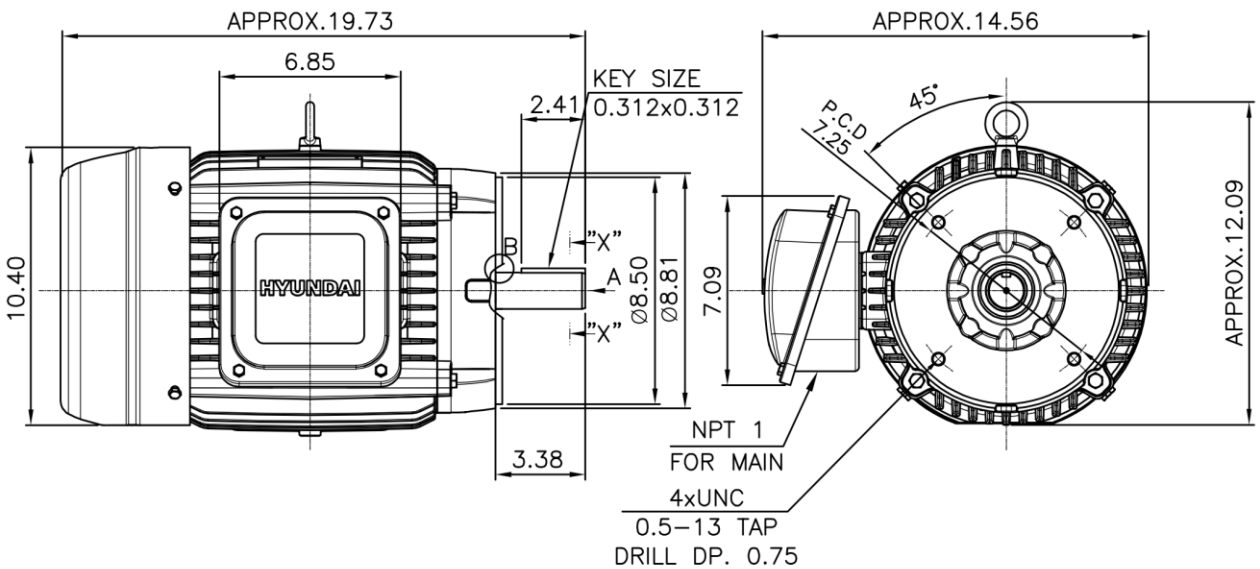


OUTPUT VS EFF., P.F & CURRENT CURVE



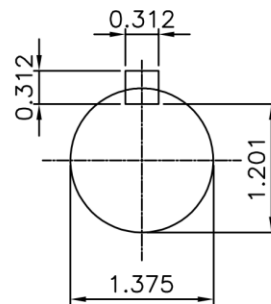
1			2		3	4			
▽	50S	REV	DATE	CONTENTS		REVD BY	CHKD BY	CHKD BY	APPD BY
▽▽	12.5S								
▽▽▽	3.2S								
▽▽▽▽	0.4S								

IEEE841



DETAIL - B

VIEW "A"



SECTION "X-X"
SCALE 4/7

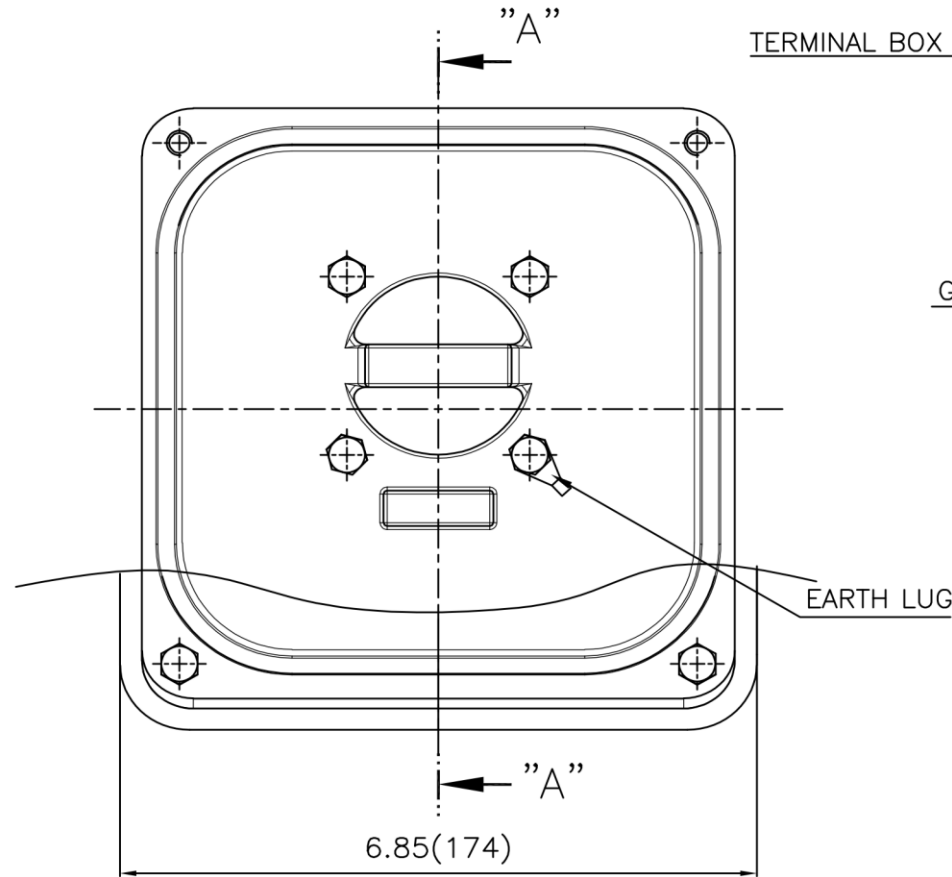
NOTE

[TOLERANCE]

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

APPD BY	S.Y.KIM	UNIT	inch	SUBJECT	NEMA 215TC	DWG SIZE
CHKD BY	R.G.KIM	SCALE	1/7	TITLE OUTLINE		
CHKD BY		PROJEC'N	3rd Angle			
DSND BY	전지현	DATE	2021-04-28			
				REF. NO	.	Sheet No. of
				DWG NO	LM-I2215C5PLV23	Revision No. 0

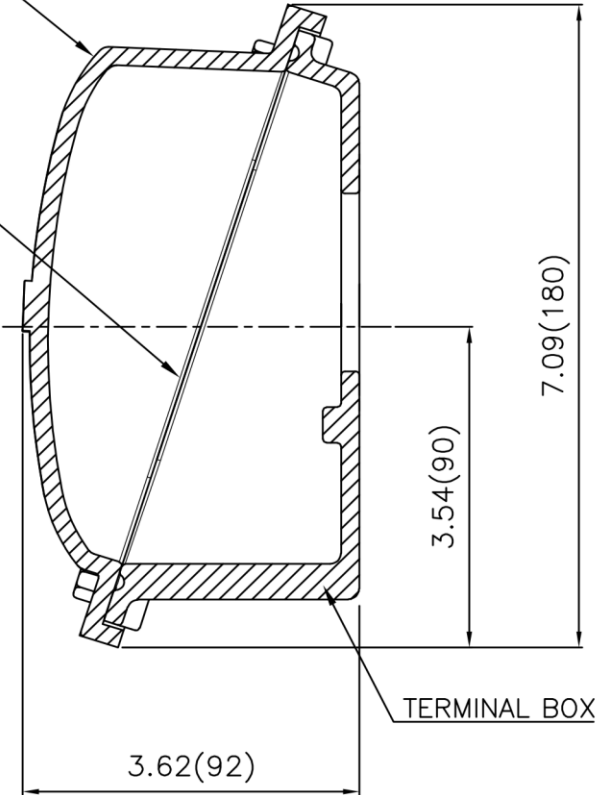
Cls. I&II, Div. 2 IEEE 841



TERMINAL BOX COVER

GASKET

EARTH LUG



TERMINAL BOX

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	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