

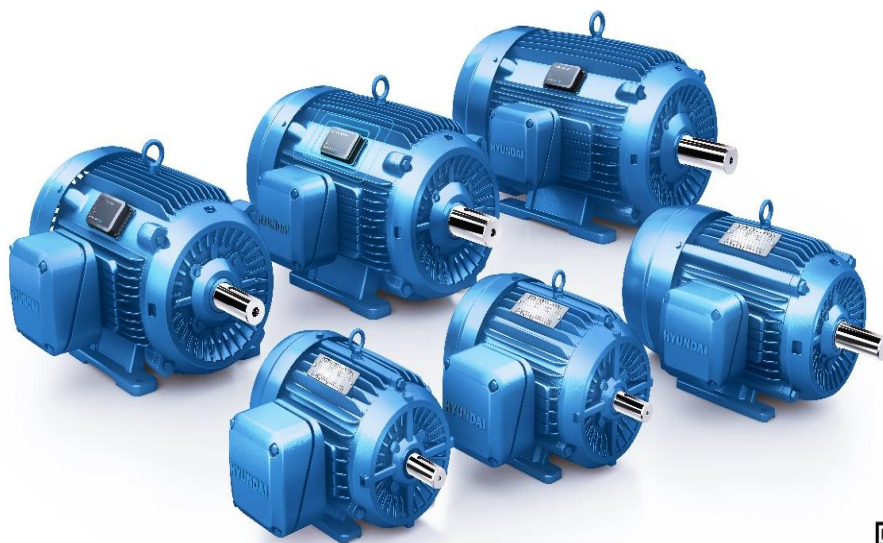
Customer :

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.	IEEEV5-36-184TCRD	Item No.			Rev. No.	[]	
Project Name		Project No.			Quantity	sets	
GENERAL SPECIFICATION				PERFORMANCE DATA			
Frame Size	184TC		Rated Output	3.7 kW		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	4.88 A	6.10 A	12.2 A
Insulation Class	F			Locked-rotor**	800 %	800 %	800 %
Temp. Rise at full load (by resistance method)			Efficiency				
at 1.0 S.F			80 deg. C				
Motor Location	☐ Indoor ☐ Outdoor		50% Load		85.5 %		
Altitude	Less than 1,000 meter		75% Load		87.5 %		
Relative Humidity	Less than 80 %		100% Load		88.5 %		
Ambient Temp.	40 deg. C (Max.)		Power Factor(p.u)				
Duty Type	Continuous (S1)		50% Load		0.710		
Service Factor	1.15		75% Load		0.810		
Mounting	B5		100% Load		0.860		
Bearing	Type	Anti-Friction	Speed at Full Load		3515 r.p.m		
	DE/N-DE	6206ZC3 / 6206ZC3	Torque				
	Lubricant	Grease(Polyrex-EM)	Full Load		7.42 lb.ft		
External Thrust	Not applicable		Locked-rotor**		190 %		
Coupling Method	☒ Direct ☐ V-belt		Breakdown**		260 %		
Shaft Extension	Single		Moment of Inertia (J)				
Terminal	Main	Cast Iron	Load(Max.)		6.170 lb.ft2		
Box	Aux.	No	Motor		0.166 lb.ft2		
	Location	Refer to Outline Drawing	Sound Pressure Level (No-load & mean value at 1m from motor)				
Application			72 dB(A)				
Area classification	Hazardous		Vibration		2.03 mm/s (peak)		
Type of Ex-Protection	Class I&II, Division 2		Permissible number of consecutive starts		Cold	3 times	
Applicable Standard	IEEE841, NEMA MG1, CSA C390				Hot	2 times	
			Paint	Munsell No.	7.5BG6/1.5		
ACCESSORIES			SUBMITTAL DRAWING				
			Outline Dimension Drawing \ Motor Weight(Approx.)				
			B5	LM-I2184C5PLV23	115 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

1.57

CROWN TRITON G2 Premium Efficiency AC 3 Phase Motor				Cat. No. IEDEV5-36-184TCRD						
5HP	2P	460V	Amps	6.10A	Type	HLS	Amb.	40°C		
Frame	184TC	Duty	CONT	Encl.	TEFC	Model	HLS184PR138V	NEMA Nom. Eff.	88.5%	
RPM	3515	Hertz	60Hz	S.F.	1.15	INS. Class	F	HD-F1	3/4 Eff.	87.5%
Bearing	Drive	6206ZC3	S.F.1.25 (When 100HP or less, Temp Rise F & Non-Hazardous)				NEMA Design	B		
	Opp.	6206ZC3	S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)				Code	J		
Usable at	50Hz 5HP 380V 8.12A 2895rpm S.F.: 1.15 Eff.: 87.5% Code: H									
	50Hz 5HP 400/415V 7.87/7.75A 2910/2915rpm S.F.: 1.15 Eff.: 87.5/87.5% Code: J/K									
CSA Certified for	Model	-	Type	PJP	Temp. Code	Frame	140~320FR			
	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	115 lb					
MARINE DUTY IEEE45 IEEE Std 841-2021		4M-138277	Made in Vietnam H4 Designed By HYUNDAI, Korea							

WIRING DIAGRAM

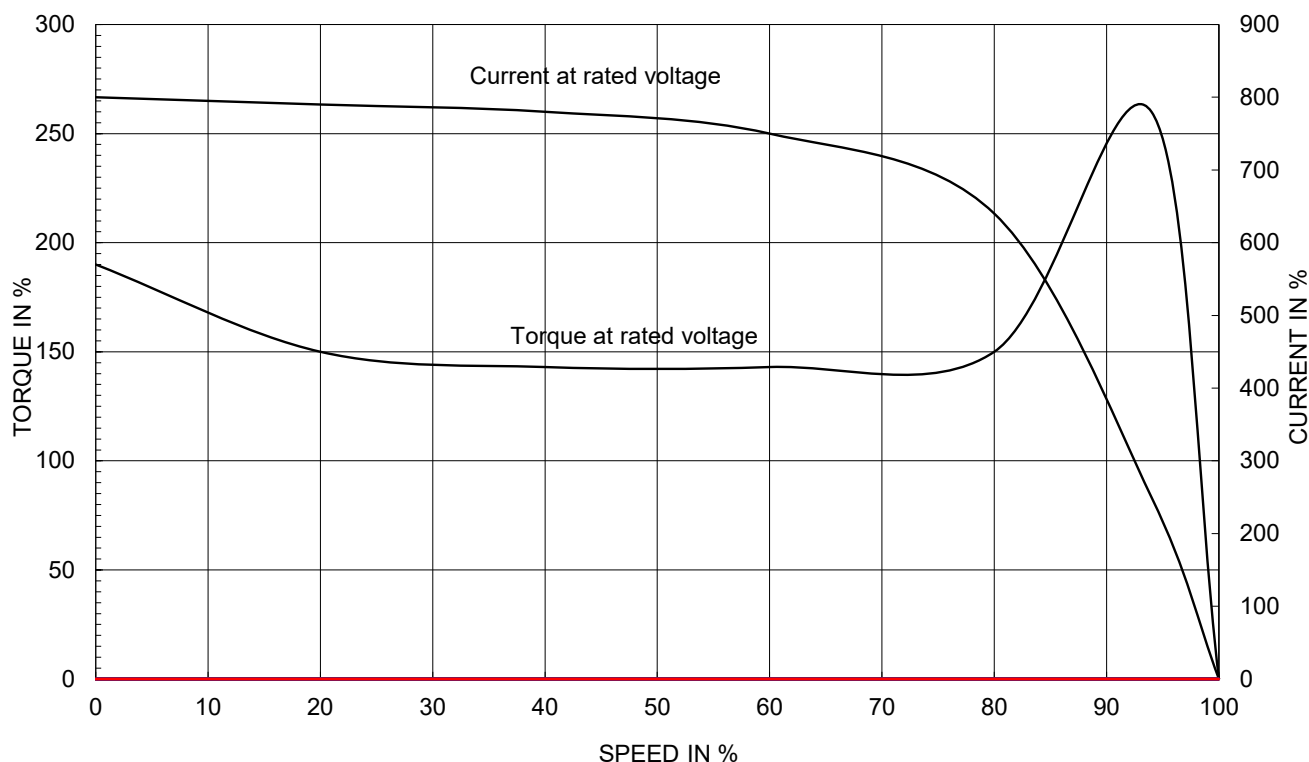
D.O.L (INVERTER & SOFT STARTER)	WYE-DELTA (Y-D)
WARNING IMPROPER INSTALLATION, CONNECTION, OPERATION, GROUNDING OF THIS MOTOR MAY CAUSE SERIOUS INJURY TO PERSONNEL OR MOTOR FAILURE. READ INSTRUCTIONS CAREFULLY. GROUNDING SHOULD BE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE AND APPLICABLE LOCAL SOUND PRACTICES. T1 T2 T3 L1 L2 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-IEDEV5-36-184TCRD	Revision No.	0

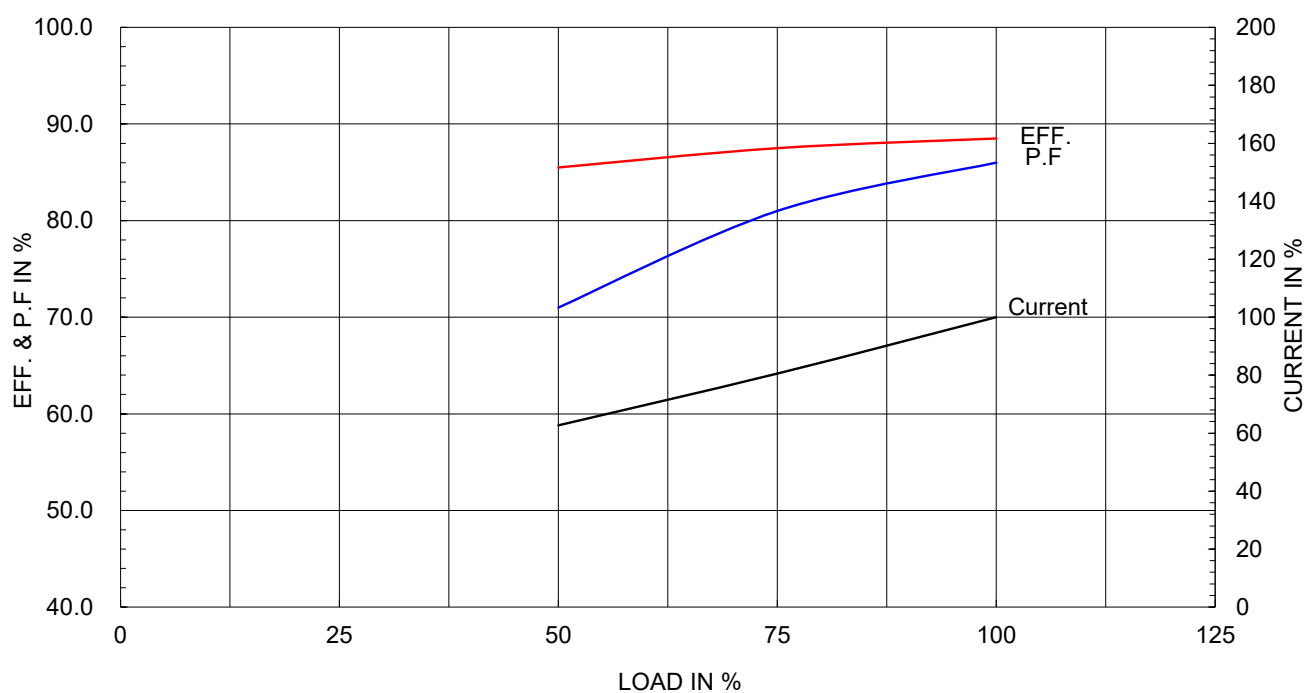
Type :	PJP	
Full Load Torque :	7.42	lb.ft
Load moment of Inertia (J) :	6.170	lb.ft2
Motor moment of Inertia (J) :	0.166	lb.ft2

3.7kW	5HP	2 P	60 Hz
Speed at Full Load :		3515 RPM	
Rated Voltage	575V	460V	230V
Full Load Current	4.88A	6.10A	12.2A

SPEED VS TORQUE & CURRENT CURVE

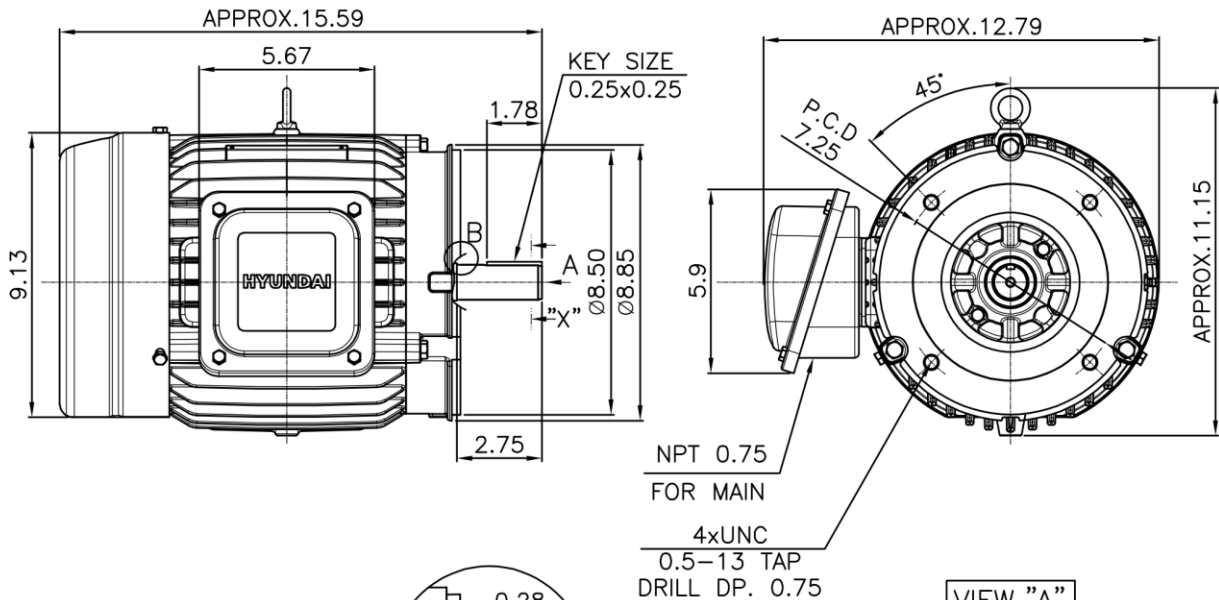


OUTPUT VS EFF., P.F & CURRENT CURVE



1	2	3	4	
▽	50S	REV	DATE	CONTENTS
▽▽	12.5S			
▽▽▽	3.2S			
▽▽▽▽	0.4S			

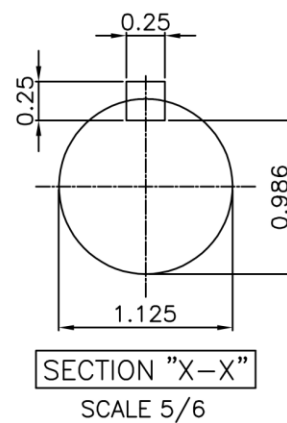
IEEE841



NOTE

[TOLERANCE]

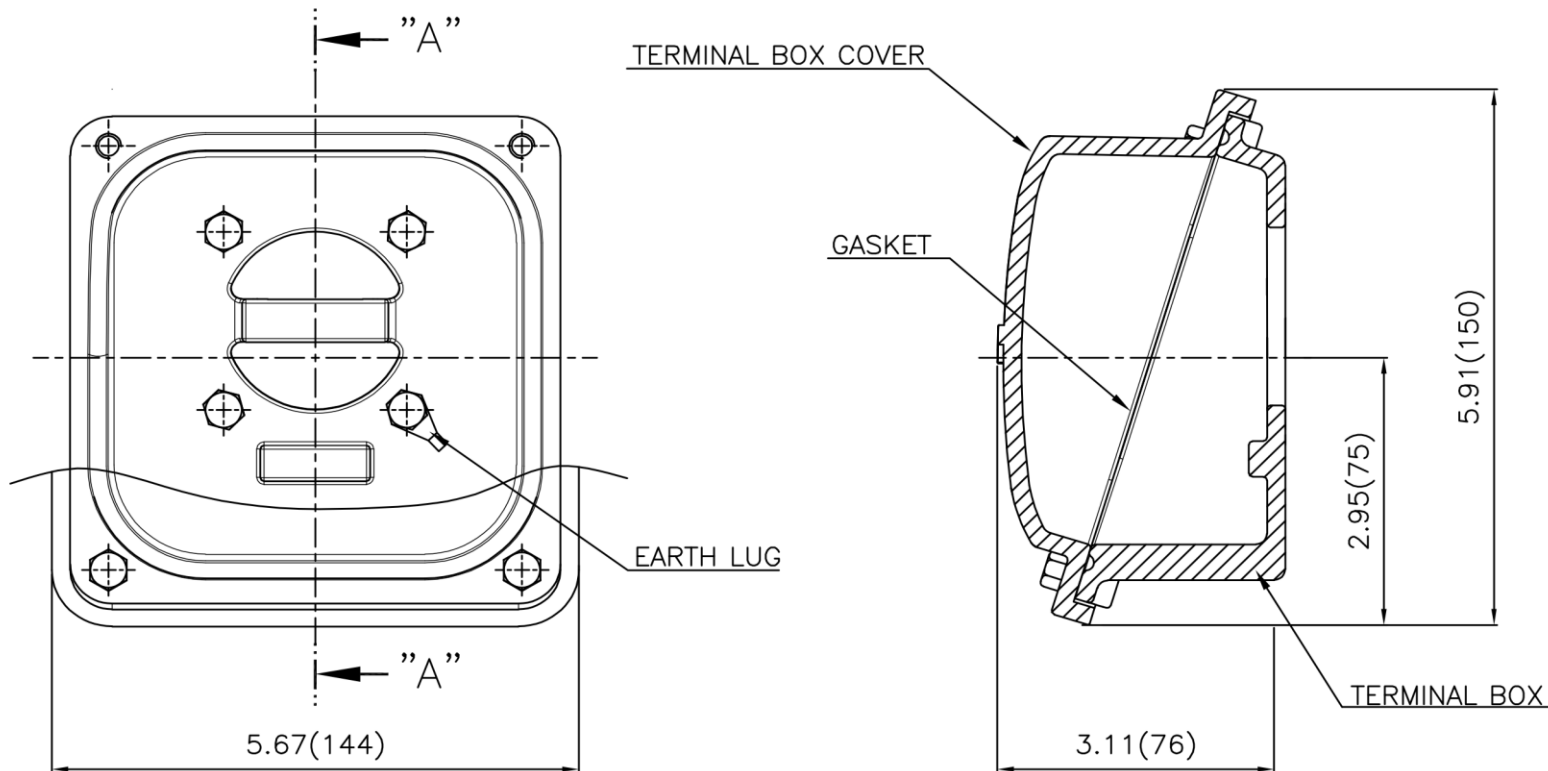
- CENTER HEIGHT : +0.00inch - 0.03inch
- SHAFT DIAMETER : +0.000inch - 0.0005inch
- KEYWAY DEPTH : +0.000inch - 0.015inch



APPD BY	S.Y.KIM	UNIT	inch	SUBJECT	NAMA 184TC	DWG SIZE
CHKD BY	R.G.KIM	SCALE	1/6			A4 (1/6)
CHKD BY		PROJEC'N	3rd Angle	TITLE	OUTLINE	
DSND BY	전지현	DATE	2021-04-28	REF. NO	.	Sheet No. of
				DWG NO	LM-I2184C5PLV23	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
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.
APP'D BY	S.Y.KIM	UNIT	inch(mm)	SUBJECT	FR. 140-180 (CAST IRON)	DWG SIZE	
CHK'D BY		SCALE	1/1.5	TITLE	TERMINAL BOX ASS'Y	A3 (1:1.5)	
CHK'D BY	R.G.KIM	PROJEC'N	3rd Angle	REF. NO		Sheet No. of	
DSND BY	네슬희	DATE	2023-10-19	DWG NO	3M-248456	Revision No. 0	

