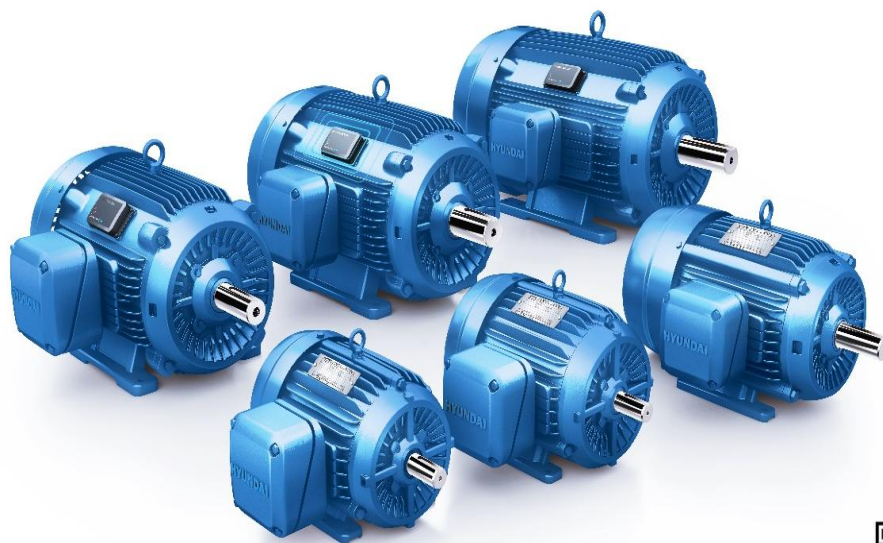


Customer :
Project Name :
Project No. :
Revision No. :

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.	IEEEV1-12-143/5TC		Item No.			Rev. No.	[]	
Project Name			Project No.			Quantity	sets	
GENERAL SPECIFICATION				PERFORMANCE DATA				
Frame Size	145TC		Rated Output	0.75 kW		1 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	1.45 A	1.81 A	3.62 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	50% Load 79.5 %					
Motor Location	☐ Indoor ☐ Outdoor		75% Load 81.5 %					
Altitude	Less than 1,000 meter		100% Load 82.5 %					
Relative Humidity	Less than 80 %		Power Factor(p.u)					
Ambient Temp.	40 deg. C (Max.)		50% Load 0.480					
Duty Type	Continuous (S1)		75% Load 0.580					
Service Factor	1.15		100% Load 0.630					
Mounting	B35		Speed at Full Load		1155 r.p.m			
Bearing	Type	Anti-Friction	Torque					
	DE/N-DE	6205ZC3 / 6204ZC3	Full Load 4.57 lb.ft					
	Lubricant	Grease(Polyrex-EM)	Locked-rotor** 180 %					
External Thrust	Not applicable		Breakdown** 275 %					
Coupling Method	☒ Direct ☐ V-belt		Moment of Inertia (J)					
Shaft Extension	Single		Load(Max.) 21.753 lb.ft2					
Terminal	Main	Cast Iron	Motor 0.083 lb.ft2					
Box	Aux.	No	Sound Pressure Level (No-load & mean value at 1m from motor)					
	Location	Refer to Outline Drawing	55 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.)					
			B35		LM-I2145C4PLV25		65 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					
			-. 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.

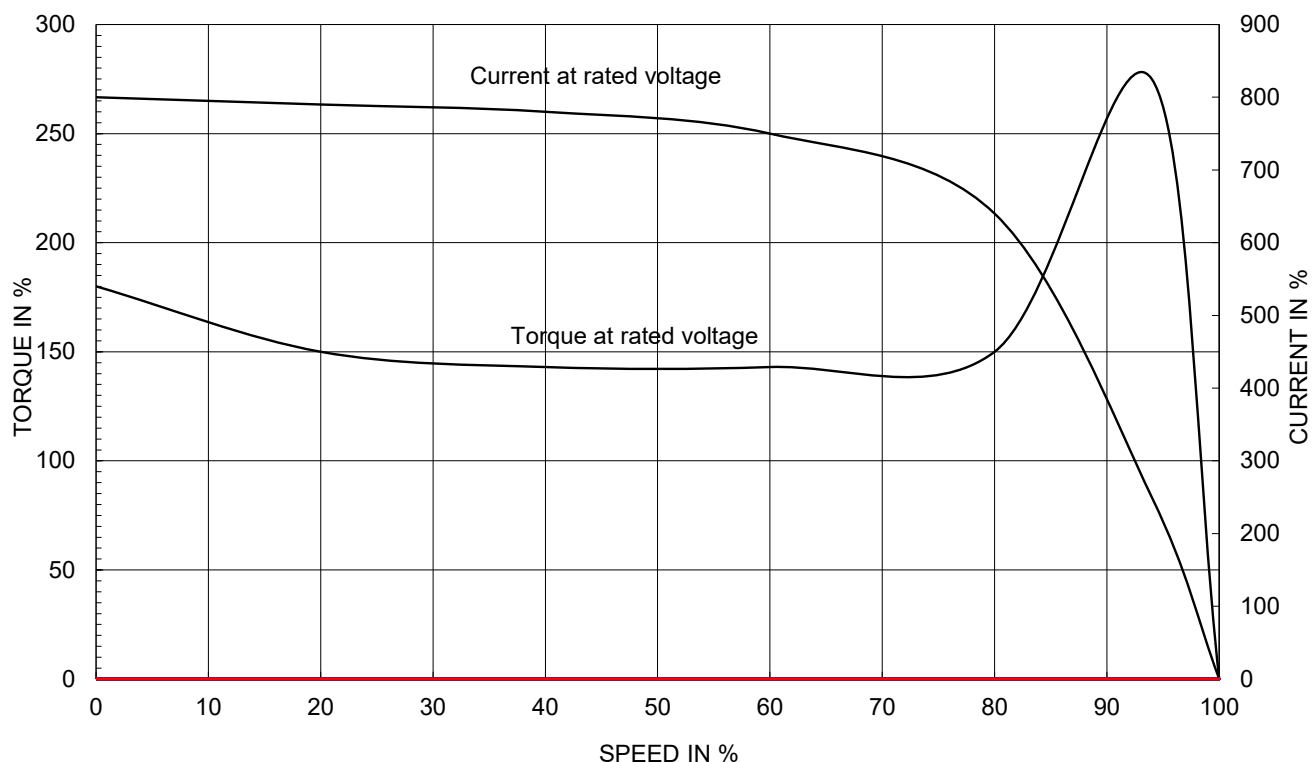
** Data is based on rated voltage & frequency and is expressed as a percentage of full-load value.

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 IEEE841 (SSEN, 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-138277 / 4M-128796	Sheet No. of
				DWG NO	NP-IEEEV1-12-143/5TC	Revision No. 0

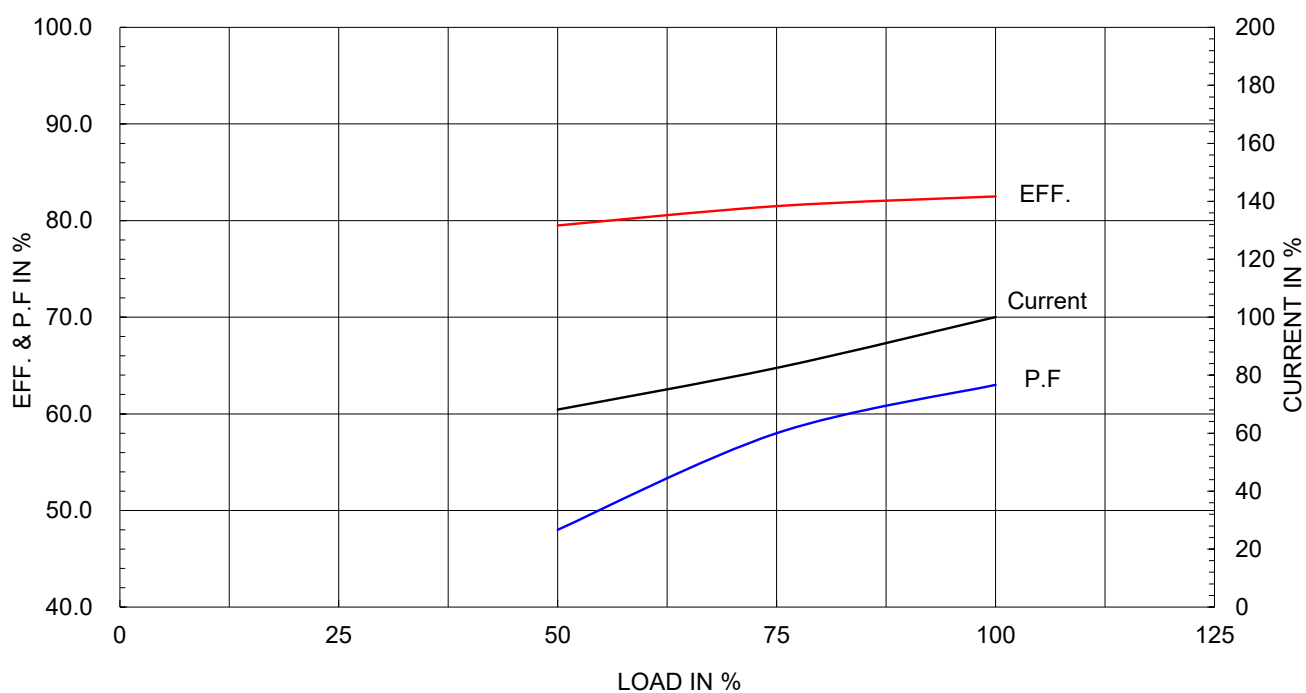
Type :	PJP	
Full Load Torque :	4.57	lb.ft
Load moment of Inertia (J) :	21.753	lb.ft2
Motor moment of Inertia (J) :	0.083	lb.ft2

0.75kW	1HP	6 P	60 Hz
Speed at Full Load :			1155 RPM
Rated Voltage	575V	460V	230V
Full Load Current	1.45A	1.81A	3.62A

SPEED VS TORQUE & CURRENT CURVE

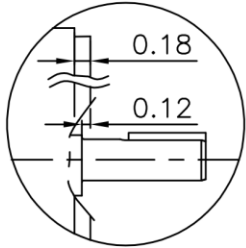
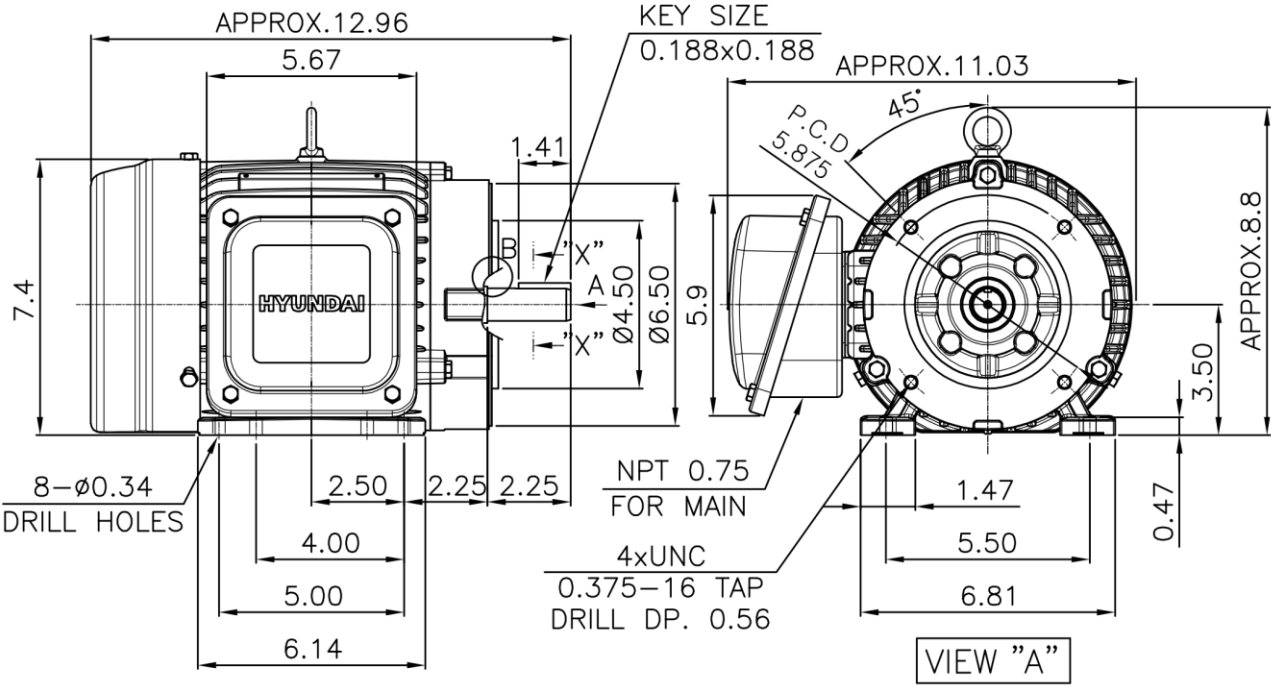


OUTPUT VS EFF., P.F & CURRENT CURVE



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

IEEE841

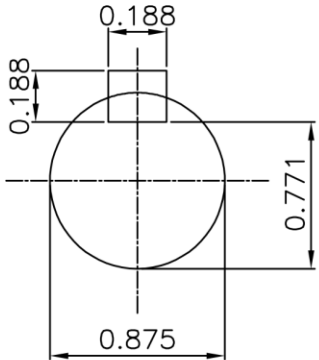


DETAIL - B

NOTE

[TOLERANCE]

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

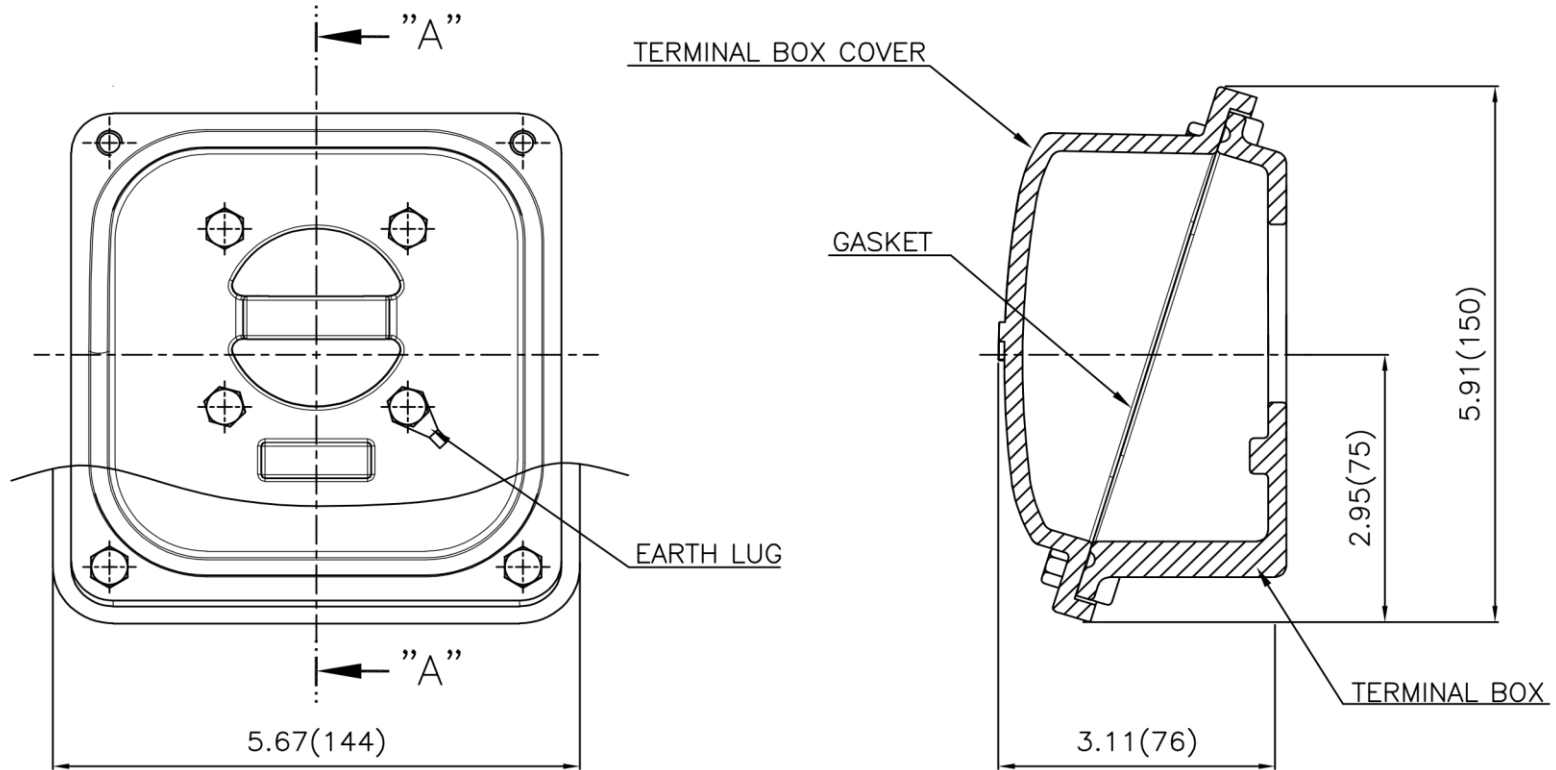


SCALE 5/6

APPD BY	S.Y.KIM	UNIT	inch	SUBJECT	NEMA 143/5TC (Dual hole)	DWG SIZE
CHKD BY	R.G.KIM	SCALE	1/5	TITLE	OUTLINE	A4 (15)
CHKD BY		PROJEC'N	3rd Angle			
DSND BY	주유림	DATE	2021-04-29	REF. NO		Sheet No. of
				DWG NO	LM-I2145C4PLV25	Revision No. 0

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						
2						
3						
4						

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	

