

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.	IEEE3-18-182T	Item No.		Rev. No.	[]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA				
Frame Size	182T		Rated Output	2.2 kW		3 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	3.12 A	3.91 A	
Insulation Class	F			Locked-rotor**	930 %	930 %	930 %
Temp. Rise at full load (by resistance method)			Efficiency				
at 1.0 S.F			80 deg. C				
Motor Location	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor		50% Load		86.5 %		
Altitude	Less than 1,000 meter		75% Load		88.5 %		
Relative Humidity	Less than 80 %		100% Load		89.5 %		
Ambient Temp.	40 deg. C (Max.)		Power Factor(p.u)				
Duty Type	Continuous (S1)		50% Load		0.640		
Service Factor	1.15		75% Load		0.740		
Mounting	B3		100% Load		0.790		
Bearing	Type	Anti-Friction	Speed at Full Load				
	DE/N-DE	6206ZC3 / 6206ZC3	1770 r.p.m				
	Lubricant	Grease(Polyrex-EM)	Torque				
External Thrust	Not applicable		Full Load		8.8 lb.ft		
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt		Locked-rotor**		220 %		
Shaft Extension	Single		Breakdown**		280 %		
Terminal	Main	Cast Iron	Moment of Inertia (J)				
Box	Aux.	No	Load(Max.)		20.204 lb.ft2		
	Location	Refer to Outline Drawing	Motor		0.190 lb.ft2		
Application			Sound Pressure Level (No-load & mean value at 1m from motor)				
Area classification	Hazardous		60 dB(A)				
Type of Ex-Protection	Class I&II, Division 2		Vibration				
Applicable Standard	IEEE841, NEMA MG1, CSA C390		3.8 mm/sec (peak)				
ACCESSORIES			SUBMITTAL DRAWING				
			Outline Dimension Drawing		Motor Weight(Approx.)		
			B3	LM-I2182B3PLV23	105 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.							
Date		DSND	CHKD	CHKD	APPD		
2024-07-13		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.

1	2	3	4
REV	DATE	CONTENTS	REVD BY

3.94

CROWN TRITON G2 Premium Efficiency AC 3 Phase Motor Cat. No. IEE3-18-182T

3HP	4P	460V	Amps	3.91	Type	HLS	Amb.	40°C	
Frame	182T	Duty	CONT	Encl.	TEFC	Model	HLS182SR238	NEMA Nom. Eff. 89.5%	
RPM	1770	Hertz	60Hz	S.F.	1.15	INS. Class	F HD-F1	3/4 Eff. 88.5%	
Bearing	Drive	6206ZC3	S.F.1.25 (When 100HP or less, Temp Rise F & Non-Hazardous)				NEMA Design	B Torque	
	Opp.	6206ZC3	S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)				Code	L	
Usable at	50Hz 2HP 380V 4.1A 1470rpm S.F.: 1.0 Eff.: 82.8% Code: L								
	50Hz 2HP 400/415V 4.2/4.4A 1475/1475rpm S.F.: 1.0 Eff.: 82.8/82.8% Code: L/L								
CSA Certified for	Model	LATER			Type	PJP	Temp. Code	Frame	140-320FR
	CLASS I, Div. 2, Gr. A, B, C & D		CLASS II, Div. 2, Gr. E, F & G (Gr. E : up to 320FR)			(Sine Wave)	Amb.40°C	T3C (160°C)	
	CLASS I, Zone 2, Gr. IIA, IIB & IIC						Amb.55°C	T3A (180°C)	
No.	-		Date	-		Weight	105 lb		

MARINE DUTY IEE45 IEE Std 841-2021

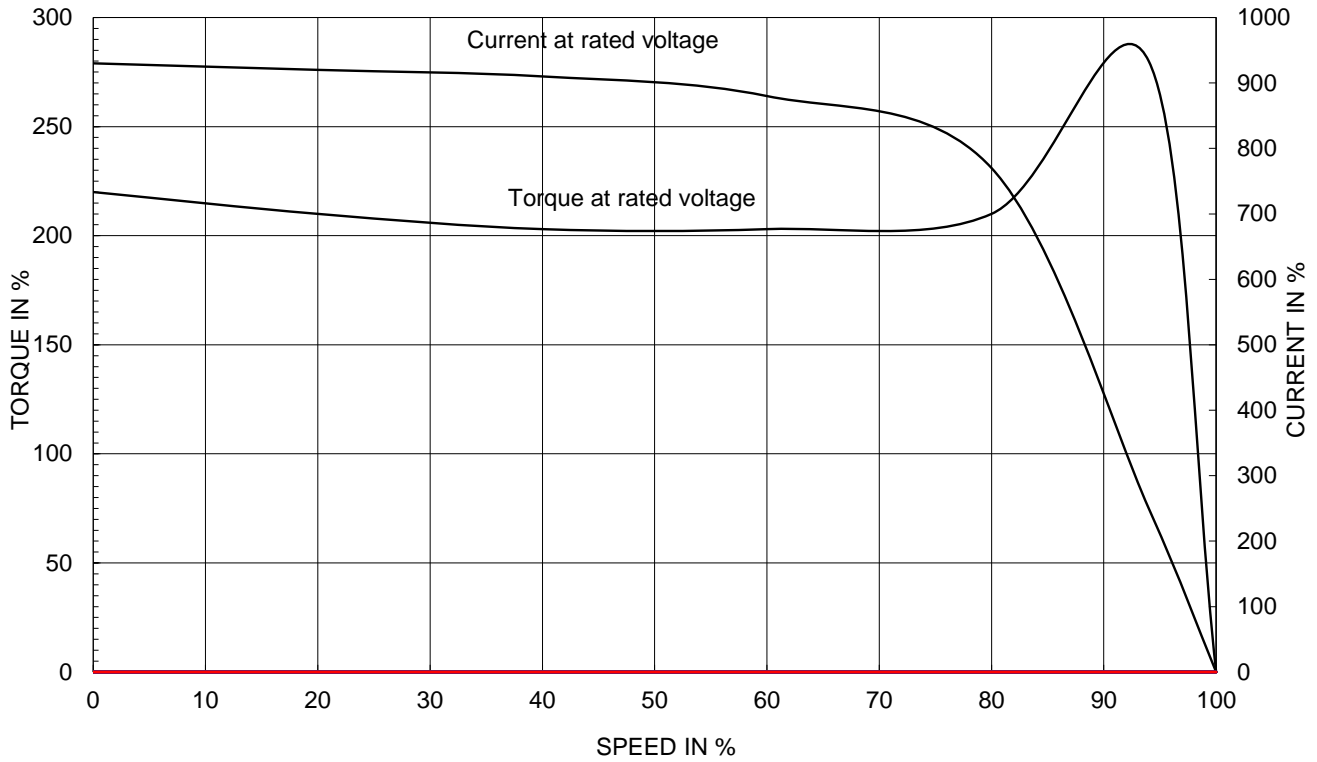
1.57

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 IEE841 (HL)	DWG SIZE	A4 (1:1)
CHKD BY	I.K.KIM	SCALE	NONE				
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	TITLE NAMEPLATE DRAWING			
DSND BY	S.H.LEE	DATE	2024.06.07				
				REF. NO	4M-135733	Sheet No.	of
				DWG NO	NP-IEE3-18-182T	Revision No.	0

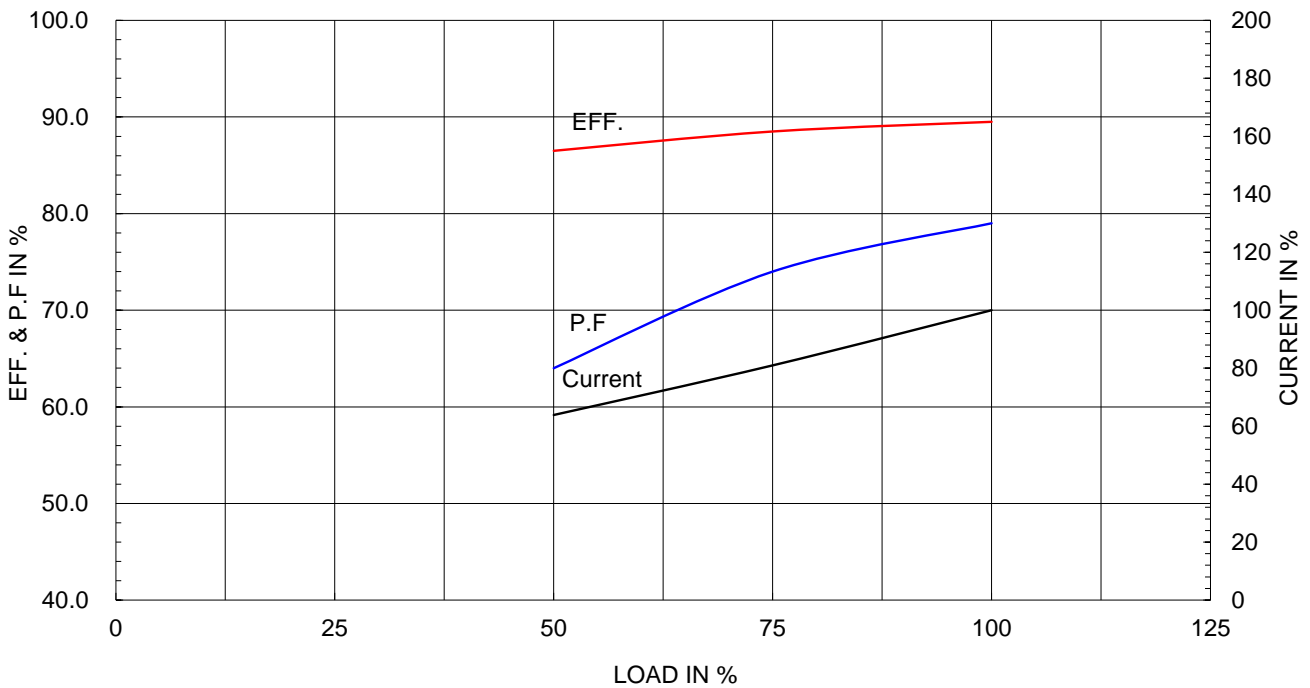
Type :	PJP
Full Load Torque :	8.8 lb.ft
Load moment of Inertia (J) :	20.204 lb.ft2
Motor moment of Inertia (J) :	0.190 lb.ft2

2.2kW 3HP	4 P	60 Hz
Speed at Full Load :		1770 RPM
Rated Voltage	575V	460V 230V
Full Load Current	3.1A	3.9A 7.8A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE

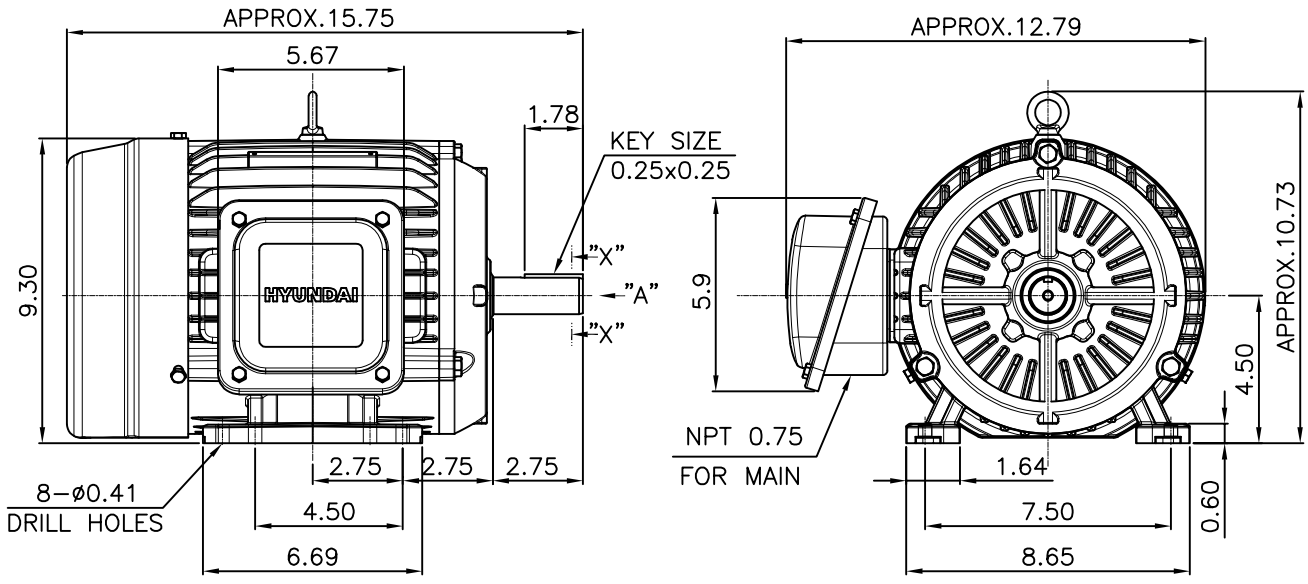


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▽	50S	REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY
▽▽	12.5S							
▽▽▽	3.2S							
▽▽▽▽	0.4S							

IEEE841

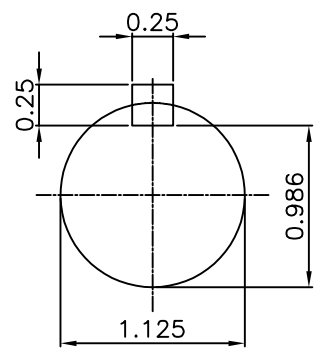


VIEW "A"

NOTE

[TOLERANCE]

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



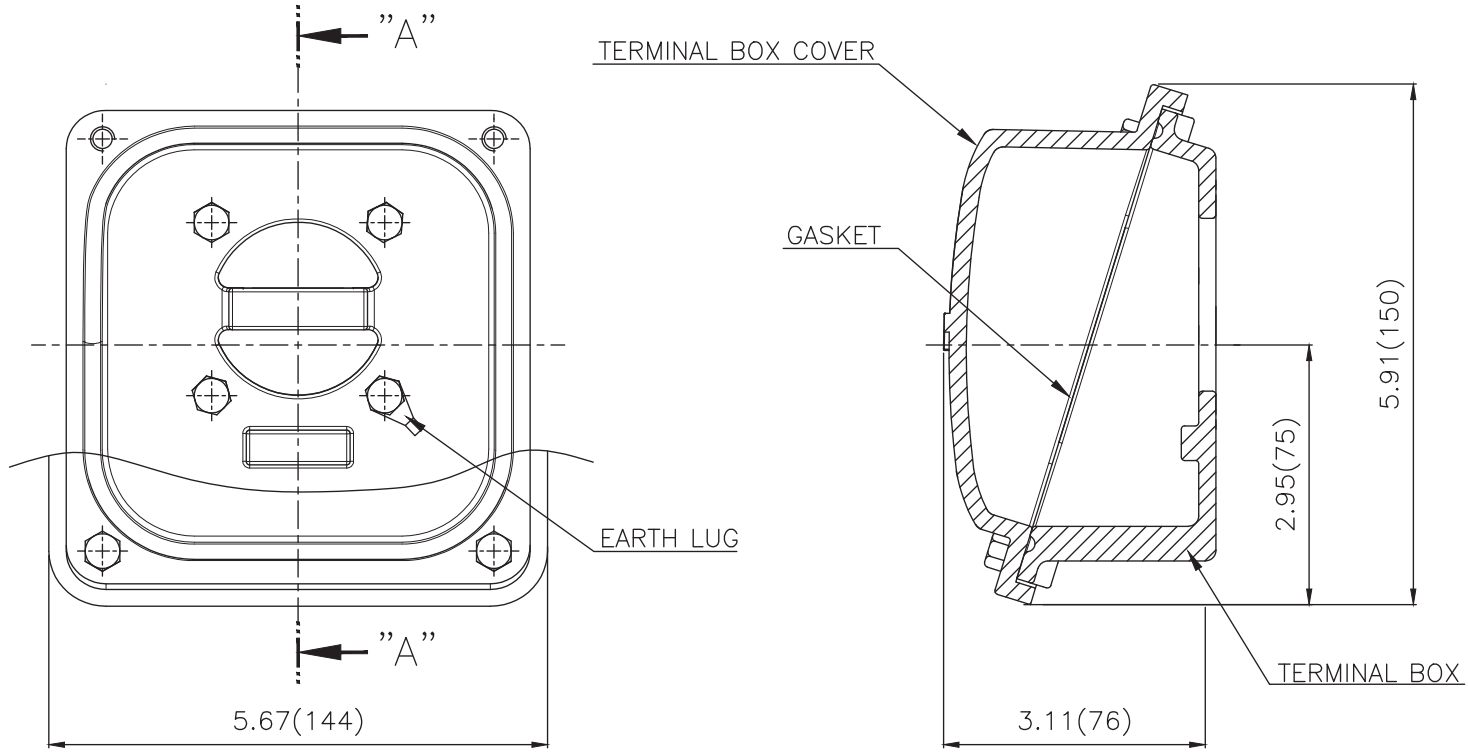
SECTION "X-X"

SCALE 5/6

APPD BY	S.Y.KIM	UNIT	mm	SUBJECT	NEMA 182T	DWG SIZE		
CHKD BY	R.G.KIM	SCALE	1/6	TITLE	OUTLINE	A4 (1:6)		
CHKD BY		PROJEC'N	3rd Angle	REF. NO		.	Sheet No.	of
DSND BY	J.H.JEON	DATE	2023-01-18	DWG NO		LM-I2182B3PLV23	Revision No.	0



**Cls. I&II, Div. 2
IEEE 841**



SEC. "A"-"A"

▽	50S
▽▽	12.5S
▽▽▽	3.2S
▽▽▽▽	0.4S

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

일반가공공차		일반제관공차	
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	A3 (1:1.5)
CHKD BY		SCALE	1/1.5	TITLE			
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	TERMINAL BOX ASS'Y			
DSND BY	배승희	DATE	2023-10-19	REF. NO		Sheet No.	of
				DWG NO	3M-248456	Revision No.	0