

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.	IEEE1.5-12-182TC	Item No.	Rev. No. []
Project Name		Project No.	Quantity sets

GENERAL SPECIFICATION		PERFORMANCE DATA				
Frame Size	182TC	Rated Output	1.1 kW 1.5 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	2.07 A	2.59 A	5.17 A
Insulation Class	F		Locked-rotor**	770 %	770 %	770 %
Temp. Rise at full load (by resistance method)		Efficiency				
at 1.0 S.F	80 deg. C	50% Load		84.5 %		
Motor Location	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor	75% Load		86.5 %		
Altitude	Less than 1,000 meter	100% Load		87.5 %		
Relative Humidity	Less than 80 %	Power Factor(p.u)				
Ambient Temp.	40 deg. C (Max.)	50% Load		0.460		
Duty Type	Continuous (S1)	75% Load		0.560		
Service Factor	1.15	100% Load		0.610		
Mounting	B35	Speed at Full Load	1175 r.p.m			
Bearing	Type	Anti-Friction	Torque			
	DE/N-DE	6206ZC3 / 6206ZC3	Full Load	6.6 lb.ft		
	Lubricant	Grease(Polyrex-EM)	Locked-rotor**	190 %		
External Thrust	Not applicable	Breakdown**	270 %			
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt	Moment of Inertia (J)				
Shaft Extension	Single	Load(Max.)	32.629 lb.ft2			
Terminal Box	Main	Cast Iron	Motor	0.593 lb.ft2		
	Aux.	No	Sound Pressure Level (No-load & mean value at 1m from motor)			
Location	Refer to Outline Drawing	55 dB(A)				
Application		Vibration				
Area classification	Hazardous	3.8 mm/sec (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.)	
B35	LM-I2182C4PLV23	125 lb.

SPARE PARTS

REMARK				
<ol style="list-style-type: none"> 1. Premium efficiency according to NEMA MG1 2. Inverter Duty @ 1.0 Service Factor & F Temperature rise <ul style="list-style-type: none"> - 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 <ul style="list-style-type: none"> - 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. IEEE1.5-12-182TC	
1.5HP	6P	460V	Amps 2.59	Type HLS	Amb. 40°C
Frame 182TC	Duty CONT	Encl. TEFC	Model HLS182PR338	NEMA Nom. Eff. 87.5%	
RPM 1175	Hertz 60Hz	S.F. 1.15	INS. Class F HD-F1	3/4 Eff. 86.5%	
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 1HP 380V 3.3A 980rpm S.F.: 1.0 Eff.: 75.9% Code: L				
	50Hz 1HP 400/415V 3.5/3.8A 980/980rpm S.F.: 1.0 Eff.: 75.9/75.9% Code: L/L				
CSA Certified for	Model LATER	Type PJP	Temp. Code (Sine Wave)	Frame 140-320FR	CE
	CLASS I, Div. 2, Gr. A, B, C & D	CLASS II, Div. 2, Gr. E, F & G (Gr. E : up to 320FR)	Amb.40°C	T3C (160°C)	
	CLASS I, Zone 2, Gr. IIA, IIB & IIC		Amb.55°C	T3A (180°C)	
No. -	Date -	Weight 125 lb			

4M-135733 Made in Korea H1 **MARINE DUTY IEEE45 IEEE Std 841-2021** **HD HYUNDAI ELECTRIC**

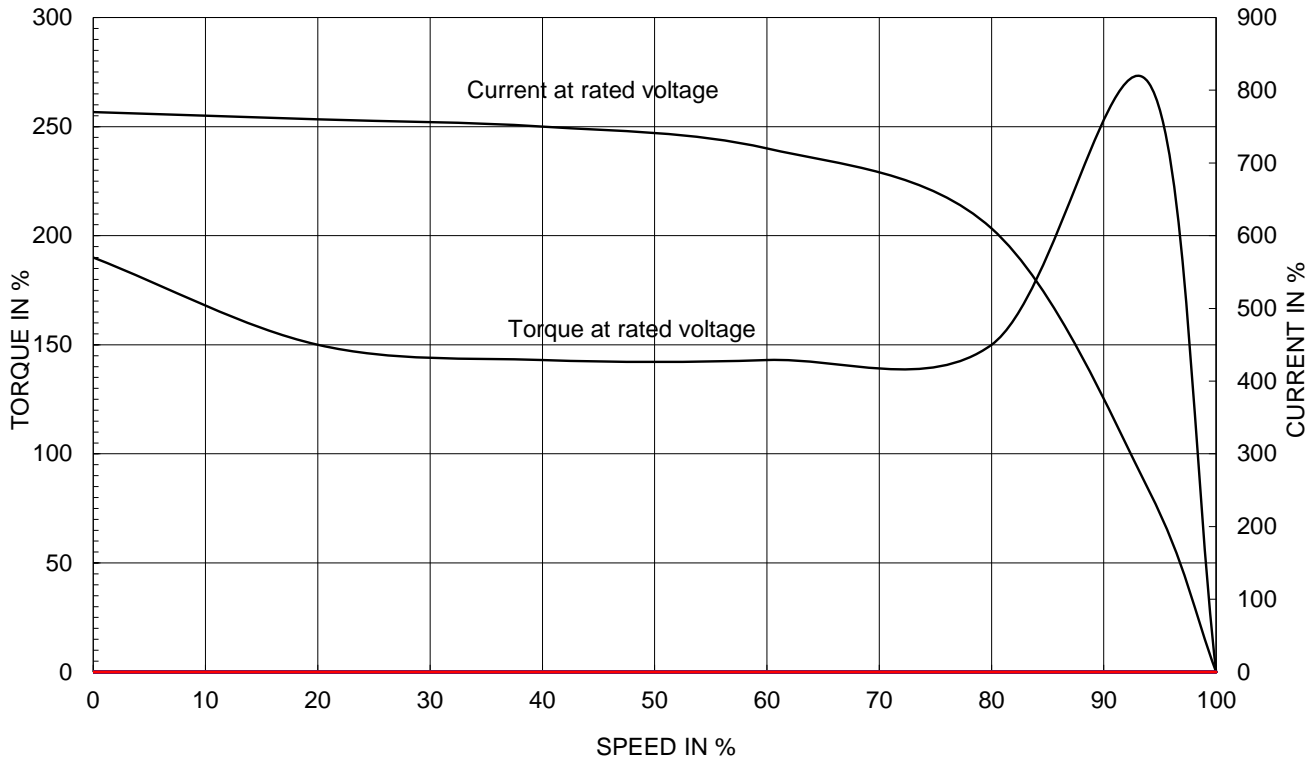
1.57

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 IEEE841 (HL)	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-135733	Sheet No. of
				DWG NO	NP-IEEE1.5-12-182TC	Revision No. 0

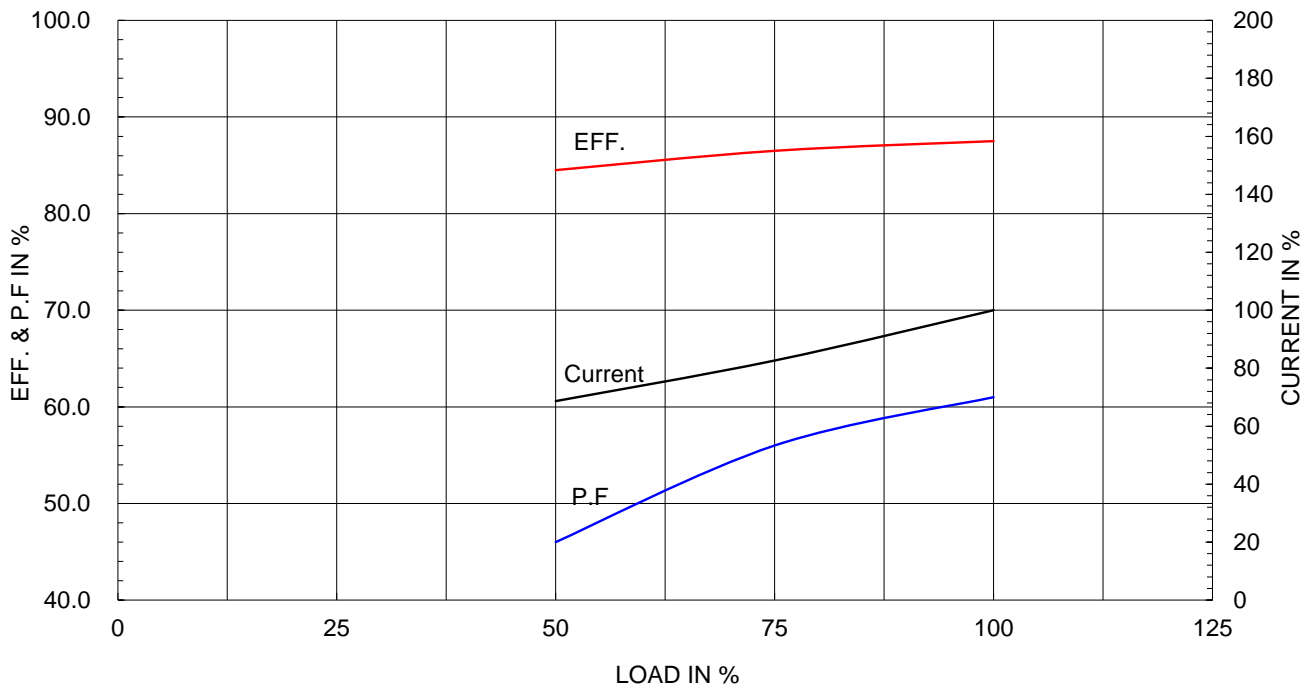
Type :	PJP
Full Load Torque :	6.6 lb.ft
Load moment of Inertia (J) :	32.629 lb.ft ²
Motor moment of Inertia (J) :	0.593 lb.ft ²

1.1kW	1.5HP	6 P	60 Hz
Speed at Full Load :			1175 RPM
Rated Voltage	575V	460V	230V
Full Load Current	2.1A	2.6A	5.2A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE

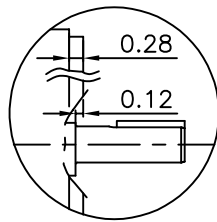
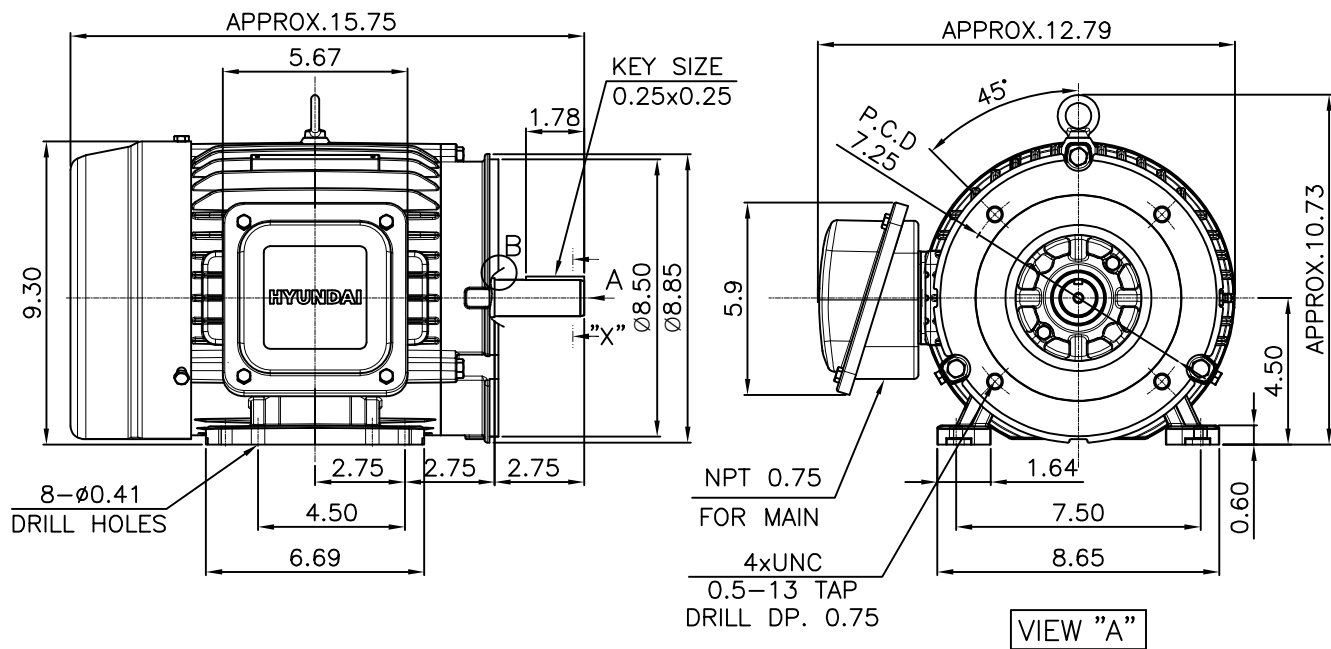


본 도면은 HD현대일렉트릭(주) 재산이며 허가없이 복사할 수 없음 (취급유의)

THIS DRAWING IS PROPRIETARY TO HYUNDAI ELECTRIC. NO PART OF THIS DRAWING MAYBE REPRODUCED WITHOUT THE PERMISSION OF HYUNDAI ELECTRIC.

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

IEEE841

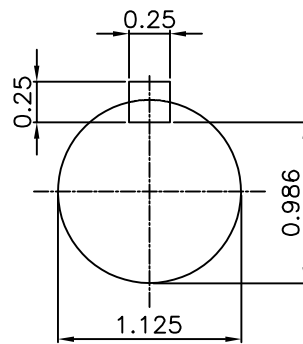


DETAIL - B

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 182TC	DWG SIZE	A4 (1:6)
CHKD BY	R.G.KIM	SCALE	1/6	TITLE	OUTLINE	REF. NO	Sheet No. of
CHKD BY		PROJEC'N	3rd Angle				
DSND BY	J.H.JEON	DATE	2023-01-18				



DWG NO	LM-I2182C4PLV23	Revision No.	0
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**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	
CHKD BY		SCALE	1/1.5	TITLE	TERMINAL BOX ASS'Y		
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	DATE	2023-10-19		
DSND BY	배승희						
REF. NO		Sheet No.	of				
DWG NO	3M-248456	Revision No.	0				

