

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

Catalog No.	HES1.5-12-182TC	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		
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					
	DE/N-DE	6206ZZC3 / 6206ZZC3					
	Lubricant	Grease(Polyrex-EM)					
External Thrust	Not applicable						
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt	Torque					
Shaft Extension	Single	Full Load		6.6 lb.ft			
Terminal Box	Main	Locked-rotor**		190 %			
	Aux.	Breakdown**		270 %			
Location	Refer to Outline Drawing	Moment of Inertia (J)					
Application		Load(Max.)		32.629 lb.ft2			
Area classification	Hazardous	Motor		0.593 lb.ft2			
Type of Ex-Protection	Class I&II, Division 2	Sound Pressure Level (No-load & mean value at 1m from motor)					
Applicable Standard	NEMA MG1, CSA C390			55 dB(A)			
ACCESSORIES		Vibration				3.8 mm/sec (peak)	
		Permissible number of consecutive starts		Cold	3 times		
				Hot	2 times		
		Paint	Munsell No.	4.0PB5.4/5.5(VL-451)			
		SUBMITTAL DRAWING					
		Outline Dimension Drawing		Motor Weight(Approx.)			
B35		LM-T2182C4PLV23	125 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	
		2024-09-10	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 CHKD BY CHKD BY APPD BY

3.94

1.57

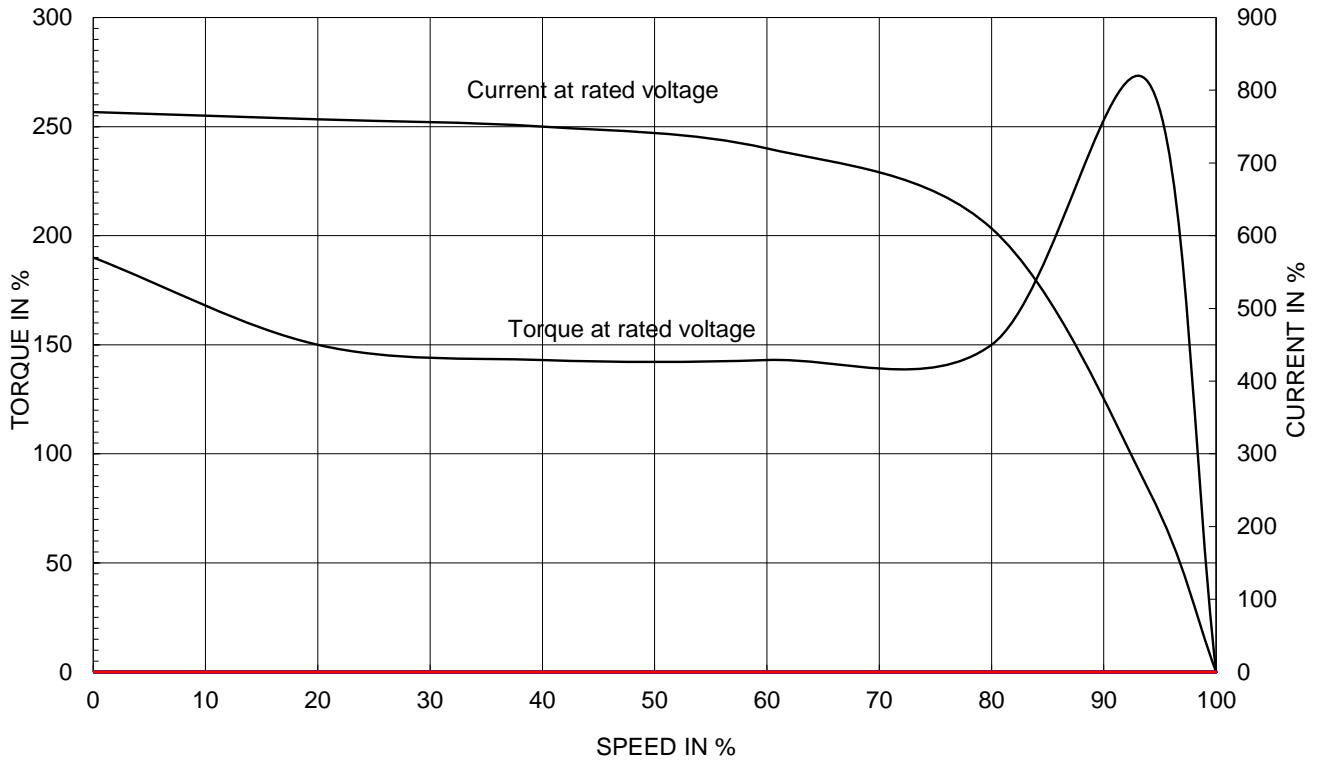
CROWN TRITON G2 Premium Efficiency AC 3 Phase Motor		Cat. No. HES1.5-12-182TC	
1.5HP 6P	230/460V	Amps 5.17/2.59	Type HLS
Frame 182TC	Duty CONT	Encl. TEFC	Model HLS182PR335
RPM 1175	Hertz 60Hz	S.F. 1.15	INS Class F HD-F1
Bearing	Drive 6206ZCC3	S.F.1.25 (When 100HP or less, Temp Rise F & Non-Hazardous)	
	Opp. 6206ZCC3	S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)	
Usable at	50Hz 1.5HP 380V 3.31A 970rpm S.F.: 1.15 Eff.: 85.5% Code: L		
	50Hz 1.5HP 400/415V 3.44/3.6A 975/975rpm S.F.: 1.15 Eff.: 85.5/85.5% Code: L/L		
CSA Certified for	Model LATER	Type PJP	Temp. Code (Sine Wave)
	CLASS I, Div. 2, Gr. A, B, C & D CLASS I, Zone 2, Gr. IIA, IIB & IIC	CLASS II, Div. 2, Gr. E, F & G (Gr. E : up to 320FR)	Frame 140-320FR Amb.40°C T3C (160°C) Amb.55°C T3A (180°C)
No. -	Date -	Weight 125 lb	
  	4M-136021 MARINE DUTY IEEE45	Made in Vietnam H4 Designed By HYUNDAI, Korea	

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 Severe Duty (HES, 143-215)	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-136021	Sheet No.	of
				DWG NO	NP-HES1.5-12-182TC	Revision No.	0

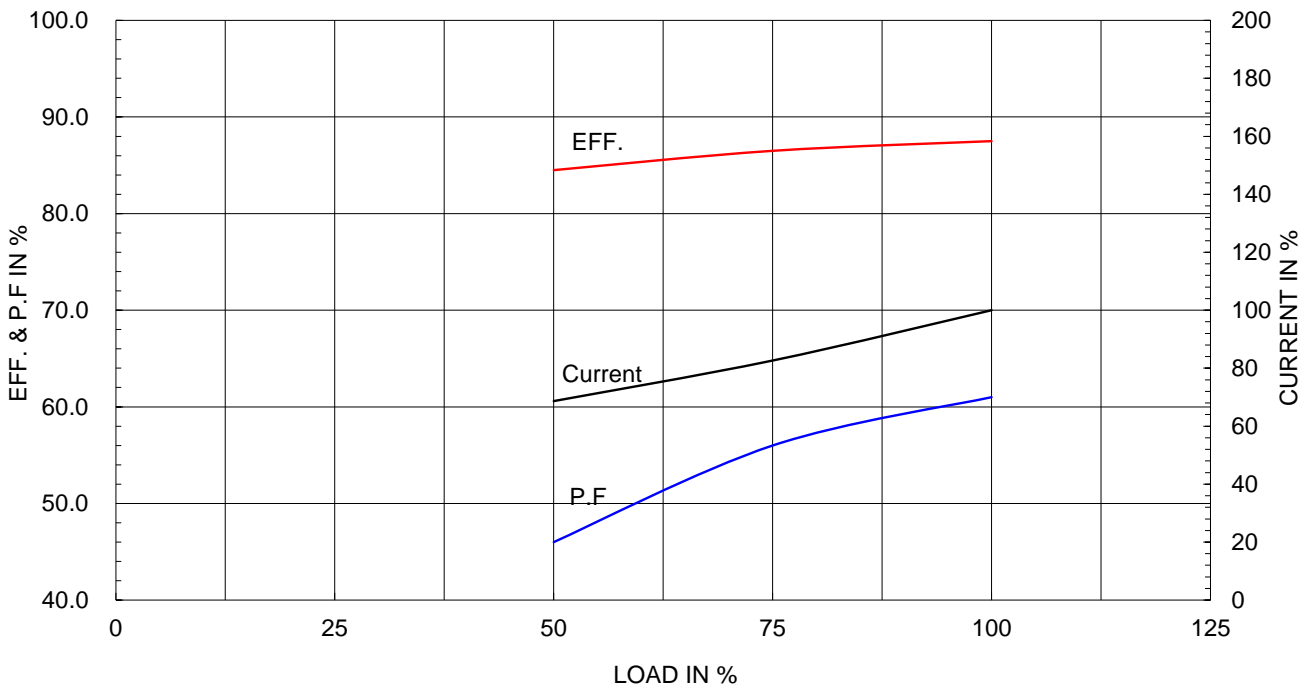
Type :	PJP
Full Load Torque :	6.6 lb.ft
Load moment of Inertia (J) :	32.629 lb.ft2
Motor moment of Inertia (J) :	0.593 lb.ft2

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



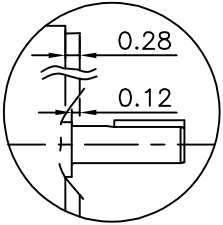
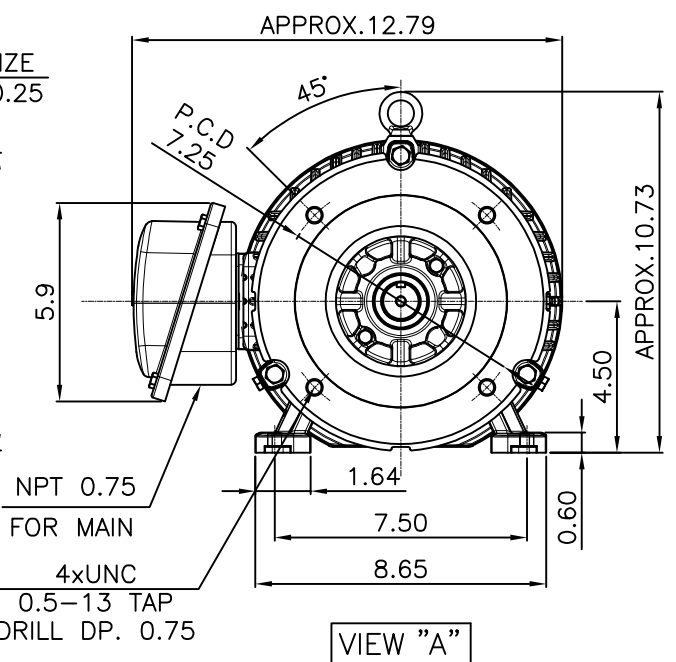
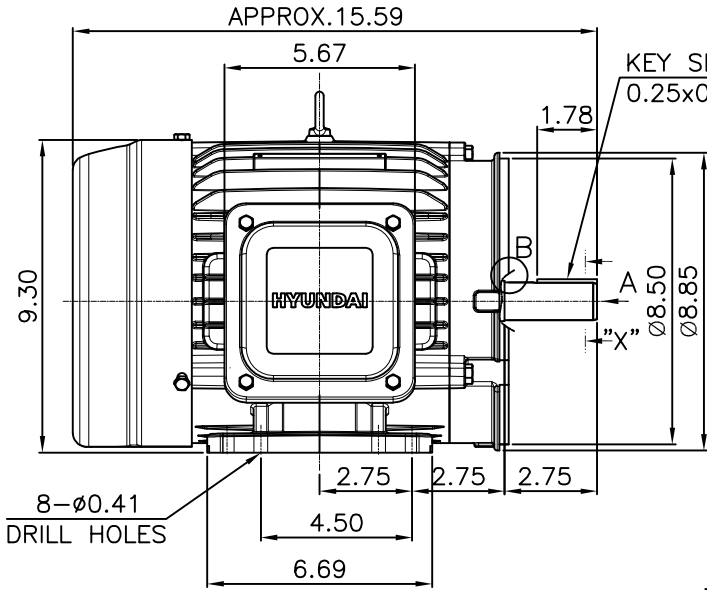
OUTPUT VS EFF., P.F & CURRENT CURVE



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.

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

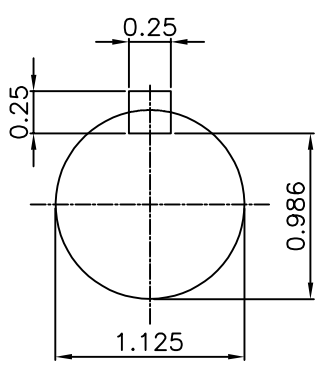


DETAIL - B

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	inch	SUBJECT	NAMA 182TC	DWG SIZE	A4 (1:6)
CHKD BY	R.G.KIM	SCALE	1/6	TITLE	OUTLINE		
CHKD BY		PROJEC'N	3rd Angle				
DSND BY	주유람	DATE	2021-04-29				



REF. NO	.	Sheet No.	of
DWG NO	LM-T2182C4PLV23	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	
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	DATE					
REF. NO						Sheet No.	of
DWG NO	3M-248456					Revision No.	0

