

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.	HES5-18-184T	Item No.		Rev. No.	[]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION			PERFORMANCE DATA			
Frame Size	184T		Rated Output	3.7 kW 5 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	5.19 A	6.49 A
Insulation Class	F			Locked-rotor**	840 %	840 %
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		0.650	
Service Factor	1.15		75% Load		0.750	
Mounting	B3		100% Load		0.800	
Bearing	Type	Anti-Friction	Speed at Full Load			
	DE/N-DE	6206ZZC3 / 6206ZZC3	1760 r.p.m			
	Lubricant	Grease(Polyrex-EM)	Torque			
External Thrust	Not applicable		Full Load		14.8 lb.ft	
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt		Locked-rotor**		210 %	
Shaft Extension	Single		Breakdown**		260 %	
Terminal Box	Main	Cast Iron	Moment of Inertia (J)			
	Aux.	No	Load(Max.)		35.061 lb.ft2	
Location	Refer to Outline Drawing		Motor		0.309 lb.ft2	
			Sound Pressure Level (No-load & mean value at 1m from motor)			
Application			60 dB(A)			
Area classification	Hazardous		Vibration			
Type of Ex-Protection	Class I&II, Division 2		3.8 mm/sec (peak)			
Applicable Standard	NEMA MG1, CSA C390		Permissible number of consecutive starts		Cold 3 times	
			Hot		2 times	
			Paint	Munsell No.	4.0PB5.4/5.5(VL-451)	

ACCESSORIES

SUBMITTAL DRAWING		
Outline Dimension Drawing	Motor Weight(Approx.)	
B3	LM-T2184B3PLV23	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
2024-09-10	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. HES5-18-184T

5HP	4P	230/460V	Amps	12.97/6.49	Type	HLS	Amb.	40°C	
Frame	184T	Duty	CONT	Encl.	TEFC	Model	HLS184SR235	NEMA Nom. Eff.	89.5%
RPM	1760	Hertz	60Hz	S.F.	1.15	INS Class	F HD-F1	3/4 Eff.	88.5%
Bearing	Drive	6206ZZC3	S.F.1.25 (When 100HP or less, Temp Rise F & Non-Hazardous)				NEMA Design	B Torque	
	Opp.	6206ZZC3	S.F.1.00 (10:1 C.T., 20:1 V.T., NEMA-MG1 Part31)				Code	K	
Usable at	50Hz 5HP 380V 8.54A 1450rpm S.F.: 1.15 Eff.: 87.5% Code: H								
	50Hz 5HP 400/415V 8.44/8.47A 1455/1460rpm S.F.: 1.15 Eff.: 87.5/87.5% Code: K/K								
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		

4M-136021
MARINE DUTY IEEE45

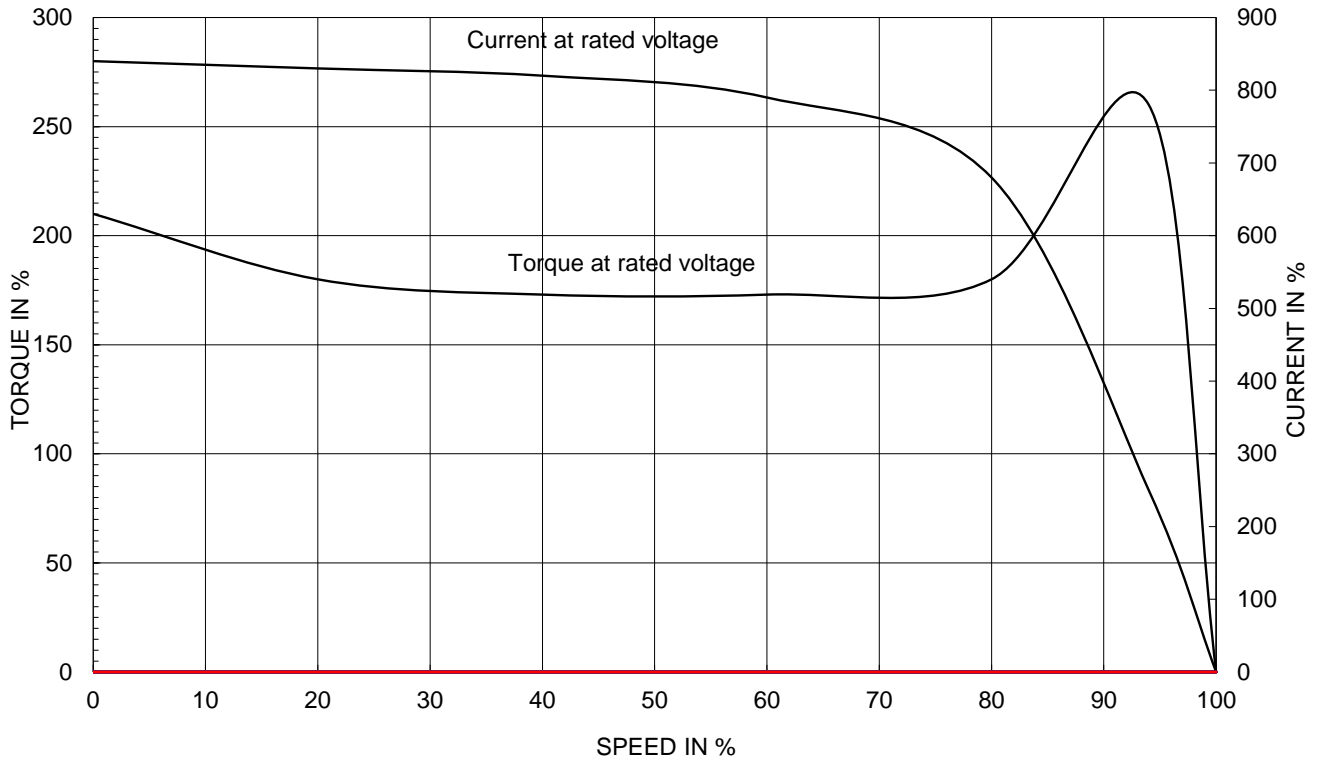
Made in Vietnam H4
Designed By HYUNDAI, Korea

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	CSA Class I, Division2 Severe Duty (HES, 143-215)	DWG SIZE
CHKD BY	I.K.KIM	SCALE	NONE	TITLE	NAMEPLATE DRAWING	A4 (1:1)
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle			
DSND BY	S.H.LEE	DATE	2024.06.07			
				REF. NO	4M-136021	Sheet No. of
				DWG NO	NP-HES5-18-184T	Revision No. 0

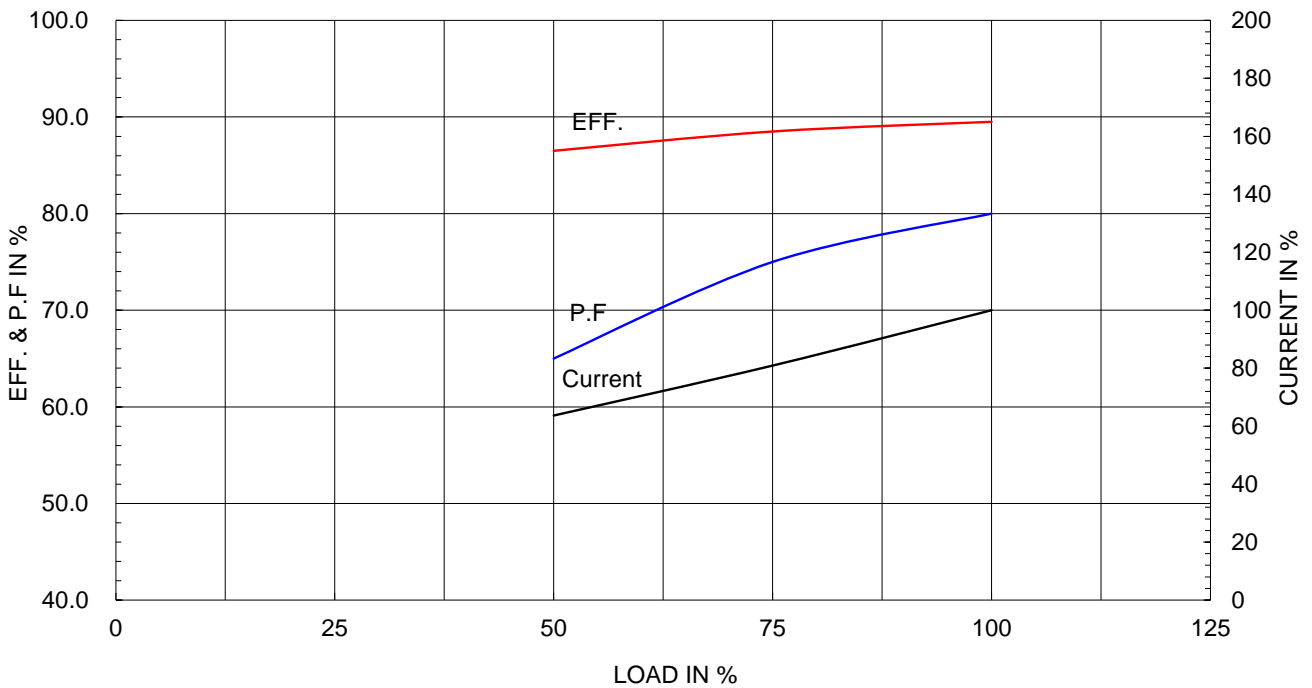
Type :	PJP
Full Load Torque :	14.8 lb.ft
Load moment of Inertia (J) :	35.061 lb.ft ²
Motor moment of Inertia (J) :	0.309 lb.ft ²

3.7kW 5HP	4 P	60 Hz
Speed at Full Load :		1760 RPM
Rated Voltage	575V	460V 230V
Full Load Current	5.2A	6.5A 13.0A

SPEED VS TORQUE & CURRENT CURVE



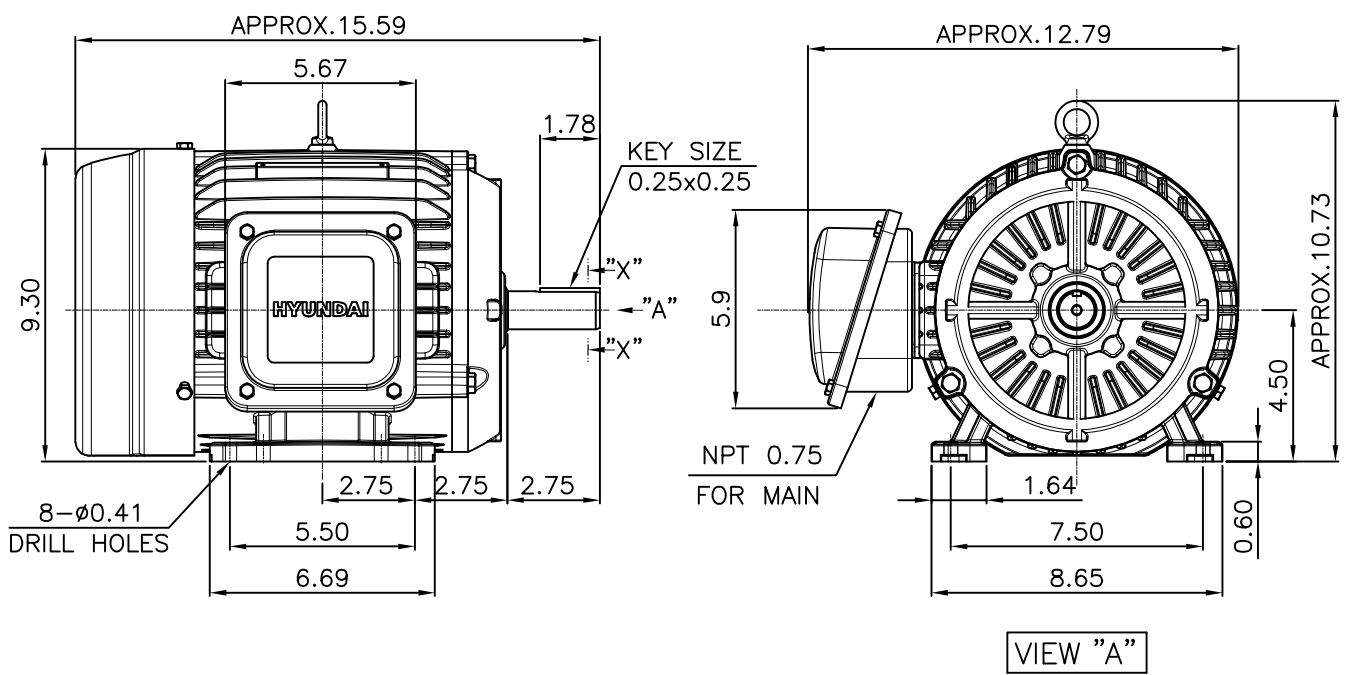
OUTPUT VS EFF., P.F & CURRENT CURVE



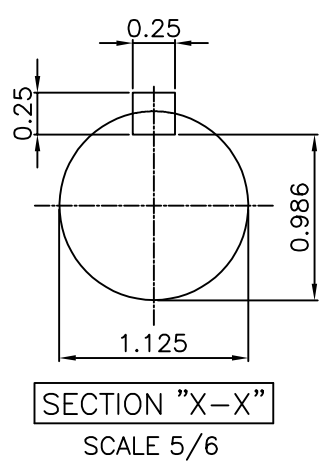
본 도면은 HD현대일렉트릭(주) 재산이며 허가없이 복사할 수 없음 (취급유의)

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



- 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 184T	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	주유람	DATE	2021-04-28				
				DWG NO	LM-T2184B3PLV23	REF. NO	.
						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						
REF. NO		Sheet No.	of	DWG NO	3M-248456	Revision No.	0

