

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.	IEEE30-18-286T	Item No.		Rev. No.	[ ]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION		PERFORMANCE DATA				
Frame Size	286T	Rated Output	22 kW	30 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	29.1 A	36.4 A	
Insulation Class	F		Locked-rotor**	740 %	740 %	740 %
Temp. Rise at full load (by resistance method)		Efficiency				
at 1.0 S.F	80 deg. C	50% Load		90.6 %		
Motor Location	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor	75% Load		92.6 %		
Altitude	Less than 1,000 meter	100% Load		93.6 %		
Relative Humidity	Less than 80 %	Power Factor(p.u)				
Ambient Temp.	40 deg. C (Max.)	50% Load		0.660		
Duty Type	Continuous ( S1 )	75% Load		0.760		
Service Factor	1.15	100% Load		0.810		
Mounting	B3	Speed at Full Load		1775 r.p.m		
Bearing	Type	Anti-Friction				
	DE/N-DE	6310ZC3 / 6310ZC3				
	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		87.3 lb.ft		
Terminal Box	Main	Locked-rotor**		170 %		
	Aux.	Breakdown**		220 %		
Location	Refer to Outline Drawing	Moment of Inertia (J)				
Application		Load(Max.)		160.272 lb.ft2		
Area classification	Hazardous	Motor		5.578 lb.ft2		
Type of Ex-Protection	Class I&II, Division 2	Sound Pressure Level (No-load & mean value at 1m from motor)				
Applicable Standard	IEEE841, NEMA MG1, CSA C390			77 dB(A)		
<b>ACCESSORIES</b>		<b>SUBMITTAL DRAWING</b>				
		Outline Dimension Drawing		Motor Weight(Approx.)		
		B3	LM-I1286B3PL001	410 lb.		
		<b>REMARK</b>				
		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.				
<b>SPARE PARTS</b>		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.

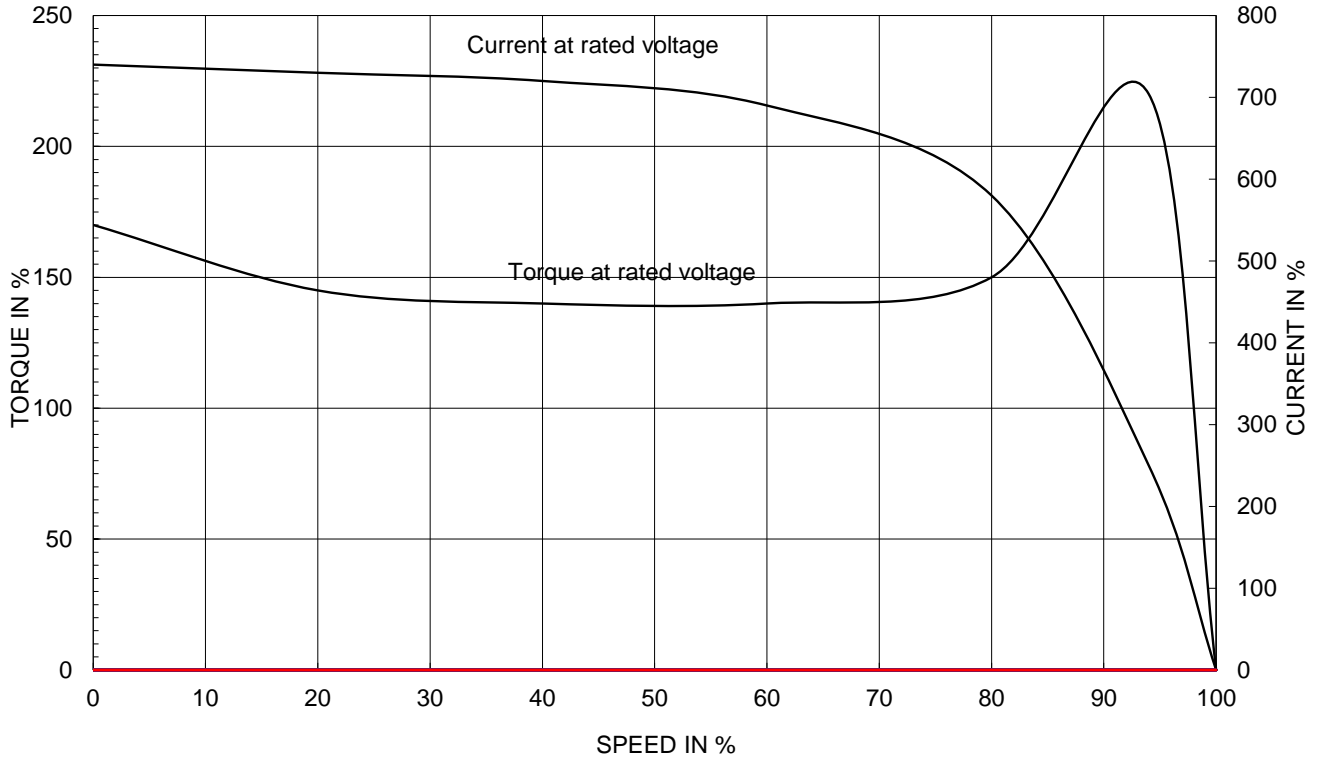
\*\* Data is based on rated voltage & frequency and is expressed as a percentage of full-load value.



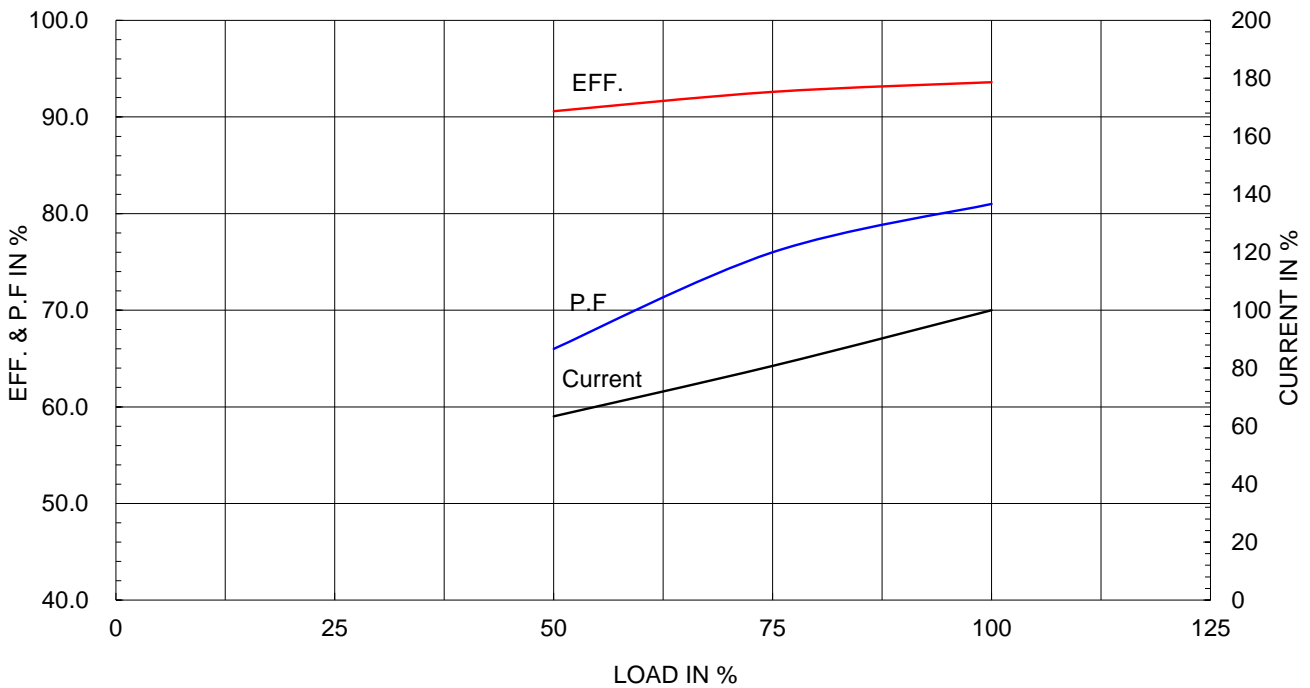
Type :	PJP
Full Load Torque :	87.3 lb.ft
Load moment of Inertia (J) :	160.272 lb.ft2
Motor moment of Inertia (J) :	5.578 lb.ft2

22kW 30HP	4 P	60 Hz
Speed at Full Load :		1775 RPM
Rated Voltage	575V	460V 230V
Full Load Current	29.1A	36.4A 72.8A

SPEED VS TORQUE & CURRENT CURVE

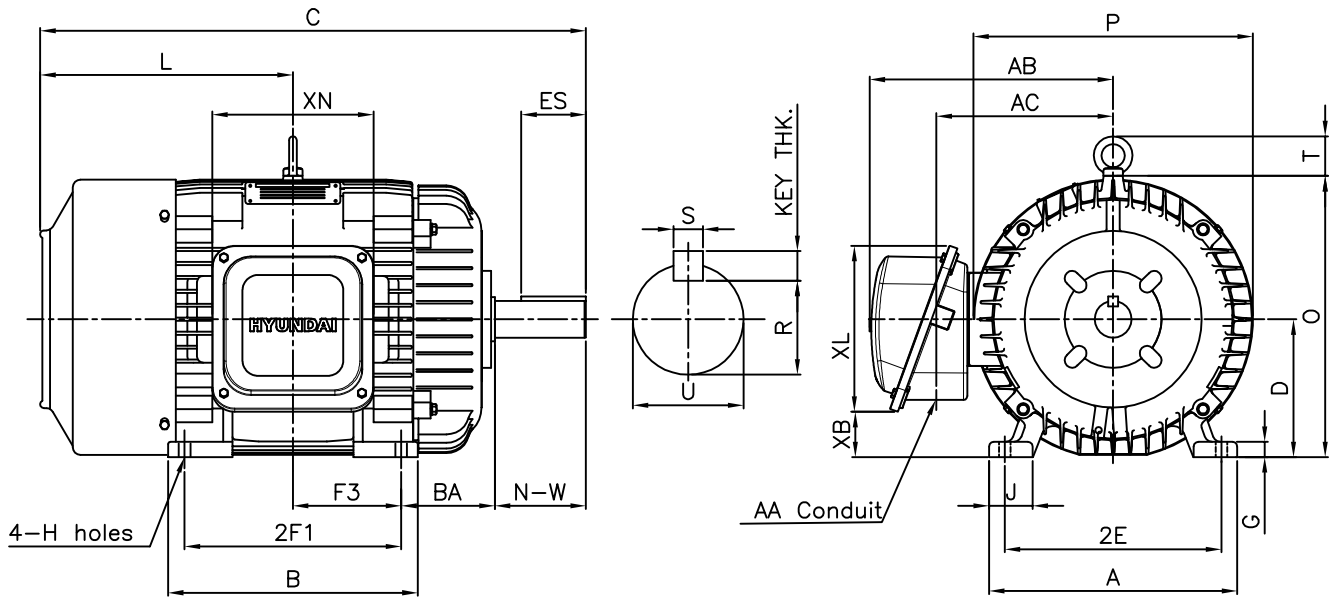


OUTPUT VS EFF., P.F & CURRENT CURVE



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

**IEEE841**



DIMENSIONS

Unit : inch

M O U N T I N G									C O N D U I T B O X						APPROX. WGT.(LB)
A	B	2E	2F1	2F2	F3	G	J	H	AA	AB	AC	XB	XL	XN	286T
12.60	12.68	11.00	11.00	-	5.50	0.78	2.20	0.53	1.50	12.44	9.06	3.39	8.43	8.19	410

O V E R A L L							S H A F T					KEY THK.	B E A R I N G	
BA	C	D	L	O	P	T	U	N-W	KEYWAY				DRIVE END	OPP. DRIVE END
									R	ES	S			
4.75	27.52	7.00	12.65	14.28	14.19	2.01	1.875	4.62	1.591	3.28	0.500	0.500	6310ZC3	6310ZC3

**NOTE**

- 1.Dimension "D" tolerance : +0.00inch - 0.03inch
- 2.Dimension "U" tolerance : +0.000inch - 0.001inch
- 3.Dimension "R" tolerance : +0.000inch - 0.015inch

APPD BY	S.Y.KIM	UNIT	INCH	SUBJECT	NEMA 286T	DWG SIZE	A4 ( 1:1 )		
CHKD BY	R.G.KIM	SCALE	NONE	TITLE	OUTLINE	REF. NO	350A8110AA		
CHKD BY	Y.H.BAE	PROJEC'N	3각법(3rd Angle)					Sheet No.	of
DSND BY	H.K.LEE	DATE	2021-04-30					Revision No.	0



REF. NO	350A8110AA	Sheet No.	of
DWG NO	LM-I1286B3PL001	Revision No.	0



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



SEC. "A"-"A"

▽	50S
▽▽	12.5S
▽▽▽	3.2S
▽▽▽▽	0.4S

Q'TY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.
APPD BY	S.Y.KIM	UNIT	inch(mm)	SUBJECT	FR. 250-280 (CAST IRON)		DWG SIZE
CHKD BY		SCALE	1/2	TITLE	TERMINAL BOX ASS'Y		A3 ( 1:2 )
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle				
DSND BY	배승희	DATE	2023-10-19				
REF. NO						Sheet No.	of
DWG NO	3M-248458					Revision No.	0

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



REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY
1						