

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

Model No. or RFQ No.	Item No.	Rev. No. []	
Project Name	Project No.	Quantity	sets

GENERAL SPECIFICATION		PERFORMANCE DATA			
Frame Size	445TC	Rated Output	110 kW	150.0 HP	
Type	PJP	Number of Poles	4		
Enclosure(Protection)	Totally Enclosed / IP55	Rotor Type	Squirrel Cage		
Method of Cooling	IC411(FC)	Starting Method*	<input checked="" type="checkbox"/> D.O.L <input type="checkbox"/> Y-Δ		
Rated Frequency	60 Hz	Rated Voltage	575 V	460 V	230 V
Number of Phases	3	Current	Full Load	131.0 A	163.8 A 327.5 A
Insulation Class	<input checked="" type="checkbox"/> F <input type="checkbox"/> B <input type="checkbox"/> H		Locked-rotor**	700 %	700 %
Temp. Rise at full load (by resistance method)		Efficiency			
at 1.0 S.F	80 deg. C	50% Load		92.8 %	
Motor Location	<input checked="" type="checkbox"/> Indoor <input type="checkbox"/> Outdoor	75% Load		94.8 %	
Altitude	Less than 1000 meter	100% Load		95.8 %	
Relative Humidity	Less than 80 %	Power Factor(p.u)			
Ambient Temp.	40 deg. C (Max.)	50% Load		0.730	
Duty Type	Continuous (S1)	75% Load		0.830	
Service Factor		100% Load		0.880	
Mounting	B35	Speed at Full Load		1785 r.p.m	
Bearing	Type	Anti-Friction			
	DE/N-DE	6318C3 or NU318 / 6316C3			
	Lubricant	Grease			
External Thrust	Not applicable				
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-Belt	Torque			
Shaft Extension	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double	Full Load		434.1 lb.ft	
Terminal Box	Main	<input type="checkbox"/> Aluminum <input checked="" type="checkbox"/> Cast Iron		Locked-rotor**	
	Aux.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		140 %	
Location	Refer to Outline Drawing				
Application		Breakdown**		220 %	
Area classification	Hazardous	Moment of Inertia (J)			
Type of Ex-Protection	Class I & II, Division 2	Load(Max.)		1,855.724 lb.ft2	
Applicable Standard	NEMA MG1, CSA C390	Motor		67.430 lb.ft2	
		Sound Pressure Level (No-load & mean value at 1m from motor)			
		85 dB(A)			
		Vibration			
		3.8 mm/sec (peak)			
		Permissible number of consecutive starts		Cold	
		Hot		2 times	
		Paint	Munsell No.	4.0PB5.4/5.5(VL-451)	

ACCESSORIES	SUBMITTAL DRAWING
	Outline Dimension Drawing \ Motor Weight(Approx.)
	B35 LM-T1445C4PL001 1720 lb.

REMARK
<p>1. Premium efficiency according to NEMA MG1</p> <p>2. Inverter Duty @ 1.0 Service Factor & F Temperature rise</p> <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 <p>3. CSA Certification</p> <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.) <p>4. Service Factor 1.15 and Temperature rise B are applicable under the condition of sine wave power.</p> <p>5. Service Factor 1.25 is applicable to motors of 100HP or less with temperature rise F & Non-Hazardous.</p>
Date DSND CHKD CHKD APPD
2023-11-13 I.S. Ko S.H. Lee Y.K. Kim S.Y. 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.

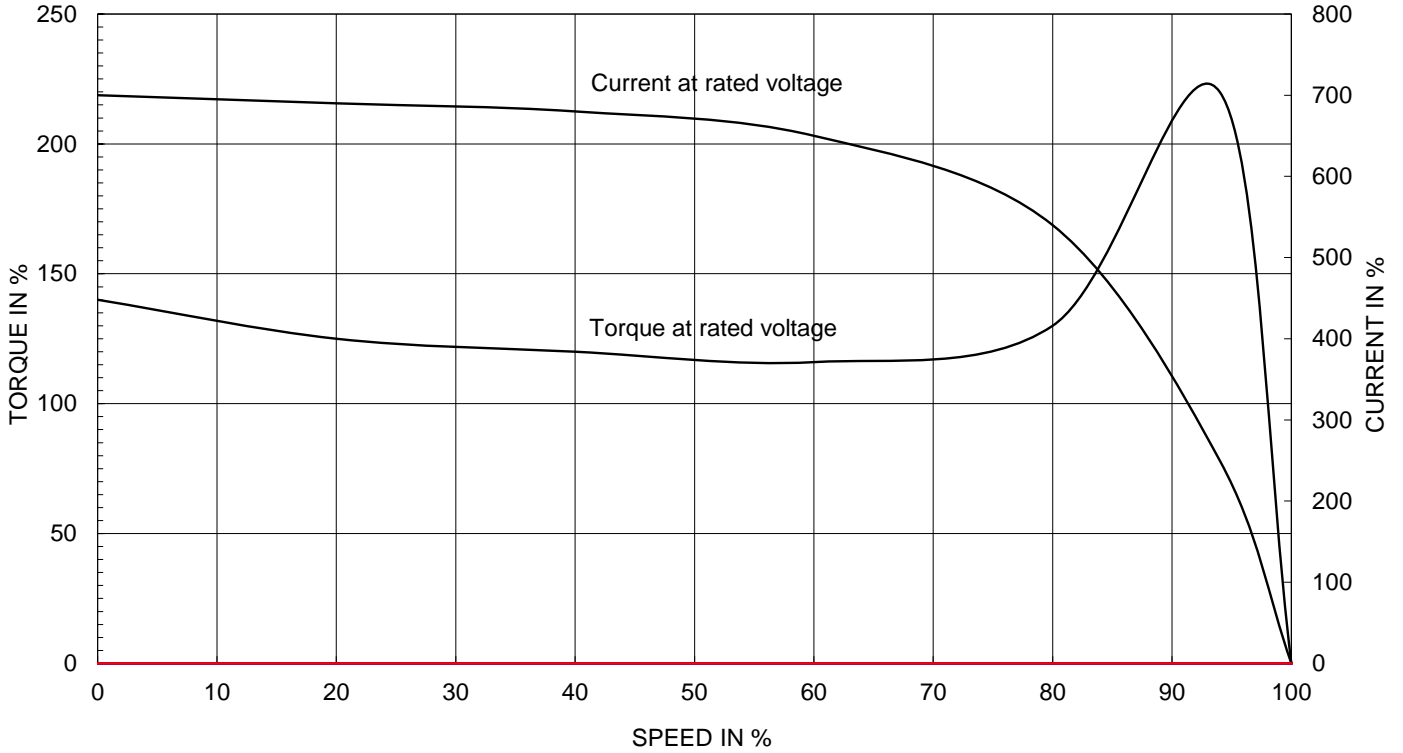
Inspection and performance test shall be done according to maker standard, if not mentioned.

* 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.

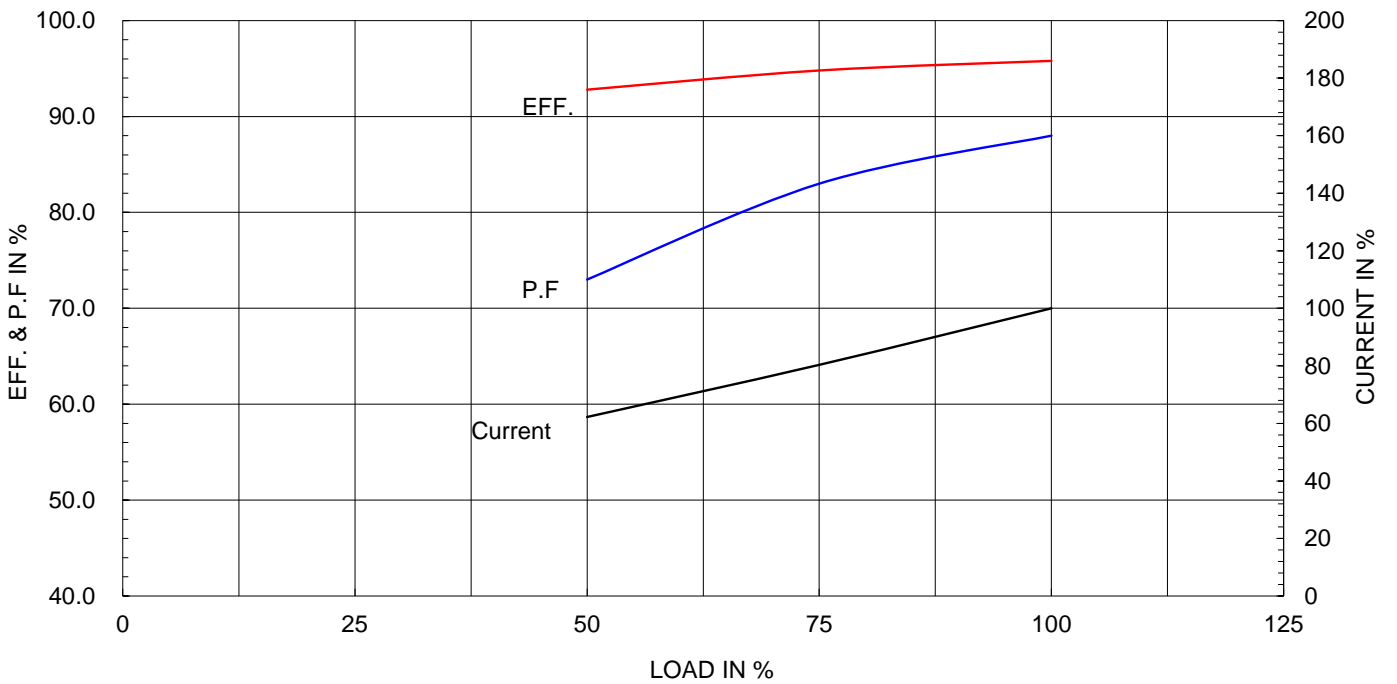
** Data is based on rated voltage & frequency and is expressed as a percentage of full-load value.

Type :	PJP	110 kW	150 HP	4 P	60 Hz
Full Load Torque :	434.1 lb.ft	Speed at Full Load : 1785 RPM			
Load moment of Inertia (J) :	- lb.ft2	Rated Voltage	575V	460V	230V
Motor moment of Inertia (J) :	67.430 lb.ft2	Full Load Current	131.0A	163.8A	327.5A

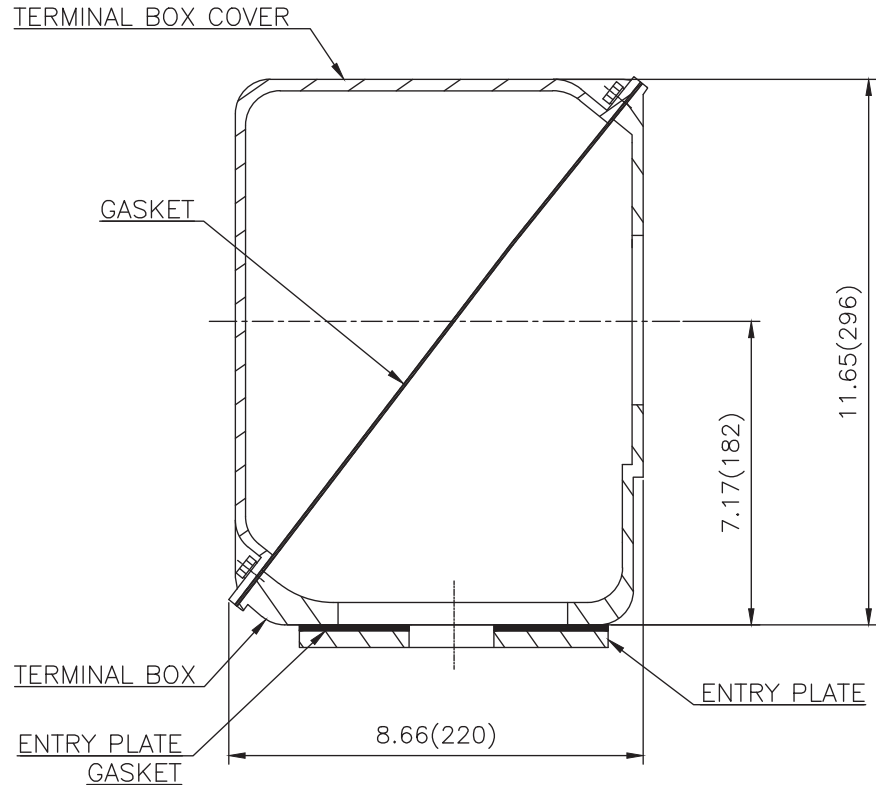
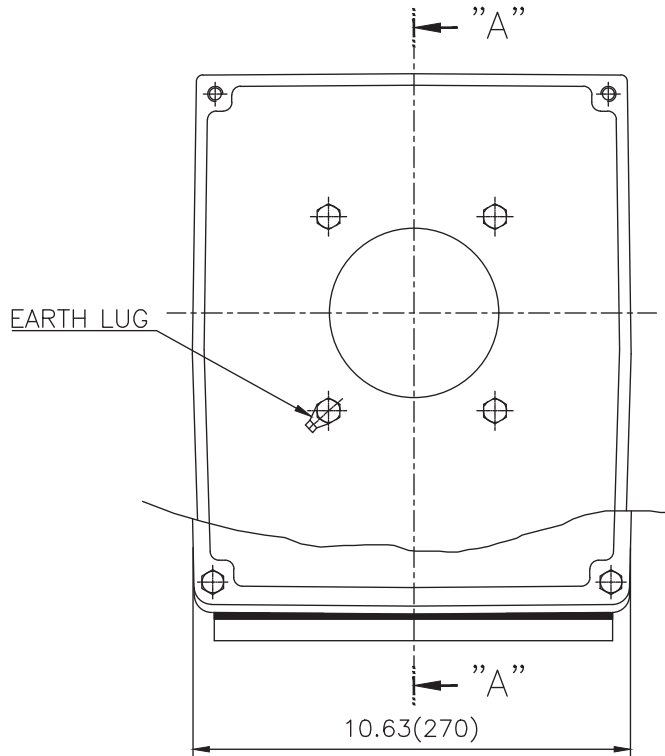
SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



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

일반기준공차		일반재판공차	
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. 400-440 (CAST IRON)	DWG SIZE	A3 (1:1.2)
CHKD BY		SCALE	1/1.2	TITLE	MAIN TERMINAL BOX ASS'Y		
CHKD BY	R.G.KIM	PROJEC'N	3rd Angle	REF. NO		Sheet No.	of
DSND BY	배승희	DATE	2023-10-19	DWG NO	3M-248451	Revision No.	0

