

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.	IEEE125-12-445TCRD	Item No.		Rev. No.	[ ]
Project Name		Project No.		Quantity	sets

GENERAL SPECIFICATION		PERFORMANCE DATA			
Frame Size	445TC	Rated Output	95 kW	125 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	118.1 A	147.7 A
Insulation Class	F		Locked-rotor**	675 %	675 %
Temp. Rise at full load (by resistance method)		Efficiency			
at 1.0 S.F	80 deg. C	50% Load		92.0 %	
Motor Location	<input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor	75% Load		94.0 %	
Altitude	Less than 1,000 meter	100% Load		95.0 %	
Relative Humidity	Less than 80 %	Power Factor(p.u)			
Ambient Temp.	40 deg. C (Max.)	50% Load		0.700	
Duty Type	Continuous ( S1 )	75% Load		0.800	
Service Factor	1.15	100% Load		0.850	
Mounting	B5	Speed at Full Load	1185 r.p.m		
Bearing	Type	Anti-Friction	Torque		
	DE/N-DE	6318C3 / 6316C3	Full Load	564.8 lb.ft	
	Lubricant	Grease(Polyrex-EM)	Locked-rotor**	140 %	
External Thrust	Not applicable	Breakdown**	220 %		
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-belt	Moment of Inertia (J)			
Shaft Extension	Single	Load(Max.)	3,090.203 lb.ft2		
Terminal Box	Main	Cast Iron	Motor	89.860 lb.ft2	
	Aux.	No	Sound Pressure Level (No-load & mean value at 1m from motor)		
Location	Refer to Outline Drawing	80 dB(A)		Vibration	
Application		3.8 mm/sec (peak)			
Area classification	Hazardous	Permissible number of consecutive starts	Cold	3 times	
Type of Ex-Protection	Class I&II, Division 2		Hot	2 times	
Applicable Standard	IEEE841, NEMA MG1, CSA C390	Paint	Munsell No.	7.5BG6/1.5	

ACCESSORIES	SUBMITTAL DRAWING		
	Outline Dimension Drawing	Motor Weight(Approx.)	
	B5	LM-I1445C5PL001	1800 lb.

REMARK										
<ol style="list-style-type: none"> <li>Premium efficiency according to NEMA MG1</li> <li>Inverter Duty @ 1.0 Service Factor &amp; F Temperature rise <ul style="list-style-type: none"> <li>-. 10:1 VT (20:1 VT at 50% load)</li> <li>-. 10:1 CT</li> <li>-. CHP up to 1.5 times base speed, NEMA MG1 Part31</li> </ul> </li> <li>CSA Certification <ul style="list-style-type: none"> <li>-. Class I, Division 2, Group A, B, C &amp; D</li> <li>-. Class II, Division 2 Group E, F &amp; G (Group E : up to 320Fr.)</li> </ul> </li> <li>Service Factor 1.15 and Temperature rise B are applicable under the condition of sine wave power.</li> <li>Service Factor 1.25 is applicable to motors of 100HP or less with temperature rise F &amp; Non-Hazardous.</li> </ol>										
<table border="1"> <tr> <td>Date</td> <td>DSND</td> <td>CHKD</td> <td>CHKD</td> <td>APPD</td> </tr> <tr> <td>2024-07-13</td> <td>S.H. Lee</td> <td>I.K. Kim</td> <td>R.G. Kim</td> <td>S.W. Kim</td> </tr> </table>	Date	DSND	CHKD	CHKD	APPD	2024-07-13	S.H. Lee	I.K. Kim	R.G. Kim	S.W. Kim
Date	DSND	CHKD	CHKD	APPD						
2024-07-13	S.H. Lee	I.K. Kim	R.G. Kim	S.W. Kim						

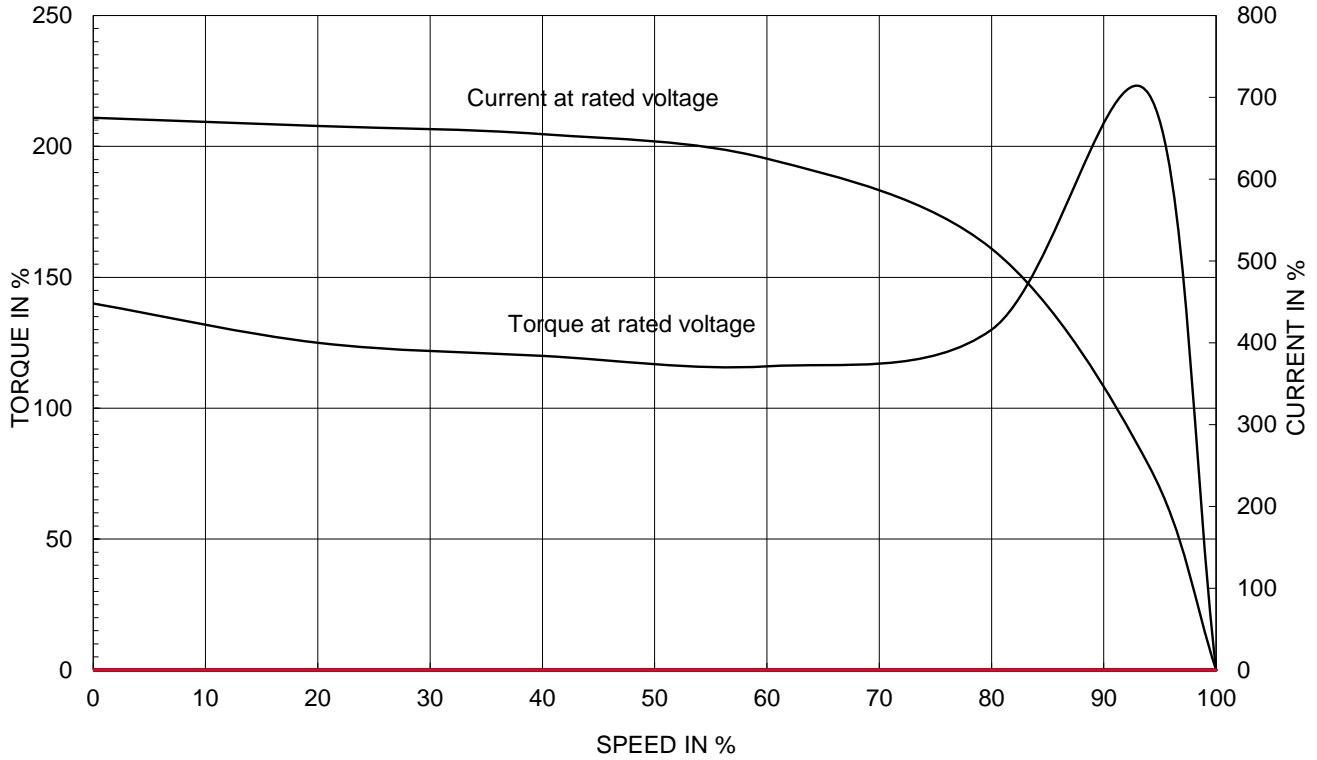
[Note] Others not mentioned in this data sheet shall be in accordance with maker standard.  
Above technical data are only design values and shall be guaranteed with tolerance of applicable standard.  
Inspection and performance test shall be done according to maker standard, if not mentioned.  
\* In 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.



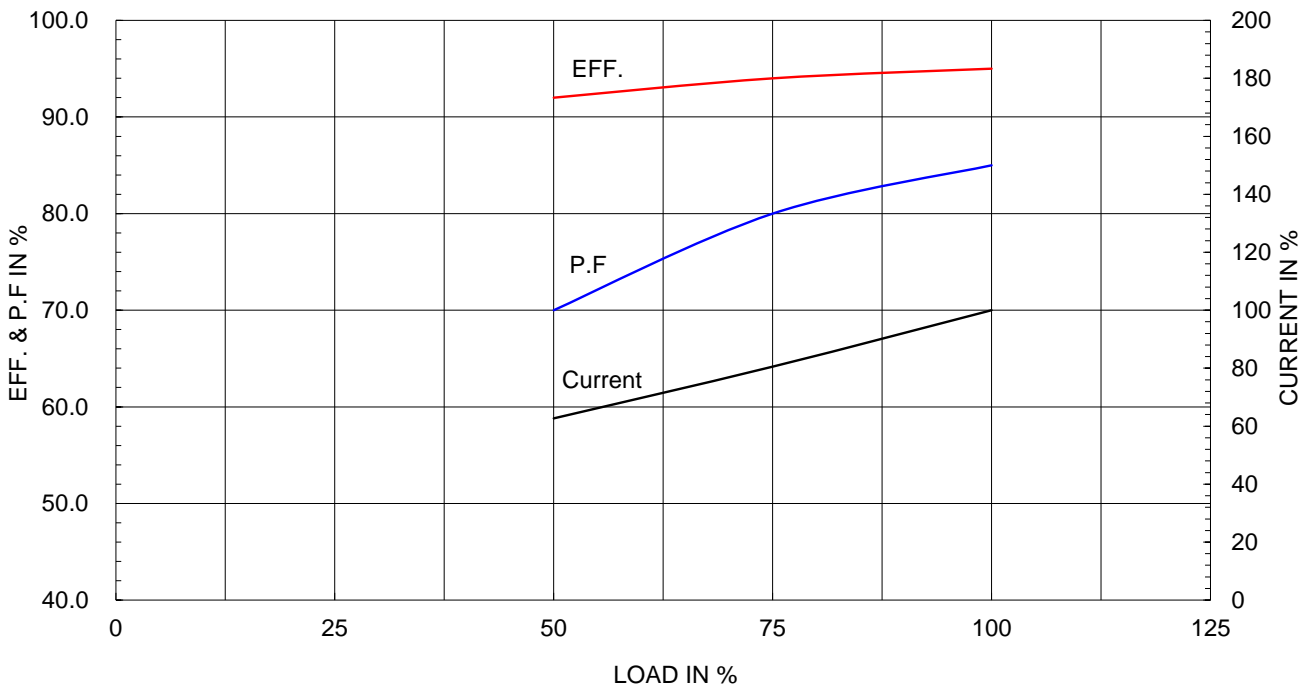
Type :	PJP	
Full Load Torque :	564.8	lb.ft
Load moment of Inertia (J) :	3090.203	lb.ft <sup>2</sup>
Motor moment of Inertia (J) :	89.860	lb.ft <sup>2</sup>

95kW	125HP	6 P	60 Hz
Speed at Full Load :			1185 RPM
Rated Voltage	575V	460V	230V
Full Load Current	118.1A	147.7A	295.3A

SPEED VS TORQUE & CURRENT CURVE

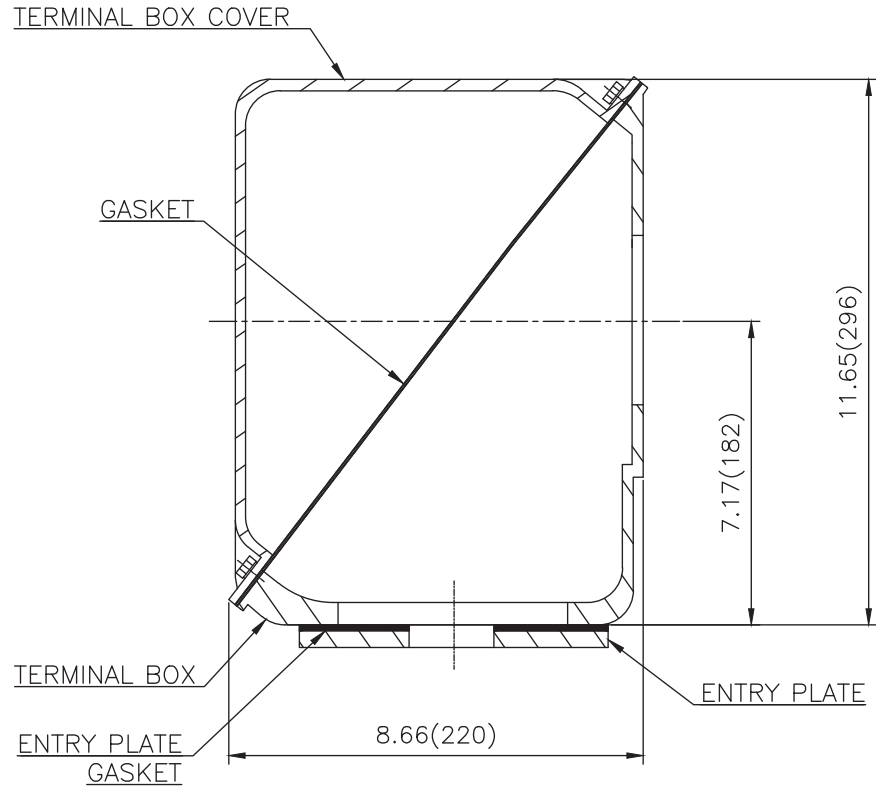
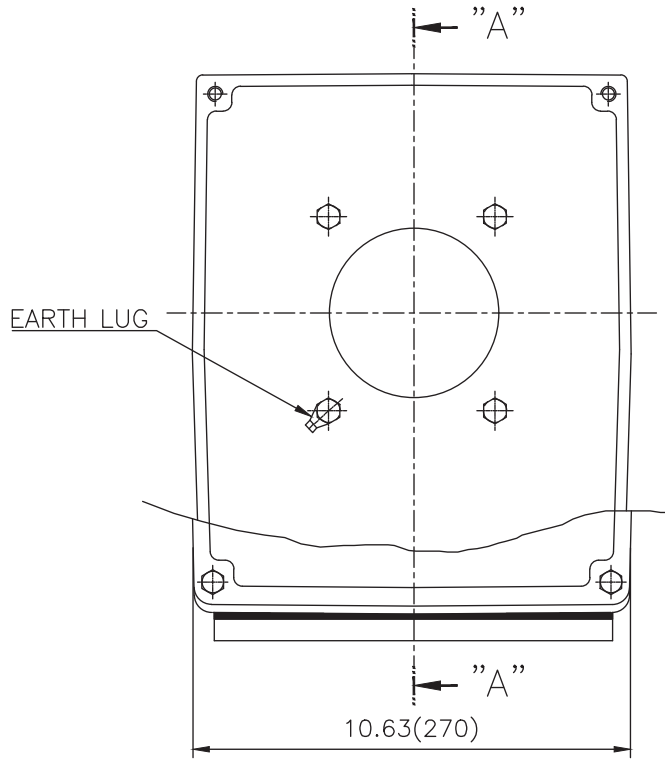


OUTPUT VS EFF., P.F & CURRENT CURVE





**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	DATE	2023-10-19		
DSND BY	배승희						
REF. NO		Sheet No.	of				
DWG NO	3M-248451	Revision No.	0				

