

# AC INDUCTION MOTOR DATA SHEET

Model No.or RFQ No		Item No. <span style="color: red;">▲</span>	PKM-302	Rev. No.	[ 2 ]
Project Name <span style="color: red;">▲</span>	250 BPSD GTL PLANT	Project No.	20143767RMHC17	Quantity	1 set

GENERAL SPECIFICATION		PERFORMANCE DATA		
Frame Size	400	Rated Output	850 HP	
Type	HNP3 403-88E	Number of Poles	8	
Enclosure(Protection)	WP II ( IP 23W )	Rotor Type	Squirrel Cage	
Method of Cooling	IC611	Starting Method*	VFD	
Rated Frequency	60 Hz	Rated Voltage	4160 V	
Number of Phases	3	Current	Full Load 116.4 A	
Insulation Class	<input checked="" type="checkbox"/> F <input type="checkbox"/> B <input type="checkbox"/> H	Locked-rotor**	550 %	
Temp. Rise at full load (by resistance method)		Efficiency		
at 1.0 S.F	80 deg.C	50% Load	93.8 %	
Motor Location	<input type="checkbox"/> Indoor <input checked="" type="checkbox"/> Outdoor	75% Load	94.3 %	
Altitude	Less than 1000meter	100% Load	94.5 %	
Relative Humidity	Less than 100 %	Power Factor(p.u)		
Ambient Temp.	40 deg.C (Max.)	50% Load	0.68	
Duty Type	Continuous ( S1 )	75% Load	0.78	
Service Factor	1.0	100% Load	0.80	
Mounting	<input checked="" type="checkbox"/> B3 <input type="checkbox"/> B5 <input type="checkbox"/> V1 <input type="checkbox"/>	Speed at Full Load	890 r.p.m	
Bearing	Type	Split Sleeve	Torque	
	DE/N-DE	SLEEVE / SLEEVE		
	Lubricant	Oil		
External Thrust	Not applicable		Full Load	693.9 kg·m
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-Belt	Moment of Inertia (J)	Locked-rotor**	75 %
Shaft Extension	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double	Load	Breakdown**	210 %
Terminal Box	Main	<input checked="" type="checkbox"/> Steel <input type="checkbox"/> Cast Iron	Motor	26.7 kg·m <sup>2</sup>
	Aux.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Sound Pressure Level (No-load & mean value at 1m from motor)	85 dB(A)
Rotation(Viewed from DE)	<input type="checkbox"/> CW <input checked="" type="checkbox"/> CCW <input type="checkbox"/> BI-Direction	Vibration	2.3mm/s(r.m.s)	
Application <span style="color: red;">▲</span>	Reciprocating Compressor	Permissible number of consecutive starts	<span style="color: red;">▲</span> Cold	3 time
Area classification	Hazardous Area		Hot	2 time
Type of Ex-Protection <span style="color: red;">▲</span>	Class 1 Division 2 Group B, T3	Paint	Munsell No.	7.5 BG 6/1.5
Applicable Standard <span style="color: red;">▲</span>	NEMA			

ACCESSORIES
1. Winding Temp. Detector (Pt 100Ω, Dual) : 1ea/Phase
2. Bearing Temp. Detector (Pt 100Ω, Single) : 1ea/Bearing
3. Space Heater : 1Phase, 120V, 200W

SUBMITTAL DRAWING	
Outline Dimension Drawing	Motor Weight(Approx.)
B3	HM-092959 4000 kg

SPARE PARTS
N/A

REMARK				
Multi-level inverter or the interver with sine filter should be applied to this motor.				
Date	DSND	CHKD	CHKD	APPD
2015.02.10	H.K.LEE	--	Y.G.KWON	Y.S.JOO

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 maker standard, if not mentioned.  
 \* In case of Inverter-Fed Motor, performance data is based on sine wave tests.  
 \*\* The data are based on rated voltage & frequency, and data are expressed as a percentage of full load value.

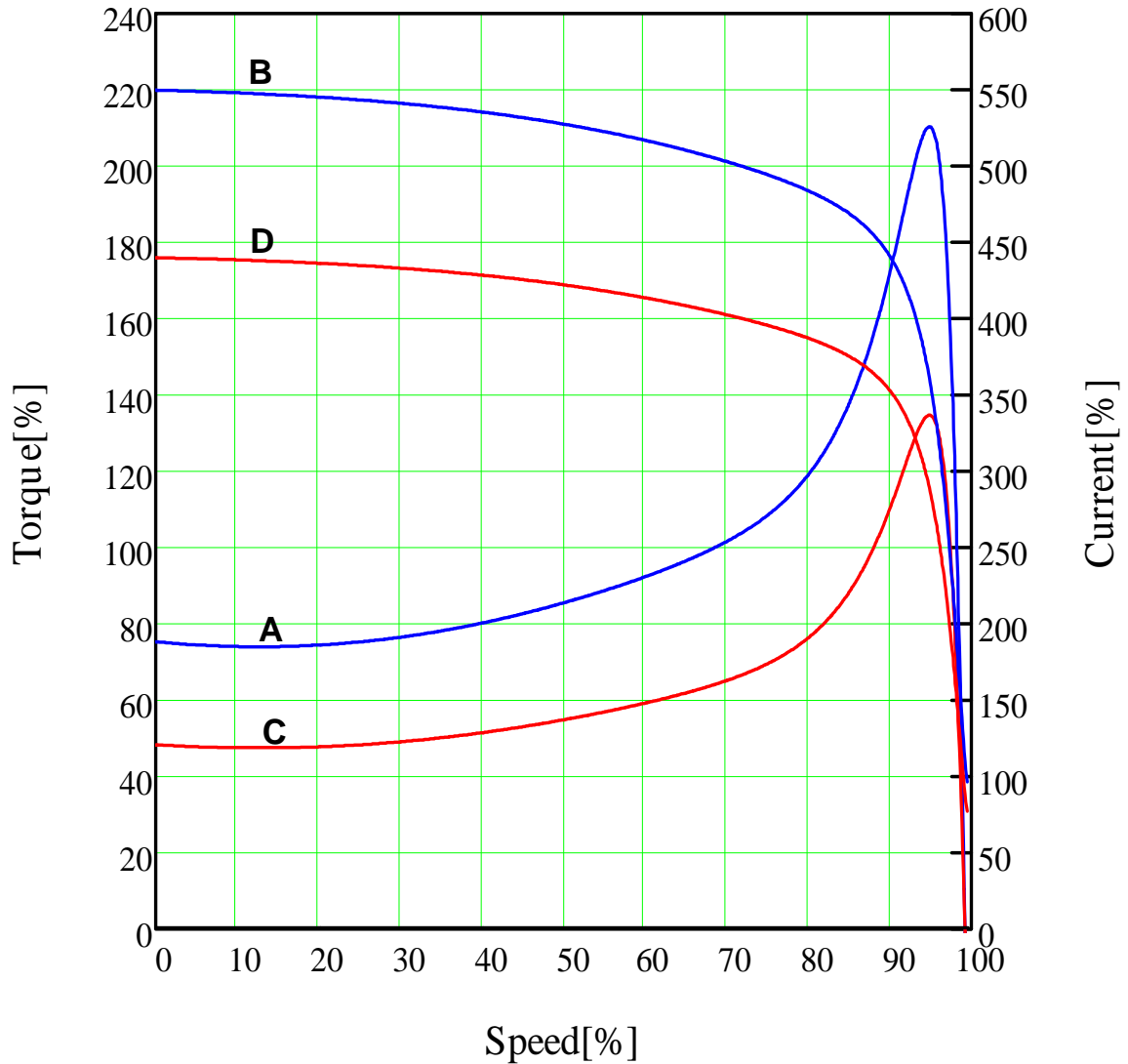


## SPEED-TORQUE & CURRENT CURVE

CURVE NO.

**STC - 14RMHC17**

Type : <b>HNP3 403-88E</b>	Motor Specification : <b>850 HP 8 P 60 Hz</b>
Full Load Torque : <b>693.9 kg.m</b>	Speed at Full Load : <b>890 r.p.m</b>
Motor moment of Inertia (J) : <b>26.7 kg.m<sup>2</sup></b>	Rated Voltage : <b>4160 V</b>
Load moment of Inertia (J) : <b>-- kg.m<sup>2</sup></b>	Full Load Current : <b>116.4 A</b>



**NOTE**

- A: SPEED-TORQUE CURVE AT RATED VOLTAGE
- B: SPEED-CURRENT CURVE AT RATED VOLTAGE
- C: SPEED-TORQUE CURVE AT 80% RATED VOLTAGE
- D: SPEED-CURRENT CURVE AT 80 % RATED VOLTAGE

REMARK.	REV.	CONTENTS	DATE	DSN	CHK	APPD
	0	ORIGINAL ISSUE	2014-10-24	D.S.HEO	D.K.SEO	Y.S.KIM

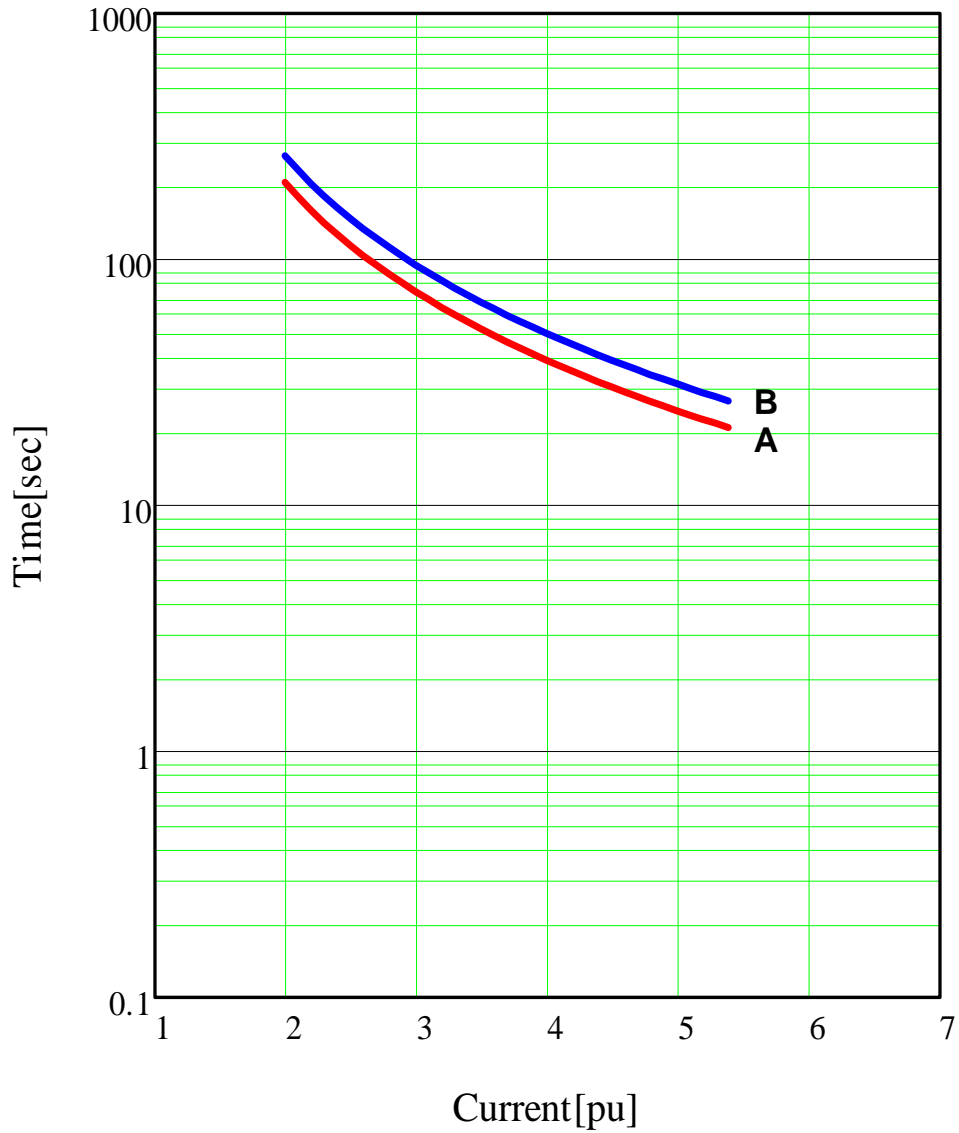


### THERMAL LIMIT & TIME CURRENT CURVE

CURVE NO.

**TLC - 14RMHC17**

Type	: <b>HNP3 403-88E</b>	Motor Specification	: <b>850 HP 8 P 60 Hz</b>
Full Load Torque	: <b>693.9 kg.m</b>	Speed at Full Load	: <b>890 r.p.m</b>
Motor moment of Inertia (J)	: <b>26.7 kg·m<sup>2</sup></b>	Rated Voltage	: <b>4160 V</b>
Load moment of Inertia (J)	: <b>-- kg·m<sup>2</sup></b>	Full Load Current	: <b>116.4 A</b>



**NOTE** A: THERMAL LIMIT CURVE AT HOT CONDITION  
 B: THERMAL LIMIT CURVE AT COLD CONDITION

REMARK.	REV.	CONTENTS	DATE	DSN	CHK	APPD
	0	ORIGINAL ISSUE	2014-10-24	D.S.HEO	D.K.SEO	Y.S.KIM