



## AC INDUCTION MOTOR DATA SHEET

Model No. or RFQ No.	Item No.	Rev. No.	[ 0 ]
Project Name	Project No.	Quantity	sets

GENERAL SPECIFICATION		PERFORMANCE DATA				
Frame Size	280LL	Rated Output	200 kW	268 HP		
Type	HS-200/4	Number of Poles	4			
Enclosure(Protection)	Totally Enclosed ( IP55 )	Rotor Type	Squirrel Cage			
Method of Cooling	IC416(BC)	Starting Method*	■ V.V.V.F.(C.T.:0.06~60Hz or V.T.:0.03~60Hz)			
Rated Frequency	60 Hz	Rated Voltage	440 V	380 V    220 V		
Number of Phases	3	Current	Full Load	312.1 A    361.4 A    624.3 A		
Insulation Class	■ F    □ B    □ H	Locked-rotor**	630 %	630 %    630 %		
Temp. Rise at full load (by resistance method)		Efficiency				
at 1.0 S.F	80 deg. C	50% Load	94.5 %			
Motor Location	■ Indoor    □ Outdoor	75% Load	95.0 %			
Altitude	Less than 1000 meter	100% Load	95.0 %			
Relative Humidity	Less than 80 %	Power Factor(p.u)				
Ambient Temp.	40 deg. C (Max.)	50% Load	0.860			
Duty Type	Continuous ( S1 )	75% Load	0.880			
Service Factor	1.15	100% Load	0.885			
Mounting	■ B3    □ B5    □ V1    □ B3/B5	Speed at Full Load	1785 r.p.m			
Bearing	Type	Anti-Friction				
	DE/N-DE	NU320 / 6318C3				
	Lubricant	Grease(Gadus S2 V 100 2)				
External Thrust	Not applicable			Torque		
Coupling Method	■ Direct    □ V-Belt	Full Load	109.1 kg-m			
Shaft Extension	■ Single    □ Double	Locked-rotor**	170 %			
Terminal Box	Main	□ Steel    ■ Cast Iron	Breakdown**	220 %		
	Aux.	□ Yes    ■ No	Moment of Inertia (J)			
Location	Refer to Outline Drawing					
Application		Load(Max.)	139.850 kg-m <sup>2</sup>			
Area classification	Non-Hazardous	Motor	5.488 kg-m <sup>2</sup>			
Type of Ex-Protection	Not applicable	Sound Pressure Level (No-load & mean value at 1m from motor)				
Applicable Standard	KS,IEC,NEMA MG1 Part30&31	85 dB(A)				
ACCESSORIES		Vibration				
		2.2 mm/sec (r.m.s)				
		Permissible number of consecutive starts				
		Cold	3 times			
SPARE PARTS		Hot				
		2 times				
		Paint	Munsell No.	4.0PB5.4/5.5(VL-451)		
		Inverter Duty & High Efficiency				
* For use on PWM VFD 2000:1VT, 1000:1CT@1.0S.F&F Temp. rise * Blower Motor : 2HP-4P, 440V, 60Hz, IP54, B5						
		Date	DSND	CHKD	CHKD	APPD
		2011-03-22	R. G. KIM	O.J. KIM	J.H. KIM	K.J. KANG

ACCESSORIES		SUBMITTAL DRAWING		
		Outline Dimension Drawing \ Motor Weight(Approx.)		
		B3(Side-Single)	VJ8XZRWP61	1180 kg
		B3(Top-Single)	VJ8XYRWP61	1240 kg
		B3(Top-Double)	VJ8XYIOP61	1240 kg
		Main T-Box Ass'y	3M-016882	

SPARE PARTS		REMARK				
		<b>Inverter Duty &amp; High Efficiency</b>				
		* For use on PWM VFD 2000:1VT, 1000:1CT@1.0S.F&F Temp. rise				
		* Blower Motor : 2HP-4P, 440V, 60Hz, IP54, B5				
		Date	DSND	CHKD	CHKD	APPD
		2011-03-22	R. G. KIM	O.J. KIM	J.H. KIM	K.J. KANG

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.  
 \*\* Data is based on when the motor is supplied at rated voltage & frequency, and the data is expressed as a percentage of full-load value.



# PERFORMANCE CURVE

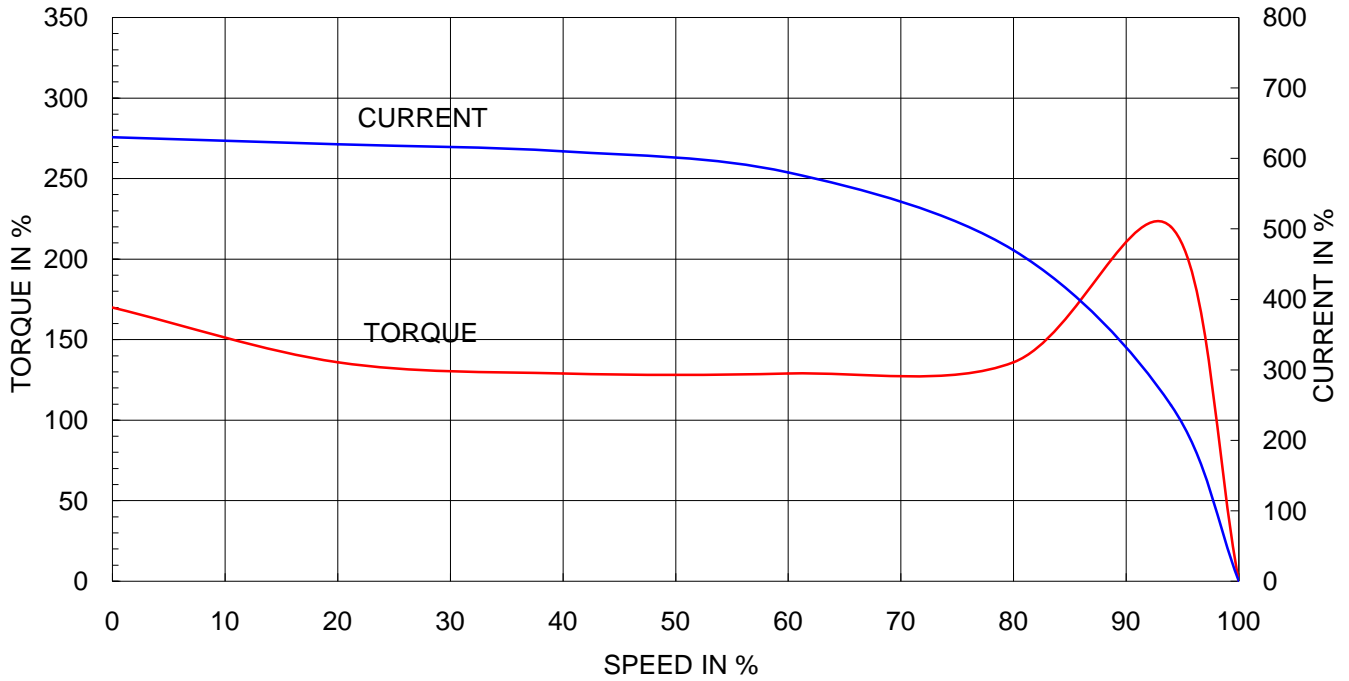
CURVE NO.

P-HS-200/4

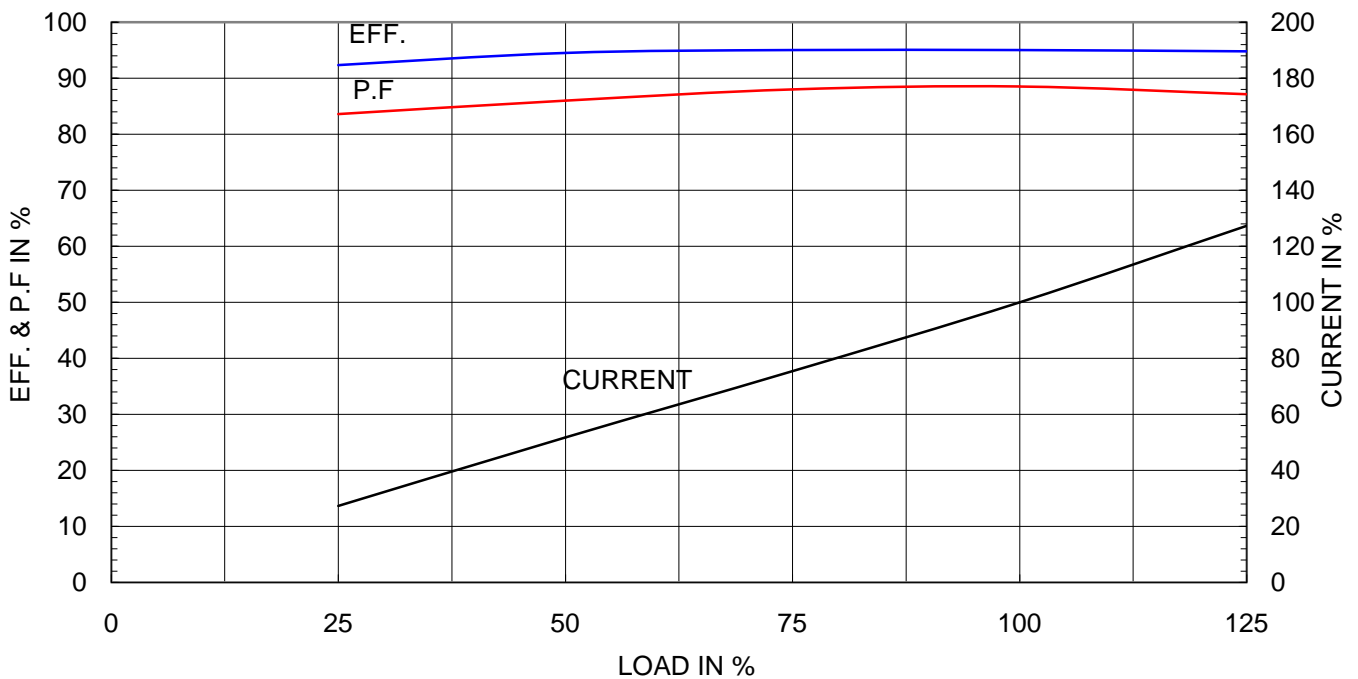
Type	:	HVD
Full Load Torque	:	109.1 Kg.m
Motor moment of Inertia (J)	:	5.488 Kg.m <sup>2</sup>
Load moment of Inertia (J)	:	139.850 Kg.m <sup>2</sup>

200 kW	4 P	60 Hz	
Speed at Full Load :		1785 RPM	
Rated Voltage	440V	380V	220V
Full Load Current	312.1A	361.4A	624.3A

SPEED VS TORQUE & CURRENT CURVE



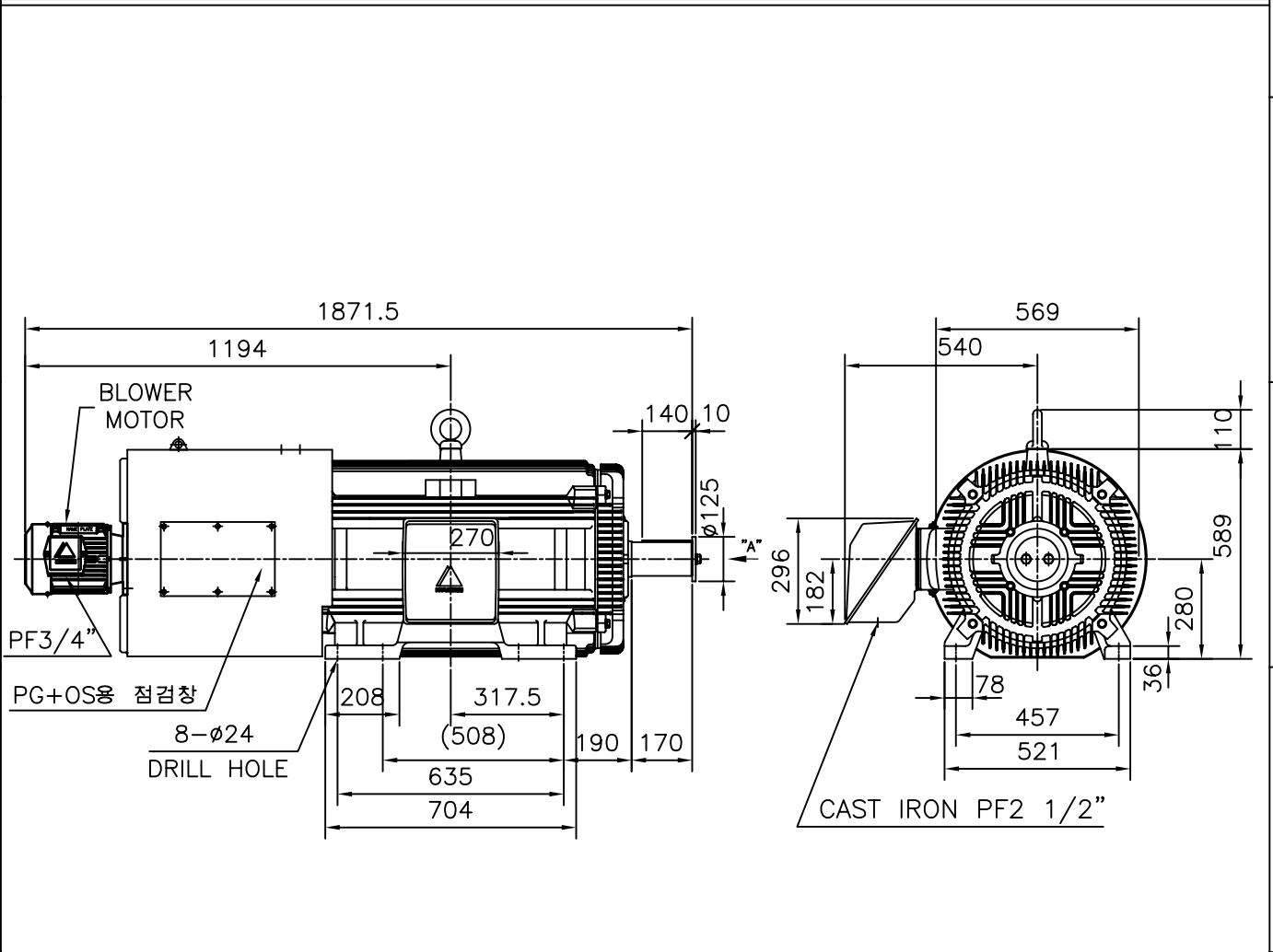
OUTPUT VS EFF., P.F & CURRENT CURVE



본 도면은 현대중공업(주) 재산이므로  
허가없이 복사할 수 없음 (취급주의)

THIS DRAWING IS PROPRIETARY TO HHI. NO PART OF THIS DRAWING  
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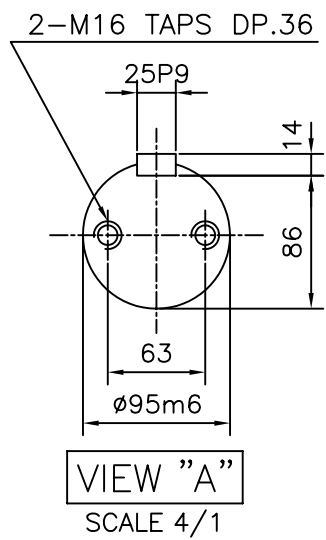
		<h1>TEFC</h1>		<h2>TYPE</h2>		HVD	
		<b>THREE PHASE INDUCTION MOTOR</b>				CAST IRON FRAME	



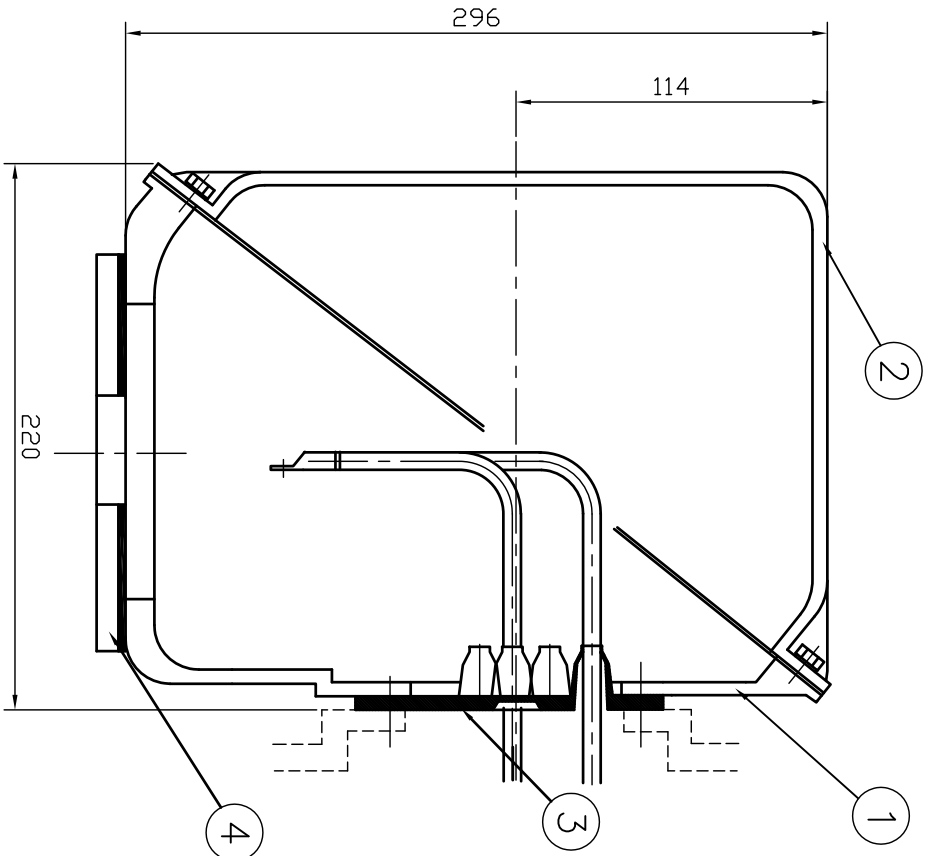
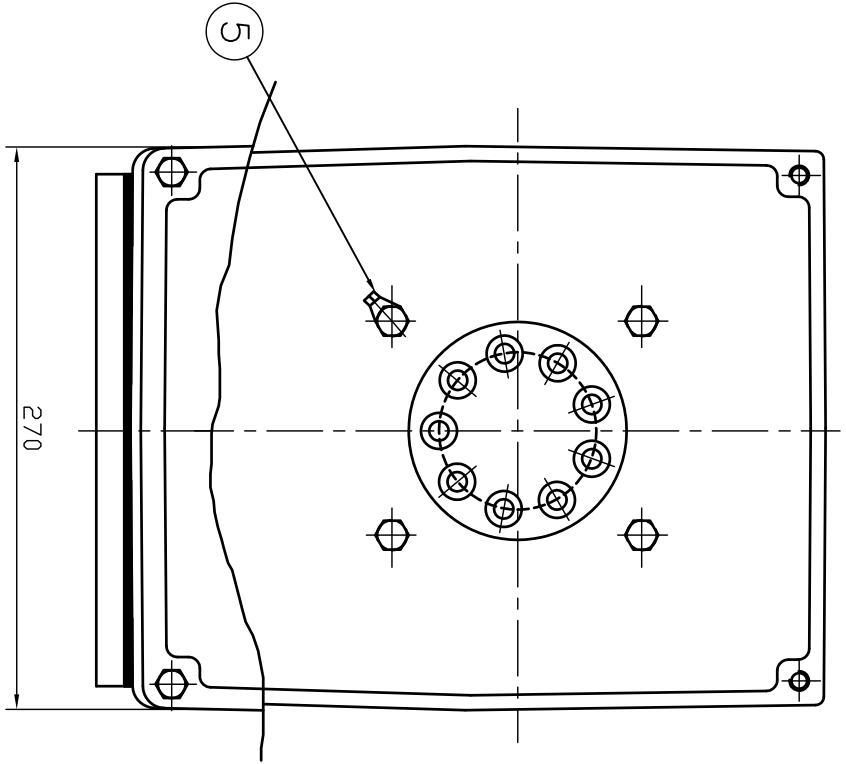
**NOTE**

1. TOLERANCE :

CENTER HEIGHT	280	$\begin{matrix} 0 \\ -1.0 \end{matrix}$
SHAFT DIAMETER	$\varnothing 95$	$\begin{matrix} +0.035 \\ +0.013 \end{matrix}$
KEYWAY WIDTH	25	$\begin{matrix} -0.022 \\ -0.074 \end{matrix}$
KEYWAY DEPTH	9	$\begin{matrix} +0.2 \\ 0 \end{matrix}$
KEY WIDTH	25	$\begin{matrix} 0 \\ -0.052 \end{matrix}$
KEY HEIGHT	14	$\begin{matrix} 0 \\ -0.110 \end{matrix}$



APPD BY KIM J.H. UNIT MM				SUBJECT L2 Fr.280LL-P, SINGLE		TEFC STANDARD	
CHKD BY KIM O.J. SCALE 1/20				TITLE		CAD PROJ \ FILE	
CHKD BY				PROJECT PROJEC'N 3rd Angle		MMSTDMTR/VJ8XZROP61	
DSND BY KIM RYANG GYU DATE 2005.12.16				OUTLINE		Sheet No. of	
				REF. NO L2-Series		Revision No. 0	
				DWG NO VJ8XZRWP61			



REV	DATE	CONTENTS	REV'D BY	CHKD BY	Q.P. CHK	APP'D BY
1						
2						
3						
4						

1	EARTH TERMINAL LUG										
1	CABLE ENTRY PLATE										
1	GASKET	NBR									
1	TERMINAL BOX COVER	CAST IRON									
1	TERMINAL BOX BODY	CAST IRON									

QTY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.
	APP'D BY	권진오	UNIT	MM			
	Q.P. CHK	주영철	SCALE	NONE			
	CHKD BY	권오철	PROJEC'N	3 레벨(3rd Angle)			
	DSND BY	김헌태	DATE	92.06.05			

REF. NO	DWG NO	SHEET NO	TOTAL SHEETS
	3M-016882		

TITLE	SUBJECT	FILE NO.
TERMINAL BOX ASS'Y	HLA6 - 250,280Fr.	T-BOX-M \ 38016882



Sheet No. of  
Revision No.