



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	225S			Rated Output	55 kW 75 HP																						
Type	HS-55/4			Number of Poles	4																						
Enclosure(Protection)	Totally Enclosed (IP55)			Rotor Type	Squirrel Cage																						
Method of Cooling	IC411(FC)			Starting Method*	<input type="checkbox"/> D.O.L <input type="checkbox"/> Y- Δ																						
Rated Frequency	60 Hz			Rated Voltage	440 V	380 V	220 V																				
Number of Phases	3			Current	Full Load	90.2 A	104.5 A 180.5 A																				
Insulation Class	<input checked="" type="checkbox"/> F <input type="checkbox"/> B <input type="checkbox"/> H				Locked-rotor**	670 %	670 % 670 %																				
Temp. Rise at full load (by resistance method)				Efficiency																							
at 1.0 S.F 80 deg. C																											
Motor Location	<input checked="" type="checkbox"/> Indoor <input type="checkbox"/> Outdoor			50% Load 93.2 %																							
Altitude	Less than 1000 meter			75% Load 94.2 %																							
Relative Humidity	Less than 80 %			100% Load 94.1 %																							
Ambient Temp.	40 deg. C (Max.)			Power Factor(p.u)																							
Duty Type	Continuous (S1)			50% Load 0.742																							
Service Factor	1.15			75% Load 0.819																							
Mounting	<input checked="" type="checkbox"/> B3 <input type="checkbox"/> B5 <input type="checkbox"/> V1 <input type="checkbox"/> B3/B5			100% Load 0.850																							
Bearing	Type	Anti-Friction		Speed at Full Load																							
	DE/N-DE	6314C3 / 6213C3		1780 r.p.m																							
	Lubricant	Grease(Gadus S2 V 100 2)		Torque																							
External Thrust	Not applicable		Full Load 30.1 kg·m																								
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-Belt		Locked-rotor** 180 %																								
Shaft Extension	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double		Breakdown** 230 %																								
Terminal Box	Main	<input type="checkbox"/> Steel <input checked="" type="checkbox"/> Cast Iron		Moment of Inertia (J)																							
	Aux.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Load(Max.) 27.600 kg·m ²																							
Location	Refer to Outline Drawing			Motor 0.950 kg·m ²																							
Application				Sound Pressure Level (No-load & mean value at 1m from motor)																							
Area classification	Non-Hazardous			82 dB(A)																							
Type of Ex-Protection	Not applicable			Vibration 2.2 mm/sec (r.m.s)																							
Applicable Standard	KS,IEC,NEMA MG1 Part30(Vpeak)			Permissible number of consecutive starts																							
ACCESSORIES				SUBMITTAL DRAWING																							
				Outline Dimension Drawing \ Motor Weight(Approx.)																							
SPARE PARTS				<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>B3</td> <td>TJ2SAP51</td> <td>350 kg</td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </table>				B3	TJ2SAP51	350 kg																	
				B3	TJ2SAP51	350 kg																					
REMARK				<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Main T-Box Ass'y</td> <td colspan="3">3M-016881</td> </tr> <tr> <td> </td> <td colspan="3"> </td> </tr> <tr> <td> </td> <td colspan="3"> </td> </tr> <tr> <td> </td> <td colspan="3"> </td> </tr> <tr> <td> </td> <td colspan="3"> </td> </tr> </table>				Main T-Box Ass'y	3M-016881																		
				Main T-Box Ass'y	3M-016881																						
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.				High Efficiency *, For use on PWM VFD 10:1VT, 3:1CT@1.0S.F&F Temp. rise																							
				<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Date</th> <th>DSND</th> <th>CHKD</th> <th>CHKD</th> <th>APPD</th> </tr> </thead> <tbody> <tr> <td>2010-05-28</td> <td>R.G. KIM</td> <td>O.J. KIM</td> <td>J.H. KIM</td> <td>K.J. KANG</td> </tr> </tbody> </table>					Date	DSND	CHKD	CHKD	APPD	2010-05-28	R.G. KIM	O.J. KIM	J.H. KIM	K.J. KANG									
Date	DSND	CHKD	CHKD	APPD																							
2010-05-28	R.G. KIM	O.J. KIM	J.H. KIM	K.J. KANG																							

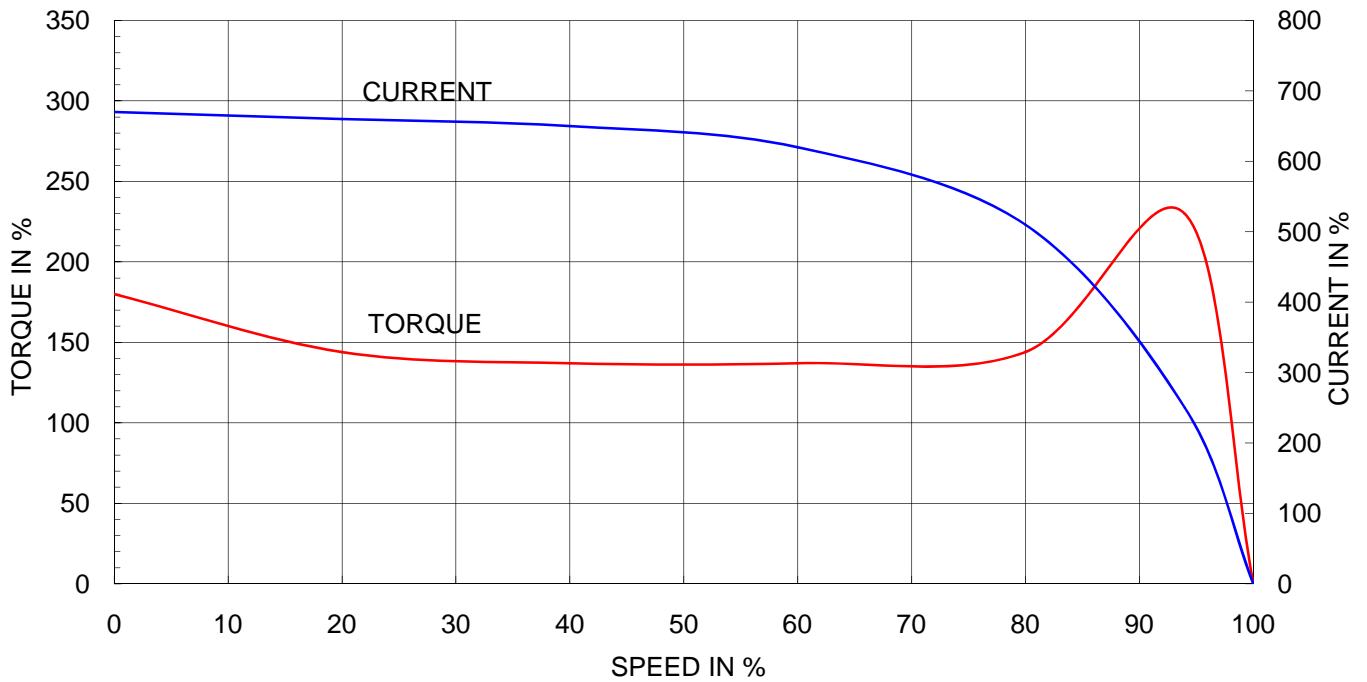
Note: Others not mentioned in this data sheet shall be in accordance with maker standard.
 Above technical data are only design values and shall be guaranteed with tolerance of applicable standard.
 Inspection and performance test shall be maker standard, if not mentioned.
 * In case of Inverter-Fed 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.

HHI W230-131-1 * In case of Inverter or V.V.V.F Motor:Performance data is based on sine wave tests. A4(210mm X 297mm)

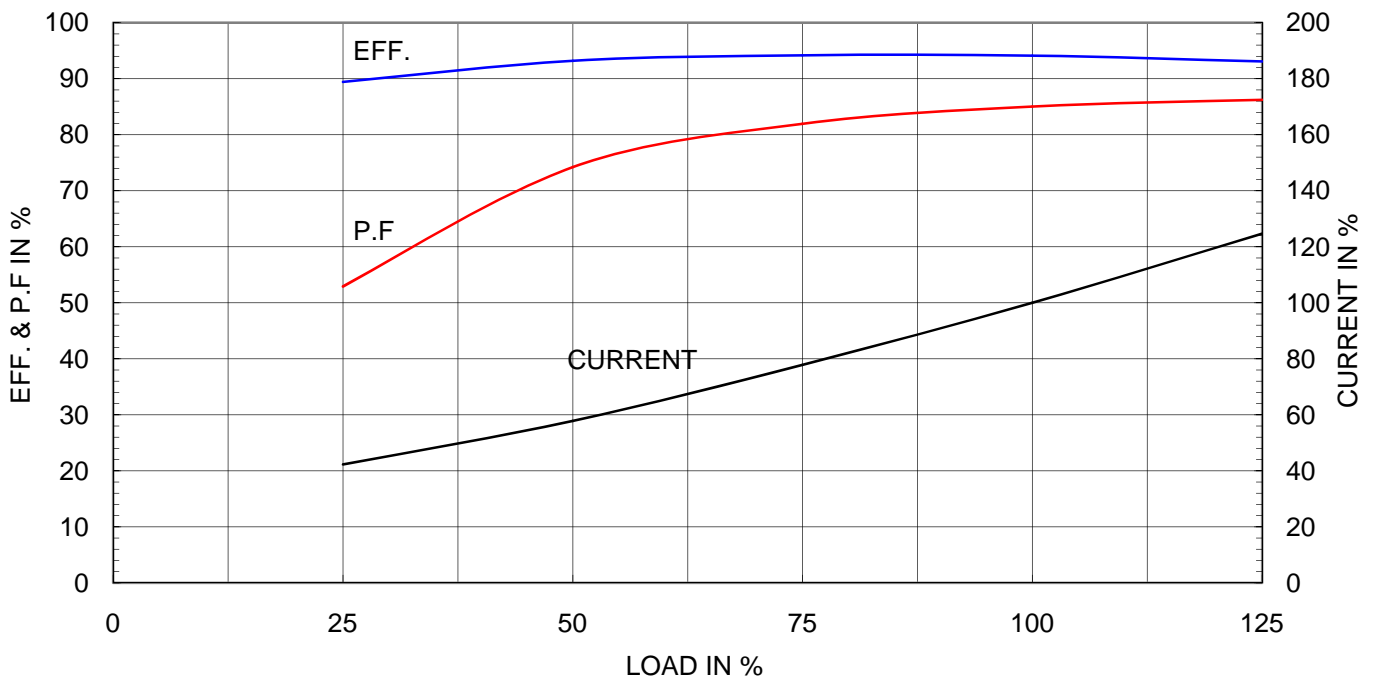
Type	:	HS
Full Load Torque	:	30.1 Kg.m
Motor moment of Inertia (J)	:	0.950 Kg.m ²
Load moment of Inertia (J)	:	27.600 Kg.m ²

55 kW	4 P	60 Hz	
Speed at Full Load :		1780 RPM	
Rated Voltage	440V	380V	220V
Full Load Current	90.2A	104.5A	180.5A

SPEED VS TORQUE & CURRENT CURVE



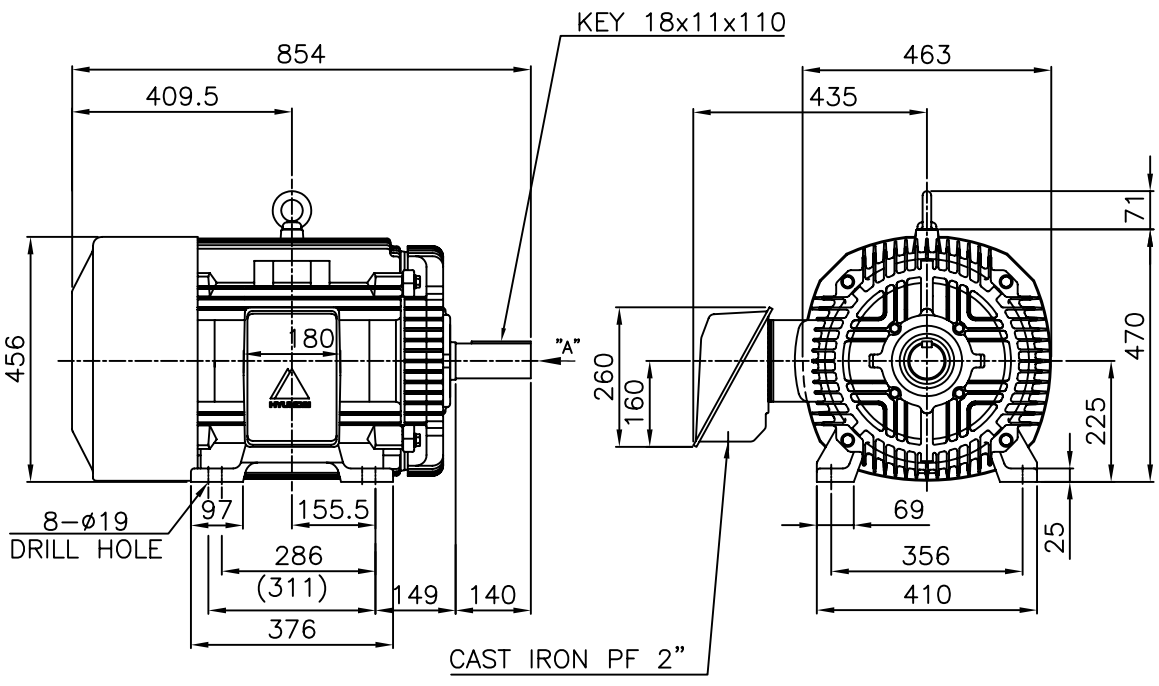
OUTPUT VS EFF., P.F & CURRENT CURVE



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

THIS DRAWING IS PROPRIETARY TO HHI. NO PART OF THIS DRAWING
MAYBE REPRODUCED WITHOUT THE PERMISSION OF HHI.

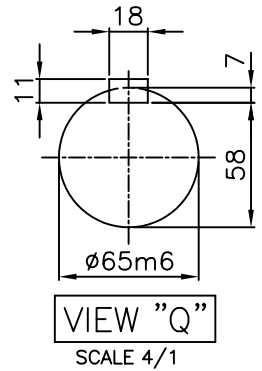
1		2		3		4	
		<h1>TEFC</h1>				TYPE	
		THREE PHASE INDUCTION MOTOR				⁽¹⁾ TNB , TDB	
						CAST IRON FRAME	



NOTE

1. TOLERANCE :

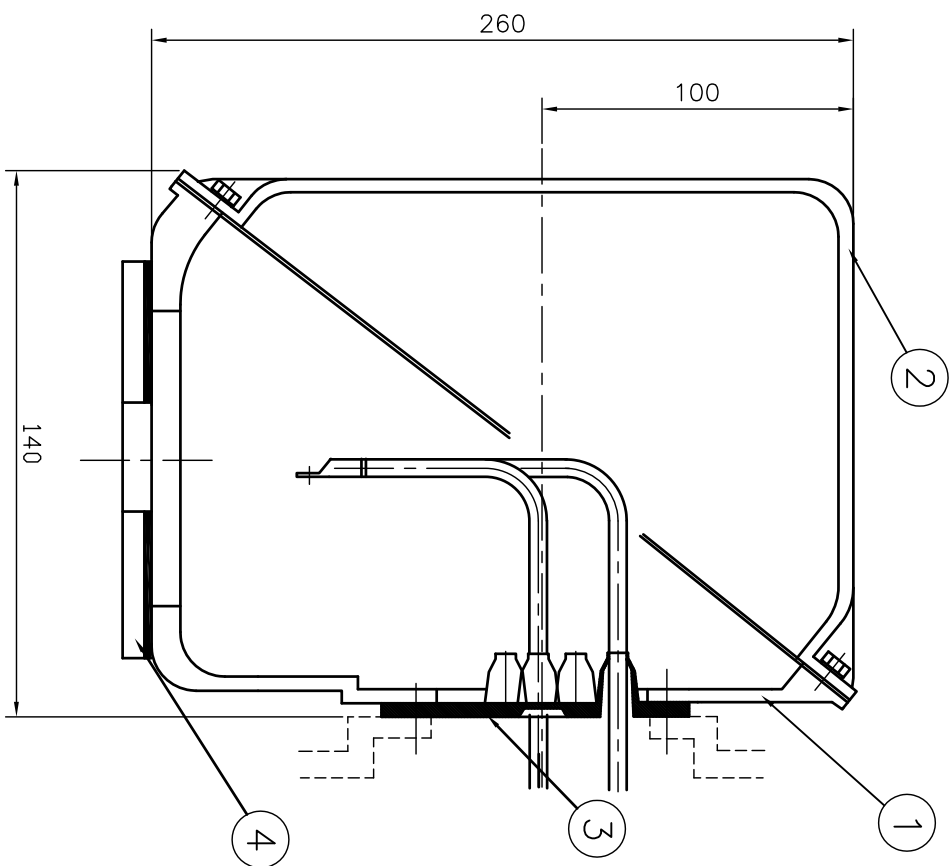
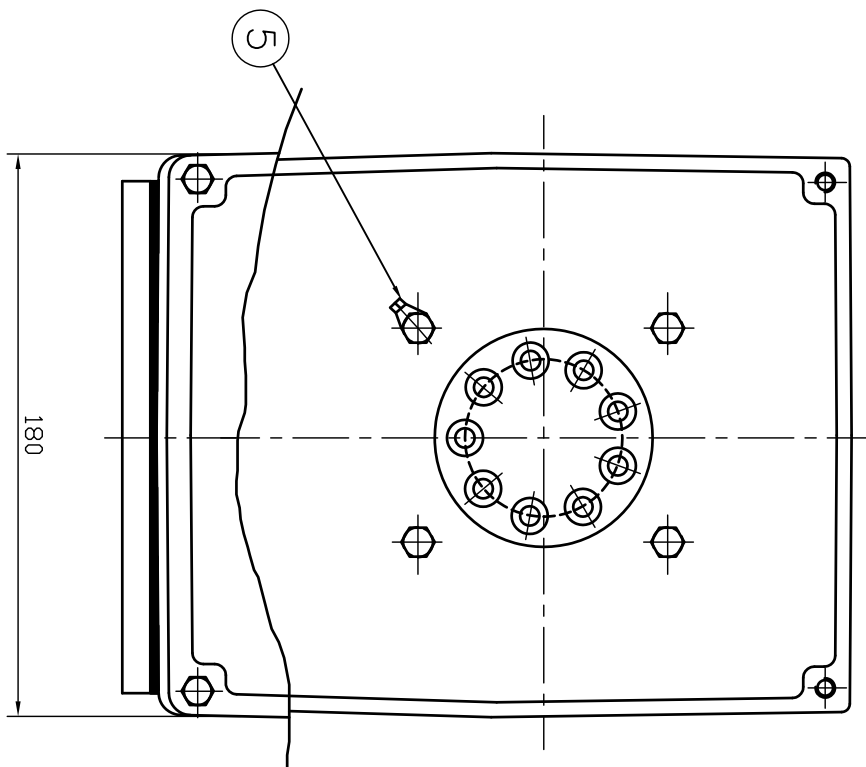
CENTER HEIGHT	225	$\begin{matrix} 0 \\ -0.5 \end{matrix}$
BASE HOLE	$\phi 19$	$\begin{matrix} +0.43 \\ 0 \end{matrix}$
SHAFT DIAMETER	$\phi 65$	$\begin{matrix} +0.030 \\ +0.011 \end{matrix}$
KEYWAY WIDTH	18	$\begin{matrix} -0.018 \\ -0.061 \end{matrix}$
KEYWAY DEPTH	7	$\begin{matrix} +0.2 \\ 0 \end{matrix}$
KEY WIDTH	18	$\begin{matrix} 0 \\ -0.043 \end{matrix}$
KEY HEIGHT	11	$\begin{matrix} 0 \\ -0.110 \end{matrix}$



2. The type (1)—"TNB , TDB" is for HHI's standard products and it can be changed for customer's requirements or detail designing.

TEFC STANDARD

APPD BY	KANG K.J.	UNIT	MM	SUBJECT	KS Fr.225S TEFC	CAD PROJ \ FILE
CHKD BY	KIM O.J.	SCALE	1/15			MMSTDMTR/TJ2SAP51
CHKD BY	LEE N.D.	PROJEC'N	3rd Angle	OUTLINE THREE-PHASE INDUCTION MOTOR		
DSND BY	KIM RYANG GYU	DATE	2007.03.23			
				REF. NO	L2-Series	Sheet No. of
				DWG NO	TJ2SAP51	Revision No. 0



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

1	EARTH TERMINAL LUG					5
1	CABLE ENTRY PLATE					4
1	GASKET	NBR				3
1	TERMINAL BOX COVER	CAST IRON				2
1	TERMINAL BOX BODY	CAST IRON				1

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-016881		

TITLE	SUBJECT	SCALE	DATE
TERMINAL BOX ASS'Y (CAST IRON)	HLA6 - 200, 225Fr.	NONE	92.06.05

REF. NO	DWG NO	REV. NO	TOTAL SHEETS
	3M-016881	0	



Sheet No. of
Revision No. 0