

# AC INDUCTION MOTOR DATA SHEET

Model No.or RFQ No.		Item No.		Rev. No. [ 0 ]			
Project Name		Project No.		Quantity sets			
<b>GENERAL SPECIFICATION</b>			<b>PERFORMANCE DATA</b>				
Frame Size	225S		Rated Output	45 kW 60 HP			
Type	HS-45/6		Number of Poles	6			
Enclosure(Protection)	Explosion Proof ( 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	440 V	380 V 220 V		
Number of Phases	3		Current	Full Load	75.6 A 87.5 A 151.1 A		
Insulation Class	<input checked="" type="checkbox"/> F <input type="checkbox"/> B <input type="checkbox"/> 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 93.3 %				
Motor Location <input type="checkbox"/> Indoor <input checked="" type="checkbox"/> Outdoor			75% Load 93.7 %				
Altitude Less than 1000 meter			100% Load 93.6 %				
Relative Humidity Less than 80 %			Power Factor(p.u)				
Ambient Temp. 40 deg. C (Max.)			50% Load 0.750				
Duty Type Continuous ( S1 )			75% Load 0.825				
Service Factor 1.00			100% Load 0.835				
Mounting <input type="checkbox"/> B3 <input type="checkbox"/> B5 <input checked="" type="checkbox"/> V1 <input type="checkbox"/> B3/B5			Speed at Full Load 1185 r.p.m				
Bearing	Type	Anti-Friction		Torque			
	DE/N-DE	6314C3 / 6213C3		Full Load 37.0 kg·m			
	Lubricant	Grease(Gadus S2 V 100 2)		Locked-rotor** 150 %			
External Thrust Not applicable			Breakdown** 230 %				
Coupling Method <input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-Belt			Moment of Inertia (J)				
Shaft Extension <input checked="" type="checkbox"/> Single <input type="checkbox"/> Double			Load(Max.) 101.050 kg·m²				
Terminal Box	Main	<input type="checkbox"/> Steel <input checked="" type="checkbox"/> Cast Iron		Motor 1.555 kg·m²			
	Aux.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Sound Pressure Level (No-load & mean value at 1m from motor)			
	Location	Refer to Outline Drawing		73 dB(A)			
Application			Vibration 2.2 mm/sec (r.m.s)				
Area classification Hazardous			Permissible number of consecutive starts Cold 3 times				
Type of Ex-Protection Ex d II T4			Hot 2 times				
Applicable Standard KS,IEC			Paint Munsell No. 4.OPB5.4/5.5(VL-451)				
<b>ACCESSORIES</b>			<b>SUBMITTAL DRAWING</b>				
			Outline Dimension Drawing \ Motor Weight(Approx.)				
			B3		kg		
			B5 0		0 kg		
			V1 GJ25PP02		545 kg		
			B3/B5 0		0 kg		
			Main T-Box Ass'y 3M-036961				
<b>SPARE PARTS</b>			<b>REMARK</b> High Efficiency				
			Date	DSND	CHKD	CHKD	APPD
			2010-05-28	R.G. KIM	O.J. KIM	J.H. KIM	K.J. KANG

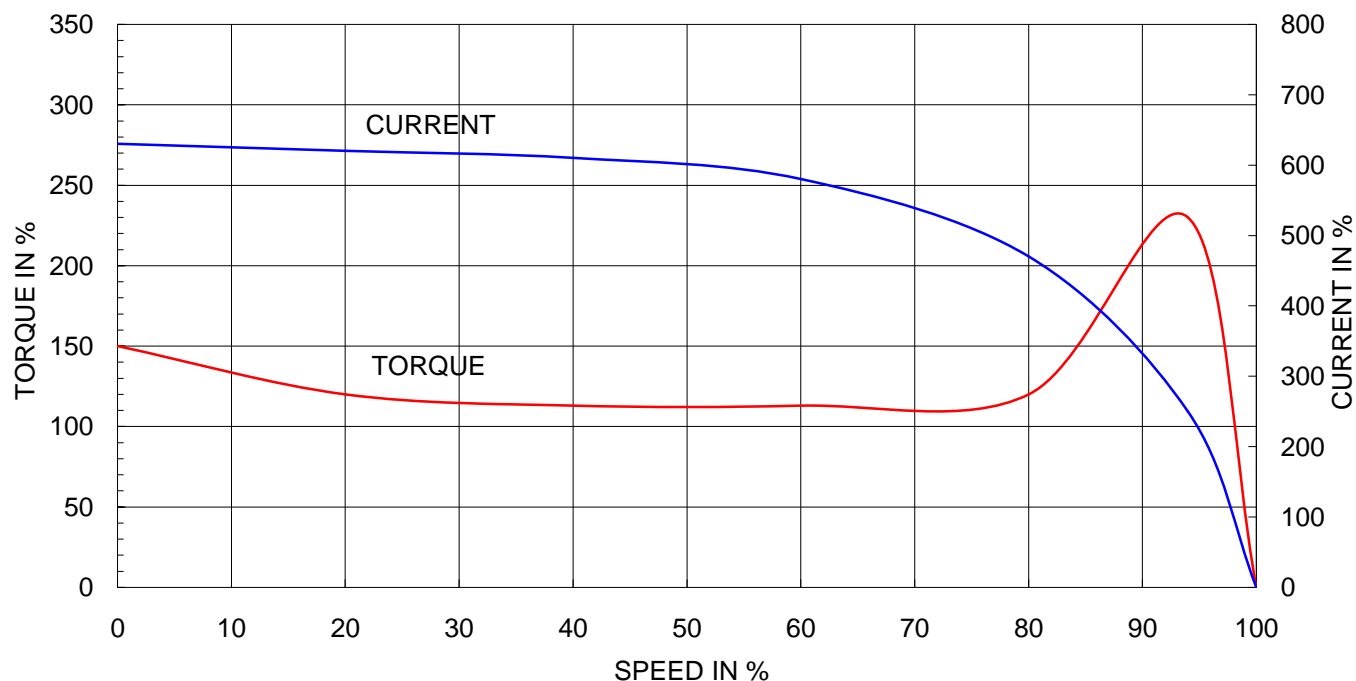
Note: Others not mentioned in this data sheet shall be in accordance with maker standard.  
 Above technical data are only design values and shall be guaranteed with tolerance of applicable standard.  
 Inspection and performance test shall be maker standard, if not mentioned.  
 \* In case of Inverter-Fed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

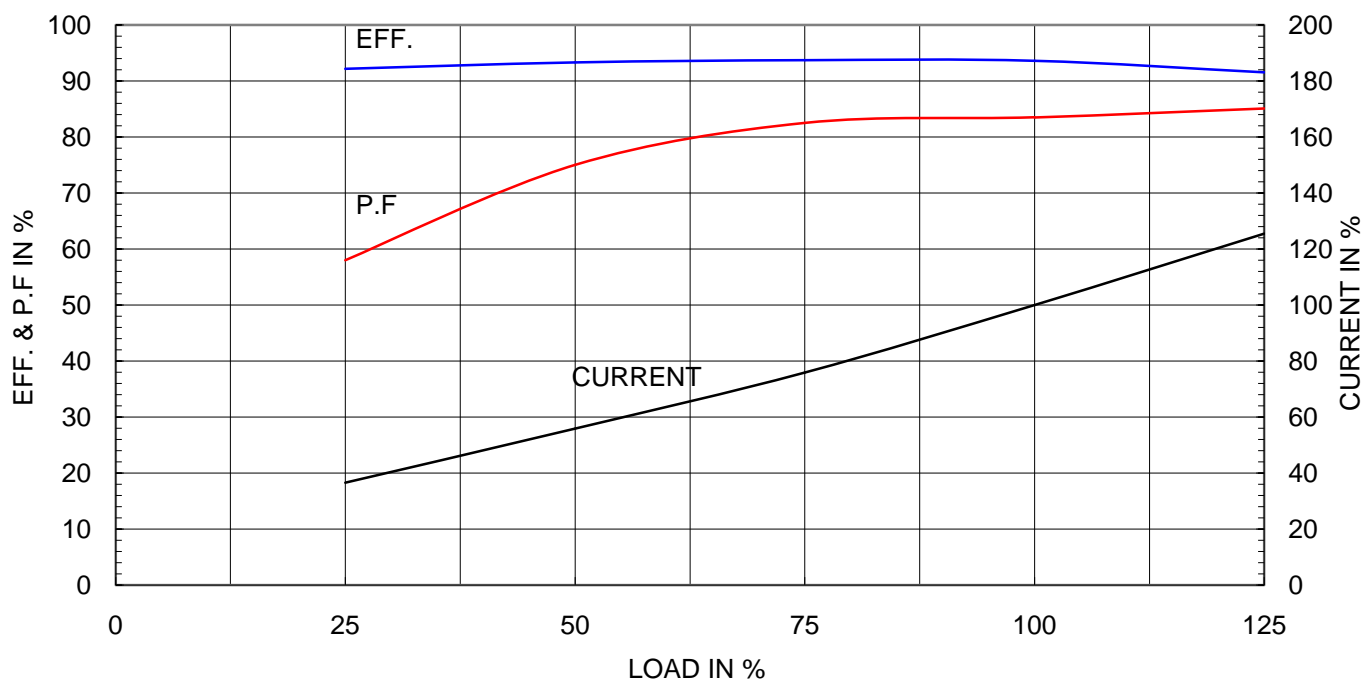
Type	:	GHB225M
Full Load Torque	:	37.0 Kg.m
Motor moment of Inertia (J)	:	1.555 Kg.m <sup>2</sup>
Load moment of Inertia (J)	:	101.050 Kg.m <sup>2</sup>

45 kW		6 P		60 Hz	
Speed at Full Load :				1185 RPM	
Rated Voltage	440V	380V	220V		
Full Load Current	75.6A	87.5A	151.1A		

SPEED VS TORQUE &amp; CURRENT CURVE



OUTPUT VS EFF., P.F &amp; CURRENT CURVE





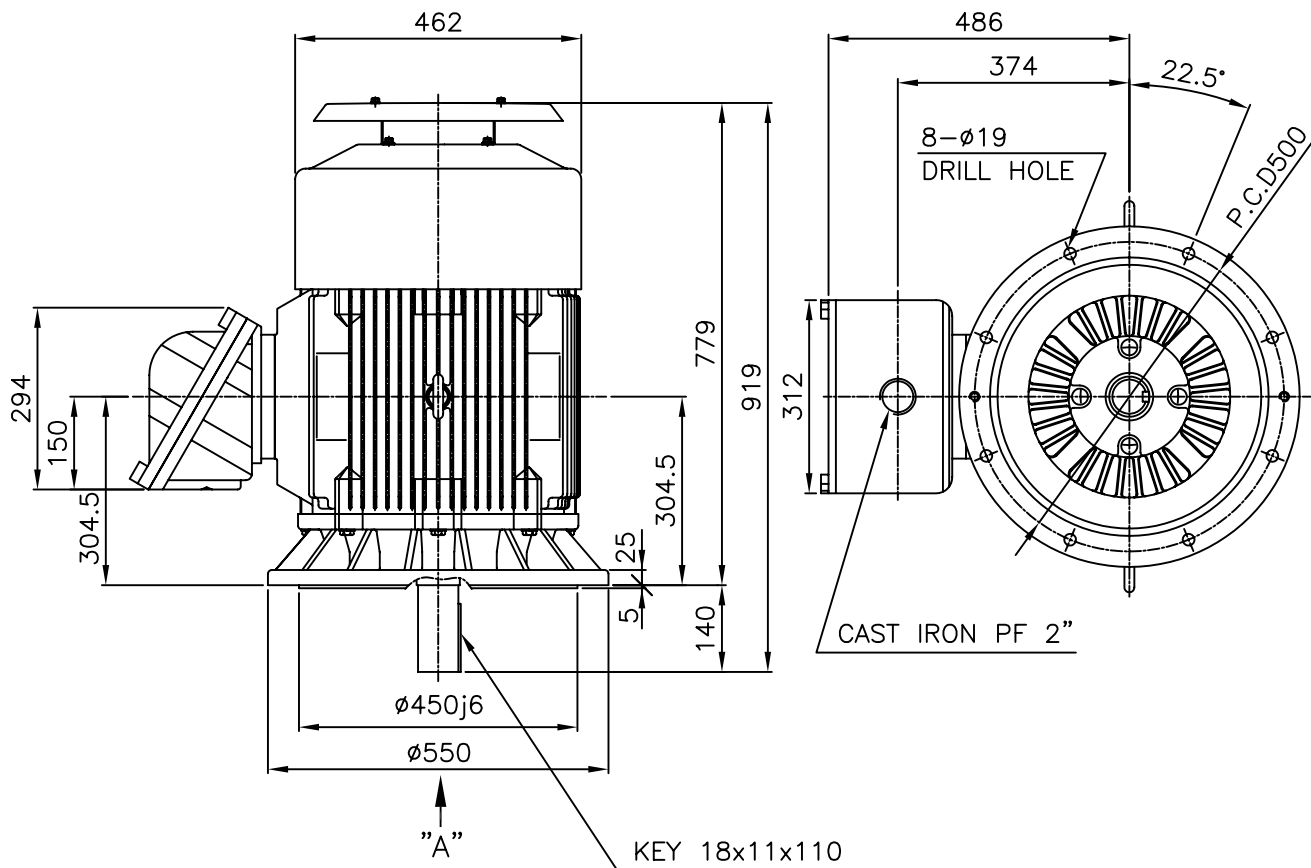
# TEFC

## THREE PHASE INDUCTION MOTOR

**TYPE**

GHB225M

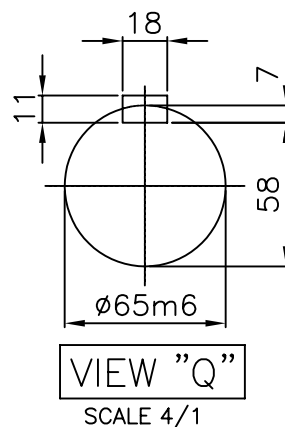
CAST IRON FRAME



### NOTE

#### 1.TOLERANCE :

RABBET DIAMETER	$\phi 450 \pm 0.020$
SHAFT DIAMETER	$\phi 65 \begin{smallmatrix} +0.030 \\ +0.011 \end{smallmatrix}$
KEYWAY WIDTH	$18 \begin{smallmatrix} -0.018 \\ -0.061 \end{smallmatrix}$
KEYWAY DEPTH	$7 \begin{smallmatrix} +0.2 \\ 0 \end{smallmatrix}$
KEY WIDTH	$18 \begin{smallmatrix} 0 \\ -0.043 \end{smallmatrix}$
KEY HEIGHT	$11 \begin{smallmatrix} 0 \\ -0.110 \end{smallmatrix}$



2.Ex d IIB T4 : (EXPLOSION CONSTRUCTION & IGNITION GROUP)

TEFC STANDARD

APPD BY	Y.S.KIM	UNIT	MM
CHKD BY		SCALE	1/13
CHKD BY		PROJEC'N	3rd Angle
DSND BY	LEE NOH DUK	DATE	2008.07.14

SUBJECT	KS Fr.225 d2G4	CAD PROJ \ FILE
TITLE	OUTLINE THREE-PHASE INDUCTION MOTOR	MMSTDMTR/GJ25PP02
REF. NO	L3-SERIES	Sheet No. of
DWG NO	GJ25PP02	Revision No. 0



[illegible]