HYUNDAI HEAVY INDUSTRIES CO.,LTD.

AC INDUCTION MOTOR DATA SHEET

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

GENERAL SPECIFICATION

Frame Size		225S
Type		HS-55/2
Enclosure(Protection)		Explosion Proof (IP55)
Method of Cooling		IC411(FC)
Rated Frequency		60 Hz
Number of Phases		3
Insulation Class		■ F ☐ B ☐ H
Temp. Rise at full load (by resistance method)		
	at 1.0 S.F	80 deg. C
Motor Location		■ Indoor ☐ Outdoor
Altitude		Less than 1000 meter
Relative Humidity		Less than 80 %
Ambient Temp.		40 deg. C (Max.)
Duty Type		Continuous (S1)
Service Factor		1.00
Mounting		■ B3 ☐ B5 ☐ V1 ☐ B3/B5
Bearing	Type	Anti-Friction
	DE/N-DE	6213C3 / 6213C3
	Lubricant	Grease(Gadus S2 V 100 2)
External Thrust		Not applicable
Coupling Method		■ Direct ☐ V-Belt
Shaft Extension		■ Single ☐ Double
Terminal Box	Main	☐ Steel ■ Cast Iron
	Aux.	☐ Yes ■ No
	Location	Refer to Outline Drawing
Application		
Area classification		Hazardous
Type of Ex-Protection		Ex d II T4
Applicable Standard		KS,IEC

PERFORMANCE DATA

Rated Output		55 kW	75 HP	
Number of Poles		2		
Rotor Type		Squirrel Cage		
Starting Method*		■ D.O.L	☐ Y-△	
Rated Voltage		440 V	380 V	220 V
Current	Full Load	84.8 A	98.2 A	169.6 A
	Locked-rotor**	630 %	630 %	630 %
Efficiency				
	50% Load	92.7 %		
	75% Load	93.1 %		
	100% Load	93.0 %		
Power Factor(p.u)				
	50% Load	0.898		
	75% Load	0.915		
	100% Load	0.915		
Speed at Full Load		3570 r.p.m		
Torque				
	Full Load	15.0 kg·m		
	Locked-rotor**	150 %		
	Breakdown**	250 %		
Moment of Inertia (J)				
	Load(Max.)	5.750 kg·m²		
	Motor	0.628 kg·m²		
Sound Pressure Level (No-load & mean value at 1m from motor)		82 dB(A)		
Vibration		2.2 mm/sec (r.m.s)		
Permissible number of consecutive starts		Cold 3 times		
		Hot 2 times		
Paint	Munsell No.	4.0PB5.4/5.5(VL-451)		

ACCESSORIES

SUBMITTAL DRAWING

Outline Dimension Drawing \ Motor Weight(Approx.)			
B3	GJ2SAC01	475	kg
B5	0	0	kg
V1			kg
B3/B5	0	0	kg
Main T-Box Ass'y	3M-036961		

SPARE PARTS

REMARK

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.

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PERFORMANCE CURVE

CURVE NO.

P-HS-55/2

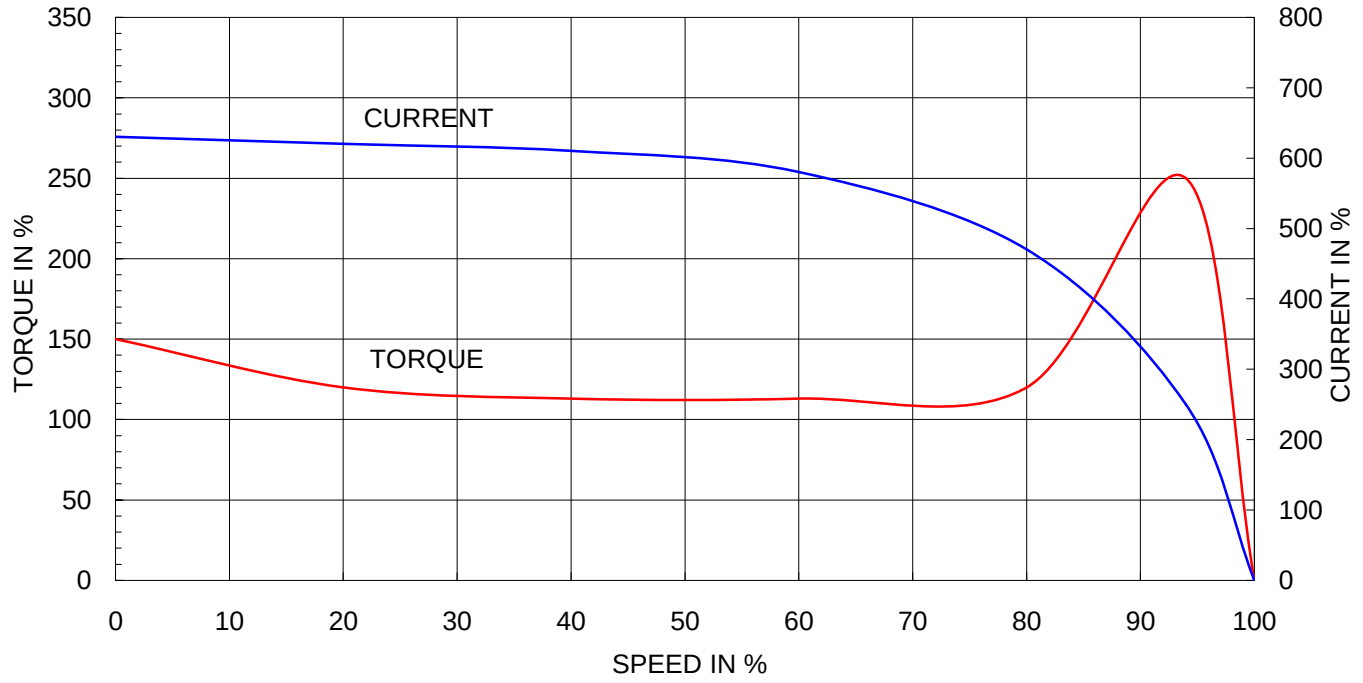
Type	:	GHB225M
Full Load Torque :	15.0	Kg.m
Motor moment of Inertia (J) :	0.628	$Kg.m^2$
Load moment of Inertia (J) :	5.750	$Kg.m^2$

55 kW 2 P 60 Hz

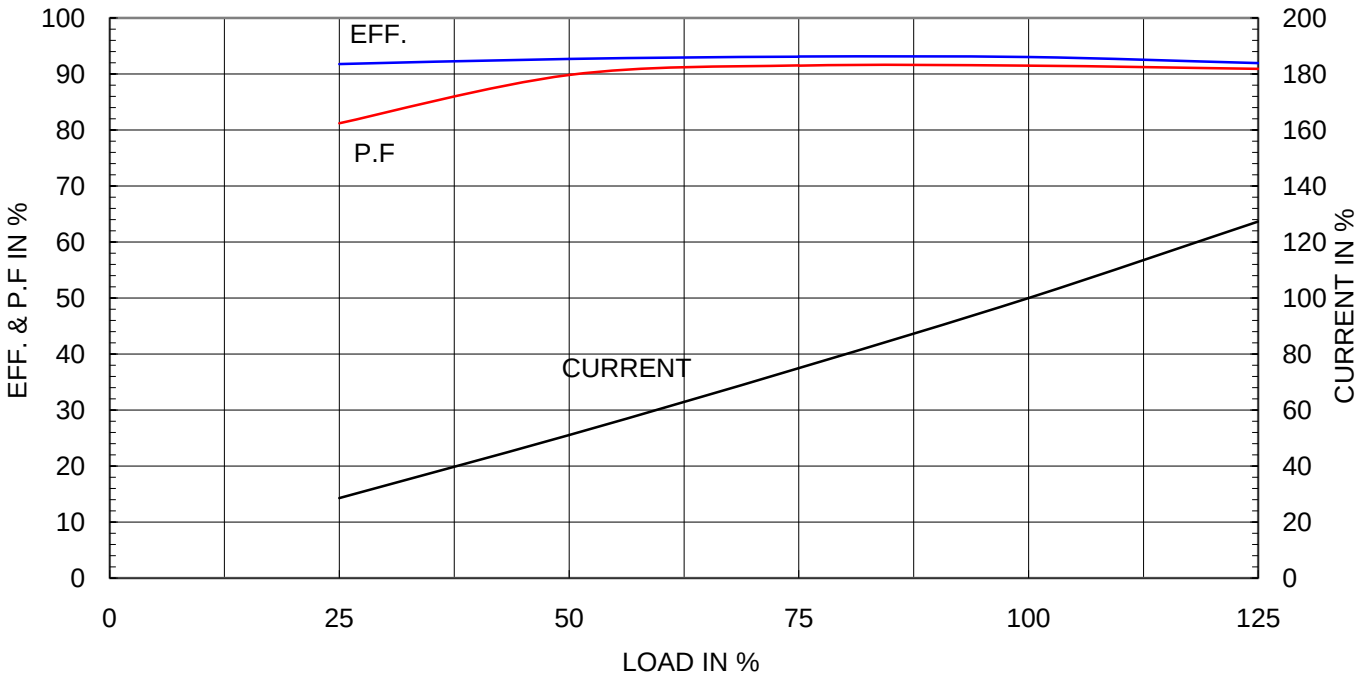
Speed at Full Load : 3570 RPM

Rated Voltage	440V	380V	220V	
Full Load Current	84.8A	98.2A	169.6A	

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



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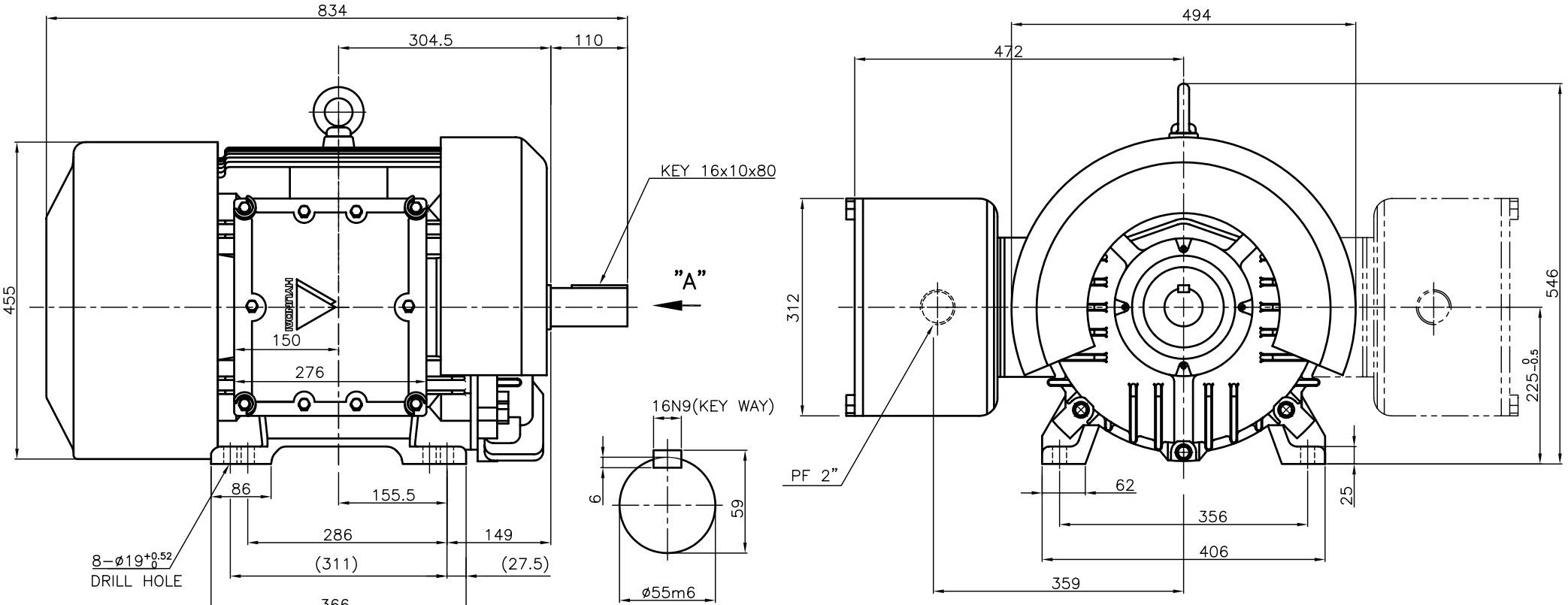
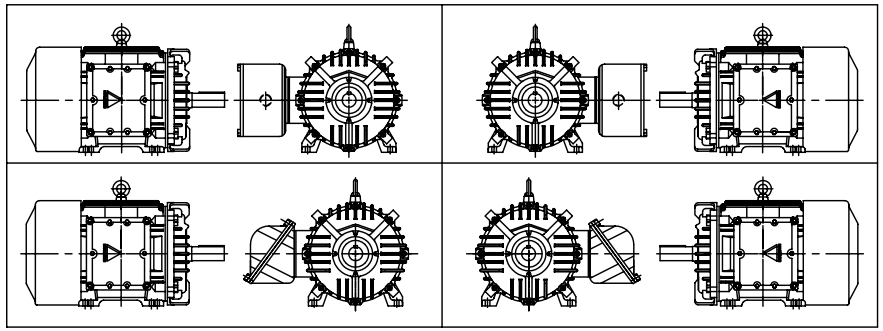


VIEW "A"
SCALE2.5/1

*TERMINAL BOX LOCATION



Ex d IIB T4

(EXPLOSION CONSTRUCTION & IGNITION GROOP)

▽	50S
▽▽	12.5S
▽▽▽	3.2S
▽▽▽▽	0.4S

Q'TY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.

APPD BY	강경중	UNIT	MM	SUBJECT	KS FR.225S, CTYPE, EP
CHKD BY	김옥진	SCALE	1/6	CAD PROJ \ FILE	MMSTDMTR\GJ2SAC01
CHKD BY	김종선	PROJEC'N	3rd Angle	TITLE	OUTLINE DIMENSION
DSND BY	김량규	DATE	2005.06.07		THREE-PHASE INDUCTION MOTOR

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

일반 가공 공차		일반 제관 공차	
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

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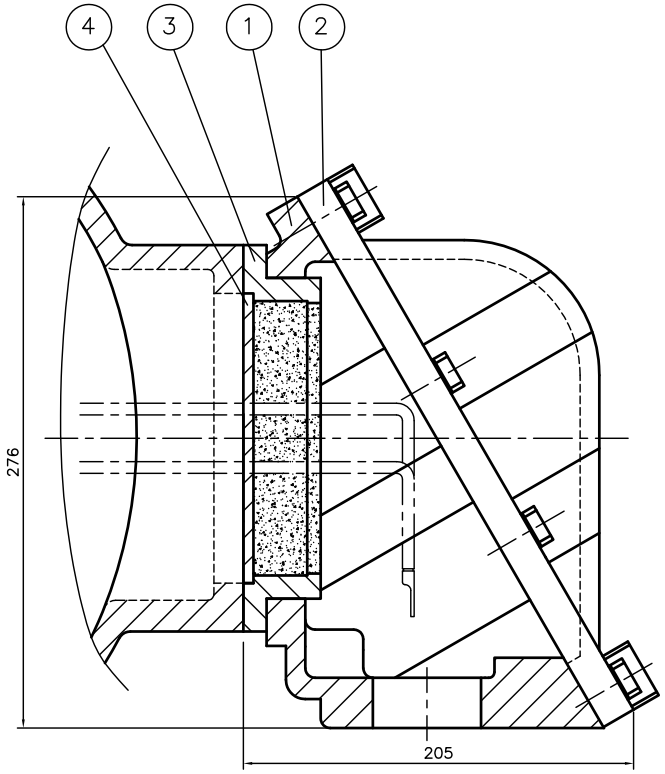
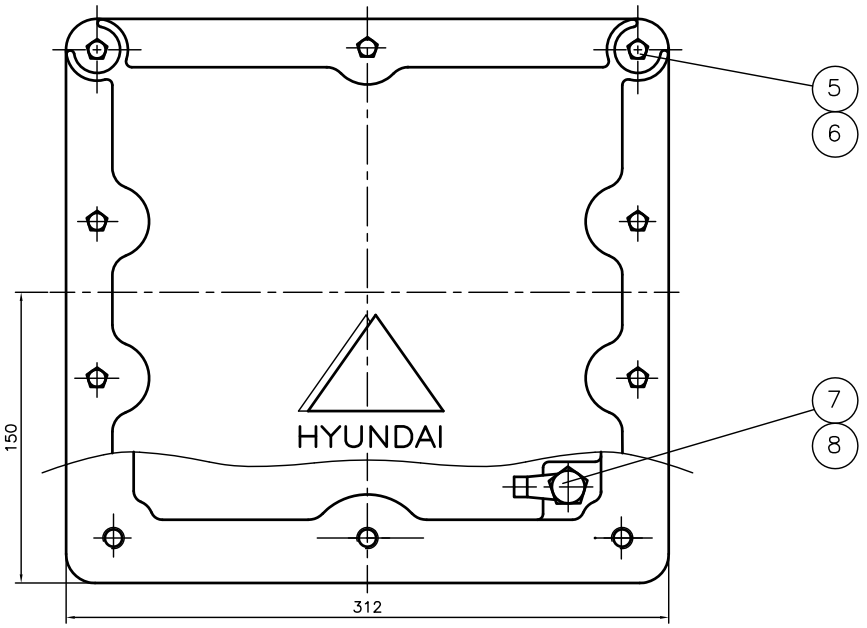
INDUSTRIAL & POWER SYSTEMS

REF. NO		Sheet No.	of
DWG NO	GJ2SAC-01	Revision No.	

25KJ





NO.	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.
1	HEX. BOLT	BRONZE	M10				8
1	EARTH TERMINAL LUG	ST'D					7
10	SPRING WASHER	SUP3					6
10	HEX. BOLT	S45C	M8				5
1	GUIDE PLATE	E.G.P					4
1	ADAPTER	FC25					3
1	TERMINAL BOX COVER	FC25					2
1	TERMINAL BOX BODY	FC25					1
Q'TY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.

APPD BY	KANG K.J	UNIT	MM	SUBJECT	HLA6 FR.225 (d2G4)
Q.P CHK	KIM O.J	SCALE	NONE	TITLE	TERMINAL BOX ASS'Y
CHKD BY		PROJEC'N	3 각법(3rd Angle)		
DSND BY	KIM JONG SEON	DATE	98.10.30		

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REF. NO		Sheet No. of
DWG NO	3M-036961	Revision No.

CAD PROJ ⊞ \ FILE ⊞
T-BOX-M \ 3r036961

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY