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		280LL
Type		HS-200/4
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	NU320M / 6318C3
	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		200 kW	268 HP	
Number of Poles		4		
Rotor Type		Squirrel Cage		
Starting Method*		■ D.O.L	☐ Y-△	
Rated Voltage		440 V	380 V	220 V
Current	Full Load	312.1 A	361.4 A	624.3 A
	Locked-rotor**	630 %	630 %	630 %
Efficiency				
	50% Load	94.5 %		
	75% Load	95.0 %		
	100% Load	95.0 %		
Power Factor(p.u)				
	50% Load	0.860		
	75% Load	0.880		
	100% Load	0.885		
Speed at Full Load		1785 r.p.m		
Torque				
	Full Load	109.1 kg·m		
	Locked-rotor**	170 %		
	Breakdown**	220 %		
Moment of Inertia (J)				
	Load(Max.)	139.850 kg·m²		
	Motor	5.488 kg·m²		
Sound Pressure Level (No-load & mean value at 1m from motor)		85 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		kg
	B5	0	0 kg
	V1	GJ8XPP02	1470 kg
	B3/B5	0	0 kg
Main T-Box Ass'y		3M-036962	

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.

HYUNDAI HEAVY INDUSTRIES CO.,LTD.

PERFORMANCE CURVE

CURVE NO.

P-HS-200/4

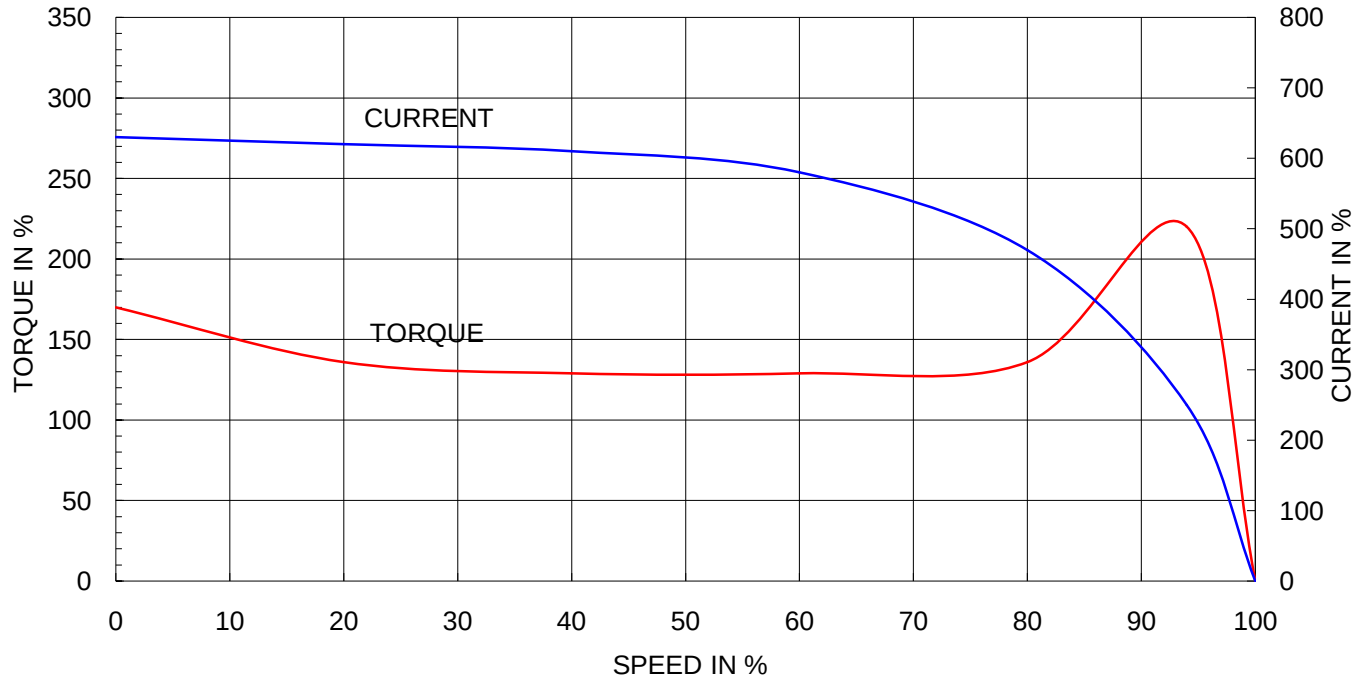
Type :	GHB280X	
Full Load Torque :	109.1	Kg.m
Motor moment of Inertia (J) :	5.488	$Kg.m^2$
Load moment of Inertia (J) :	139.850	$Kg.m^2$

200 kW 4 P 60 Hz

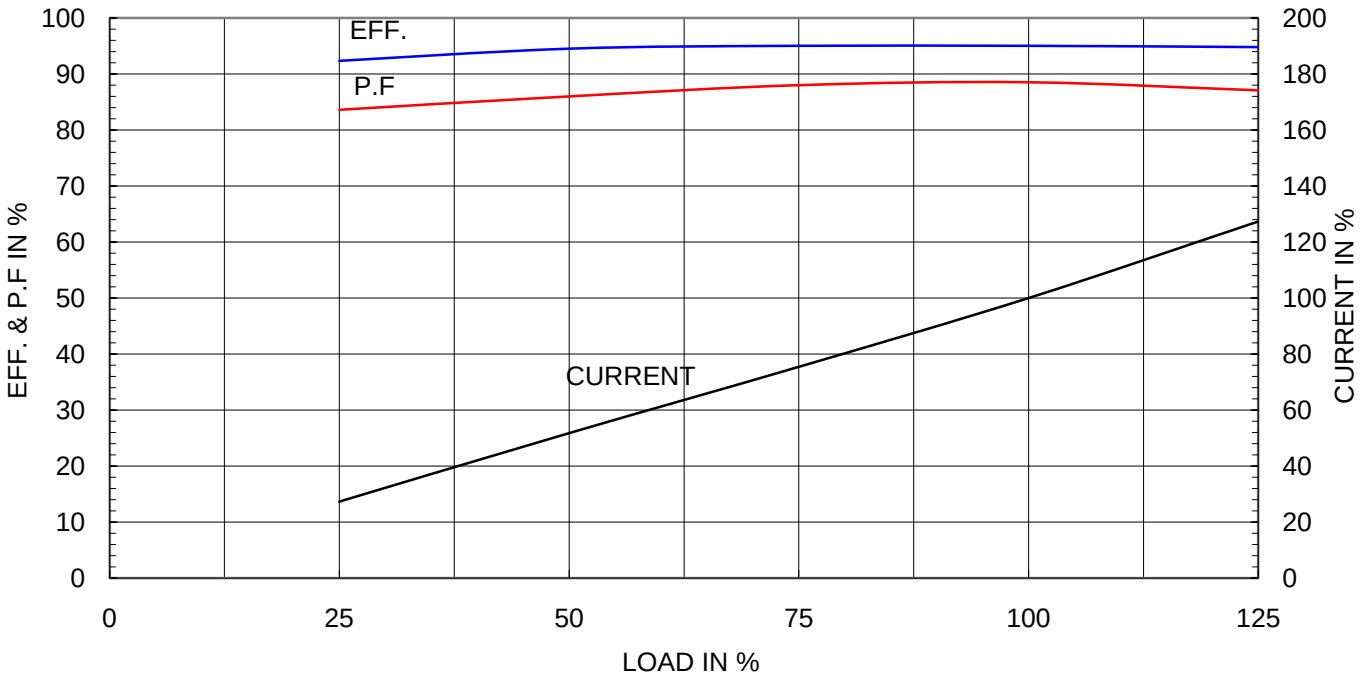
Speed at Full Load : 1785 RPM

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

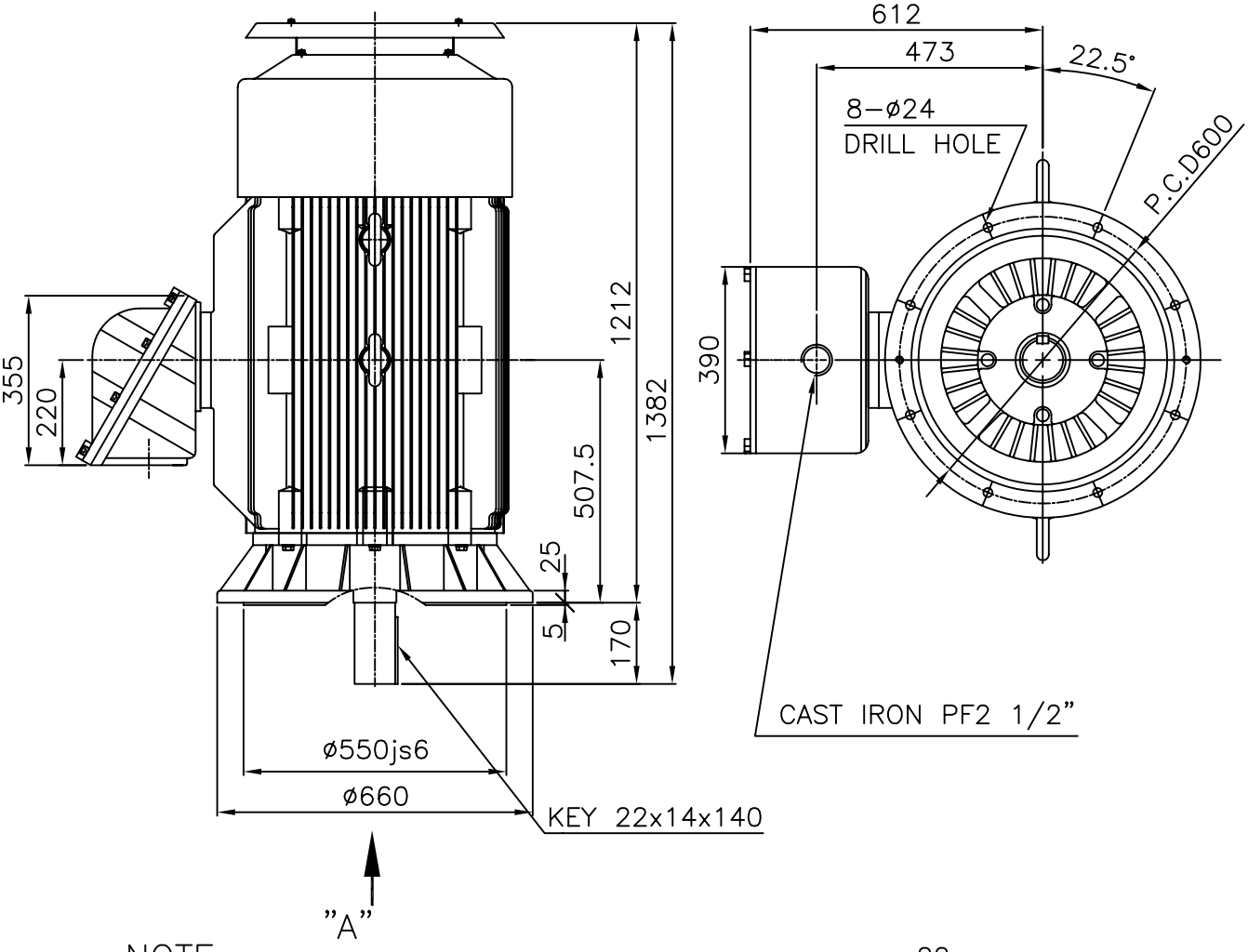


HYUNDAI HEAVY INDUSTRIES CO., LTD.

TEFC

THREE PHASE INDUCTION MOTOR

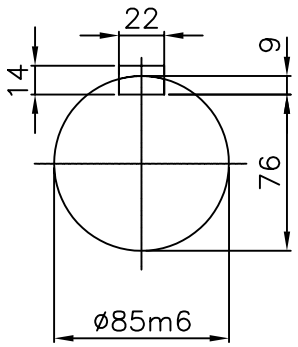
TYPE	GHB280X
	CAST IRON FRAME



NOTE

1.TOLERANCE :

RABBET DIAMETER	ø550	±0.022
SHAFT DIAMETER	ø85	+0.035 +0.013
KEYWAY WIDTH	22	−0.022 −0.074
KEYWAY DEPTH	9	+0.2 0
KEY WIDTH	22	0 −0.052
KEY HEIGHT	14	0 −0.110



VIEW "A"

SCALE 4/1

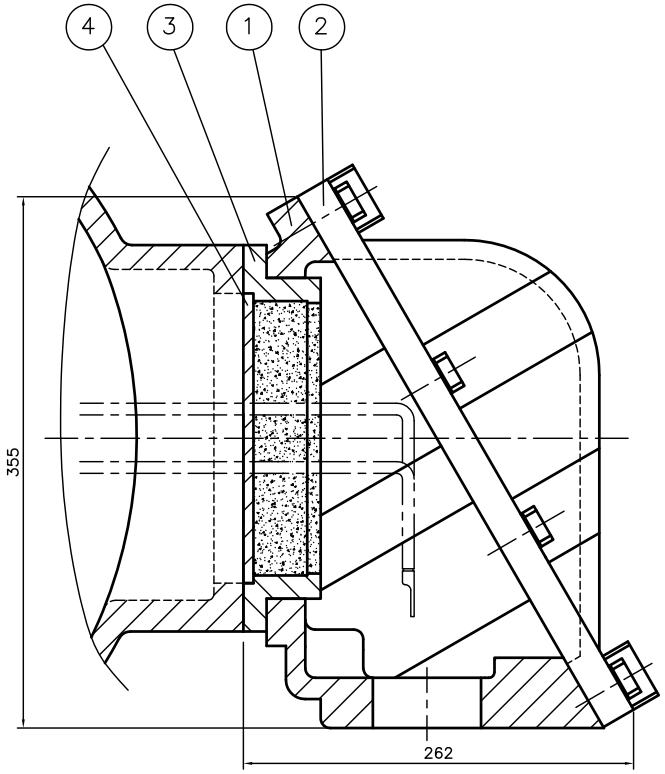
2.Ex d IIB T4 : (EXPLOSION CONSTRUCTION & IGNITION GROUP)

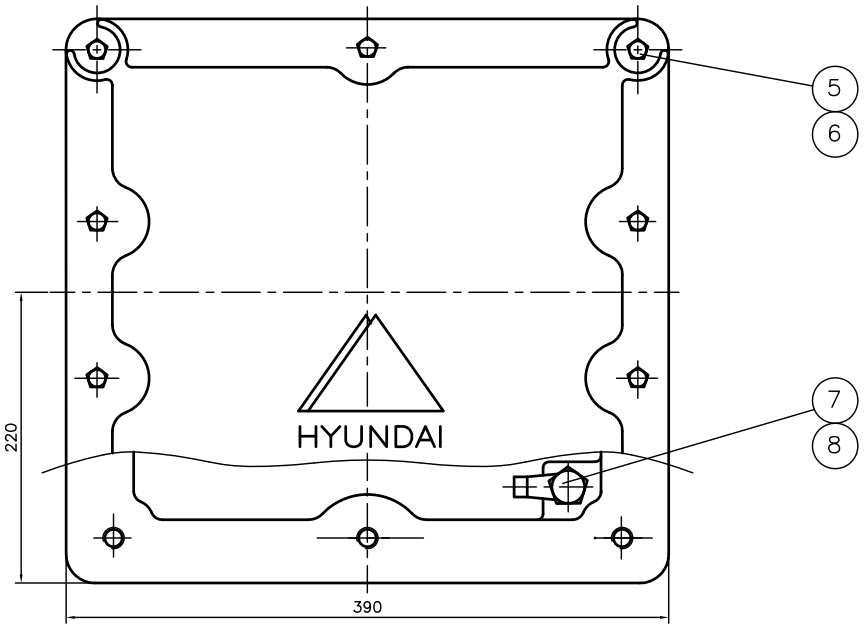
TEFC STANDARD

APPD BY	Y.S.KIM	UNIT	MM
CHKD BY		SCALE	1/15
CHKD BY		PROJEC'N	3rd Angle
DSND BY	LEE NOH DUK	DATE	2008.07.14

SUBJECT	KS Fr.280LL d2G4	CAD PROJ \ FILE	MMSTDMTR/GJ8XPP02
TITLE	OUTLINE THREE–PHASE INDUCTION MOTOR		
REF. NO	L3–SERIES	Sheet No.	of
DWG NO	GJ8XPP02	Revision No.	0

HYUNDAI HEAVY INDUSTRIES CO., LTD.
INDUSTRIAL & POWER SYSTEMS





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	M12				5
1	GUIDE PLATE	E.G.P					4
1	ADAPTER	FC25					3
1	TERMINAL BOX COVER	FC25					2
1	TERMINAL BOX BODY	FC25					1

APPD BY		UNIT	MM	SUBJECT	HLA6 FR.250,280 (d2G4)
Q.P CHK		SCALE	NONE	TITLE	TERMINAL BOX ASS'Y
CHKD BY		PROJEC'N	3 각법(3rd Angle)		
DSND BY	KIM JONG SEON	DATE	98.10.30	REF. NO	Sheet No. of
HYUNDAI HEAVY INDUSTRIES CO., LTD.				DWG NO	3M-036962 Revision No.

CAD PROJ ⊞ \ FILE ⊞
T-BOX-M \ 3r036962

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY