



# AC INDUCTION MOTOR DATA SHEET

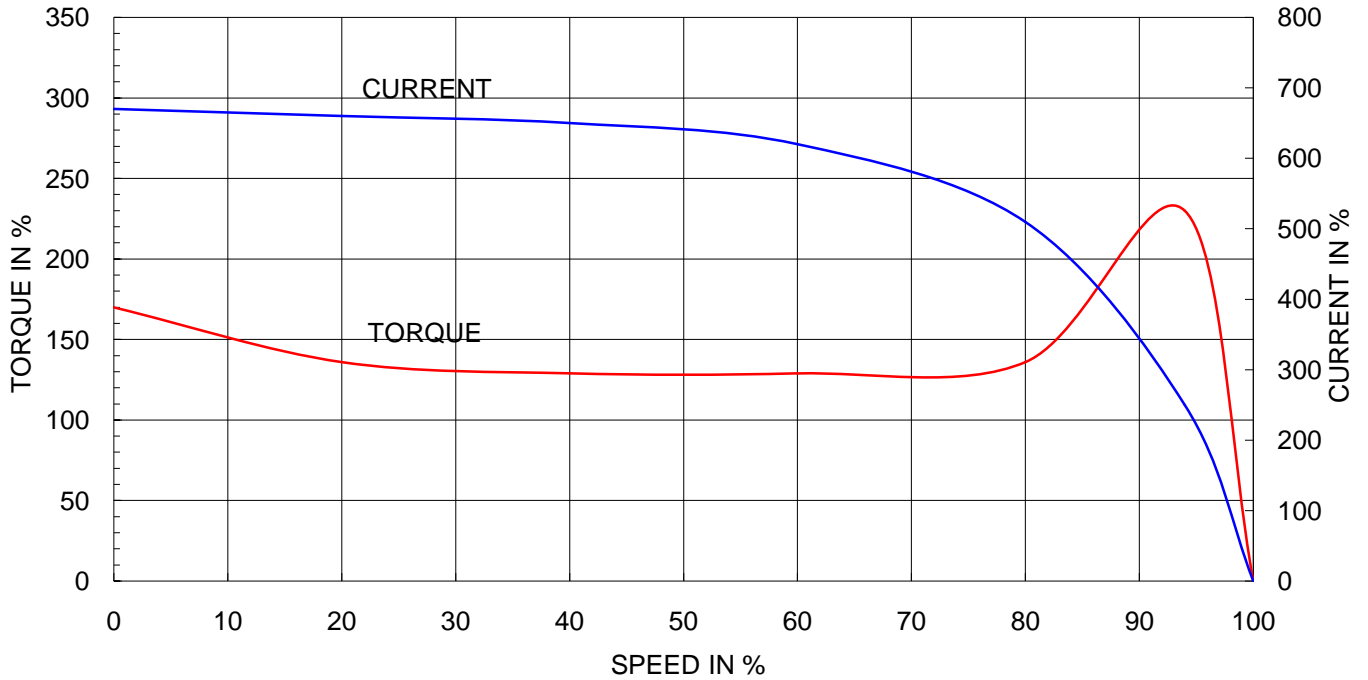
Model No.or RFQ No.		Item No.		Rev. No. [ 0 ]		
Project Name		Project No.		Quantity sets		
GENERAL SPECIFICATION			PERFORMANCE DATA			
Frame Size		280LL		Rated Output 160 kW 214 HP		
Type		HS-160/4		Number of Poles 4		
Enclosure(Protection)		Explosion Proof ( IP55 )		Rotor Type Squirrel Cage		
Method 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		
Insulation Class		<input checked="" type="checkbox"/> F <input type="checkbox"/> B <input type="checkbox"/> H				
Temp. Rise at full load (by resistance method) at 1.0 S.F. 80 deg. C		Motor Location <input type="checkbox"/> Indoor <input checked="" type="checkbox"/> Outdoor		Efficiency		
				50% Load 94.6 %		
Altitude		Less than 1000 meter		75% Load 95.1 %		
Relative Humidity		Less than 80 %		100% Load 95.0 %		
Ambient Temp.		40 deg. C (Max.)		Power Factor(p.u)		
Duty Type		Continuous ( S1 )		50% Load 0.810		
Service Factor		1.00		75% Load 0.875		
Mounting		<input type="checkbox"/> B3 <input type="checkbox"/> B5 <input checked="" type="checkbox"/> V1 <input type="checkbox"/> B3/B5		100% Load 0.880		
Bearing		Type Anti-Friction		Speed at Full Load 1785 r.p.m		
		DE/N-DE NU320M / 6318C3		Torque		
		Lubricant Grease(Gadus S2 V 100 2)		Full Load 87.3 kg·m		
External Thrust		Not applicable		Locked-rotor** 170 %		
Coupling Method		<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-Belt		Breakdown** 230 %		
Shaft Extension		<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double		Moment of Inertia (J)		
Terminal Box		Main <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Cast Iron		Load(Max.) 97.250 kg·m²		
		Aux. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Motor 3.653 kg·m²		
Location		Refer to Outline Drawing		Sound Pressure Level (No-load & mean value at 1m from motor) 85 dB(A)		
Application				Vibration 2.2 mm/sec (r.m.s)		
Area classification		Hazardous		Permissible number of consecutive starts		
Type of Ex-Protection		Ex d II T4		Cold 3 times		
Applicable Standard		KS,IEC		Hot 2 times		
				Paint Munsell No. 4.OPB5.4/5.5(VL-451)		
ACCESSORIES			SUBMITTAL DRAWING			
			Outline Dimension Drawing \ Motor Weight(Approx.)			
			B3			kg
			B5		0	0 kg
			V1		GJ8XPP02	1320 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.

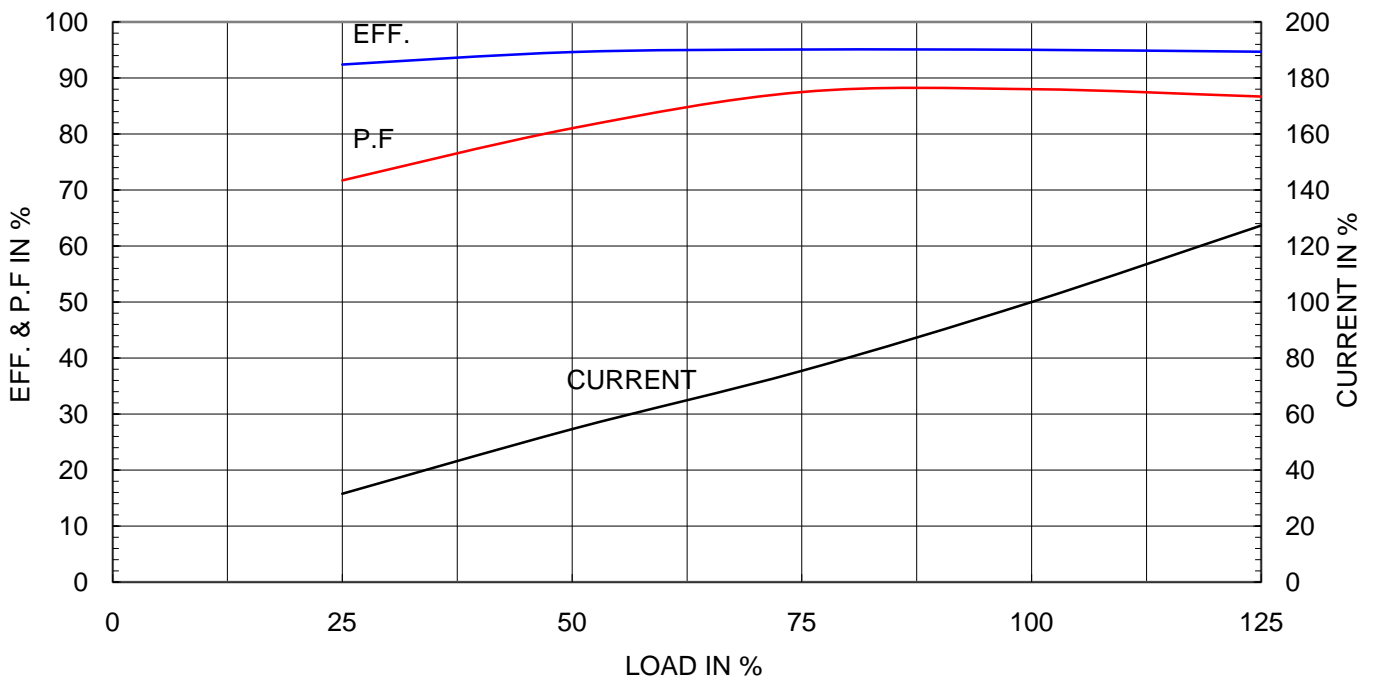
Type	:	GHB280L
Full Load Torque	:	87.3 Kg.m
Motor moment of Inertia (J)	:	3.653 Kg.m <sup>2</sup>
Load moment of Inertia (J)	:	97.250 Kg.m <sup>2</sup>

160 kW	4 P	60 Hz	
Speed at Full Load :		1785 RPM	
Rated Voltage	440V	380V	220V
Full Load Current	251.1A	290.8A	502.3A

SPEED VS TORQUE & CURRENT CURVE



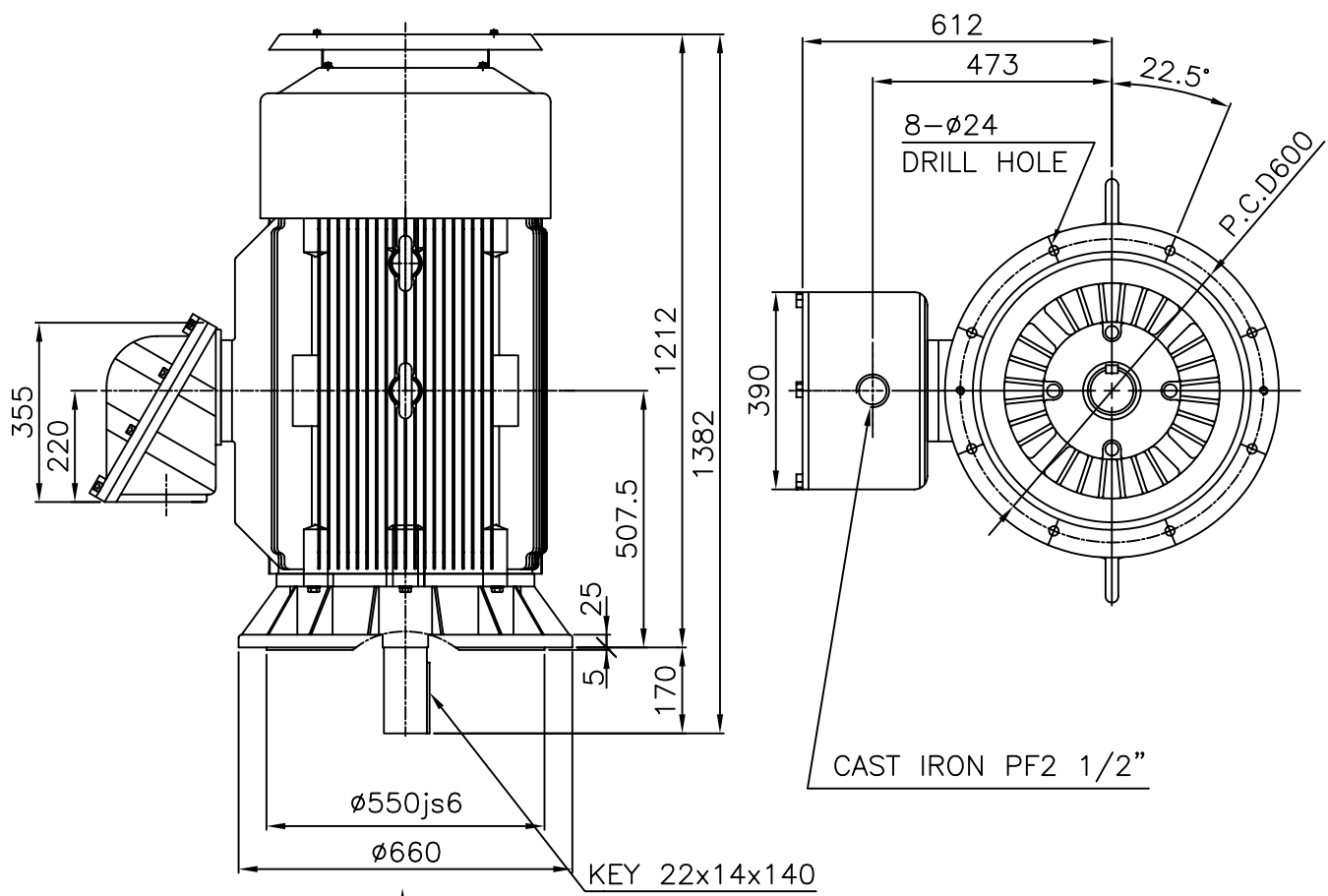
OUTPUT VS EFF., P.F & CURRENT CURVE



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

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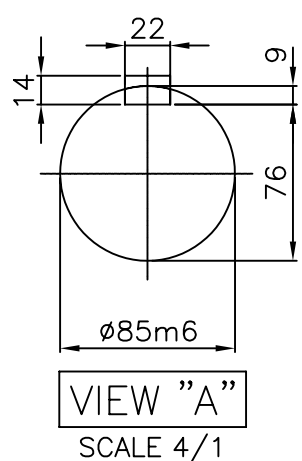
		<h1>TEFC</h1>		<b>TYPE</b>	GHB280X
		<b>THREE PHASE INDUCTION MOTOR</b>			CAST IRON FRAME



**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



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

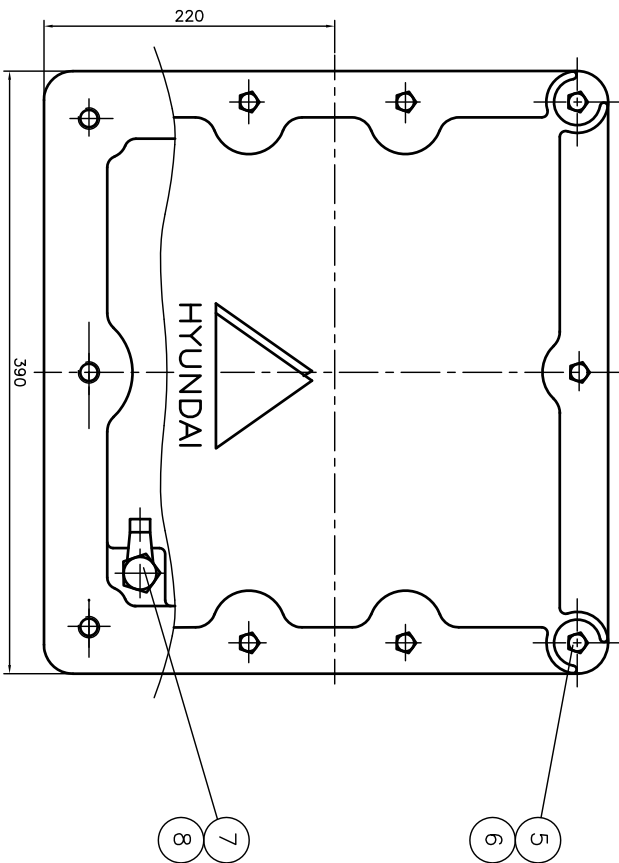
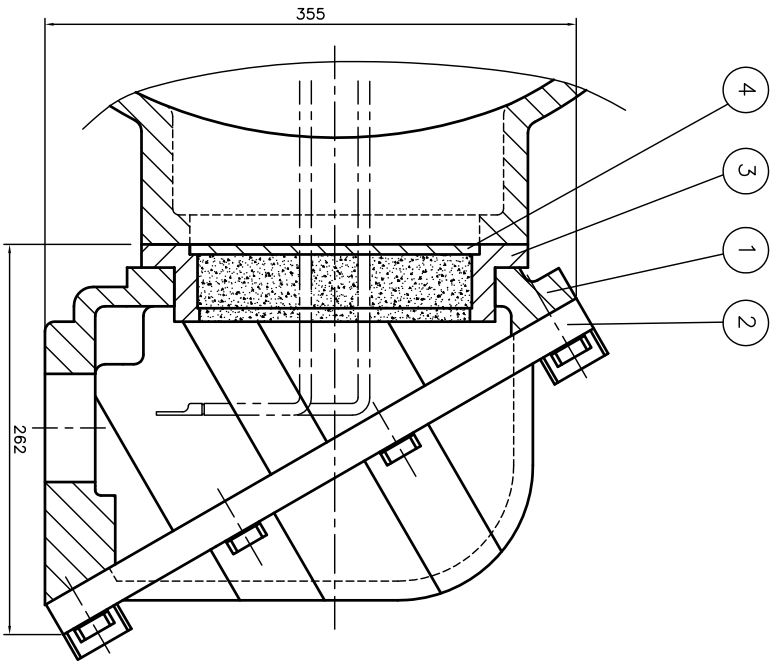
TEFC STANDARD

CAD PROJ \ FILE  
MMSTDMTR/GJ8XPP02

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	
TITLE	<b>OUTLINE</b> THREE-PHASE INDUCTION MOTOR	

REF. NO	L3-SERIES	Sheet No. of
DWG NO	GJ8XPP02	Revision No. 0



QTY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.
1	HEX. BOLT	BRONZE	M10				8
1	EARTH TERMINAL LUG	STD					7
10	SPRING WASHER	SUP-3					6
10	HEX. BOLT	S45C	M12				5
1	GUIDE PLATE	E.C.P					4
1	ADAPTER	FC25					3
1	TERMINAL BOX COVER	FC25					2
1	TERMINAL BOX BODY	FC25					1

APRD BY	UNIT	MM	SUBJECT	H/LAB FR-250,280 (2234)	SCALE	NONE	TITLE	TERMINAL BOX ASS'Y
CHKD BY	SCALE	NONE	PROJECN	3-24(3rd Angle)	DATE	98.10.30	REF. NO.	
DSND BY	KIM JONG SEON		DATE	98.10.30	DWG NO.	3M-036962	Sheet No.	
							of	
							Revision No.	

REV	DATE	CONTENTS	REQD BY	CHKD BY	APRD BY
1					
2					
3					
4					

