HYUNDAI HEAVY INDUSTRIES CO.,LTD.

DATA SHEET of AC INDUCTION MOTOR

150 HP - 2 P
TE

DESIGN NO : KS C4202-1996

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

GENERAL SPECIFICATION

Frame No.		280S
Type		TNB
Enclosure(Protection)		Totally Enclosed (IP IP54)
Cooling Method		IC411(FC)
Frequency		60 Hz
Phase		3 Φ
Insulation Class		■ F ☐ B ☐ H
Temp. Rise at full load (by resistance method)		
	at 1.0 S.F	105 ℃
Location		☐ Indoor ☐ Outdoor
Altitude		Less than 1000 meter
Humidity		Less than 80 %
Ambient Temp.		40 ℃ (Max.)
Duty		CONT.(S1)
Service Factor		1.00
Electric Design		NEMA Design B
Construction		☐ B3 ☐ B5 ☐ V1 ☐
Bearing	Type	Anti-friction
	DE/ODE	6314C3 \ 6314C3
	Lubricant	GREASE(ALVANIA#2)
External Thrust		Not applicable
Coupling Method		■ Direct ☐ V-Belt
Shaft Extension		■ Single ☐ Double
Terminal Box	Main	☐ Steel ■ Cast Iron
	Aux.	☐ Yes ■ No
	Location	■ Left ☐ Right
		(Viewed from Drive End)
Application		
Area Classification		Not applicable
Applicable Standard		KS
Inspection and Performance Test		
	HHI Stand.	Maker Test Report

PERFORMANCE DATA

Output		150 HP		110 KW
Poles		2 P		
Rotor Type		Squirrel Cage		
Starting Method(*)		■ D.O.L.		☐ Y-△
Rated Voltage		440 V	380 V	220 V
Current	Rated Load	172.4 A	199.6 A	344.8 A
	Start'g-D.O.L	1,120.6 A	1,297.6 A	2,241.3 A
Efficiency				
	50% Load	91.0 %		
	75% Load	91.8 %		
	100% Load	92.0 %		
Power Factor				
	50% Load	86.0 %		
	75% Load	90.5 %		
	100% Load	91.0 %		
Speed at Rated Load		3570 RPM	/ SLIP	0.83 %
Torque (D.O.L)				
	Rated	30.0 Kg.m		100 %
	Starting	39.0 Kg.m		130 %
	Break down	69.0 Kg.m		230 %
Allowable Load GD^2 referred to motor shaft		43.000 $Kg.m^2$		
Motor GD^2		5.160 $Kg.m^2$		
Noise Level (dB(A))		98 dB(A) at 1m from motor(No-load)		
Vibration(Velocity)		3.8 mm/sec.(peak)		
Starting Duty		Cold 2 times \ Hot 1 time		
Paint	Munsell No.	4.0PB5.4/5.5(VL-451)		

SUBMITTAL DRAWING

Outline Dimension Drawing \ Motor Weight(Approx.)		
☐ B3	TJ8SAC50	700 Kg
☐ B5	TJ80BC50	740 Kg
☐ V1	TJ80PC50	740 Kg

Main T-Box Ass'y: 3M-016882

ACCESSORIES(OPTION ITEM)

SPARE PARTS

REMARK

Note: Others not mentioned in this specification shall be in accordance with HHI standard.
Above technical data are only design values and shall be guaranteed with tolerance of applicable standard.

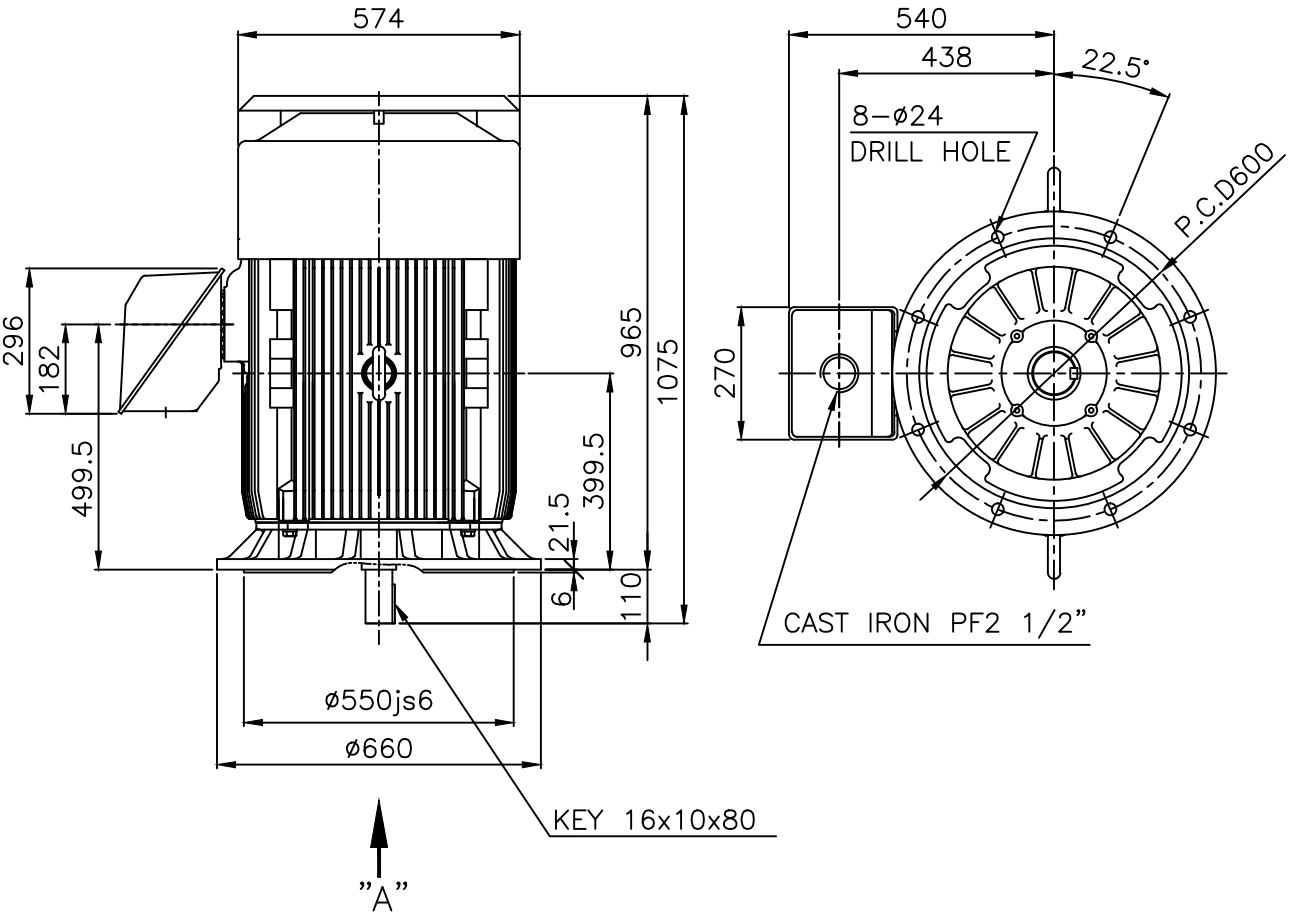
Date	DSND	CHKD	CHKD	APPD
2004.01.27	KIM R.G.		KIM O.J.	KANG K.G.

HYUNDAI HEAVY INDUSTRIES CO., LTD.

TEFC

THREE PHASE INDUCTION MOTOR

TYPE	(1) TNB , TDB
	CAST IRON FRAME

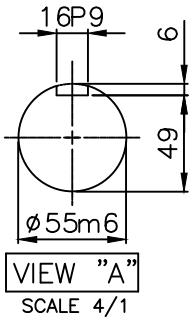


NOTE

1.TOLERANCE :

RABBET DIAMETER	ø550js6	±0.022
SHAFT DIAMETER	ø55m6	+0.030 +0.011
KEYWAY WIDTH	16P9	−0.018 −0.061
KEYWAY DEPTH	6	+0.2 0

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



VIEW "A"
SCALE 4/1

APPD BY	KANG K.J.	UNIT	MM
CHKD BY	KIM O.J.	SCALE	1/15
CHKD BY		PROJEC'N	3rd Angle
DSND BY	KIM RYANG GYU	DATE	2004.02.13

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

SUBJECT	KS Fr.280 TEFC	TEFC STANDARD
		CAD PROJ \ FILE
		MMSTDMTR/TJ80PC50
TITLE	OUTLINE THREE–PHASE INDUCTION MOTOR	
REF. NO	L3–SERIES	Sheet No. of
DWG NO	TJ80PC50	Revision No. 0

HYUNDAI HEAVY INDUSTRIES CO., LTD.

PERFORMANCE CURVE

CURVE NO.

P-TNBJ8S02110

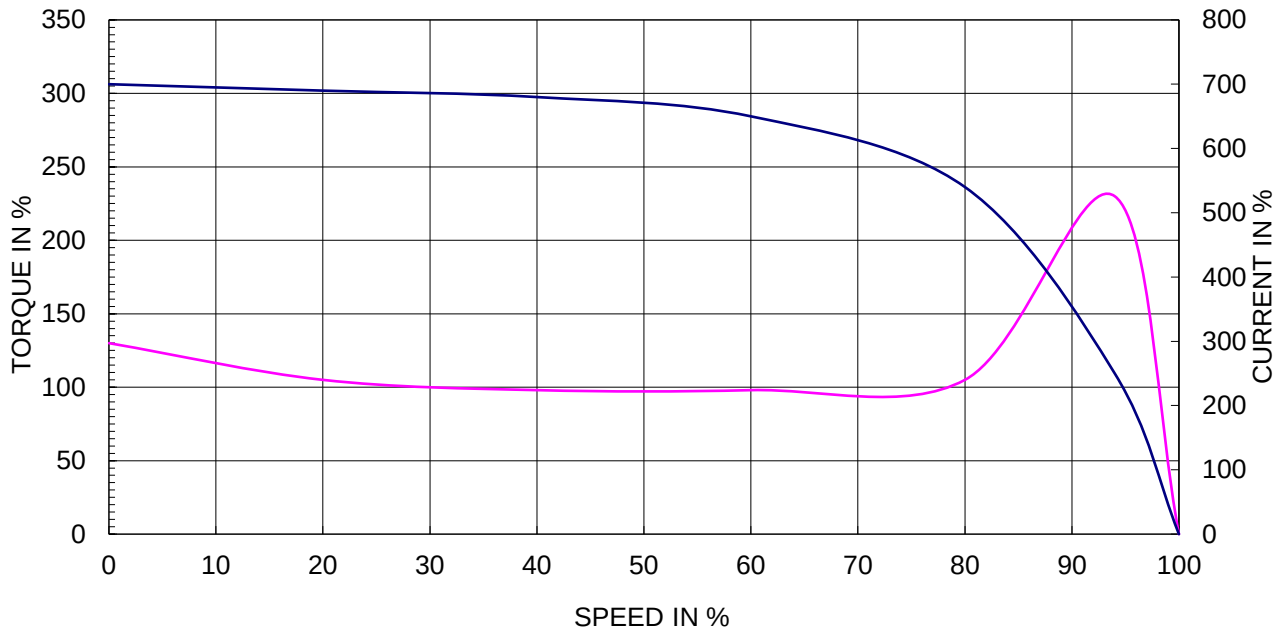
TYPE	:	
RATED TORQUE :	30.0	Kg.m
GD2 OF MOTOR :	5.2	$Kg.m^2$
(ALLOWABLE) GD2 OF LOA	43.0	$Kg.m^2$

110 kW | 2 P | 60 Hz

RATED SPEED : 3570 RPM

VOLTAGE	440V	380 V	220V
RATED CURRENT	172.4A	199.6 A	344.8A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE