HYUNDAI HEAVY INDUSTRIES CO.,LTD.

DATA SHEET of AC INDUCTION MOTOR

120 HP - 4 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.		250M
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	6316C3 \ 6313C3
	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		120 HP	90 KW	
Poles		4 P		
Rotor Type		Squirrel Cage		
Starting Method(*)		■ D.O.L.	☐ Y-△	
Rated Voltage		440 V	380 V	220 V
Current	Rated Load	144.8 A	167.6 A	289.5 A
	Start'g-D.O.L	941.0 A	1,089.6 A	1,882.0 A
Efficiency				
	50% Load	91.8 %		
	75% Load	92.7 %		
	100% Load	92.7 %		
Power Factor				
	50% Load	81.0 %		
	75% Load	86.0 %		
	100% Load	88.0 %		
Speed at Rated Load		1765 RPM	/ SLIP 1.94 %	
Torque (D.O.L)				
	Rated	49.7 Kg.m	100 %	
	Starting	79.5 Kg.m	160 %	
	Break down	104.3 Kg.m	210 %	
Allowable Load GD^2 referred to motor shaft				
		221.000 $Kg.m^2$		
Motor GD^2		6.940 $Kg.m^2$		
Noise Level (dB(A))		82 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	TJ5MAP51	525 Kg
☐ B5	TJ50BP51	550 Kg
☐ V1	TJ50PP51	550 Kg

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

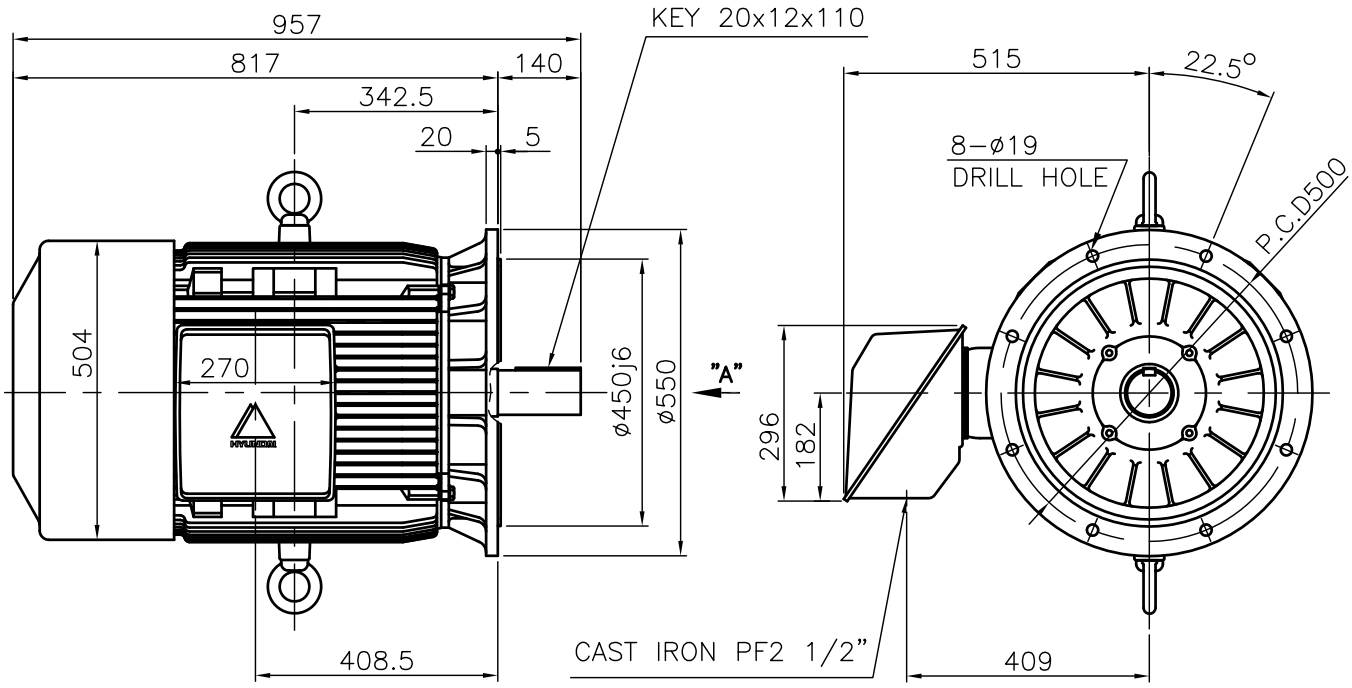
ACCESSORIES(OPTION ITEM)

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.

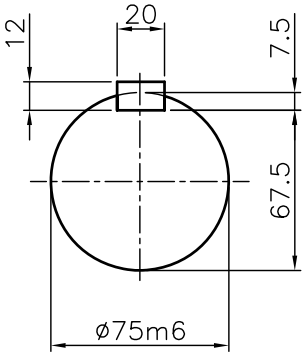


NOTE

1.TOLERANCE :

RABBET DIAMETER	ø450j6	±0.020
SHAFT DIAMETER	ø75m6	+0.030 +0.011
KEYWAY WIDTH	20P9	−0.022 −0.074
KEYWAY DEPTH	7.5	+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	1/13
CHKD BY	LEE N.D.	PROJEC'N	3rd Angle
DSND BY	KIM RYANG GYU	DATE	2007.03.23

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

SUBJECT	KS Fr.250 TEFC	TEFC STANDARD
		CAD PROJ \ FILE
		MMSTDMTR/TJ50BP5
TITLE	OUTLINE	
	THREE−PHASE INDUCTION MOTOR	
REF. NO	L3−Series	Sheet No. of
DWG NO	TJ50BP51	Revision No. 0

1 2 3 4

HYUNDAI
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PERFORMANCE CURVE

CURVE NO.

P-TNBJ5M04090

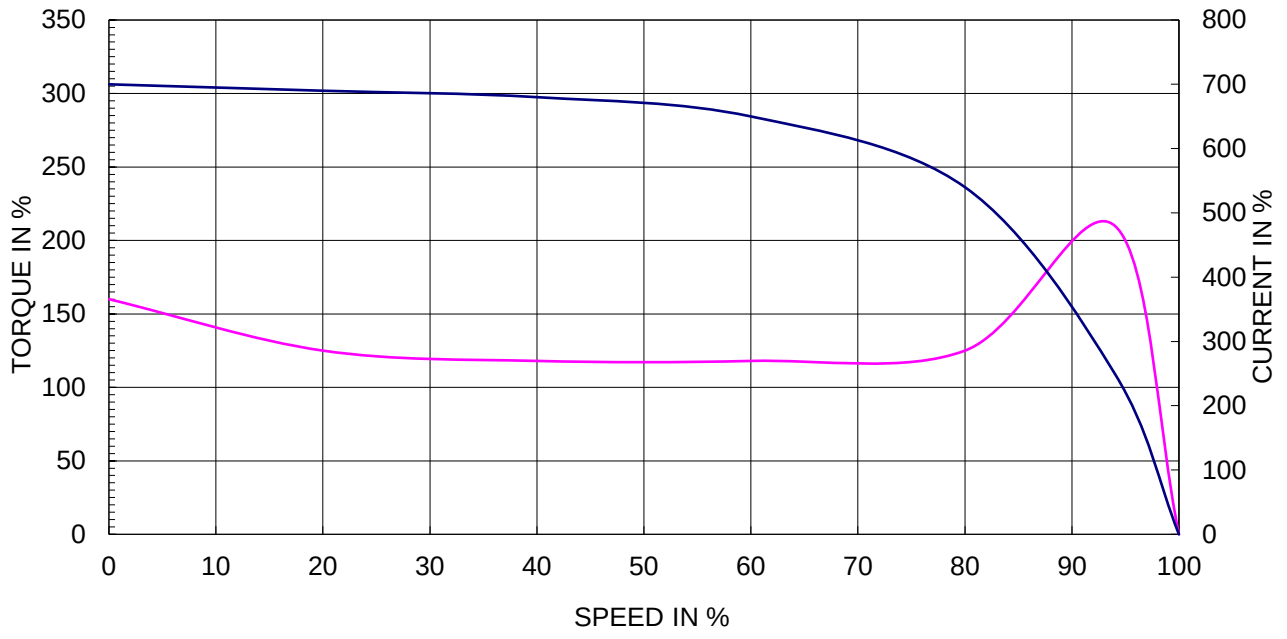
TYPE :		
RATED TORQUE :	49.7	Kg.m
GD2 OF MOTOR :	5.0	$Kg.m^2$
(ALLOWABLE) GD2 OF LOA	221.0	$Kg.m^2$

90 kW 4 P 60 Hz

RATED SPEED : 1765 RPM

VOLTAGE	440V	380 V	220V
RATED CURRENT	144.8A	167.6 A	289.5A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE