HYUNDAI HEAVY INDUSTRIES CO.,LTD.

DATA SHEET of AC INDUCTION MOTOR

214 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.		280L
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		214 HP		160 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	248.1 A	287.2 A	496.1 A
	Start'g-D.O.L	1,612.3 A	1,866.9 A	3,224.7 A
Efficiency				
	50% Load	91.7 %		
	75% Load	92.3 %		
	100% Load	92.5 %		
Power Factor				
	50% Load	87.0 %		
	75% Load	91.0 %		
	100% Load	91.5 %		
Speed at Rated Load		3565 RPM	/ SLIP	0.97 %
Torque (D.O.L)				
	Rated	43.7 Kg.m		100 %
	Starting	52.5 Kg.m		120 %
	Break down	91.8 Kg.m		210 %
Allowable Load GD^2 referred to motor shaft				
		50.000 $Kg.m^2$		
Motor GD^2		7.180 $Kg.m^2$		
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	TJ8LAC50	850 Kg
☐ B5	TJ8LBC50	890 Kg
☐ V1	TJ8LPC50	890 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.

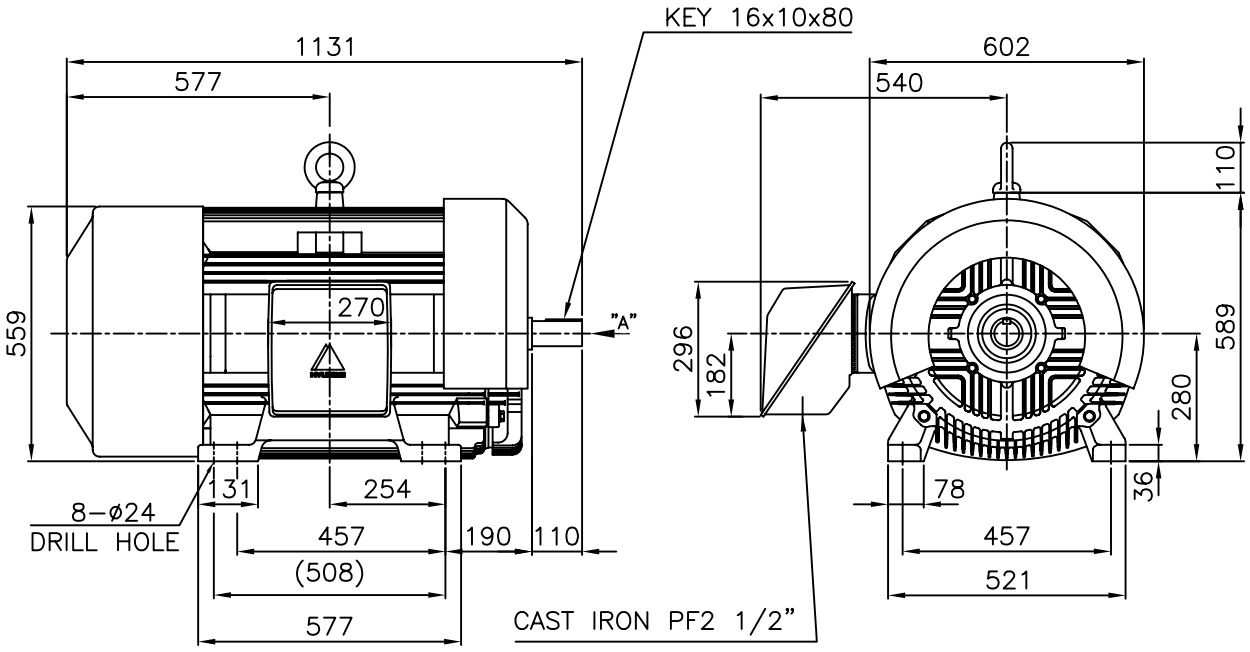
HYUNDAI HEAVY INDUSTRIES CO., LTD.

TEFC

THREE PHASE INDUCTION MOTOR

TYPE (1) TNB , TDB

CAST IRON FRAME

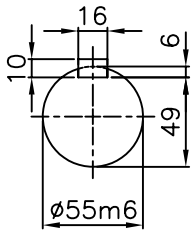


NOTE

1.TOLERANCE :

CENTER HEIGHT	$280\ ^{0}_{-1.0}$
BASE HOLE	$ø24\ ^{+0.43}_{0}$
SHAFT DIAMETER	$ø55\ ^{+0.030}_{+0.011}$
KEYWAY WIDTH	$16\ ^{-0.018}_{-0.061}$
KEYWAY DEPTH	$6\ ^{+0.2}_{0}$
KEY WIDTH	$16\ ^{0}_{-0.043}$
KEY HEIGHT	$10\ ^{0}_{-0.090}$

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	1/17
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.280L TEFC	TEFC STANDARD
		CAD PROJ \ FILE: MMSTDMTR/TJ8LAC50
TITLE	OUTLINE THREE–PHASE INDUCTION MOTOR	
REF. NO	L2–Series	Sheet No. of
DWG NO	TJ8LAC50	Revision No. 0

HYUNDAI
HEAVY INDUSTRIES CO., LTD

PERFORMANCE CURVE

CURVE NO.
P-TNBJ8L02160

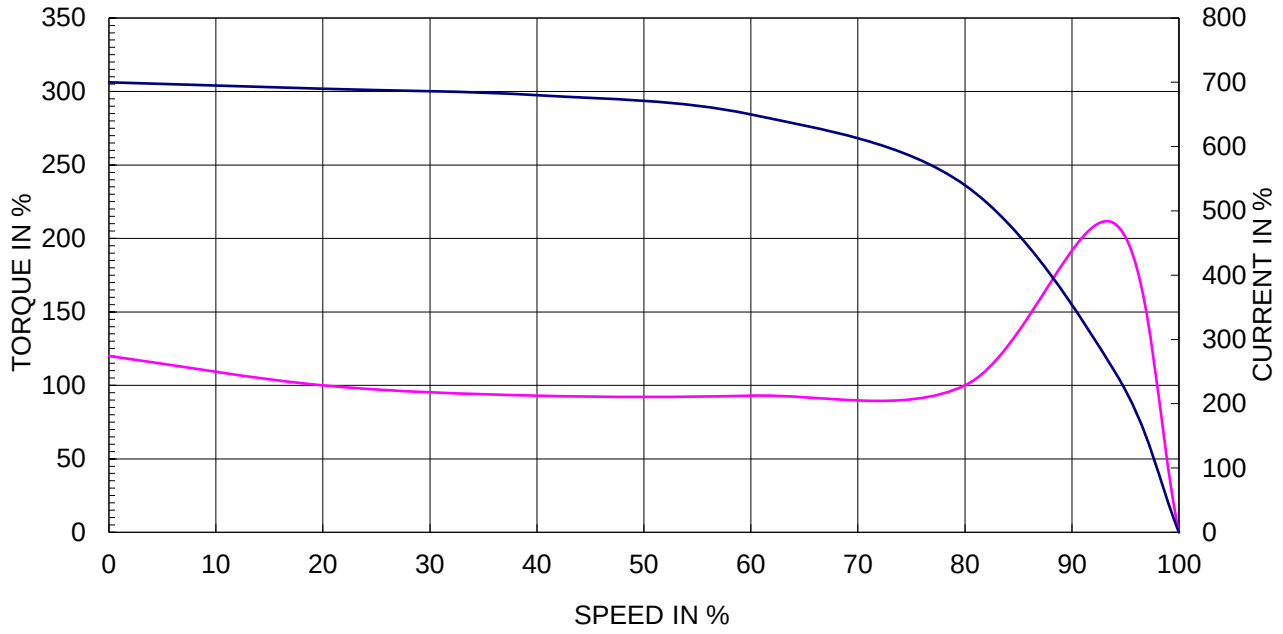
TYPE	:	
RATED TORQUE :	43.7	Kg.m
GD2 OF MOTOR :	7.2	$Kg.m^2$
(ALLOWABLE) GD2 OF LOA	50.0	$Kg.m^2$

160 kW 2 P 60 Hz

RATED SPEED : 3565 RPM

VOLTAGE	440V	380 V	220V
RATED CURRENT	248.1A	287.2 A	496.1A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE