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		100L
Type		HS
Enclosure(Protection)		Totally Enclosed (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		Continuos (S1)
Service Factor		1.15
Mounting		☐ B3 ■ B5 ☐ V1 ☐ B3/B5
Bearing	Type	Anti-Friction
	DE/N-DE	6206ZZC3 / 6206ZZC3
	Lubricant	Grease(Polyrex-EM)
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		Non-Hazardous
Type of Ex-Protection		Not applicable
Applicable Standard		KS,IEC,NEMA MG1 Part30(Vpeak)

PERFORMANCE DATA

Rated Output		2.2 kW	3 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	4.1 A	4.7 A	8.2 A
	Locked-rotor**	650 %	650 %	650 %
Efficiency				
	50% Load	87.0 %		
	75% Load	88.0 %		
	100% Load	87.5 %		
Power Factor(p.u)				
	50% Load	0.649		
	75% Load	0.753		
	100% Load	0.805		
Speed at Full Load		1750 r.p.m		
Torque				
	Full Load	1.2 kg·m		
	Locked-rotor**	200 %		
	Breakdown**	270 %		
Moment of Inertia (J)				
	Load(Max.)	2.500 kg·m²		
	Motor	0.008 kg·m²		
Sound Pressure Level (No-load & mean value at 1m from motor)		64 dB(A)		
Vibration		1.6 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	227B2020AB01	40 kg
	V1		kg
	B3/B5		kg
Main T-Box Ass'y		227B8004CB	

SPARE PARTS

REMARK

High Efficiency

∗ For use on PWM VFD 10:1VT, 3:1CT@1.0S.F&F Temp. rise

Date	DSND	CHKD	CHKD	APPD
2011-04-14	W.H.BACK	S. J. RA	O. J. KIM	J. H. KIM

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-2.2/4

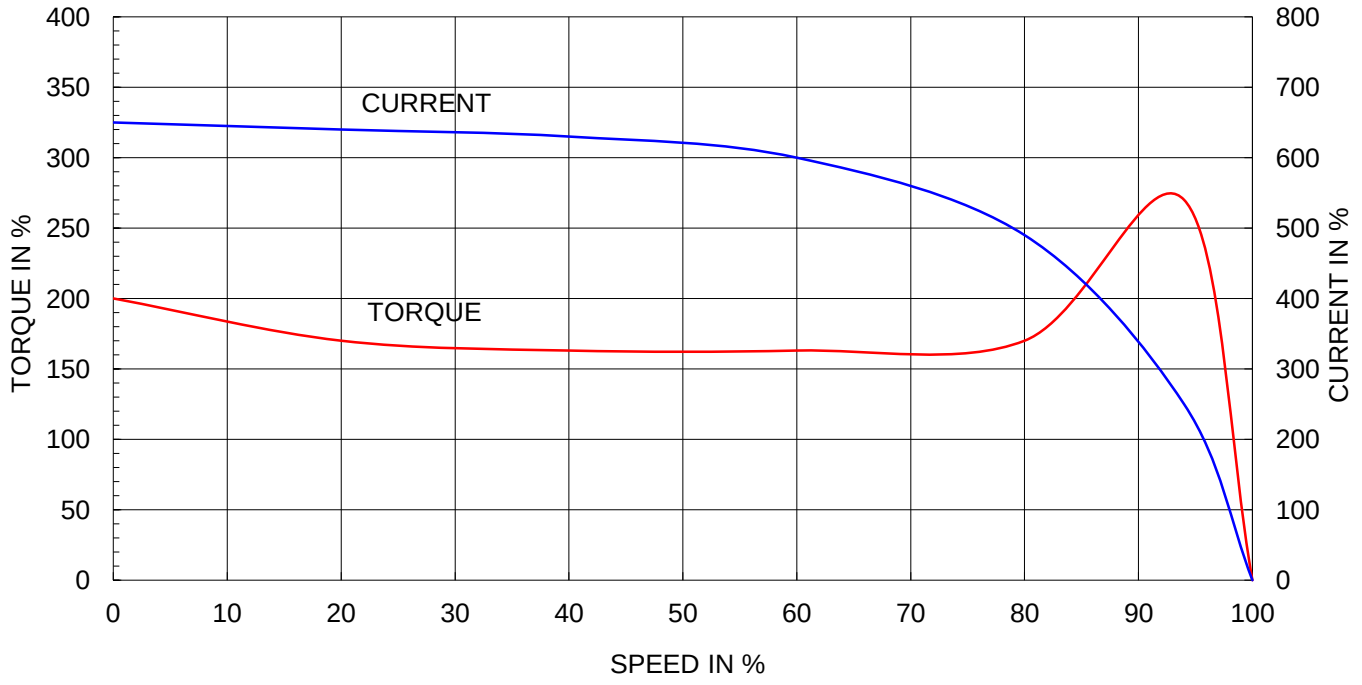
Type :	HS	
Full Load Torque :	1.2	Kg.m
Motor moment of Inertia (J) :	0.008	$Kg.m^2$
Load moment of Inertia (J) :	2.500	$Kg.m^2$

2.2 kW 4 P 60 Hz

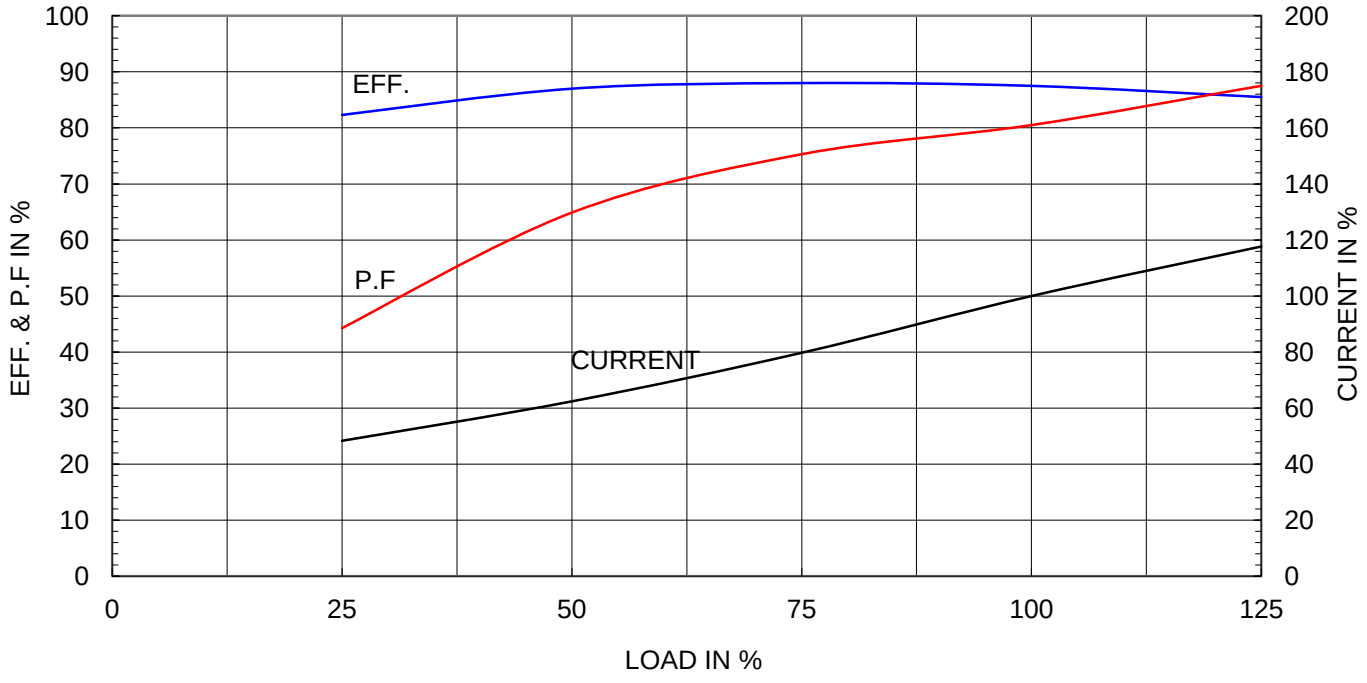
Speed at Full Load : 1750 RPM

Rated Voltage	440V	380V	220V	
Full Load Current	4.1A	4.7A	8.2A	

SPEED VS TORQUE & CURRENT CURVE



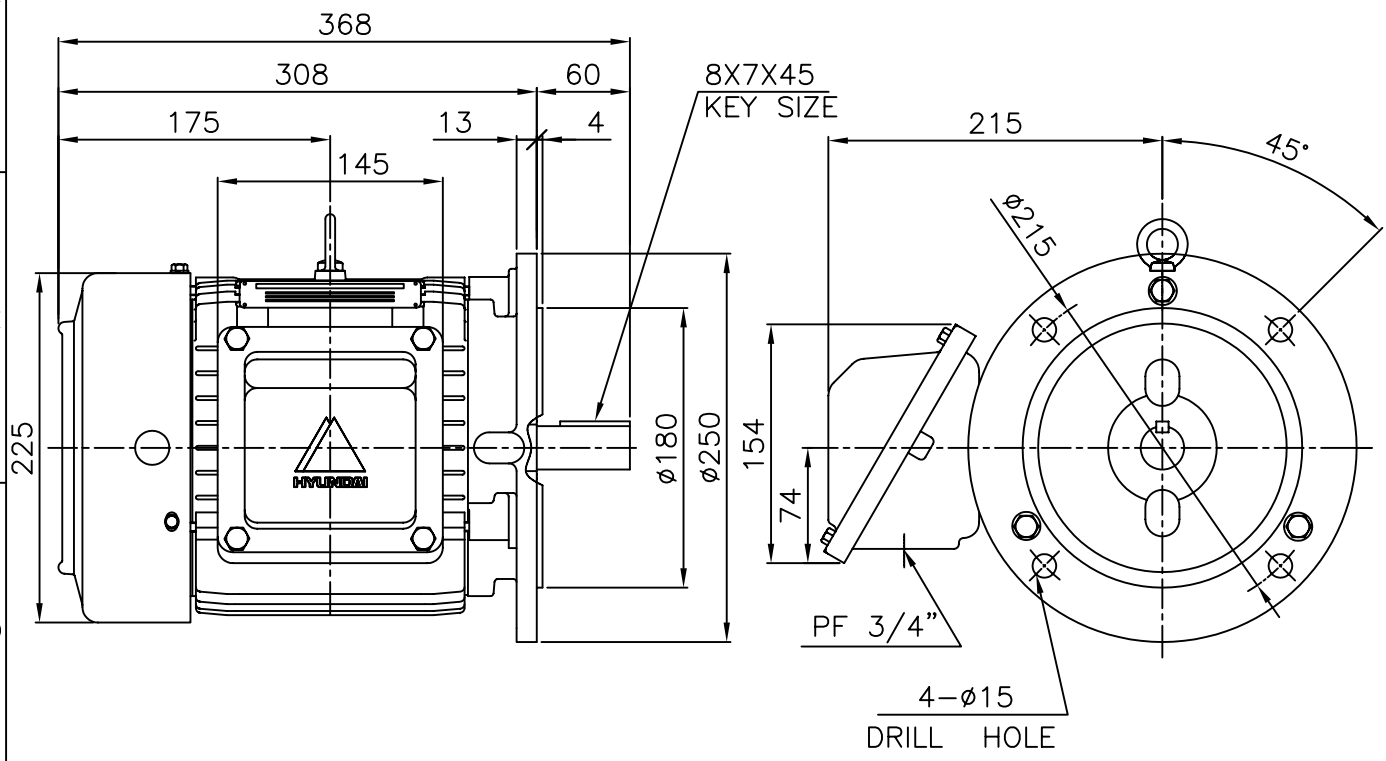
OUTPUT VS EFF., P.F & CURRENT CURVE



HYUNDAI HEAVY INDUSTRIES CO., LTD.

TEFC
THREE PHASE INDUCTION MOTOR

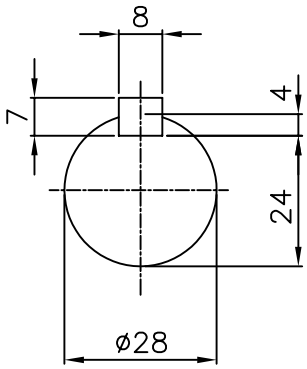
TYPE	HL, HLS
	CAST IRON FRAME



NOTE

1.TOLERANCE :

FLANGE HOLES	ø15	+0.43 0
RABBET DIAMETER	ø180	+0.014 −0.011
SHAFT DIAMETER	ø28	+0.009 −0.004
KEYWAY WIDTH	8	0 −0.036
KEYWAY DEPTH	4	+0.2 0



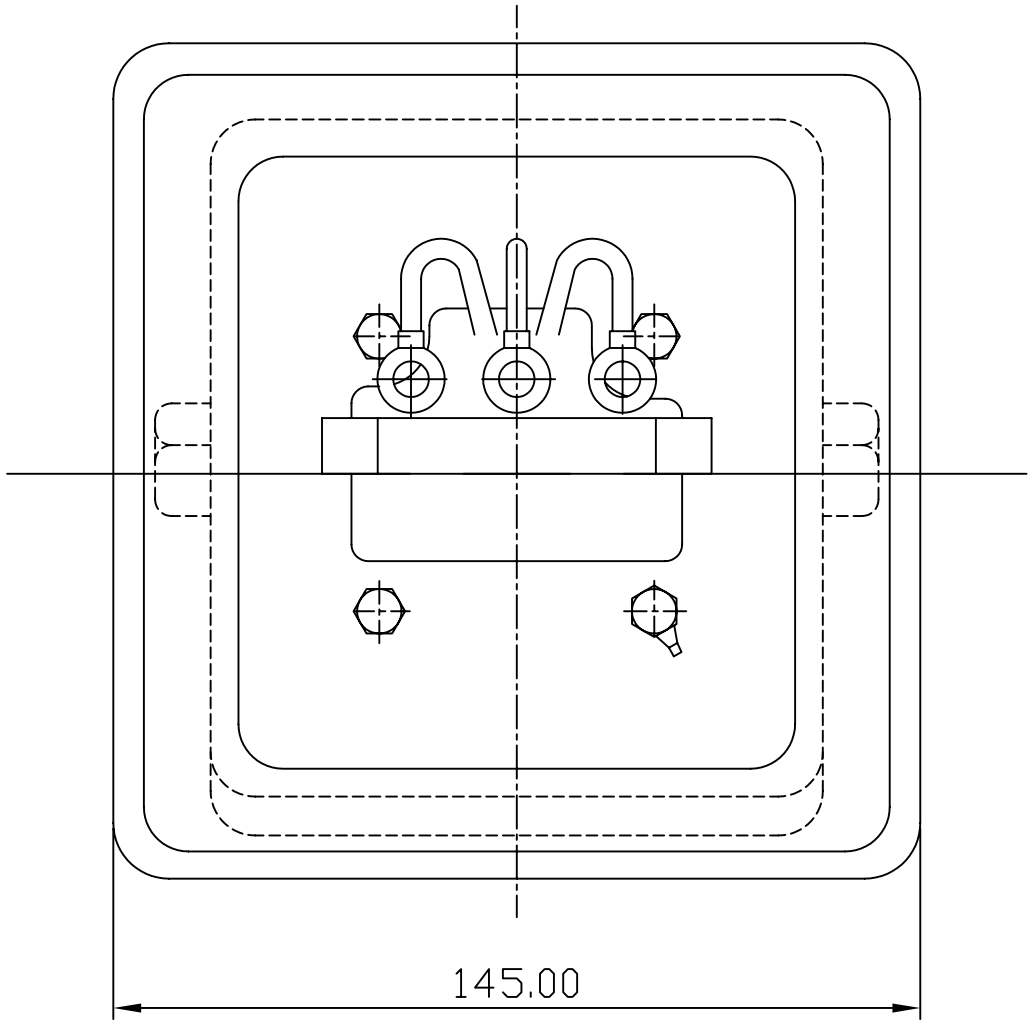
*CAST IRON CONDUIT BOX

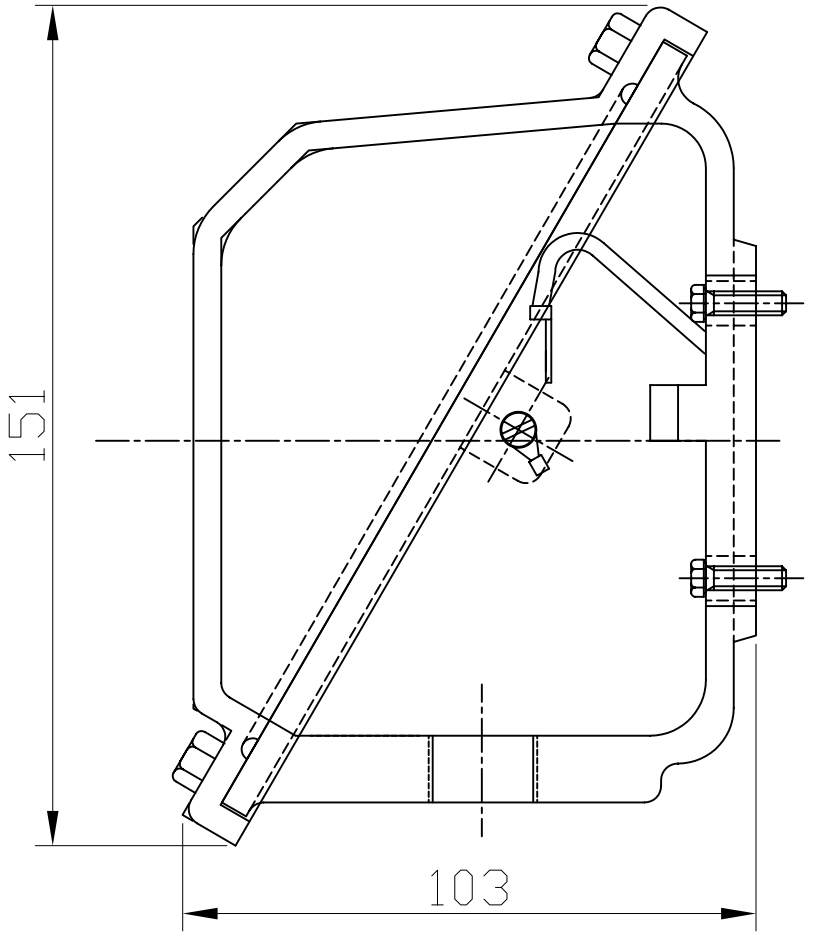
APPD BY	J. H. KIM	UNIT	mm
CHKD BY	Y. S. KIM	SCALE	1/5
CHKD BY	S. H. KO	PROJEC'N	3rd Angle
DSND BY	I. K. KIM	DATE	2002.10.30

SUBJECT	KS 100L	CAD PROJ \ FILE: XSDNKS\B2020AA01
TITLE	OUTLINE	
REF. NO	B2020AB01	Sheet No. of
DWG NO	227B2020AB01	Revision No. 0

HYUNDAI HEAVY INDUSTRIES CO., LTD.
Electro-Electric System Division

HYUNDAI HEAVY INDUSTRIES CO., LTD.





REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY

Q'TY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.

APPD BY		UNIT	MM	SUBJECT	IEC 100 – 132
CHKD BY		SCALE	1/1	TITLE	TERMINAL BOX ASS'Y
CHKD BY		PROJEC'N	3 각법(3rd Angle)		
DSND BY	J. S. JEONG	DATE	2005.10.19.		

CAD PROJ 명 \ FILE 명: XSMOUT\7B8004CB

HYUNDAI HEAVY INDUSTRIES CO., LTD.
ELECTRICAL ENGINEERING DIVISION

REF. NO	7B8004CB	Sheet No.	of
DWG NO	227B8004CB	Revision No.	0