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		132S
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	6208ZZC3 / 6208ZZC3
	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		3.7 kW	5 HP	
Number of Poles		6		
Rotor Type		Squirrel Cage		
Starting Method*		■ D.O.L	☐ Y- △	
Rated Voltage		440 V	380 V	220 V
Current	Full Load	7.5 A	8.7 A	15.1 A
	Locked-rotor**	600 %	600 %	600 %
Efficiency				
	50% Load	86.8 %		
	75% Load	87.9 %		
	100% Load	87.5 %		
Power Factor(p.u)				
	50% Load	0.551		
	75% Load	0.676		
	100% Load	0.735		
Speed at Full Load		1165 r.p.m		
Torque				
	Full Load	3.1 kg·m		
	Locked-rotor**	180 %		
	Breakdown**	220 %		
Moment of Inertia (J)				
	Load(Max.)	7.750 kg·m²		
	Motor	0.040 kg·m²		
Sound Pressure Level (No-load & mean value at 1m from motor)		62 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	227B2003AB03	67	kg
B5	227B2020AB03	69	kg
V1	227B2060AB03	69	kg
B3/B5	227B2040AB03	69	kg
Main T-Box Ass'y	227B9003CB2		

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.

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PERFORMANCE CURVE

CURVE NO.

P-HS-3.7/6

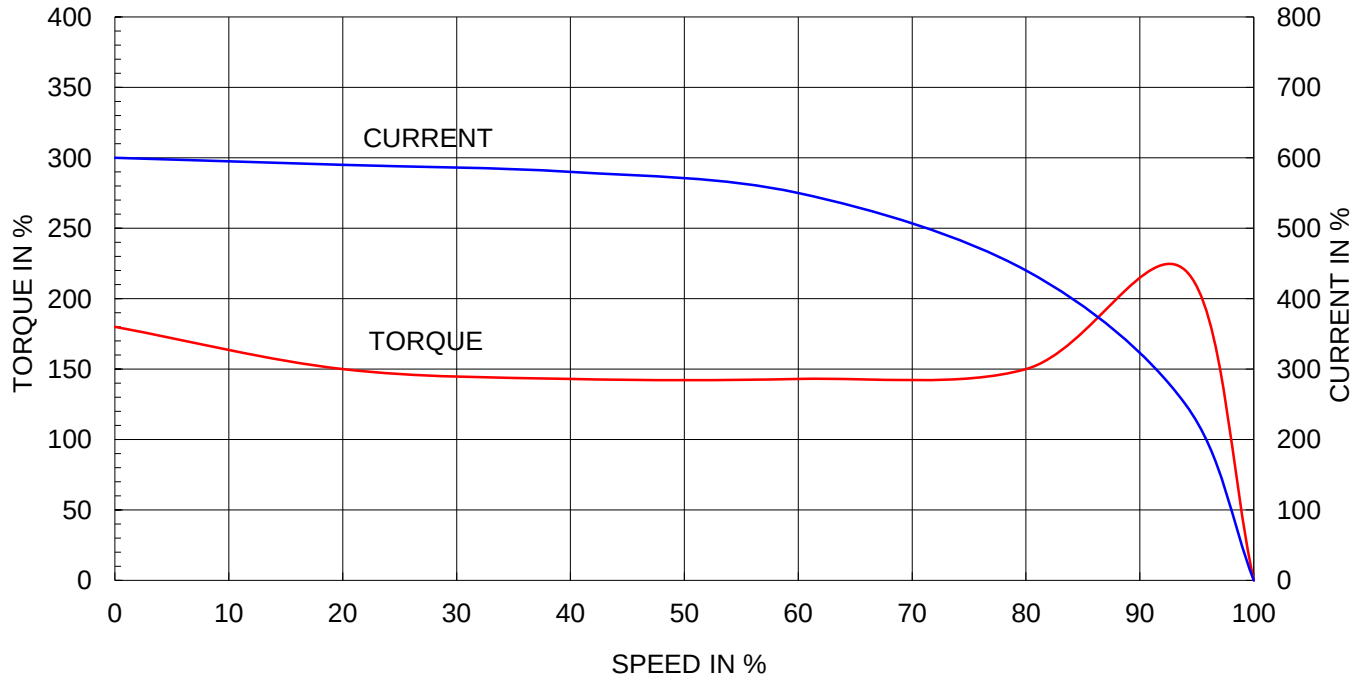
Type :	HS	
Full Load Torque :	3.1	Kg.m
Motor moment of Inertia (J) :	0.040	$Kg.m^2$
Load moment of Inertia (J) :	7.750	$Kg.m^2$

3.7 kW 6 P 60 Hz

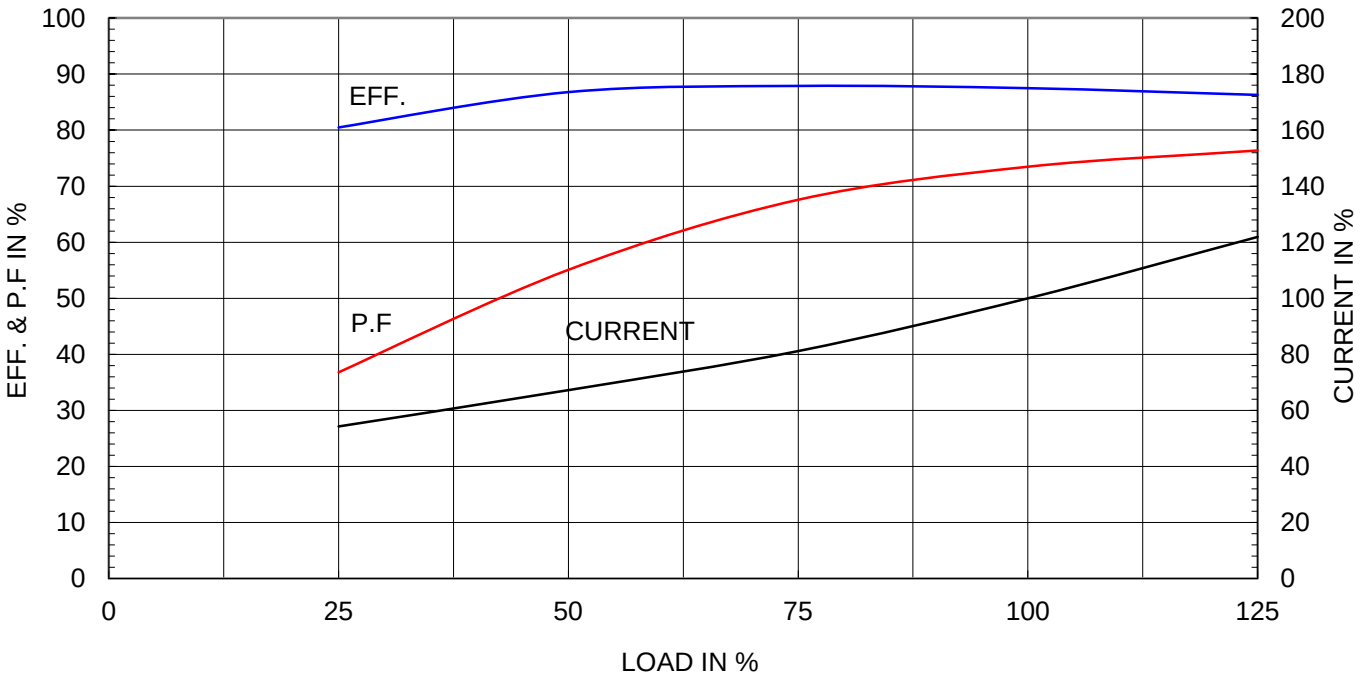
Speed at Full Load : 1165 RPM

Rated Voltage	440V	380V	220V	
Full Load Current	7.5A	8.7A	15.1A	

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



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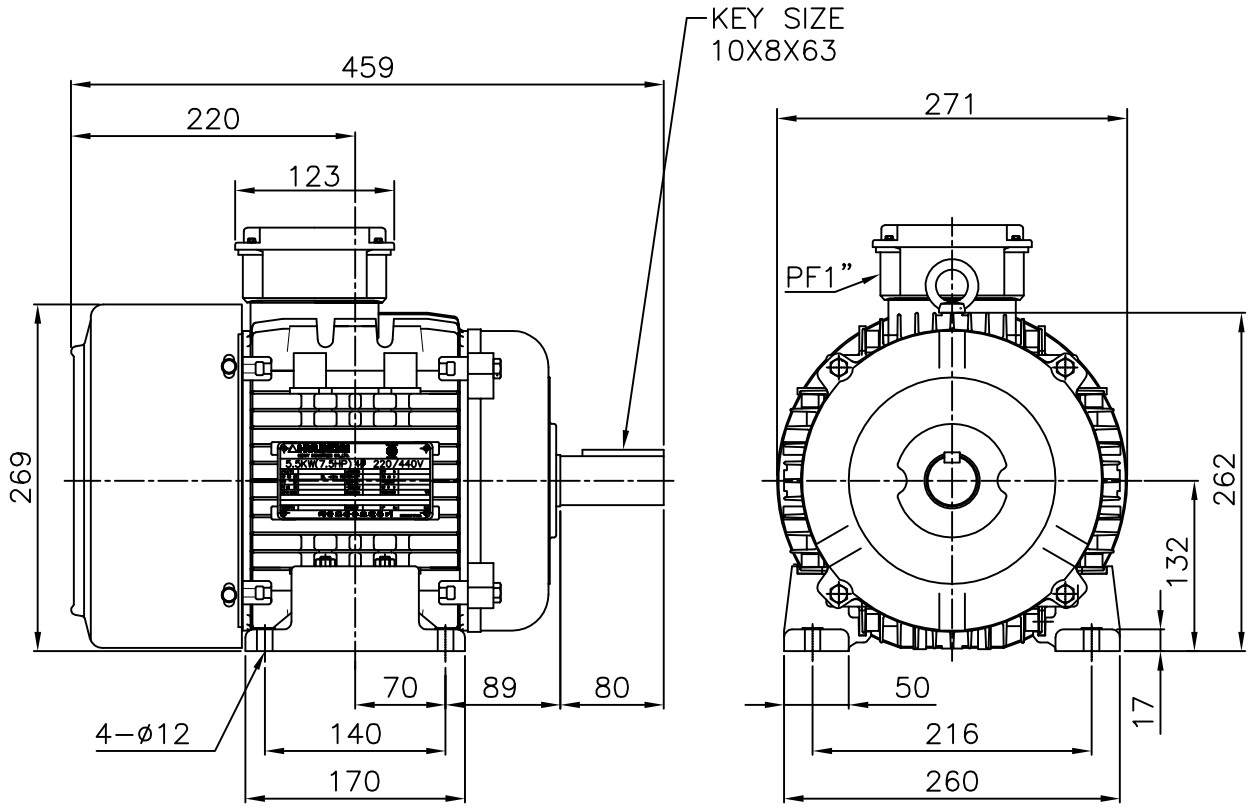
TEFC
THREE PHASE INDUCTION MOTOR

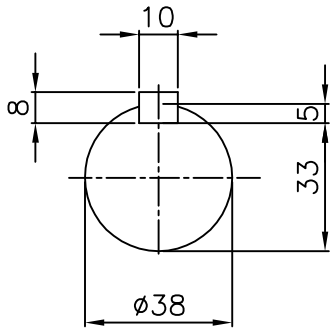
TYPE	HL, HLS
	CAST IRON FRAME



NOTE

1.TOLERANCE :

CENTER HEIGHT	$132^{+0}_{-0.5}$
BASE HOLES	$ø12^{+0.43}_{-0}$
SHAFT DIAMETER	$ø38^{+0.018}_{+0.002}$
KEYWAY WIDTH	$10^{+0}_{-0.036}$
KEYWAY DEPTH	$5^{+0.2}_{-0}$



CAST IRON CONDUIT BOX

APPD BY		UNIT	mm	SUBJECT	KS 132S	CAD PROJ \ FILE: XSDNKS\B2000AC03
CHKD BY		SCALE	1/6	TITLE	OUTLINE	
CHKD BY	S. W. SEO	PROJEC'N	3rd Angle			
DSND BY	J. S. JEONG	DATE	2009.8.11			

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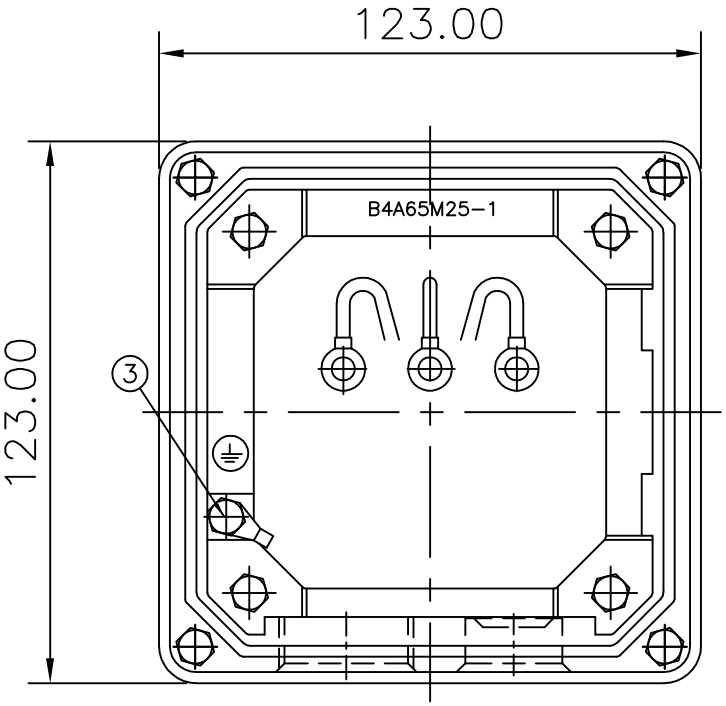
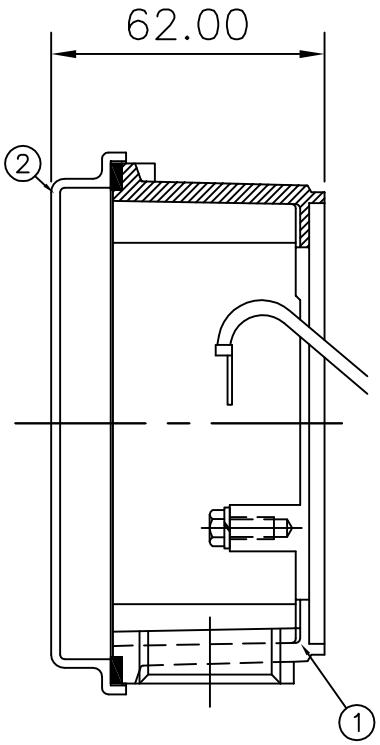
Electro-Electric System Division

REF. NO	B2000AB03	Sheet No. of
DWG NO	227B2003AB03	Revision No. 0





PT	DESPRIPTION	MATERIAL	Q'TY
1	CONDUIT BOX	ALDCS8	1
2	CONDUIT BOX COVER	ALDCS8	1
3	GROUND TERMINAL BOLT & LUG	CU	1

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 132FR
CHKD BY		SCALE	N/S		
CHKD BY		PROJEC'N	3 |Z|?!|a|?L(3rd	TITLE Angle)	CONDUIT BOX ASS'Y
DSND BY	JEONG JIN SEON	DATE	2006.02.16.		

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

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REF. NO	227B9003CB2	Sheet No.	of
DWG NO	227B9003CB2	Revision No.	0