

AC INDUCTION MOTOR DATA SHEET

Model No.or RFQ No.		Item No.		Rev. No. [0]			
Project Name		Project No.		Quantity sets			
GENERAL SPECIFICATION			PERFORMANCE DATA				
Frame Size	112M		Rated Output	3.7 kW 5 HP			
Type	HS		Number of Poles	4			
Enclosure(Protection)	Totally Enclosed (IP55)		Rotor Type	Squirrel Cage			
Method of Cooling	IC411(FC)		Starting Method*	☒ D.O.L ☐ Y- Δ			
Rated Frequency	60 Hz		Rated Voltage	440 V	380 V 220 V		
Number of Phases	3		Current	Full Load 6.9 A	8.0 A 13.8 A		
Insulation Class	☒ F ☐ B ☐ H		Locked-rotor**	650 %	650 % 650 %		
Temp. Rise at full load (by resistance method)			Efficiency				
at 1.0 S.F 80 deg. C			50% Load 87.0 %				
Motor Location	☐ Indoor ☒ Outdoor		75% Load 88.0 %				
Altitude	Less than 1000 meter		100% Load 87.5 %				
Relative Humidity	Less than 80 %		Power Factor(p.u)				
Ambient Temp.	40 deg. C (Max.)		50% Load 0.649				
Duty Type	Continuos (S1)		75% Load 0.753				
Service Factor	1.15		100% Load 0.805				
Mounting	☐ B3 ☐ B5 ☐ V1 ☒ B3/B5		Speed at Full Load 1740 r.p.m				
Bearing	Type	Anti-Friction	Torque				
	DE/N-DE	6206ZZC3 / 6206ZZC3	Full Load 2.1 kg·m				
	Lubricant	Grease(Polyrex-EM)	Locked-rotor** 210 %				
External Thrust	Not applicable		Breakdown** 260 %				
Coupling Method	☒ Direct ☐ V-Belt		Moment of Inertia (J)				
Shaft Extension	☒ Single ☐ Double		Load(Max.) 3.250 kg·m²				
Terminal Box	Main	☐ Steel ☒ Cast Iron	Motor 0.013 kg·m²				
	Aux.	☐ Yes ☒ No	Sound Pressure Level (No-load & mean value at 1m from motor)				
	Location	Refer to Outline Drawing	64 dB(A)				
Application			Vibration 1.6 mm/sec (r.m.s)				
Area classification	Non-Hazardous		Permissible number of consecutive starts				
Type of Ex-Protection	Not applicable		Cold 3 times				
Applicable Standard	KS,IEC,NEMA MG1 Part30(Vpeak)		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		kg		
			V1		kg		
			B3/B5	227B2040AB02	47 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.

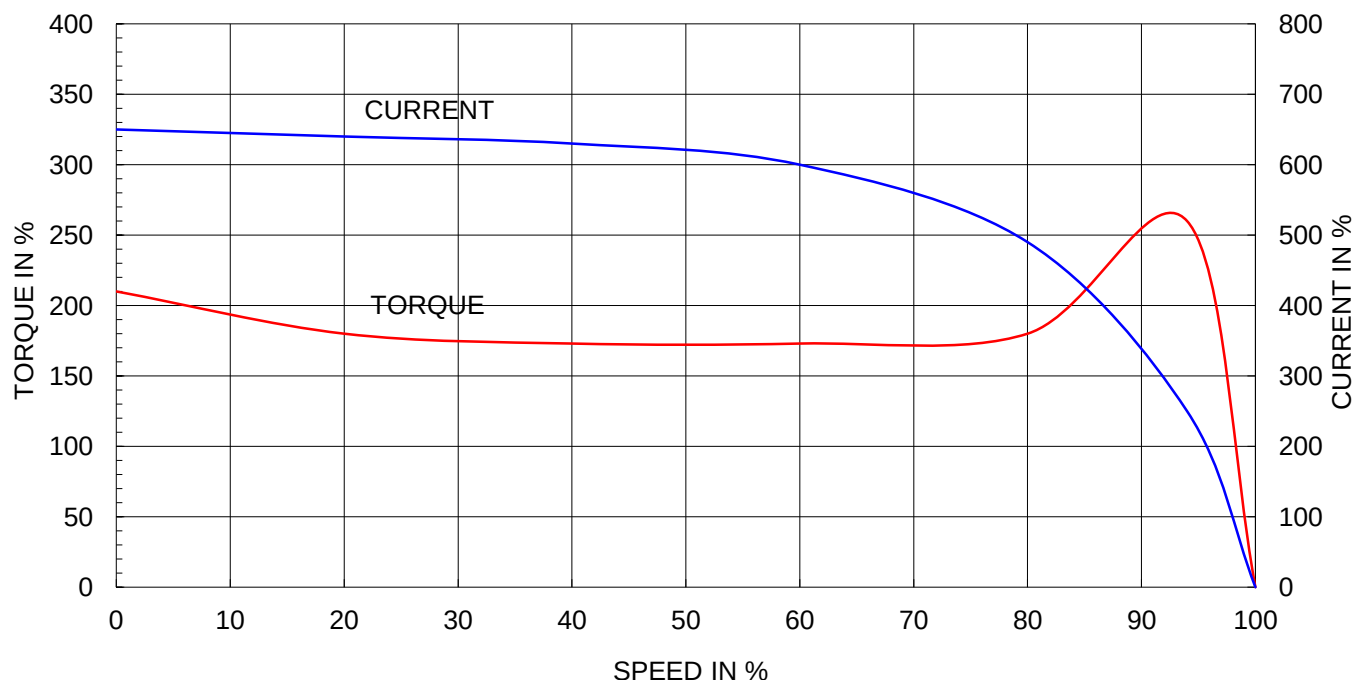
** Data is based on when the motor is supplied at rated voltage & frequency. and the data is expressed as a percentage of full-load value.

HHI W230-131-1 * In case of Inverter or V.V.V.F Motor:Performance data is based on sine wave tests. A4(210mm X 297mm)

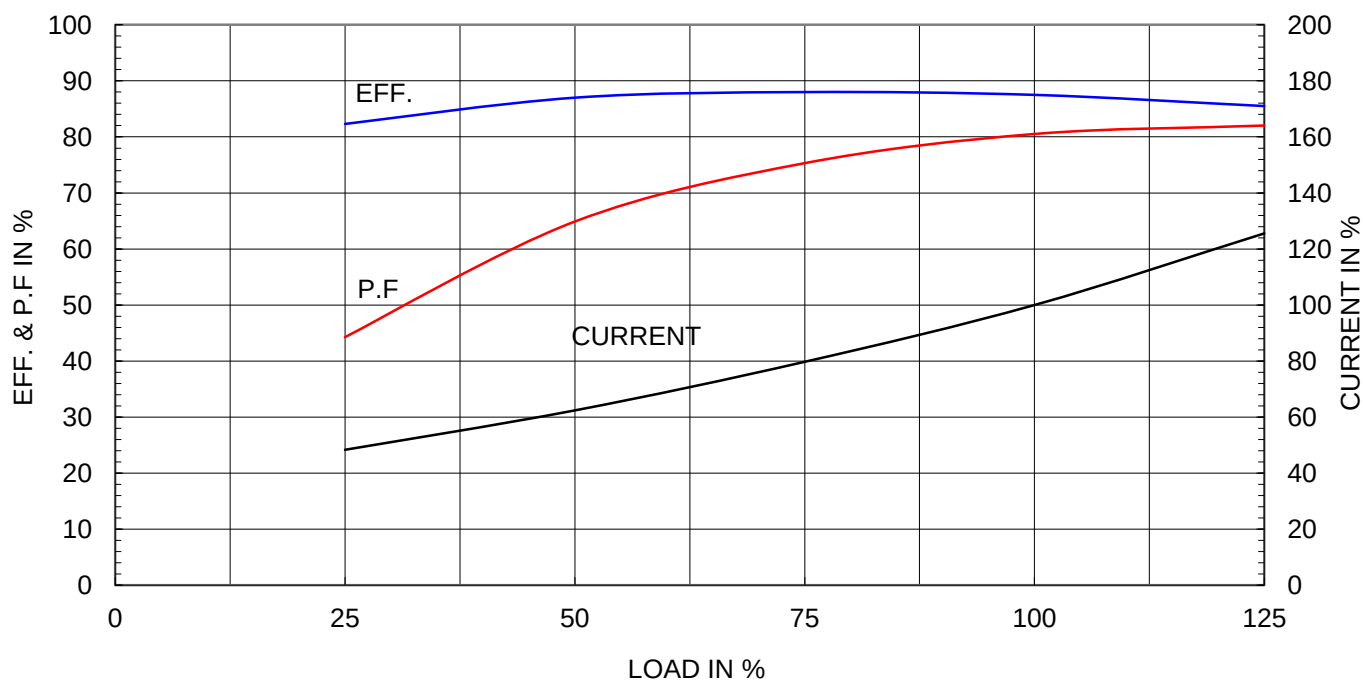
Type	:	HS
Full Load Torque	:	2.1 Kg.m
Motor moment of Inertia (J)	:	0.013 Kg.m ²
Load moment of Inertia (J)	:	3.250 Kg.m ²

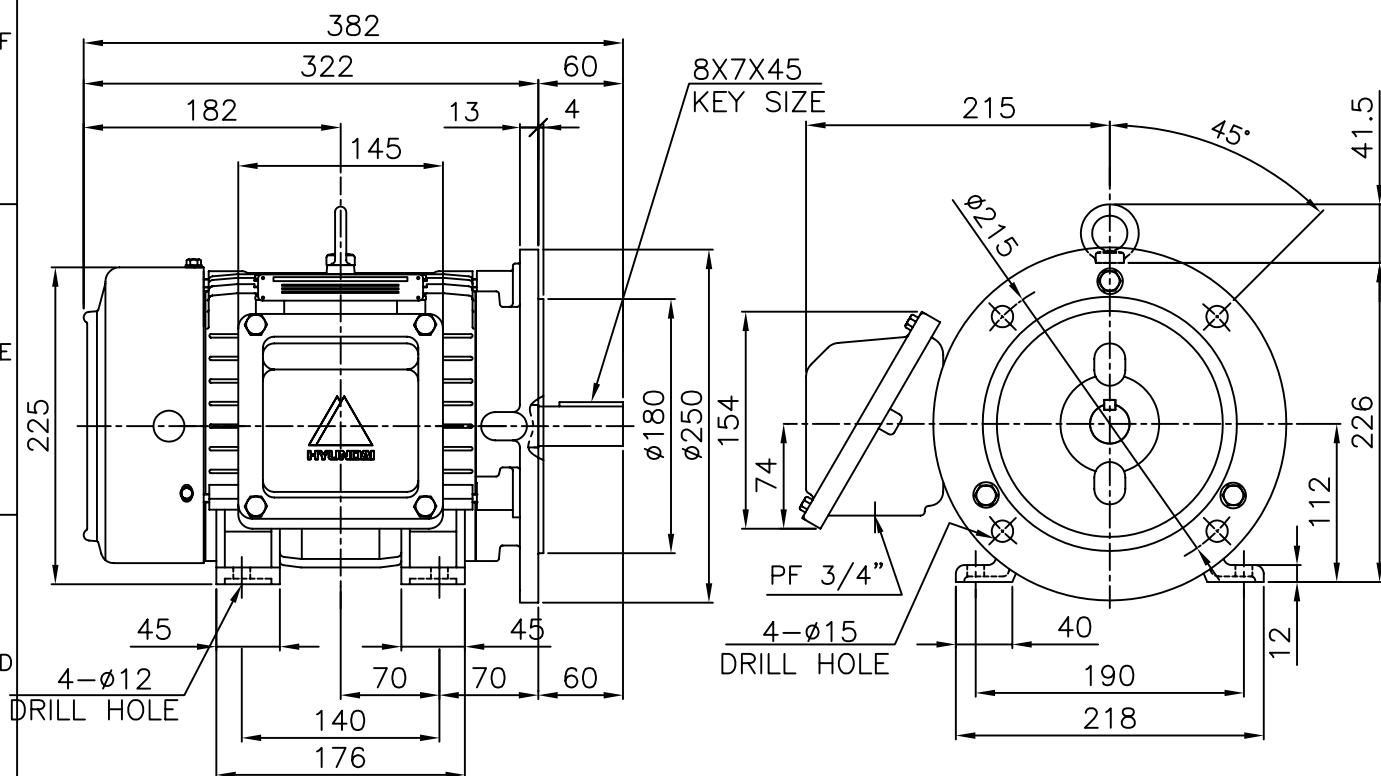
3.7 kW		4 P		60 Hz	
Speed at Full Load :				1740 RPM	
Rated Voltage	440V	380V	220V		
Full Load Current	6.9A	8.0A	13.8A		

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE

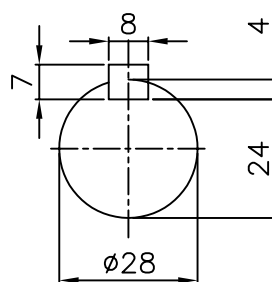




NOTE

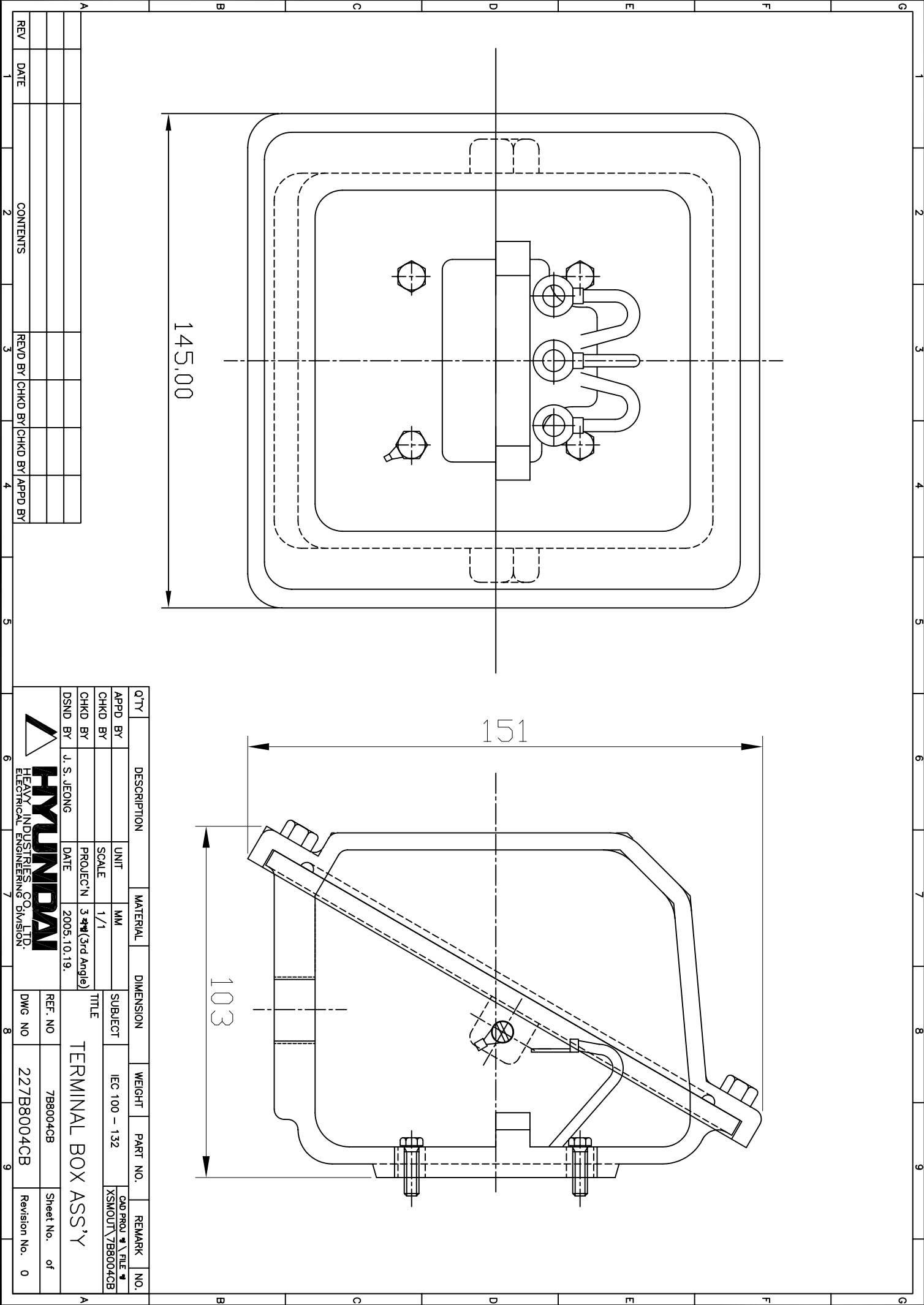
1.TOLERANCE :

CENTER HEIGHT	$112 \begin{smallmatrix} 0 \\ -0.5 \end{smallmatrix}$
BASE HOLES	$\phi 12 \begin{smallmatrix} +0.43 \\ 0 \end{smallmatrix}$
FLANGE HOLES	$\phi 15 \begin{smallmatrix} +0.43 \\ 0 \end{smallmatrix}$
RABBET DIAMETER	$\phi 180 \begin{smallmatrix} +0.014 \\ -0.011 \end{smallmatrix}$
SHAFT DIAMETER	$\phi 28 \begin{smallmatrix} +0.009 \\ -0.004 \end{smallmatrix}$
KEYWAY WIDTH	$8 \begin{smallmatrix} 0 \\ -0.036 \end{smallmatrix}$
KEYWAY DEPTH	$4 \begin{smallmatrix} +0.2 \\ 0 \end{smallmatrix}$



*CAST IRON CONDUIT BOX

APPD BY	J. H. KIM	UNIT	mm	SUBJECT	KS 112M	CAD PROJ \ FILE
CHKD BY	Y. S. KIM	SCALE	1/5			XSDNKS\B2040AB02
CHKD BY	S. H. KO	PROJEC'N	3rd Angle	TITLE	OUTLINE	
DSND BY	I. K. KIM	DATE	2002.10.30			
 HYUNDAI HEAVY INDUSTRIES CO., LTD. Electro-Electric System Division				REF. NO	B204AB02	Sheet No. of
				DWG NO	227B2040AB02	Revision No. 0



QTY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.
APPD BY	UNIT	MM	SUBJECT	IEC 100 - 132	CAD PROJ \FILE		
CHKD BY	SCALE	1/1			XSMOUT\7B8004CB		
CHKD BY	PROJEC'N	3-4#(3rd Angle)	TITLE				
DSND BY	DATE	2005.10.19.	TERMINAL BOX ASS'Y				
J. S. JEONG			REF. NO	7B8004CB	Sheet No.	of	
HYUNDAI			DWG NO	227B8004CB	Revision No.	0	
HEAVY INDUSTRIES CO. LTD.							
ELECTRICAL ENGINEERING DIVISION							