

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	2			
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 6.5 A	7.5 A 12.9 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	86.5 %			
Motor Location	☒ Indoor ☐ Outdoor		75% Load	87.7 %			
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	0.757			
Duty Type	Continuos (S1)		75% Load	0.820			
Service Factor	1.15		100% Load	0.860			
Mounting	☒ B3 ☐ B5 ☐ V1 ☐ B3/B5		Speed at Full Load	3430 r.p.m			
Bearing	Type	Anti-Friction	Torque				
	DE/N-DE	6206ZZC3 / 6206ZZC3	Full Load	1.1 kg·m			
	Lubricant	Grease(Polyrex-EM)	Locked-rotor**	200 %			
External Thrust	Not applicable		Breakdown**	250 %			
Coupling Method	☒ Direct ☐ V-Belt		Moment of Inertia (J)				
Shaft Extension	☒ Single ☐ Double		Load(Max.)	0.800 kg·m²			
Terminal Box	Main	☐ Steel ☒ Cast Iron	Motor	0.007 kg·m²			
	Aux.	☐ Yes ☒ No	Sound Pressure Level (No-load & mean value at 1m from motor)	73 dB(A)			
	Location	Refer to Outline Drawing	Vibration	1.6 mm/sec (r.m.s)			
Application			Permissible number of consecutive starts	Cold 3 times	Hot 2 times		
Area classification	Non-Hazardous		Paint	Munsell No.	4.0PB5.4/5.5(VL-451)		
Type of Ex-Protection	Not applicable		SUBMITTAL DRAWING				
Applicable Standard	KS,IEC,NEMA MG1 Part30(Vpeak)		Outline Dimension Drawing \ Motor Weight(Approx.)				
ACCESSORIES			B3	227B2000AB02	42 kg		
			B5		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.

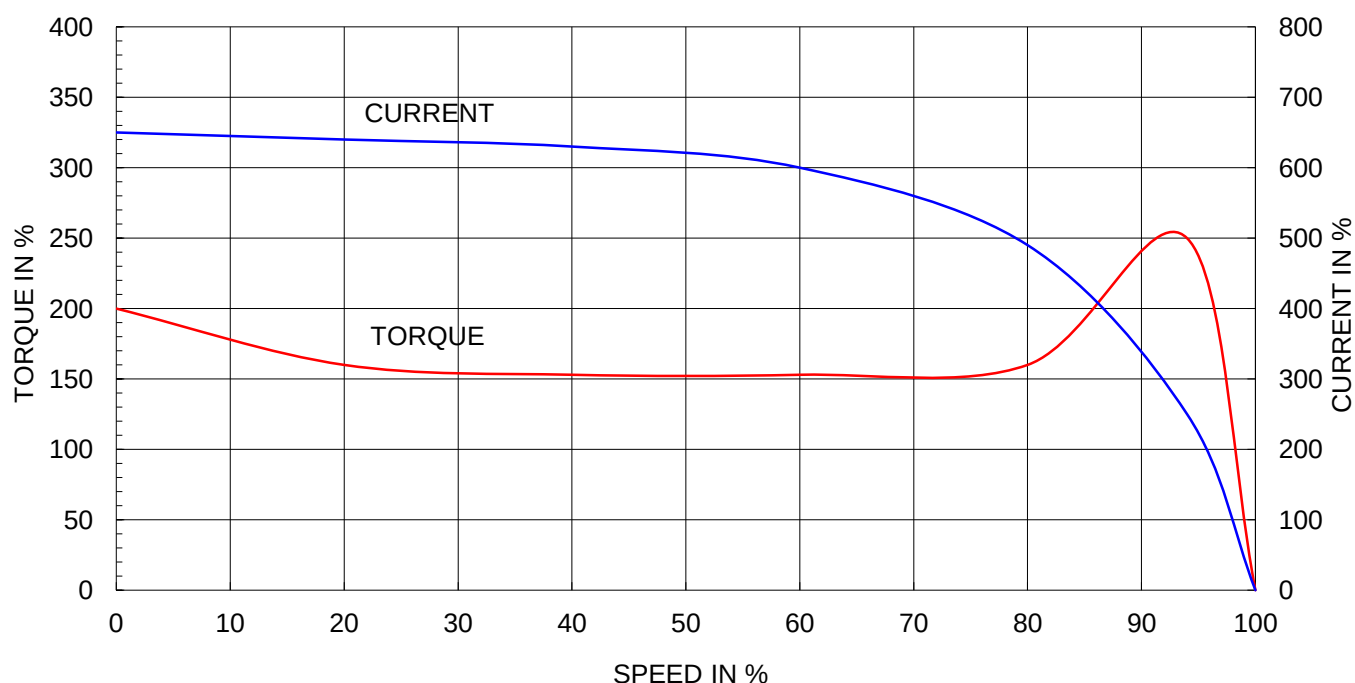
** Data is based on when the motor is supplied at rated voltage & frequency. and the data is expressed as a percentage of full-load value.

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)

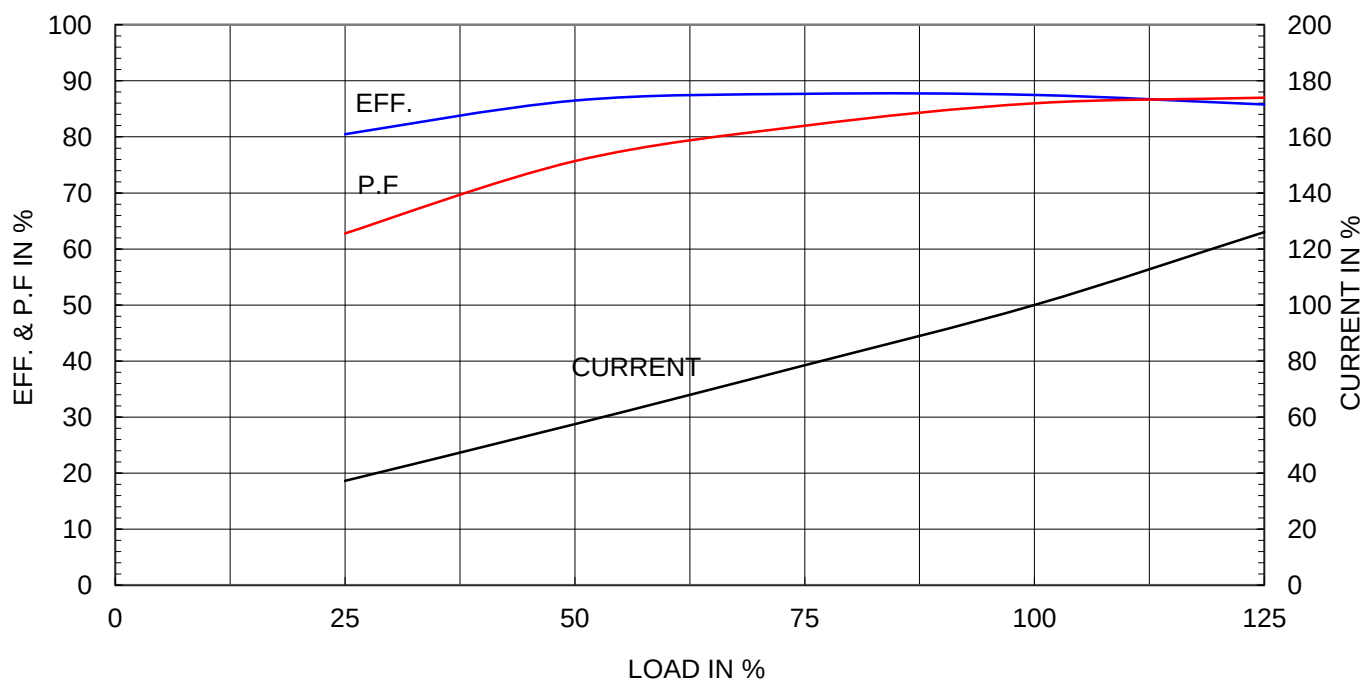
Type	:	HS
Full Load Torque	:	1.1 Kg.m
Motor moment of Inertia (J)	:	0.007 Kg.m ²
Load moment of Inertia (J)	:	0.800 Kg.m ²

3.7 kW		2 P		60 Hz	
Speed at Full Load :				3430 RPM	
Rated Voltage	440V	380V	220V		
Full Load Current	6.5A	7.5A	12.9A		

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE





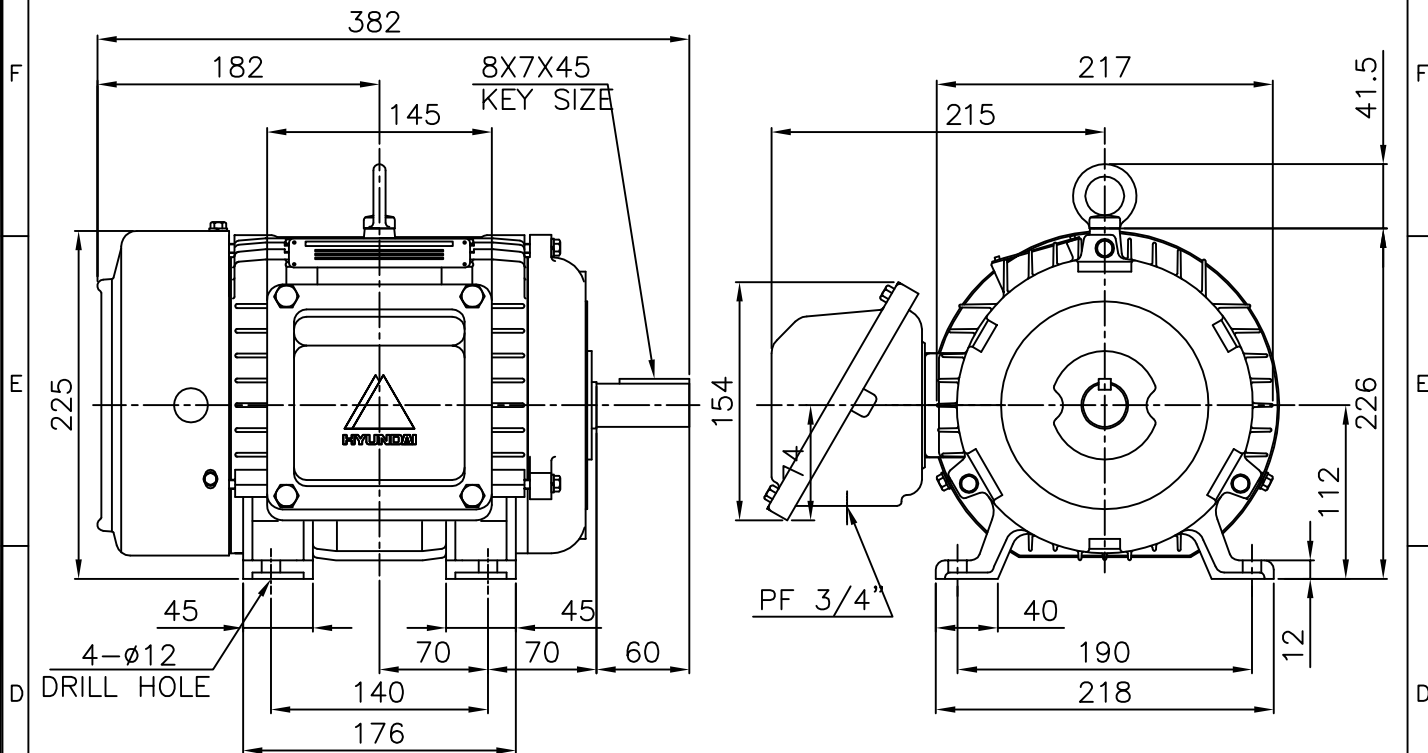
TEFC

THREE PHASE INDUCTION MOTOR

TYPE

HL, HLS

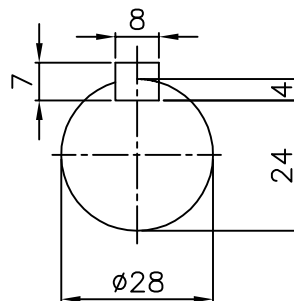
CAST IRON FRAME



NOTE

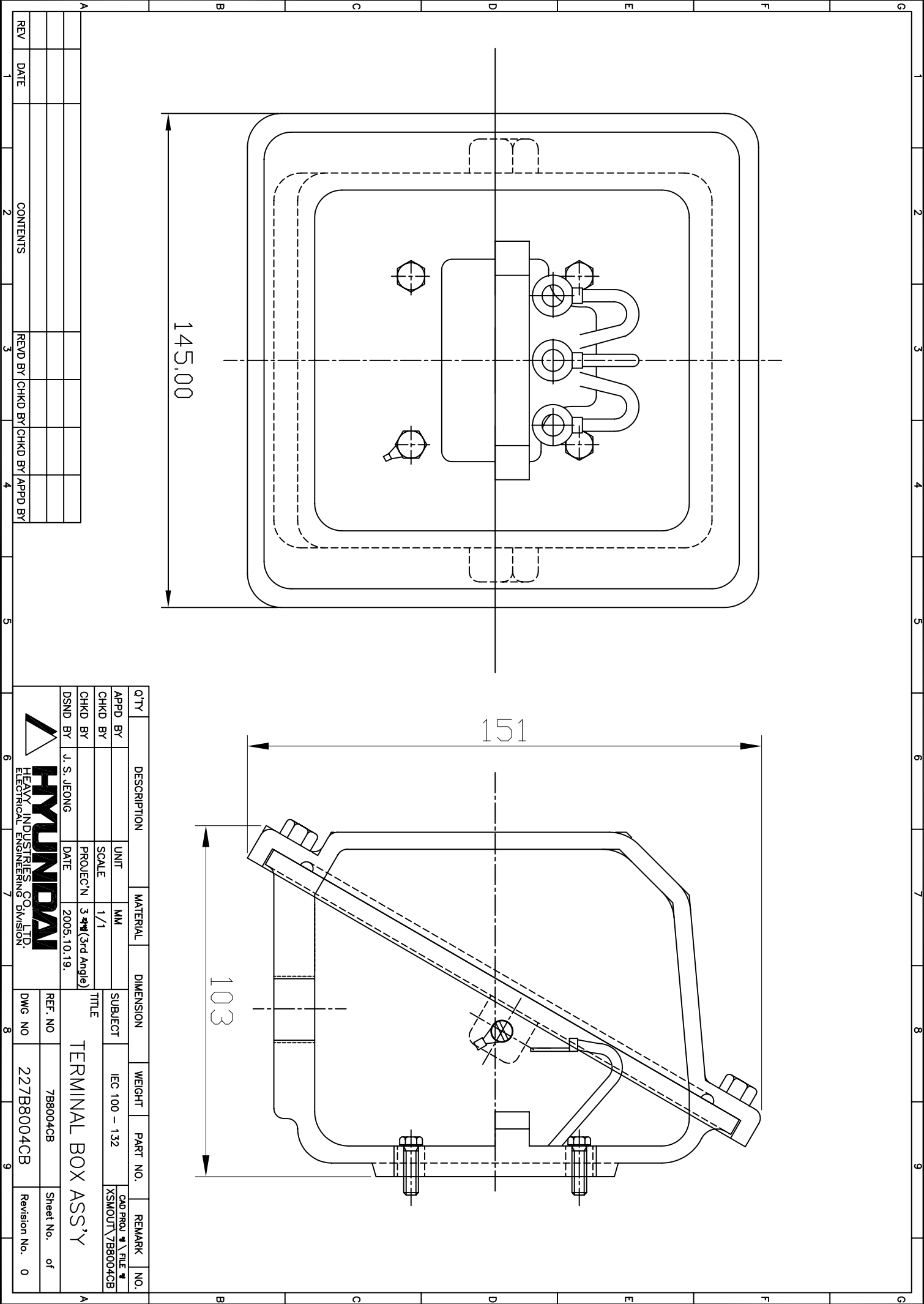
1.TOLERANCE :

CENTER HEIGHT	112	$\begin{smallmatrix} 0 \\ -0.5 \end{smallmatrix}$
BASE HOLES	Ø12	$\begin{smallmatrix} +0.43 \\ 0 \end{smallmatrix}$
SHAFT DIAMETER	Ø28	$\begin{smallmatrix} +0.009 \\ -0.004 \end{smallmatrix}$
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\B2000AB02
CHKD BY	S. H. KO	PROJEC'N	3rd Angle	TITLE	OUTLINE	
DSND BY	I. K. KIM	DATE	2001. 10. 26	REF. NO	B2000AB02	Sheet No. of
 HEAVY INDUSTRIES CO., LTD. Electro-Electric System Division				DWG NO	227B2000AB02	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	PROJECT	3-4 (3rd Angle)	XSMOUT\7B8004CB		
CHKD BY	DATE	2005.10.19.	TITLE	TERMINAL BOX ASS'Y			
DSND BY	J. S. JEONG		REF. NO.	7B8004CB	Sheet No. of		
			DWG NO.	227B8004CB	Revision No. 0		