

AC INDUCTION MOTOR DATA SHEET

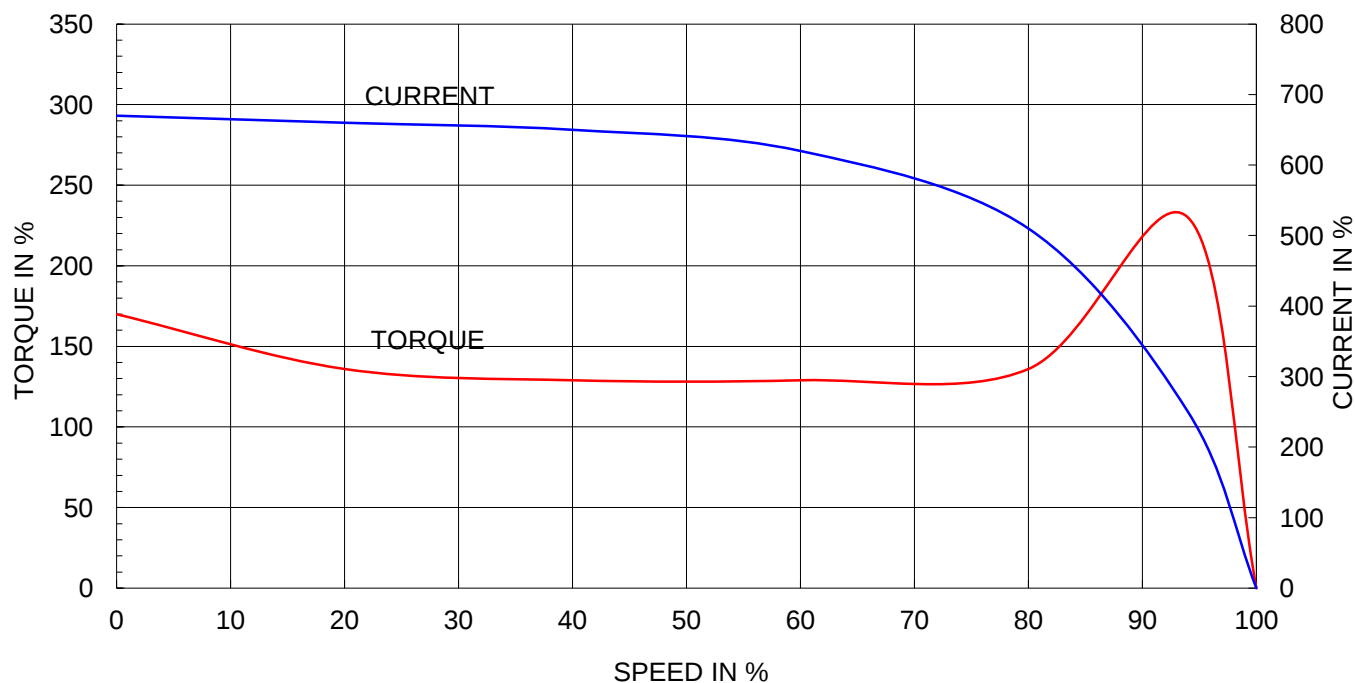
Model No.or RFQ No.		Item No.		Rev. No. [0]			
Project Name		Project No.		Quantity sets			
GENERAL SPECIFICATION			PERFORMANCE DATA				
Frame Size	280L		Rated Output	160 kW 214 HP			
Type	HS-160/4		Number of Poles	4			
Enclosure(Protection)	Totally Enclosed (IP55)		Rotor Type	Squirrel Cage			
Method 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	251.1 A 290.8 A 502.3 A		
Insulation Class	☒ F ☐ B ☐ H			Locked-rotor**	670 % 670 % 670 %		
Temp. Rise at full load (by resistance method)			Efficiency				
at 1.0 S.F 80 deg. C			50% Load 94.6 %				
Motor Location ☒ Indoor ☐ Outdoor			75% Load 95.1 %				
Altitude Less than 1000 meter			100% Load 95.0 %				
Relative Humidity Less than 80 %			Power Factor(p.u)				
Ambient Temp. 40 deg. C (Max.)			50% Load 0.810				
Duty Type Continuous (S1)			75% Load 0.875				
Service Factor 1.15			100% Load 0.880				
Mounting	☐ B3 ☒ B5 ☐ V1 ☐ B3/B5		Speed at Full Load 1785 r.p.m				
Bearing	Type	Anti-Friction	Torque				
	DE/N-DE	6318C3 / 6316C3	Full Load 87.3 kg·m				
	Lubricant	Grease(Gadus S2 V 100 2)	Locked-rotor** 170 %				
External Thrust Not applicable			Breakdown** 230 %				
Coupling Method ☒ Direct ☐ V-Belt			Moment of Inertia (J)				
Shaft Extension ☒ Single ☐ Double			Load(Max.) 97.250 kg·m²				
Terminal Box	Main	☐ Steel ☒ Cast Iron	Motor 3.653 kg·m²				
	Aux.	☐ Yes ☒ No	Sound Pressure Level (No-load & mean value at 1m from motor)				
	Location	Refer to Outline Drawing	85 dB(A)				
Application			Vibration 2.2 mm/sec (r.m.s)				
Area classification Non-Hazardous			Permissible number of				
Type of Ex-Protection Not applicable			consecutive starts 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		TJ8LBP51 910 kg		
			V1		kg		
			B3/B5		kg		
			Main T-Box Ass'y			3M-016882	
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
			2010-05-28	R.G. KIM	O.J. KIM	J.H. KIM	K.J. KANG

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.

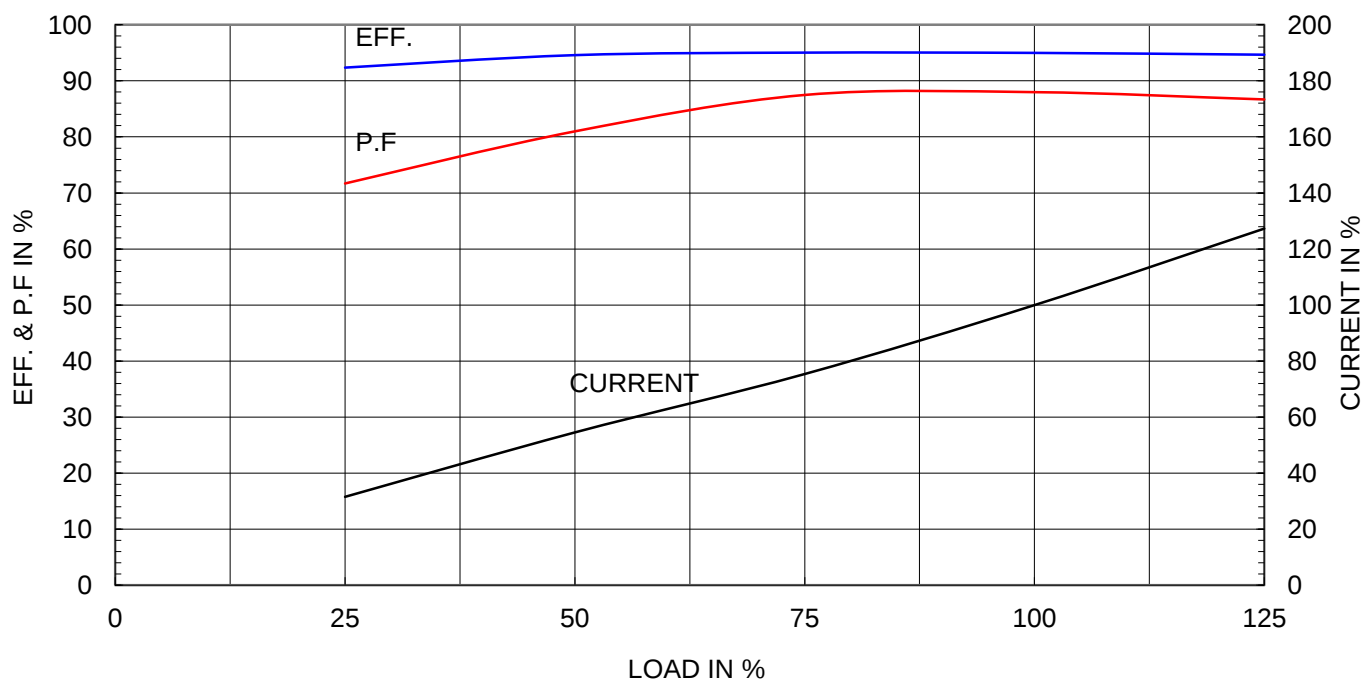
Type	:	HS
Full Load Torque	:	87.3 Kg.m
Motor moment of Inertia (J)	:	3.653 Kg.m ²
Load moment of Inertia (J)	:	97.250 Kg.m ²

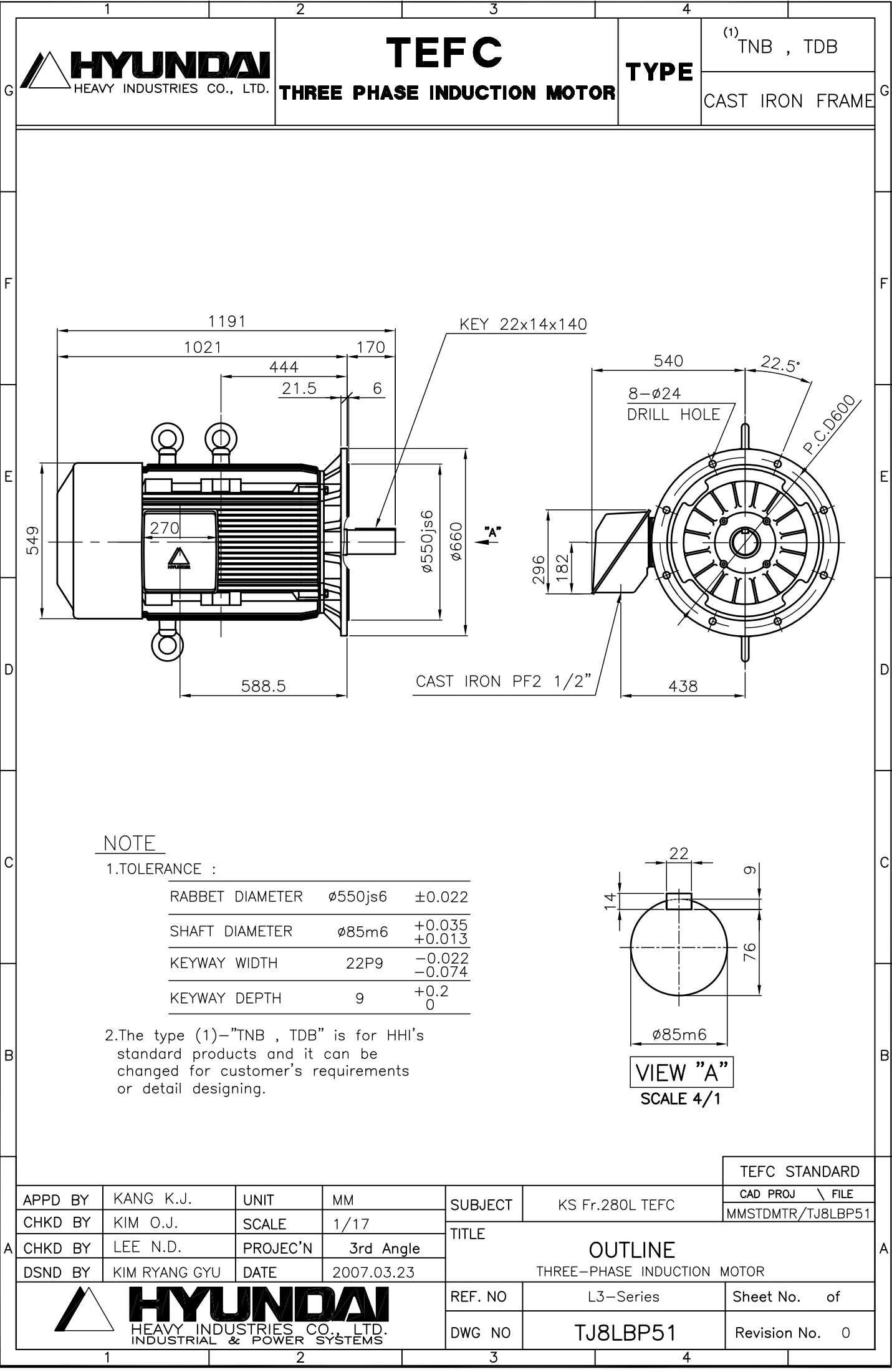
160 kW		4 P		60 Hz	
Speed at Full Load :				1785 RPM	
Rated Voltage	440V	380V	220V		
Full Load Current	251.1A	290.8A	502.3A		

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE





NOTE

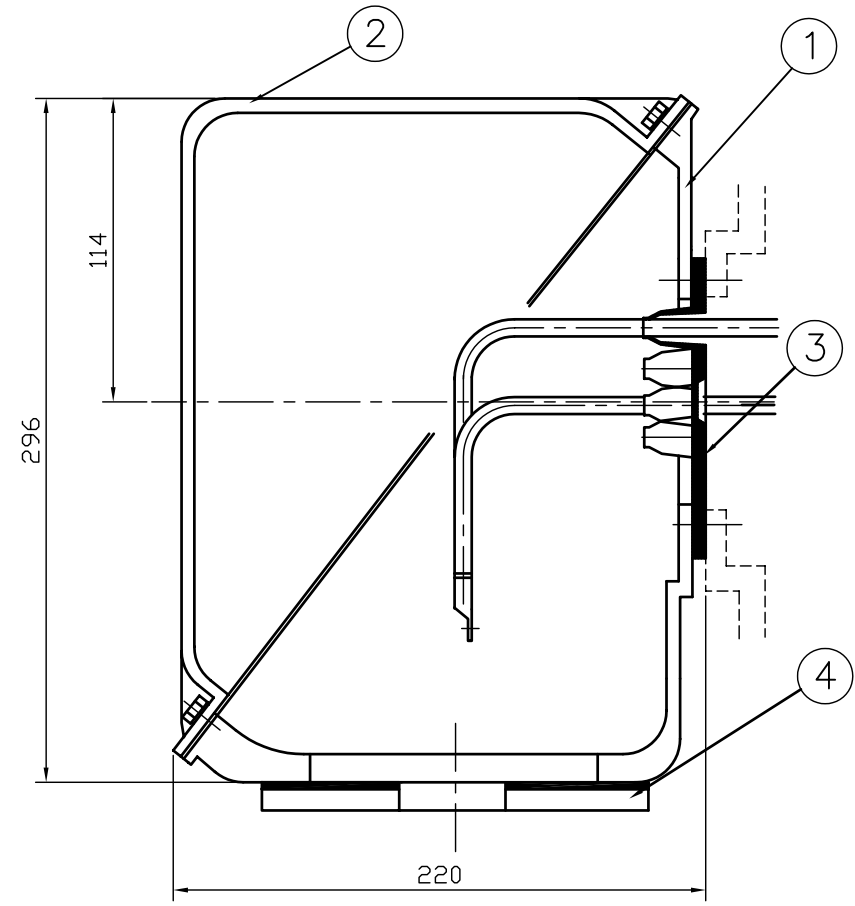
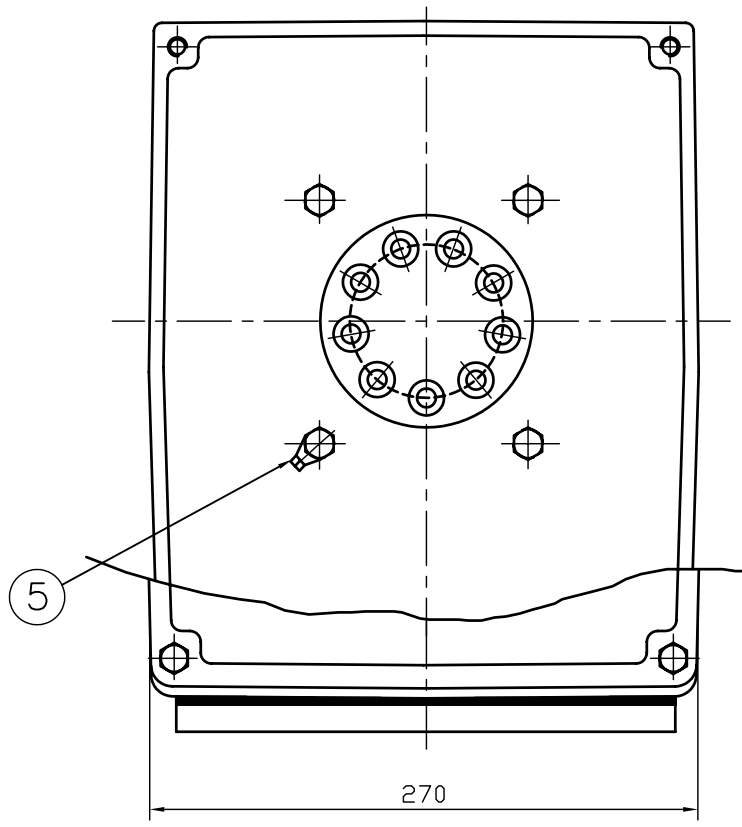
1.TOLERANCE :			
RABBET DIAMETER	ø550js6	±0.022	
SHAFT DIAMETER	ø85m6	+0.035 +0.013	
KEYWAY WIDTH	22P9	-0.022 -0.074	
KEYWAY DEPTH	9	+0.2 0	

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

				TEFC STANDARD	
APPD BY	KANG K.J.	UNIT	MM	SUBJECT	KS Fr.280L TEFC
CHKD BY	KIM O.J.	SCALE	1/17	TITLE OUTLINE THREE-PHASE INDUCTION MOTOR	
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				REF. NO	L3-Series
				DWG NO	TJ8LBP51
				Sheet No. of	
				Revision No. 0	

본 도면은 현대중공업(주) 재산이므로 허가없이
복사할 수 없음 (도면제출 시 유의하시기 바랍니다.)



1	EARTH TERMINAL LUG						5	
1	CABLE ENTRY PLATE						4	
1	GASKET	NBR					3	
1	TERMINAL BOX COVER	CAST IRON					2	
1	TERMINAL BOX BODY	CAST IRON					1	
Q'TY	DESCRIPTION	MATERIAL	DIMENSION		WEIGHT	PART NO.	REMARK	NO.
APPD BY	김 진 오	UNIT	MM	SUBJECT	HLA6 - 250,280Fr.		CAD PROJ ㉠\ FILE ㉠ T-BOX-M \ 3R016882	
Q.P. CHK	주 영 겅	SCALE	NONE	TITLE (CAST IRON) TERMINAL BOX ASS'Y				
CHKD BY	권 오 철	PROJEC'N	3 각법 (3rd Angle)					
DSND BY	김 현 태	DATE	92.06.05	REF. NO			Sheet No. of	
 HYUNDAI ELECTRICAL ENGINEERING CO., LTD.				DWG NO	3M-016882		Revision No.	

REV	DATE	CONTENTS	REVD BY	CHKD BY	Q.P. CHK	APPD BY
1						
2						
3						
4						