

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	250M	Rated Output	75 kW	100 HP	
Type	HS-75/6	Number of Poles	6		
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	123.0 A	142.5 A
Insulation Class	☒ F ☐ B ☐ H		Locked-rotor**	650 %	650 %
Temp. Rise at full load (by resistance method)		Efficiency			
at 1.0 S.F	80 deg. C		50% Load	93.9 %	
Motor Location	☒ Indoor ☐ Outdoor		75% Load	94.2 %	
Altitude	Less than 1000 meter		100% Load	94.1 %	
Relative Humidity	Less than 80 %	Power Factor(p.u)			
Ambient Temp.	40 deg. C (Max.)		50% Load	0.768	
Duty Type	Continuous (S1)		75% Load	0.831	
Service Factor	1.15		100% Load	0.850	
Mounting	☒ B3 ☐ B5 ☐ V1 ☐ B3/B5	Speed at Full Load	1185 r.p.m		
Bearing	Type	Anti-Friction	Torque		
	DE/N-DE	6316C3 / 6313C3	Full Load	61.6 kg·m	
	Lubricant	Grease(Gadus S2 V 100 2)	Locked-rotor**	150 %	
External Thrust	Not applicable		Breakdown**	230 %	
Coupling Method	☒ Direct ☐ V-Belt	Moment of Inertia (J)			
Shaft Extension	☒ Single ☐ Double	Load(Max.)	126.775 kg·m²		
Terminal	Main	Motor	2.758 kg·m²		
Box	Aux.	Sound Pressure Level (No-load & mean value at 1m from motor)			
	Location	Refer to Outline Drawing	75 dB(A)		
Application		Vibration	2.2 mm/sec (r.m.s)		
Area classification	Non-Hazardous	Permissible number of consecutive starts	Cold 3 times		
Type of Ex-Protection	Not applicable		Hot 2 times		
Applicable Standard	KS,IEC,NEMA MG1 Part30(Vpeak)	Paint	Munsell No.	4.0PB5.4/5.5(VL-451)	

ACCESSORIES	SUBMITTAL DRAWING			
	Outline Dimension Drawing \ Motor Weight(Approx.)			
	B3	TJ5MAP51	550	kg
	B5			kg
	V1			kg
	B3/B5			kg
	Main T-Box Ass'y	3M-016882		

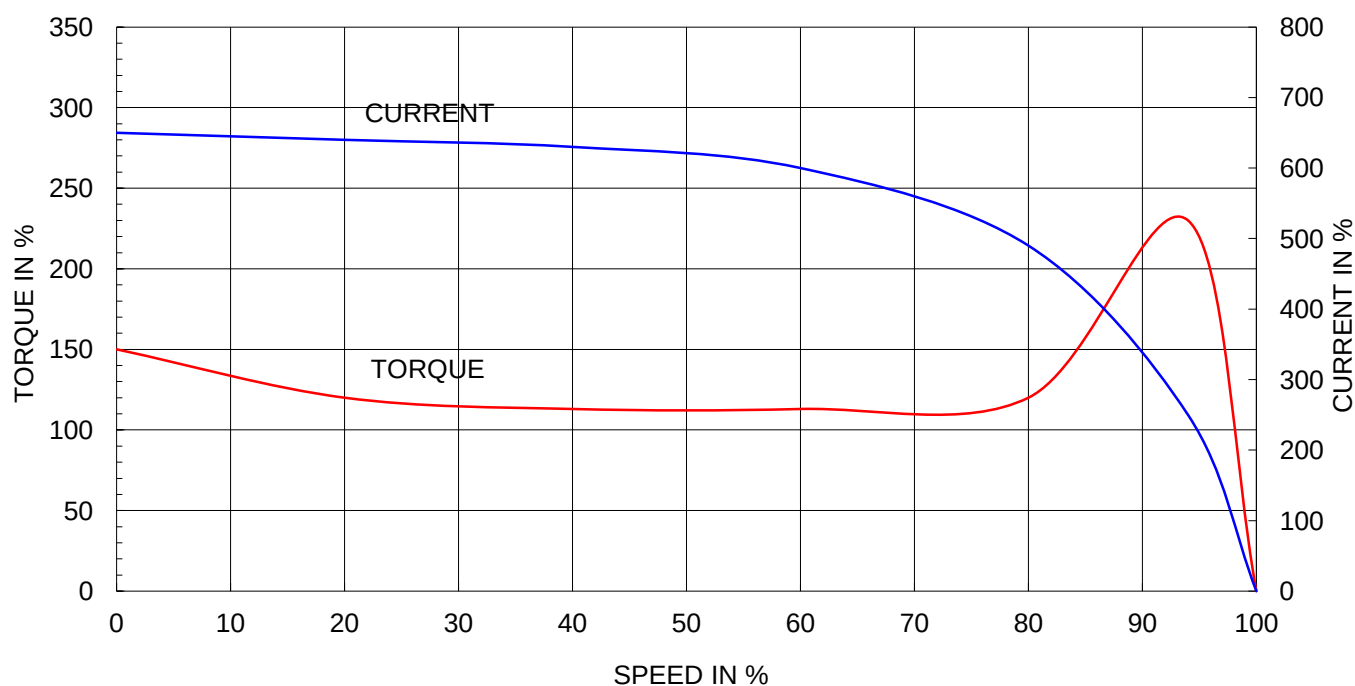
SPARE PARTS	REMARK		High Efficiency		
	*. For use on PWM VFD 10:1VT, 3:1CT@1.0S.F&F Temp. rise				
	Date	DSND	CHKD	CHKD	APPD
	2010-05-28	R.G. KIM	O.J. KIM	J.H. KIM	K.J. KANG

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.

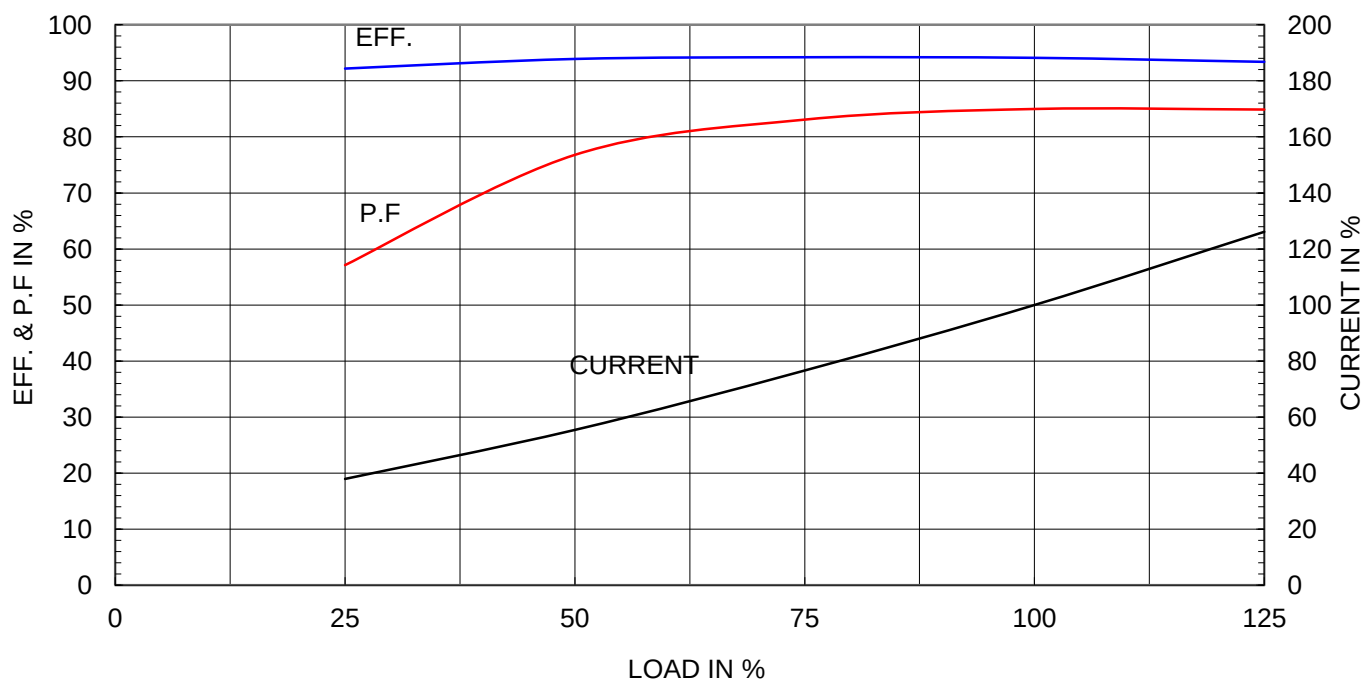
Type	:	HS
Full Load Torque	:	61.6 Kg.m
Motor moment of Inertia (J)	:	2.758 Kg.m ²
Load moment of Inertia (J)	:	126.775 Kg.m ²

75 kW		6 P		60 Hz	
Speed at Full Load :				1185 RPM	
Rated Voltage	440V	380V	220V		
Full Load Current	123.0A	142.5A	246.1A		

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



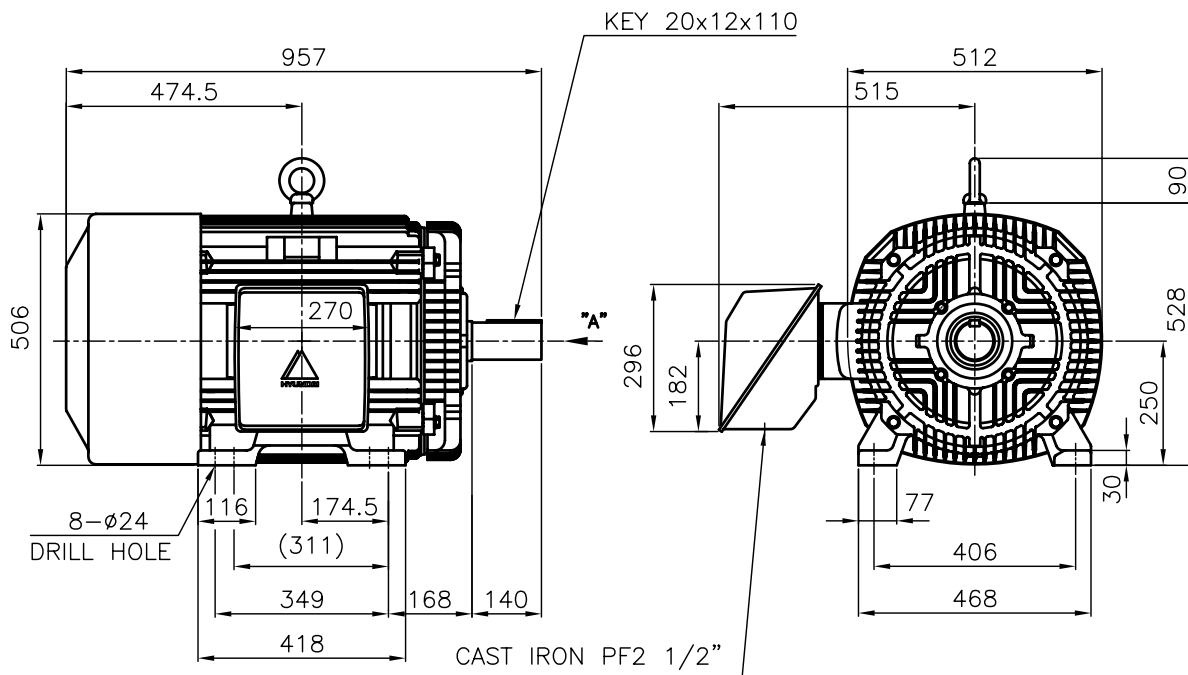


TEFC

THREE PHASE INDUCTION MOTOR

TYPE

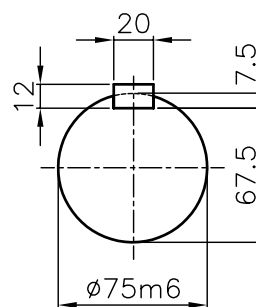
CAST IRON FRAME



NOTE

1.TOLERANCE :

CENTER HEIGHT	250 ⁰ _{-0.5}
BASE HILE	ϕ 24 ^{+0.43} ₀
SHAFT DIAMETER	ϕ 75 ^{+0.030} _{+0.011}
KEYWAY WIDTH	20 ^{-0.022} _{-0.074}
KEYWAY DEPTH	7.5 ^{+0.2} ₀
KEY WIDTH	20 ⁰ _{-0.052}
KEY HEIGHT	12 ⁰ _{-0.110}



VIEW "A"
SCALE 4/1

TEFC STANDARD

CAD PROJ \ FILE
MMSTDMTR/TJ5MAP51

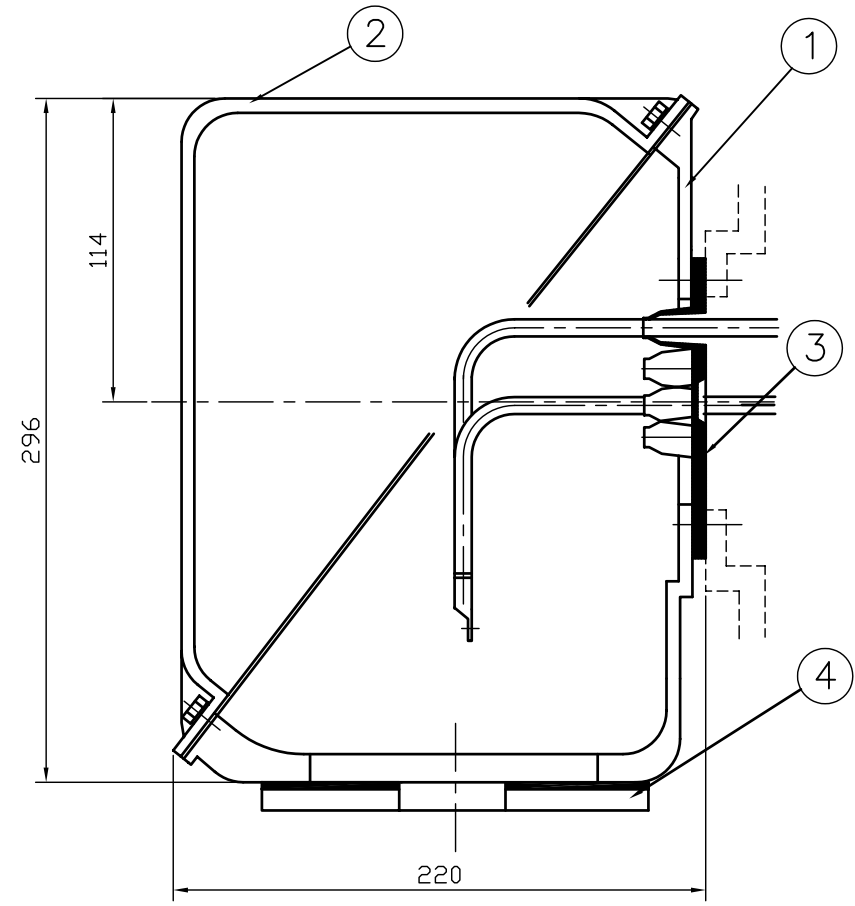
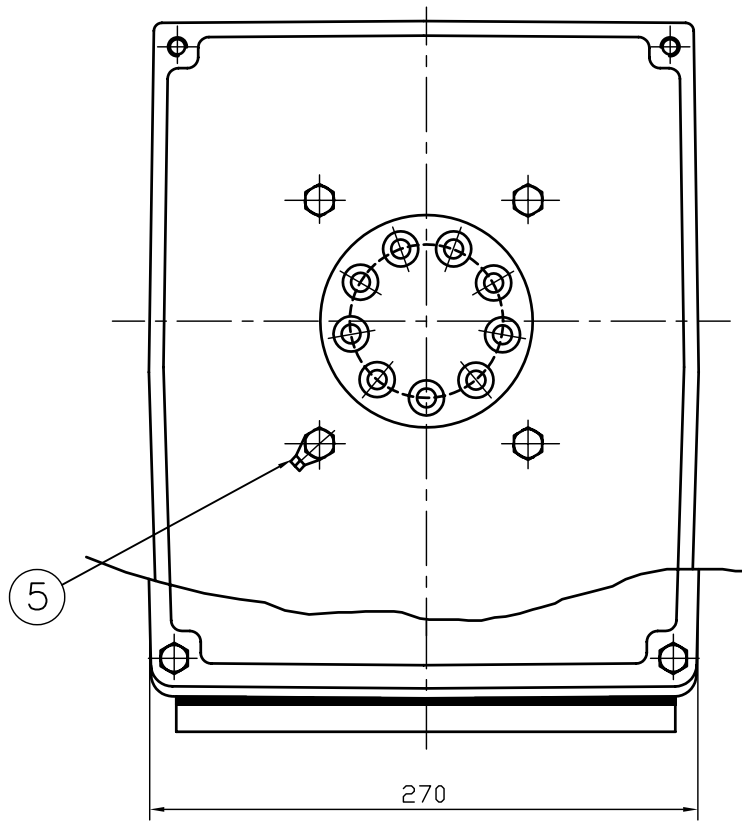
APPD BY	KANG K.J.	UNIT	MM
CHKD BY	KIM O.J.	SCALE	1/15
CHKD BY	LEE N.D.	PROJEC'N	3rd Angle
DSND BY	KIM RYANG GYU	DATE	2007.03.23

SUBJECT	KS Fr.250M TEFC
TITLE	OUTLINE THREE-PHASE INDUCTION MOTOR



REF. NO	L2-Series	Sheet No.	of
DWG NO	TJ5MAP51	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						