

Customer :
Project Name :
Project No. :
Revision No. :

SPECIFICATION for INDUCTION MOTOR



0		For Bidding			
No.	DATE	DESCRIPTION	PREPARED BY	CHECKED BY	APPROVED BY

AC INDUCTION MOTOR DATA SHEET

Model No.or RFQ No.		Item No.		Rev. No. []			
Project Name		Project No.		Quantity sets			
GENERAL SPECIFICATION			PERFORMANCE DATA				
Frame Size	112M		Rated Output	3.7 kW 5.0 HP			
Type	HKP-3.7/4		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	220 V			
Number of Phases	3		Current	Full Load	13.6 A		
Insulation Class	☒ F ☐ B ☐ H		Locked-rotor**	800 %			
Temp. Rise at full load (by resistance method)			Efficiency				
at 1.0 S.F 80 deg. C							
Motor Location	☒ Indoor ☐ Outdoor						
Altitude	Less than 1000 meter		100% Load 89.5 %				
Relative Humidity	Less than 80 %		Power Factor(p.u)				
Ambient Temp.	40 deg. C (Max.)						
Duty Type	Continuous (S1)		100% Load 0.800				
Service Factor	1.15		Speed at Full Load 1760 r.p.m				
Mounting	B3		Torque				
Bearing	Type	Anti-Friction					
	DE/N-DE	6206ZZC3 / 6206ZZC3	Full Load	2.0 kg·m 20.1			
	Lubricant	Grease	Locked-rotor**	200 % 4.1 kg·m			
External Thrust	Not applicable		Breakdown**	240 % 4.9 kg·m			
Coupling Method	☒ Direct ☐ V-Belt		Moment of Inertia (J)				
Shaft Extension	☒ Single ☐ Double		Load(Max.) 3.071 kg·m ²				
Terminal	Main	☒ Aluminum ☐ Cast Iron	Motor 0.013 kg·m ²				
Box	Aux.	☐ Yes ☐ No	Sound Pressure Level (No-load & mean value at 1m from motor)				
	Location	Refer to Outline Drawing	60 dB(A)				
Application			Vibration 1.6 mm/sec (peak)				
Area classification	Non-Hazardous		Permissible number of				
Type of Ex-Protection	Not applicable		consecutive starts				
Applicable Standard	KS, IEC, NEMA MG1 Part30(Vpeak)		Cold 20 times				
			Hot 15 times				
			Paint	Munsell No.	PHANTONE 279C		
ACCESSORIES			SUBMITTAL DRAWING				
			Outline Dimension Drawing \ Motor Weight(Approx.)				
			B3 LM-T0113B3PLV01 48 kg				
			REMARK				
			*. Premium efficiency(IE3) acc. to KS C 4202				
			*. SSEN Series				
			*. For use on PWM VFD 10:1VT,3:1CT@1.0S.F&F Temp.rise				
SPARE PARTS			FOR BIDDING				
			Date	DSND	CHKD	CHKD	APPD
			2021-04-26				

Type : HKP-3.7/4

Full Load Torque : 2.0 kg.m

Load moment of Inertia (J) : - kg.m²

Motor moment of Inertia (J) : 0.013 kg.m²

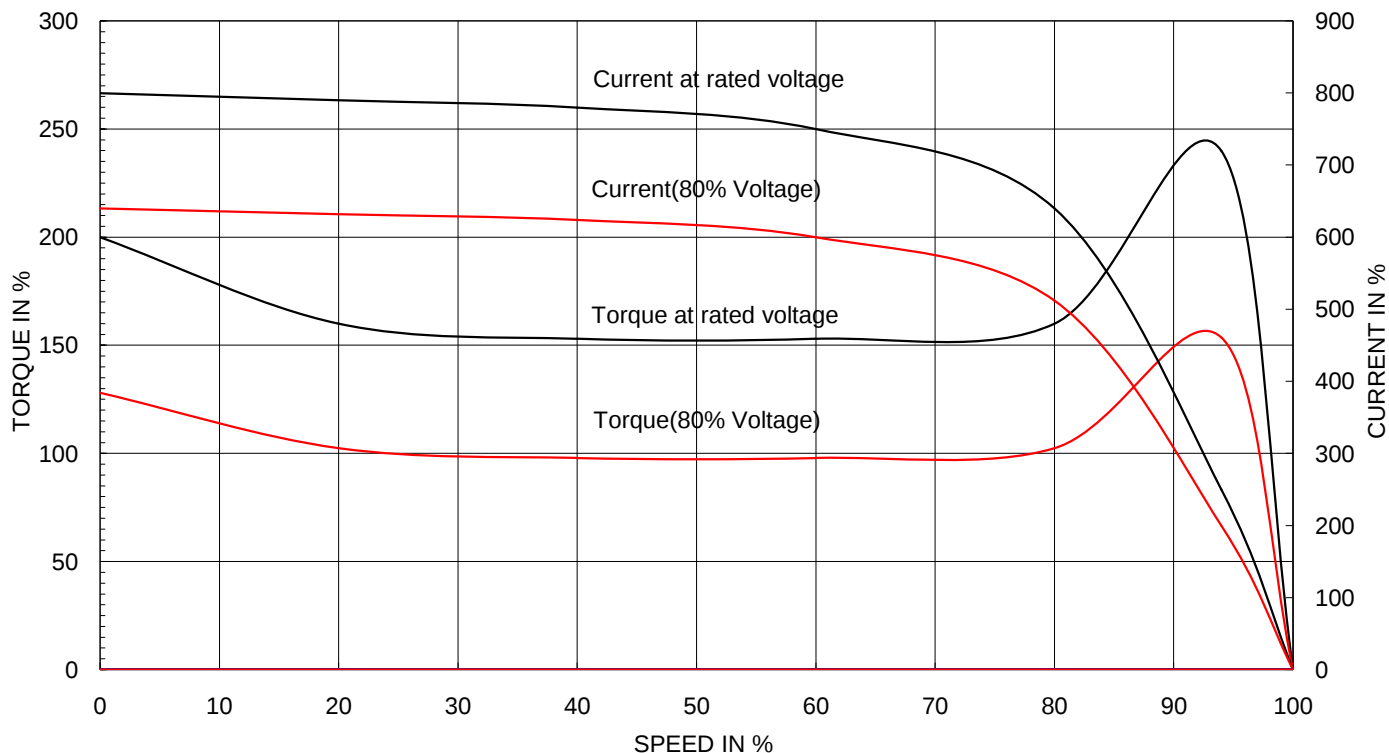
3.7 kW 4 P 60 Hz

Speed at Full Load : 1760 RPM

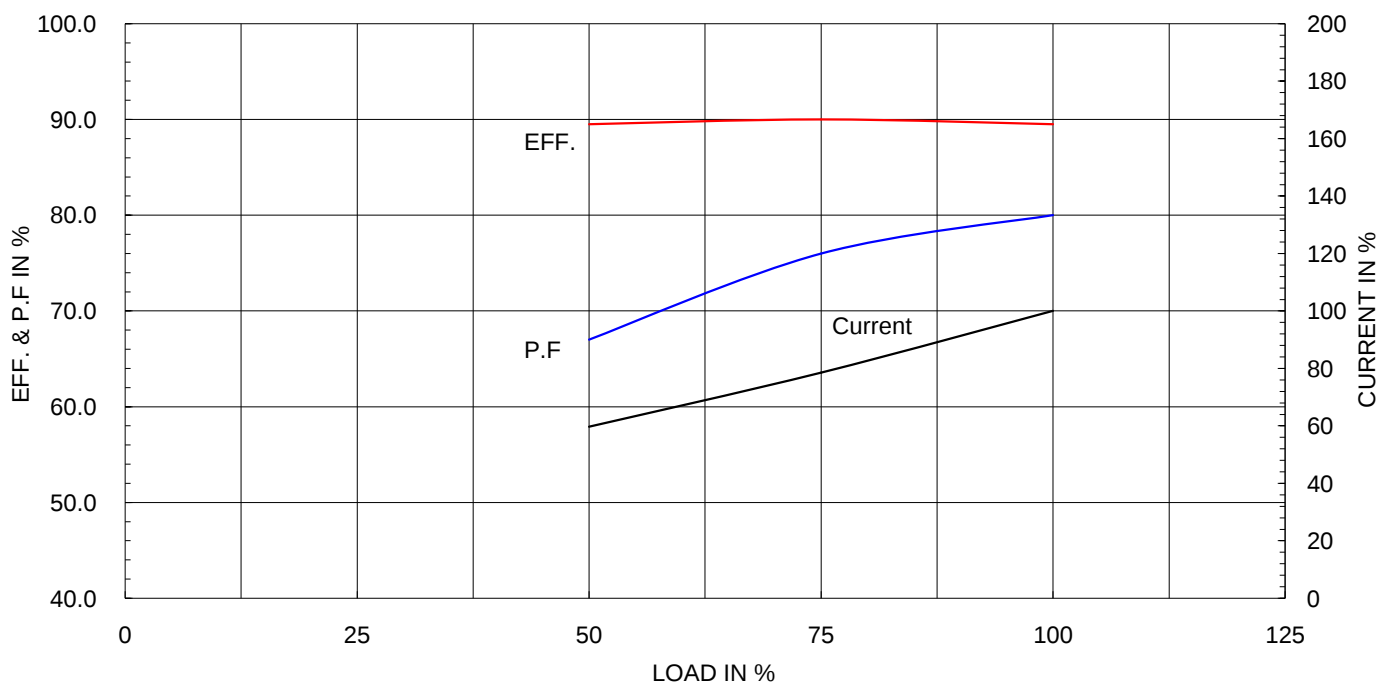
Rated Voltage 220

Full Load Current 13.6A

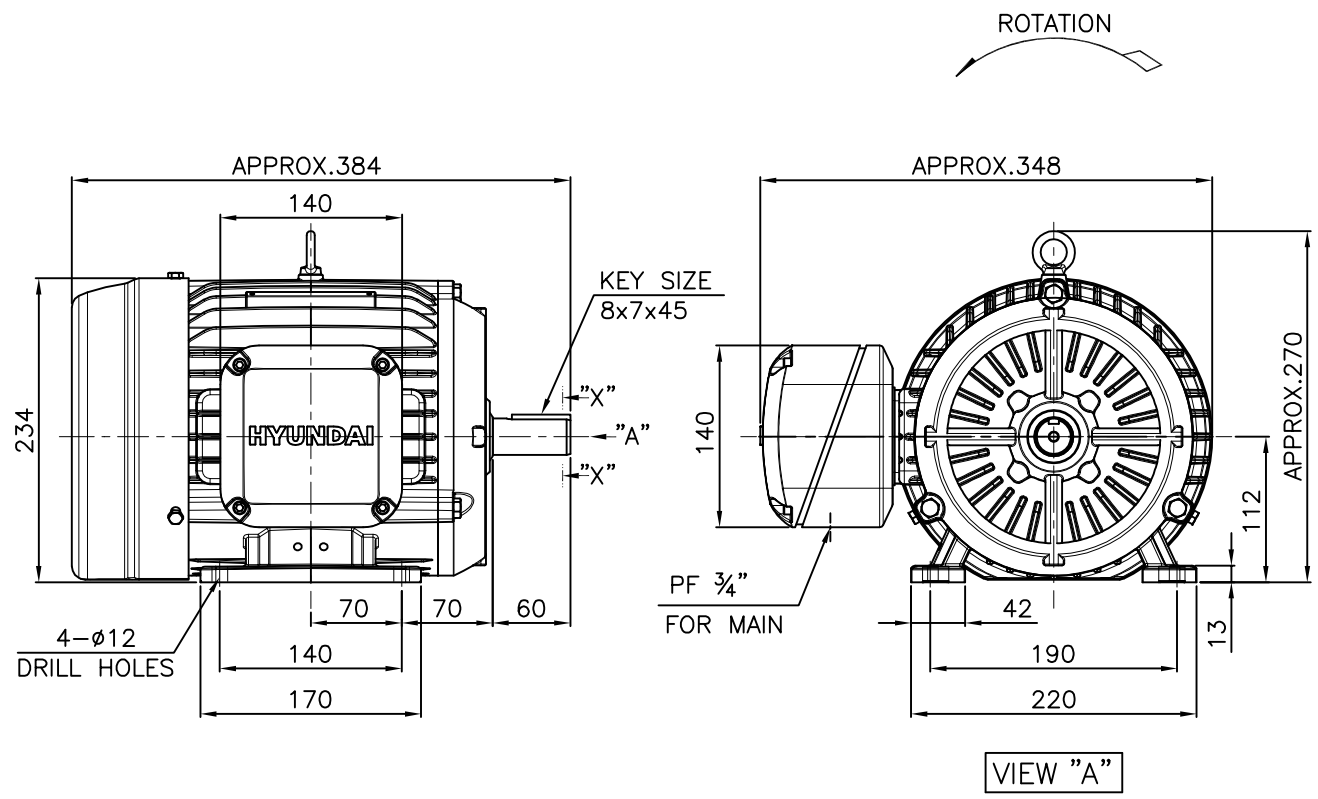
SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



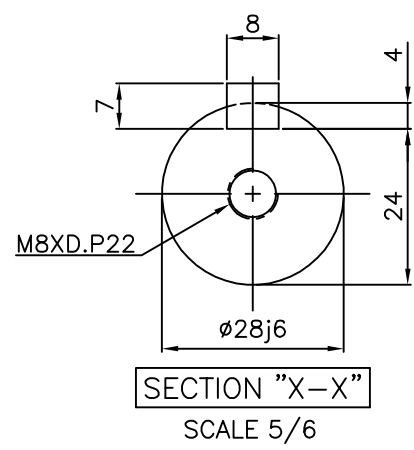
1			2		3		4			
▽	50S	REV	DATE	CONTENTS		REVD BY	CHKD BY	CHKD BY	APPD BY	
▽▽	12.5S									
▽▽▽	3.2S									
▽▽▽▽	0.4S									



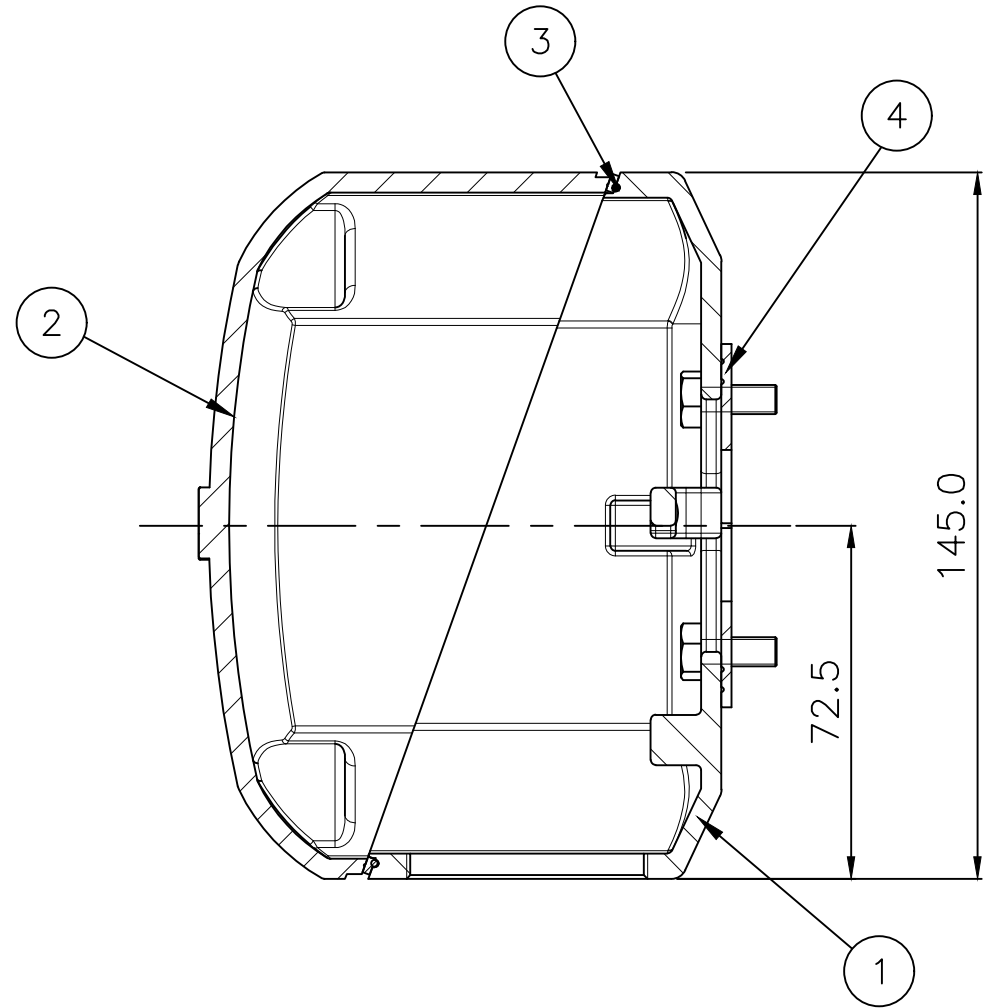
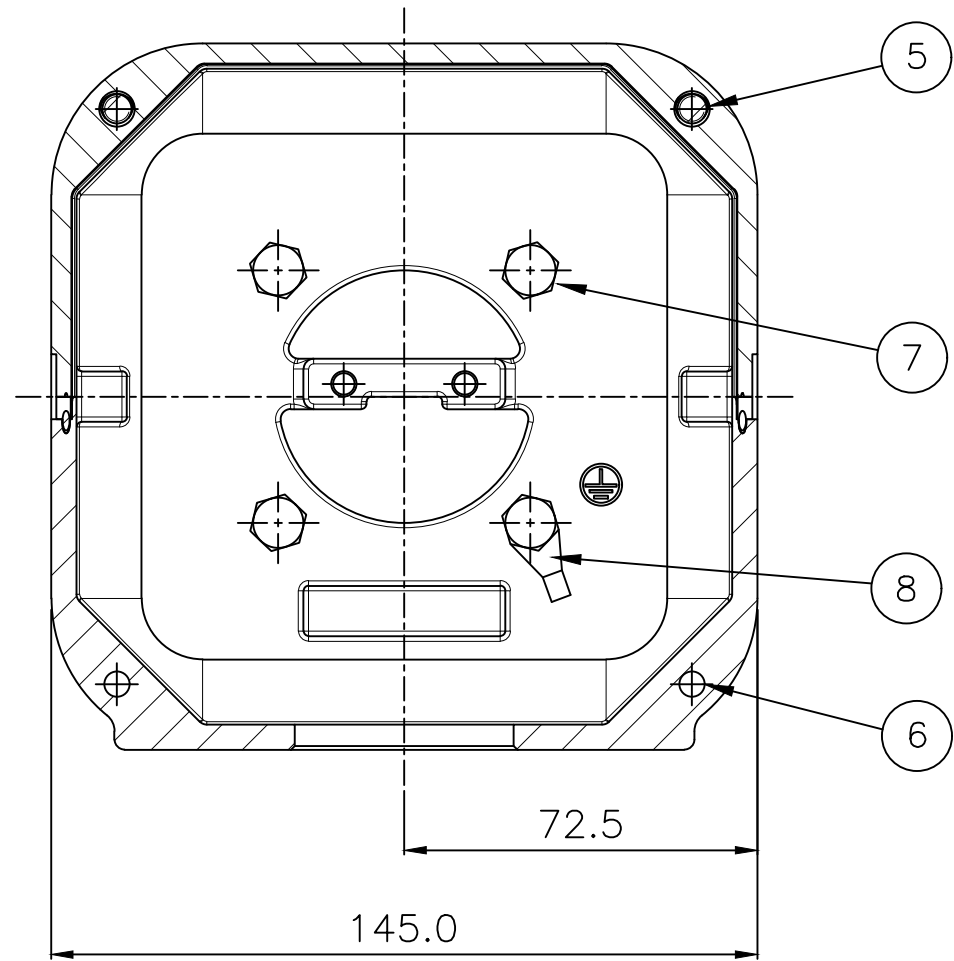
NOTE

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	$\begin{smallmatrix} +0.2 \\ 0 \end{smallmatrix}$
KEY WIDTH	8	$\begin{smallmatrix} 0 \\ -0.036 \end{smallmatrix}$
KEY HEIGHT	7	$\begin{smallmatrix} 0 \\ -0.090 \end{smallmatrix}$



APPD BY	S.K.HAN	UNIT	mm	SUBJECT	KS, IEC Fr.112M	DWG SIZE	A4 (1/6)
CHKD BY	S.Y.KIM	SCALE	1/6	TITLE OUTLINE			
CHKD BY	I.K.KIM	PROJEC'N	3각법 (3rd Angle)				
DSND BY	S.H.LEE	DATE	2019.06.17				
				REF. NO		Sheet No.	of
				DWG NO	LM-I1113B3PLV01	Revision No.	0



▽	50S
▽▽	12.5S
▽▽▽	3.2S
▽▽▽▽	0.4S

REV	DATE	CONTENTS	REVD BY	CHKD BY	CHKD BY	APPD BY	일반가공공차				일반재관공차			
							1-4	±0.1	6-30	±0.5	4-18	±0.2	30-120	±0.8
							18-63	±0.3	120-315	±1.2	63-250	±0.5	315-1000	±2.0
							250-	±0.8	1000-	±3.0				

1	GROUND TERMINAL LUG	CU	--					8
4	BOX+FRAME HEX BOLT	S45C	M6 X L15					7
2	COVER+BOX HEX BOLT	S45C	M6 X L25					6
2	COVER+BOX HEX BOLT	S45C	M6 X L65					5
1	BOX GASKET	NBR	--					4
1	COVER GASKET	NBR	--					3
1	CONDUIT BOX COVER	AL	--					2
1	CONDUIT BOX	AL	--					1
Q'TY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.	
APPD BY	S.K.HAN	UNIT	mm	SUBJECT	SSEN SERIES 100-132FR			DWG SIZE
CHKD BY	I.K.KIM	SCALE	1/1.5	TITLE TERMINAL BOX ASS'Y				A3 (1:1.5)
CHKD BY	-	PROJEC'N	3rd Angle					
DSND BY	이승호	DATE	2020-06-19					
				REF. NO				Sheet No. of
				DWG NO				3M-234756
6		7		8		9		