INDUCTION MOTOR DATA SHEET

HIGEN

3.7 kW - 4 P

MODEL: PI05HY1B4W	CUSTOMER :	REV. NO :
APPLICATION:	PROJECT NAME:	QUANTITY :

GENERAL DATA

FRAME NO.	112	
ENCLOSURE	☐ DRIP PROOF	
	☑ TOTALLY ENCLOSED	
	☐ Increased Safety Exp.-proof	
PROTECTION	IP 54	
METHODS OF COOLING	☐ SC ☑ FC ☐ AO	
FREQUENCY	60 Hz	
PHASE	3 PHASE	
SERVICE FACTOR	1.0	
INSULATION CLASS	F CLASS	
TEMP. RISE AT FULL LOAD (at S.F 1.0)		
RES. METHOD	105 °C	
THERMO. METHOD	°C	
LOCATION	☑ INDOOR ☐ OUTDOOR	
ALTITUDE	1000 m	
HUMIDITY	80 %	
AMBIENT TEMPERATURE	-10~40 °C	
RATING	☑ CONT. ☐ %ED	
NEMA DESIGN	B	
MOUNTING	☐ B3 ☑ B5 ☐ V1 ☐ B3B5	
BEARING TYPE	BALL	
BEARING DE\N-DE	6306ZZ/6205ZZ	
BEARING LUBRICANT	GREASE	
COUPLING METHOD	☑ DIRECT ☐ V-BELT	
SHAFT		
EXTENSION	SINGLE	
EXTERNAL THRUST		
TERMINAL BOX		
MAIN	☐ STEEL ☑ AL ☐ CAST	
AUX.	☐ YES ☑ NO	
BOX LOCATION	LEFT	
APPLICATION STANDARDS	IEC, KS	

PERFORMANCE DATA

OUTPUT		3.7		kW
POLES		4	POLES	
ROTOR TYPE		SQUIRREL CAGE		
STARTING METHOD		☑ D.O.L ☐ Y-△		
		☐ REACTOR (%TAP) ☐ V.V.V.F		
		☐ SOFT-STARTER		
RATED VOLTAGE		460 V	V	V
CURRENT				
	NO LOAD	A	A	A
	FULL LOAD	6.6 A	A	A
	STARTING	51.5 A	A	A
EFFICIENCY				
	AT 1/2 LOAD	%		
	AT 3/4 LOAD	%		
	AT FULL LOAD	84.0 %		
POWER FACTOR				
	AT 1/2 LOAD	%		
	AT 3/4 LOAD	%		
	AT FULL LOAD	78.0 %		
SPEED (AT FULL LOAD)		1740 rpm		
TORQUE				
	FULL LOAD	2.07 kg-m		100%
	LOCKED ROTOR	3.52 kg-m		170%
	BREAKDOWN	4.14 kg-m		200%
NOISE LEVEL		72.0 dB(A)		
VIBRATION		15.0 μm		
ALLOWABLE LOAD GD² REFERRED TO MOTOR SHAFT				
(AT DIRECT ON-LINE)		15.3 $kg\text{-}m^2$		
Motor GD^2		0.06 $kg\text{-}m^2$		
MOTOR APPROX. WEIGHT		24.0 kg		
PAINTING	MUNSELL NO.	7.1 B 4.0/0.9		
	THICKNESS	☑ STANDARD ☐ μm		

ACCESSORIES (OPTIONAL)

SUBMITTAL DRAWINGS

NOTE

1. THESE DATA ARE ONLY DESIGN VALUES AND SHALL BE GUARANTEED WITH TOLLERANCE OF APPLICATION STANDARDS.
2. OTHERS NOT MENTIONED IN THIS SHEET SHALL BE IN ACCORDANCE WITH HIGEN STANDARD.

REMARKS

1. ABOVE ALL DATA ARE CALCULATED AT 100% VOLTAGE.

FC : FAN COOLED SC : SELF COOLED
AO : AIR OVER

DATE	PREPARED	CHECKED	APPROVED
2008-07-29	M.S.PARK	H.K.KIM	H.J.KIM