



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	225S	Rated Output	45 kW	60 HP
Type	HLP-45/6	Number of Poles	6	
Enclosure(Protection)	Totally Enclosed (IP55)	Rotor Type	Squirrel Cage	
Method of Cooling	IC411(FC)	Starting Method*	<input checked="" type="checkbox"/> D.O.L <input type="checkbox"/> Y- Δ	
Rated Frequency	60 Hz	Rated Voltage	440 V	380 V 220 V
Number of Phases	3	Current	Full Load	76.2 A 88.2 A 152.4 A
Insulation Class	<input checked="" type="checkbox"/> F <input type="checkbox"/> B <input type="checkbox"/> H	Locked-rotor**	750 %	750 % 750 %
Temp. Rise at full load (by resistance method)	at 1.0 S.F 80 deg. C	Efficiency	50% Load 94.2 %	
Motor Location	<input checked="" type="checkbox"/> Indoor <input type="checkbox"/> Outdoor		75% Load 94.7 %	
Altitude	Less than 1000 meter		100% Load 94.5 %	
Relative Humidity	Less than 80 %	Power Factor(p.u)	50% Load 0.735	
Ambient Temp.	40 deg. C (Max.)		75% Load 0.800	
Duty Type	Continuous (S1)		100% Load 0.820	
Service Factor	1.15	Speed at Full Load	1185 r.p.m	
Mounting	<input checked="" type="checkbox"/> B3 <input type="checkbox"/> B5 <input type="checkbox"/> V1 <input type="checkbox"/> B3/B5	Torque	Full Load 37.0 kg·m	
Bearing	Type	Anti-Friction	Locked-rotor** 150 %	
	DE/N-DE	6314C3 / 6213C3	Breakdown** 230 %	
Lubricant	Grease(Gadus S2 V 100 2)		Moment of Inertia (J)	
External Thrust	Not applicable		Load(Max.) 101.050 kg·m ²	
Coupling Method	<input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-Belt			Motor 1.555 kg·m ²
Shaft Extension	<input checked="" type="checkbox"/> Single <input type="checkbox"/> Double			Sound Pressure Level (No-load & mean value at 1m from motor)
Terminal	Main <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Cast Iron			73 dB(A)
Box	Aux.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Vibration	
	Location	Refer to Outline Drawing	2.2 mm/sec (r.m.s)	
Application		Permissible number of consecutive starts		Cold 3 times
Area classification	Non-Hazardous			Hot 2 times
Type of Ex-Protection	Not applicable	Paint		Munsell No. 4.4PB5.5/5.6(VL-451)
Applicable Standard	KS,IEC, NEMA MG1 Part30(Vpeak)			

ACCESSORIES	SUBMITTAL DRAWING			
	Outline Dimension Drawing		Motor Weight(Approx.)	
	B3	LM-T1221B3PL001	380	kg
	B5	LM-T1225B5PL001	420	kg
	V1	LM-T1225V1PL001	420	kg
	B3/B5	LM-T1221B4PL001	400	kg
	Main T-Box Ass'y 3M-016881			

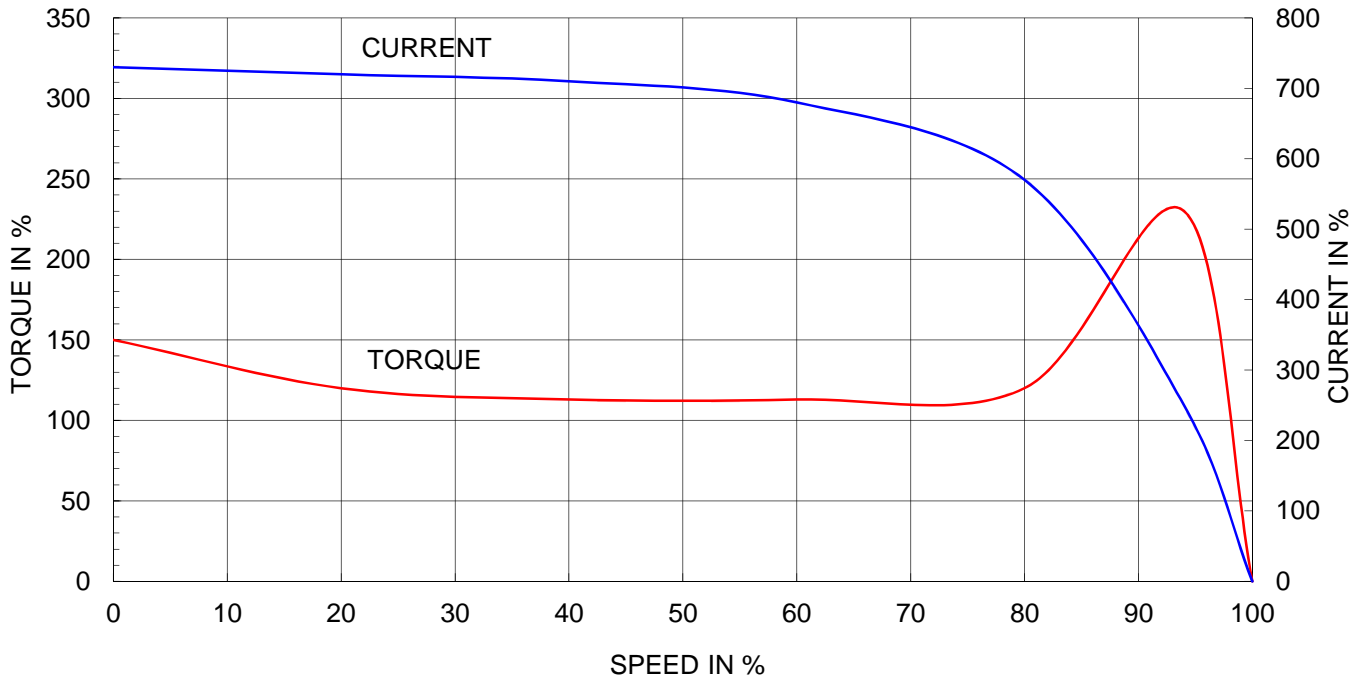
SPARE PARTS	REMARK	Premium Efficiency			
	*. For use on PWM VFD 10:1VT, 3:1CT@1.0S.F&F Temp. rise				
	Date	DSND	CHKD	CHKD	APPD
	2015-09-05	R.G. KIM	-	O.J. KIM	S.H. GO

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.

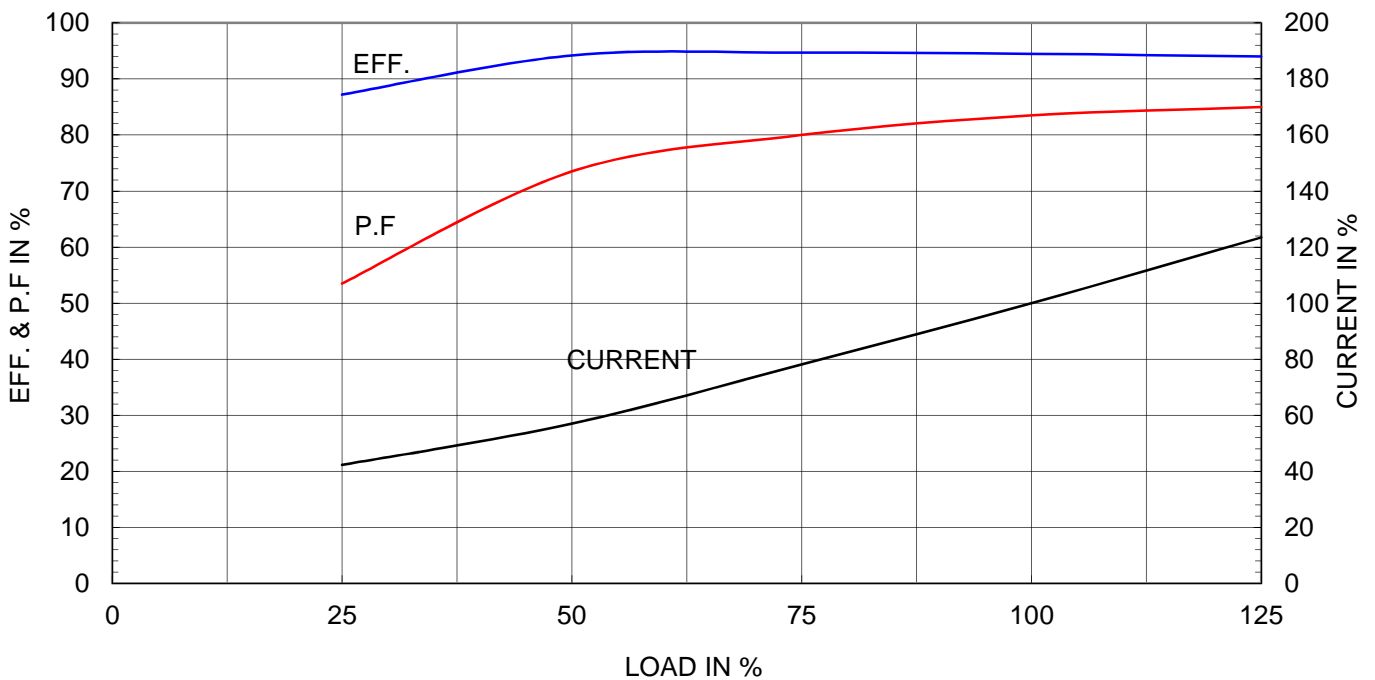
Type	:	HLP-45/6
Full Load Torque	:	37.0 Kg.m
Motor moment of Inertia (J)	:	1.555 Kg.m ²
Load moment of Inertia (J)	:	101.050 Kg.m ²

45 kW	6 P	60 Hz	
Speed at Full Load :		1185 RPM	
Rated Voltage	440V	380V	220V
Full Load Current	74.8A	86.6A	149.7A

SPEED VS TORQUE & CURRENT CURVE



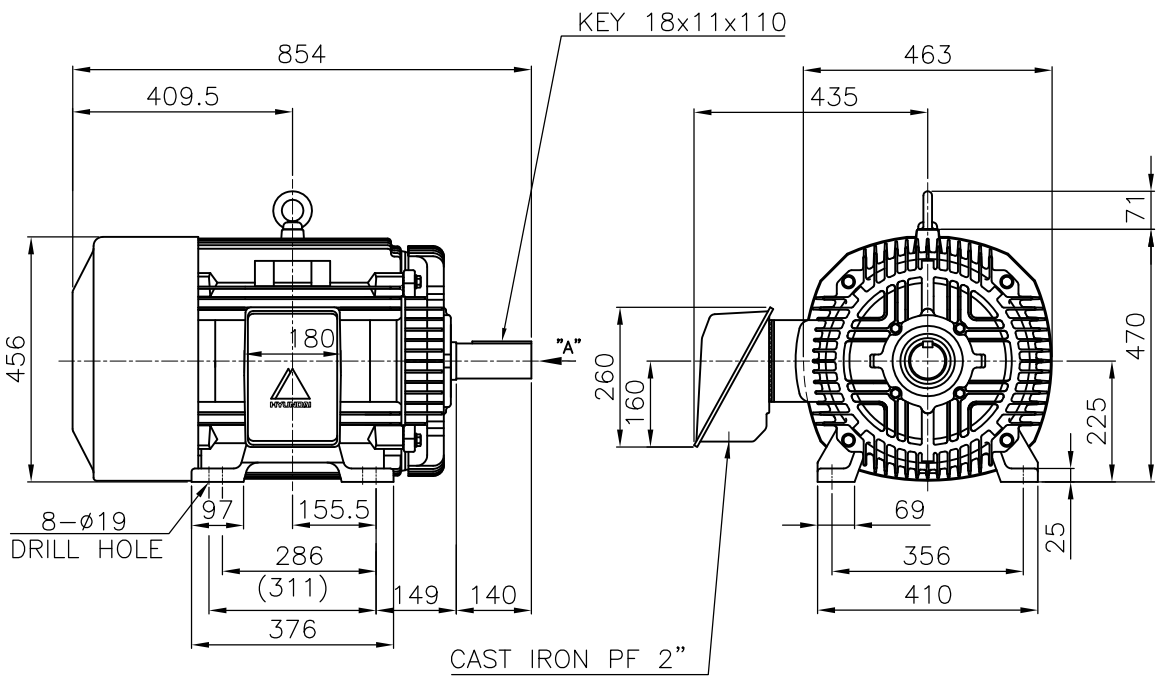
OUTPUT VS EFF., P.F & CURRENT CURVE



본 도면은 현대중공업(주) 재산이므로
허가없이 복사할 수 없음 (취급유의)

THIS DRAWING IS PROPRIETARY TO HHI. NO PART OF THIS DRAWING
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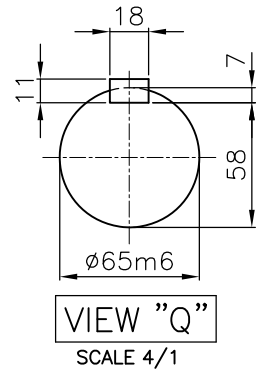
		<h1>TEFC</h1>		TYPE (1) TNB , TDB CAST IRON FRAME
		THREE PHASE INDUCTION MOTOR		



NOTE

1. TOLERANCE :

CENTER HEIGHT	225	$\begin{matrix} 0 \\ -0.5 \end{matrix}$
BASE HOLE	$\phi 19$	$\begin{matrix} +0.43 \\ 0 \end{matrix}$
SHAFT DIAMETER	$\phi 65$	$\begin{matrix} +0.030 \\ +0.011 \end{matrix}$
KEYWAY WIDTH	18	$\begin{matrix} -0.018 \\ -0.061 \end{matrix}$
KEYWAY DEPTH	7	$\begin{matrix} +0.2 \\ 0 \end{matrix}$
KEY WIDTH	18	$\begin{matrix} 0 \\ -0.043 \end{matrix}$
KEY HEIGHT	11	$\begin{matrix} 0 \\ -0.110 \end{matrix}$



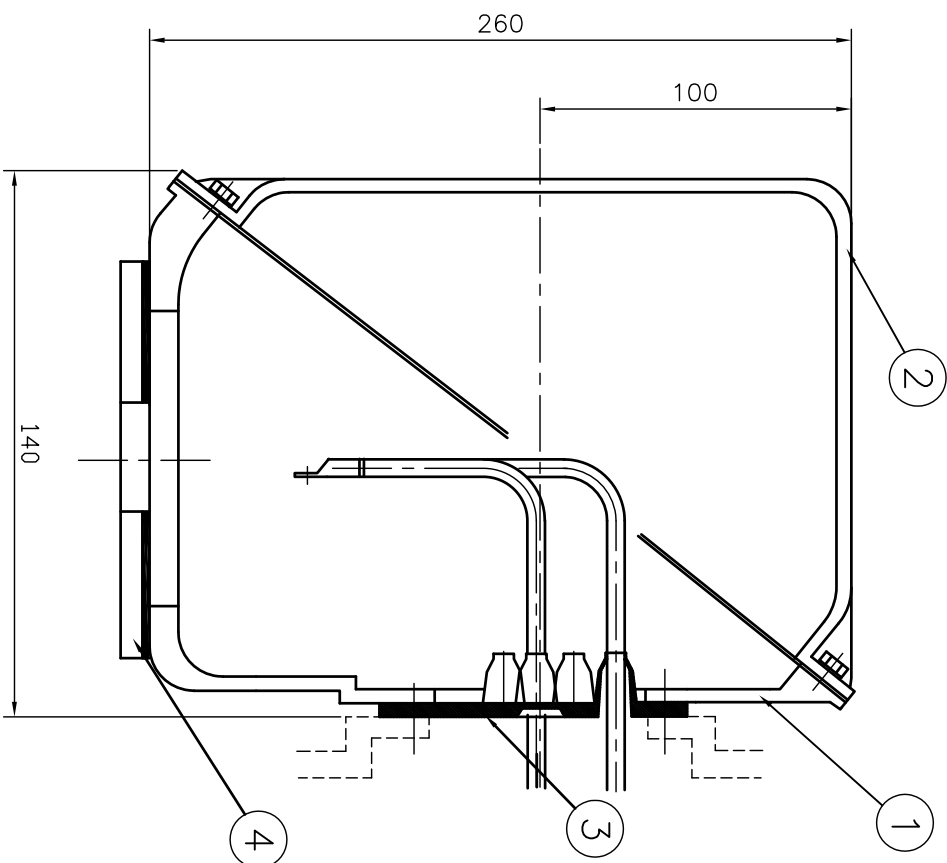
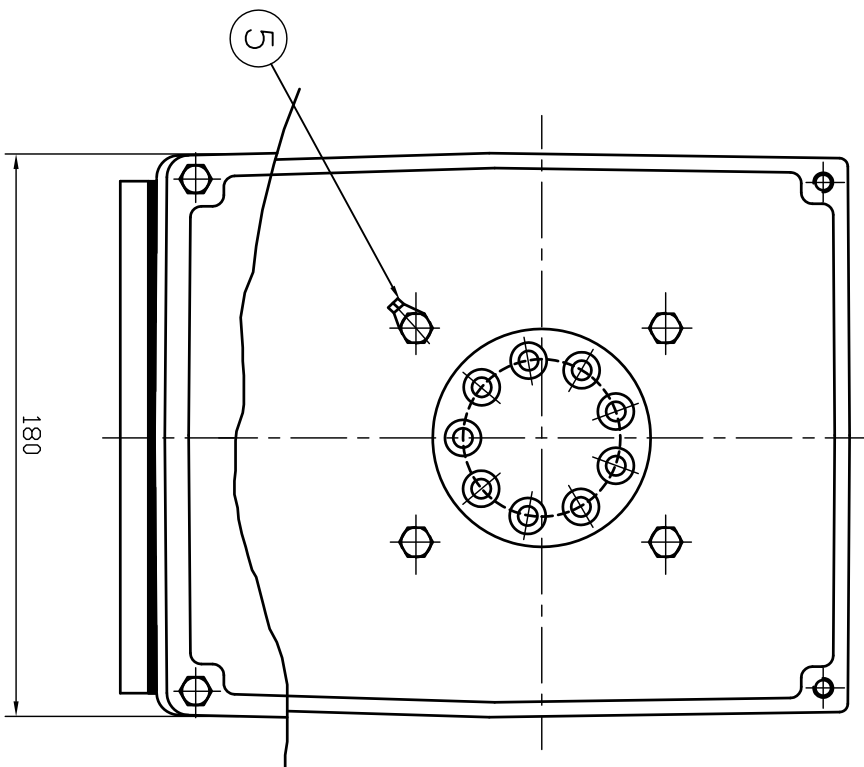
2. The type (1)—"TNB , TDB" is for HHI's standard products and it can be changed for customer's requirements or detail designing.

TEFC STANDARD
CAD PROJ \ FILE
MMSTDMTR/TJ2SAP51

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.225S-4P TEFC
TITLE	OUTLINE THREE-PHASE INDUCTION MOTOR

REF. NO	L2-Series	Sheet No. of
DWG NO	LM-T1221B3PL001	Revision No. 0



REV	DATE	CONTENTS	REV'D BY	CHK'D BY	Q.P. CHK	APP'D BY
1						

1	EARTH TERMINAL LUG									
1	CABLE ENTRY PLATE									
1	GASKET	NBR								
1	TERMINAL BOX COVER	CAST IRON								
1	TERMINAL BOX BODY	CAST IRON								

QTY	DESCRIPTION	MATERIAL	DIMENSION	WEIGHT	PART NO.	REMARK	NO.
	APP'D BY	권진오	UNIT	MM			
	Q.P. CHK	주영걸	SCALE	NONE			
	CHK'D BY	권오철	PROJEC'N	3 권(3rd Angle)			
	DSND BY	김헌태	DATE	92.06.05			

REF. NO	DWG NO	SHEET NO	TOTAL SHEETS
	3M-016881	0	0

TITLE	SUBJECT	SCALE	DATE
TERMINAL BOX ASS'Y	HLA6 - 200, 225Fr.	NONE	92.06.05



Sheet No. of
Revision No. 0