

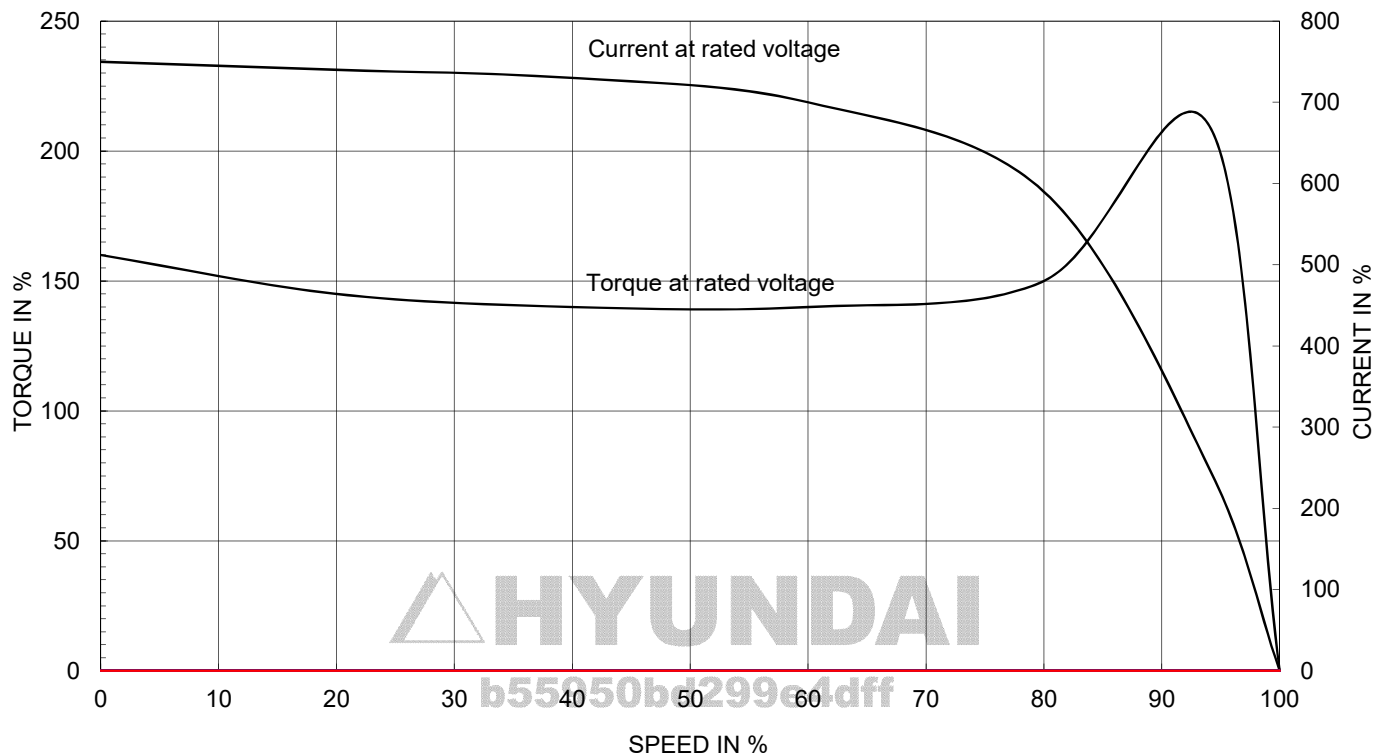
# AC INDUCTION MOTOR DATA SHEET

|                                                |  |                                                                                                                               |  |                                                              |  |                                                                        |  |        |  |
|------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------|--|------------------------------------------------------------------------|--|--------|--|
| Model No.or RFQ No.                            |  | Item No.                                                                                                                      |  | Rev. No.                                                     |  | [ 0 ]                                                                  |  |        |  |
| Project Name                                   |  | Project No.                                                                                                                   |  | Quantity                                                     |  | set                                                                    |  |        |  |
| <b>GENERAL SPECIFICATION</b>                   |  |                                                                                                                               |  | <b>PERFORMANCE DATA</b>                                      |  |                                                                        |  |        |  |
| Frame Size                                     |  | 200LL                                                                                                                         |  | Rated Output                                                 |  | 37 kW 50 HP                                                            |  |        |  |
| Type                                           |  | HLP-37/6                                                                                                                      |  | 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 64.5 A 74.7 A 129.0 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) |  |                                                                                                                               |  | Efficiency                                                   |  |                                                                        |  |        |  |
| at 1.0 S.F                                     |  | 80 °C                                                                                                                         |  | 50% Load                                                     |  | 94.0 %                                                                 |  |        |  |
| Motor Location                                 |  | <input checked="" type="checkbox"/> Indoor <input type="checkbox"/> Outdoor                                                   |  | 75% Load                                                     |  | 94.3 %                                                                 |  |        |  |
| Altitude                                       |  | Less than 1000m                                                                                                               |  | 100% Load                                                    |  | 94.1 %                                                                 |  |        |  |
| Relative Humidity                              |  | Less than 80 %                                                                                                                |  | Power Factor(p.u)                                            |  |                                                                        |  |        |  |
| Ambient Temp.                                  |  | 40 °C MAX.                                                                                                                    |  | 50% Load                                                     |  | 0.685                                                                  |  |        |  |
| Duty Type                                      |  | Continuous(S1)                                                                                                                |  | 75% Load                                                     |  | 0.765                                                                  |  |        |  |
| Service Factor                                 |  | 1.15                                                                                                                          |  | 100% Load                                                    |  | 0.800                                                                  |  |        |  |
| Mounting                                       |  | <input type="checkbox"/> B3 <input checked="" type="checkbox"/> B5 <input type="checkbox"/> V1 <input type="checkbox"/> B3/B5 |  | Speed at Full Load                                           |  | 1175 r.p.m                                                             |  |        |  |
| Bearing                                        |  | Type Anti-Friction                                                                                                            |  | Torque                                                       |  |                                                                        |  |        |  |
|                                                |  | DE/N-DE 6313ZC3 / 6212ZC3                                                                                                     |  | Full Load                                                    |  | 30.7 kg.m                                                              |  |        |  |
|                                                |  | Lubricant Grease(Polyrex-EM)                                                                                                  |  | Locked-rotor**                                               |  | 160 %                                                                  |  |        |  |
| External Thrust                                |  | Not applicable                                                                                                                |  | Breakdown**                                                  |  | 210 %                                                                  |  |        |  |
| Coupling Method                                |  | <input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-Belt                                                    |  | Moment of Inertia (J)                                        |  |                                                                        |  |        |  |
| Shaft Extension                                |  | <input checked="" type="checkbox"/> Single <input type="checkbox"/> Double                                                    |  | Load(Max.)                                                   |  | 67.47540426 kg·m²                                                      |  |        |  |
| Terminal Box                                   |  | Main <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Cast Iron                                             |  | Motor                                                        |  | 0.781 kg·m²                                                            |  |        |  |
|                                                |  | Aux. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No                                                      |  | Sound Pressure Level (No-load & mean value at 1m from motor) |  |                                                                        |  |        |  |
|                                                |  | Location Refer to Outline Drawing                                                                                             |  |                                                              |  | 68 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. Panton279C                                                 |  |        |  |
| <b>ACCESSORIES</b>                             |  |                                                                                                                               |  | <b>SUBMITTAL DRAWING</b>                                     |  |                                                                        |  |        |  |
|                                                |  |                                                                                                                               |  | Outline Dimension Drawing \ Motor Weight(Approx.)            |  |                                                                        |  |        |  |
|                                                |  |                                                                                                                               |  | B3                                                           |  |                                                                        |  | kg     |  |
|                                                |  |                                                                                                                               |  | B5                                                           |  | LM-T1207B5PLV01                                                        |  | 320 kg |  |
|                                                |  |                                                                                                                               |  | V1                                                           |  |                                                                        |  | kg     |  |
|                                                |  |                                                                                                                               |  | B3/B5                                                        |  |                                                                        |  | kg     |  |
|                                                |  |                                                                                                                               |  | Main T-Box Ass'y                                             |  | 3M-145864                                                              |  |        |  |
|                                                |  |                                                                                                                               |  |                                                              |  |                                                                        |  |        |  |
|                                                |  |                                                                                                                               |  |                                                              |  |                                                                        |  |        |  |
|                                                |  |                                                                                                                               |  | <b>REMARK</b>                                                |  |                                                                        |  |        |  |
|                                                |  |                                                                                                                               |  | *.Premium Efficiency(IE3)                                    |  |                                                                        |  |        |  |
|                                                |  |                                                                                                                               |  | *.For use on PWM VFD 10:1VT,3:1CT@1.0S.F&F Temp.rise         |  |                                                                        |  |        |  |
| <b>SPARE PARTS</b>                             |  |                                                                                                                               |  |                                                              |  |                                                                        |  |        |  |
|                                                |  |                                                                                                                               |  | Date                                                         |  | DSND                                                                   |  | CHKD   |  |
|                                                |  |                                                                                                                               |  | 2018-11-23                                                   |  | R.G. KIM                                                               |  | ---    |  |

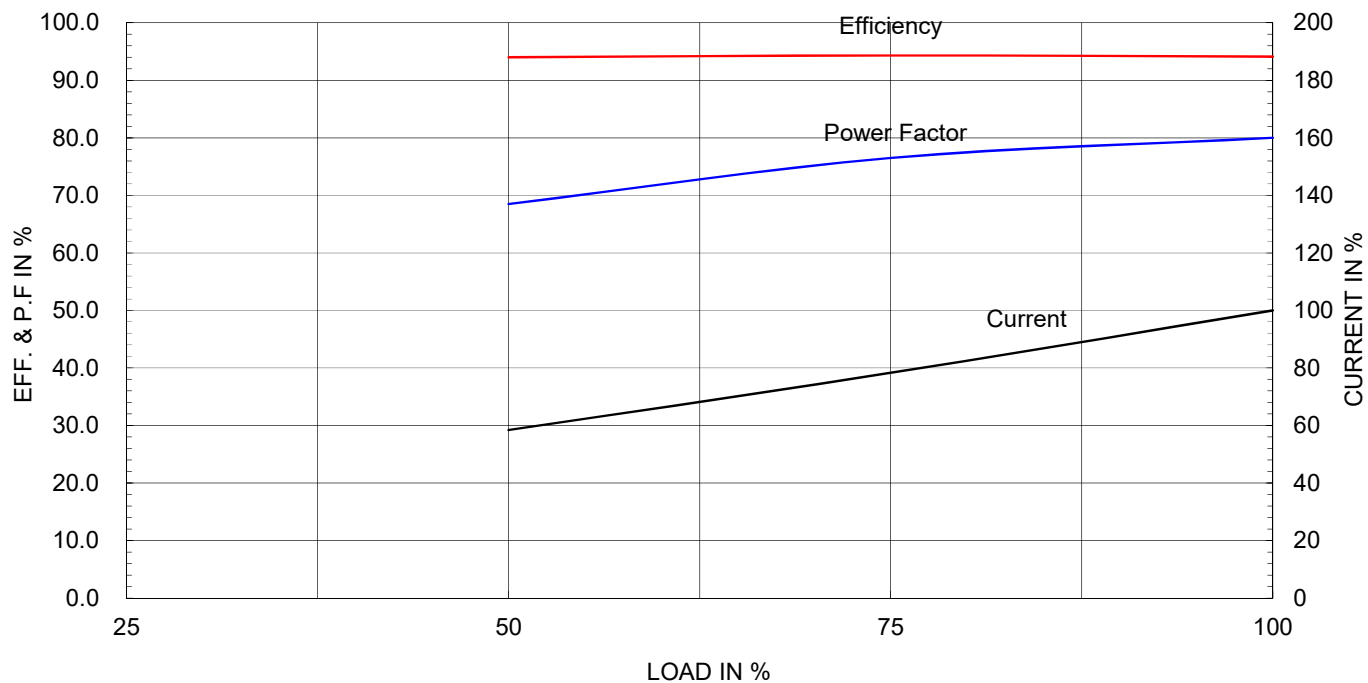
|                               |                          |
|-------------------------------|--------------------------|
| Type :                        | HLP-37/6                 |
| Full Load Torque :            | 30.7 Kg-m                |
| Load moment of Inertia (J) :  | 67.475 Kg-m <sup>2</sup> |
| Motor moment of Inertia (J) : | 0.781 Kg-m <sup>2</sup>  |

|                               |       |       |        |
|-------------------------------|-------|-------|--------|
| 37kW                          | 50HP  | 6P    | 60 Hz  |
| Speed at Full Load : 1175 RPM |       |       |        |
| Rated Voltage                 | 440V  | 380V  | 220V   |
| Full Load Current             | 64.5A | 74.7A | 129.0A |

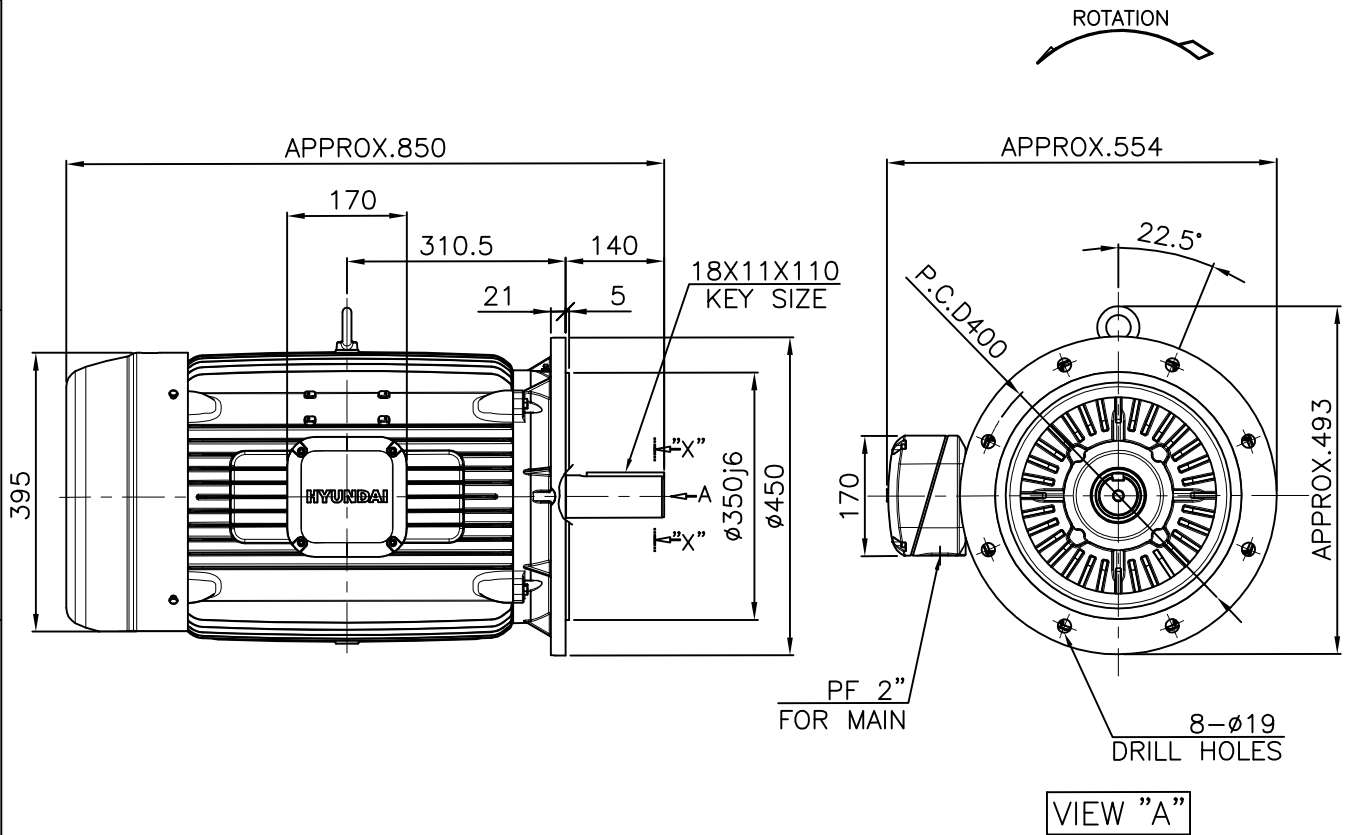
SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE



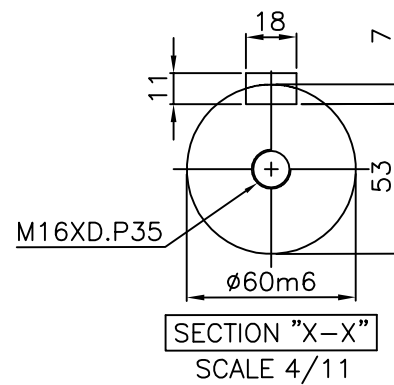
| 1    |       |     | 2    |          | 3 |  | 4       |         |         |         |  |
|------|-------|-----|------|----------|---|--|---------|---------|---------|---------|--|
| ▽    | 50S   | REV | DATE | CONTENTS |   |  | REVD BY | CHKD BY | CHKD BY | APPD BY |  |
| ▽▽   | 12.5S |     |     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



## NOTE

1.TOLERANCE :

|                 |                                                                  |
|-----------------|------------------------------------------------------------------|
| FLANGE HOLE     | $\phi 19 \begin{smallmatrix} +0.52 \\ 0 \end{smallmatrix}$       |
| RABBET DIAMETER | $\phi 350 \pm 0.018$                                             |
| SHAFT DIAMETER  | $\phi 60 \begin{smallmatrix} +0.030 \\ +0.011 \end{smallmatrix}$ |
| KEYWAY WIDTH    | $18 \begin{smallmatrix} 0 \\ -0.043 \end{smallmatrix}$           |
| KEYWAY DEPTH    | $7 \begin{smallmatrix} +0.2 \\ 0 \end{smallmatrix}$              |
| KEY WIDTH       | $18 \begin{smallmatrix} 0 \\ -0.043 \end{smallmatrix}$           |
| KEY HEIGHT      | $11 \begin{smallmatrix} 0 \\ -0.110 \end{smallmatrix}$           |



|         |         |          |                 |         |                   |                |
|---------|---------|----------|-----------------|---------|-------------------|----------------|
| APPD BY | S.K.HAN | UNIT     | mm              | SUBJECT | KS Fr.200LL-4~20P | DWG SIZE       |
| CHKD BY | I.K.KIM | SCALE    | 1/11            | TITLE   |                   | A4 ( 1:11 )    |
| CHKD BY | S.H.LEE | PROJEC'N | 3각법 (3rd Angle) |         |                   |                |
| DSND BY | S.R.KIM | DATE     | 2020.06.19      |         |                   |                |
|         |         |          |                 | REF. NO |                   | Sheet No. of   |
|         |         |          |                 | DWG NO  | LM-T1207B5PLV01   | Revision No. 0 |

