

## AC INDUCTION MOTOR DATA SHEET

| Model No.o                                |             |   | Item No.  |                   |                | ev. No.     | [ 0 ]   |  |
|---|-------------|---|---|-------------------|----------------|-------------|---------|--|
| Project Nan                               | ne          |   | Project No.                                       |                   | Q              | uantity     | set     |  |
|   | GENER       | AL SPECIFICATION  |   | PER               | FORMANCE I     | DATA        |         |  |
| Frame Size                                |             | 100L  | Rated Output                                      |                   | 2.2 kW         |             | 3 HP    |  |
| Type                                      |             | HLP-2.2/4   | Number of Po                                      | Number of Poles   |                |             |         |  |
| Enclosure(P                               | Protection) | Totally Enclosed (IP55)   | Rotor Type  |                   | Squirrel Cage  |             |         |  |
| Method of C                               |             | IC411(FC)   | Starting Method*                                  |                   | D.O.L          |             |         |  |
| Rated Frequency                           |             | 60 Hz   | Rated Voltage                                     |                   |                |             |         |  |
| Number of Phases                          |             | 3   | Current Full Load                                 |                   | 4.2 A          |             |         |  |
| Insulation C                              |             | ■ F □ B □ H   | _   | ocked-rotor**     | 835 %          | 835         |         |  |
|   |             | resistance method)  |   | ocked-fotof       | 633 %          | 633         | % 633 % |  |
|   | · •         |   | Efficiency SS 0 0                                 |                   |                |             |         |  |
|   | 1.0 S.F     | 00 0  | 50% Load  |                   | 88.0 %         |             |         |  |
| Motor Loca                                | tion        | ■ Indoor □ Outdoor  | 75% Load  |                   | 89.4 %         |             |         |  |
| Altitude                                  |             | Less than 1000m   | 100% Load   |                   | 89.5 %         |             |         |  |
| Relative Hu                               |             | Less than 80 %  | Power Factor                                      |                   | I              |             |         |  |
| Ambient Te                                | emp.        | 40 °C MAX.  |   | 50% Load          | 0.508          |             |         |  |
| Duty Type                                 |             | Continuous(S1)  |   | 75% Load          | 0.688          |             |         |  |
| Service Fac                               | tor         | 1.15  |   | 100% Load         | 0.764          |             |         |  |
| Mounting                                  |             | □ B3 ■ B5 □ V1 □ B3/B5  | Speed at Full                                     | Load              | 1760           | r.p.m       |         |  |
|   | Type        | Anti-Friction   | Torque  |                   |                |             |         |  |
| Bearing                                   | DE/N-DE     | 6206ZZC3 / 6206ZZC3   | F   | ull Load          | 1.2            | kg.m        |         |  |
|   | Lubricant   | Grease(Polyrex-EM)  | L   | ocked-rotor**     | 200            |             |         |  |
| External Th                               | rust        | Not applicable  | B   | Breakdown**       | 250            | %           |         |  |
| Coupling M                                | lethod      | ■ Direct □ V-Belt   | Moment of In                                      | nertia (J)        | !              |             |         |  |
| Shaft Exten                               |             | ■ Single □ Double   |   | oad(Max.)         | 1.82625        | kg·m²       |         |  |
|   | Main        | ☐ Steel ☐ Cast Iron   |   | Motor             |                | kg·m²       |         |  |
| Terminal                                  | Aux.        | ☐ Yes ■ No  |   | re Level (No-load |                |             | notor)  |  |
| Box                                       | Location    | Refer to Outline Drawing  | 1   | ( (               |                | dB(A)       | ,       |  |
| Application                               |             | Teres to Sutine Brawing   | Vibration   |                   |                | mm/sec(r.m  | (2)     |  |
| Area classif                              |             | Non-Hazardous   | Permissible number of                             |                   |                | times       | .5)     |  |
|   |             | Not applicable  | consecutive starts                                |                   |                | times       |         |  |
| Type of Ex-Protection Applicable Standard |             | KS, IEC, NEMA MG1 Part30(Vpeak)   |   |                   |                | Panton279C  |         |  |
|   | SSORIES     | KS, IEC, NEWA WOT Tait50(Vpcak)   | SUBMITTAL DRAWING                                 |                   |                |             |         |  |
| ACCE                                      | BBOKIEB     | _   | Outline Dimension Drawing \ Motor Weight(Approx.) |                   |                |             |         |  |
|   |             |   | Outilité Dillie                                   | B3                | 1              | IVIOIOI V   |         |  |
|   |             |   |   | B5                | LM-T1105B5F    | DI 3701     | kg      |  |
|   |             |   |   |                   | LM-11103B3F    | LVUI        | 41 kg   |  |
|   |             |   |   | V1                |                |             | kg      |  |
|   |             |   | 16: 50  | B3/B5             | 23.5.4.40.5.40 |             | kg      |  |
|   |             |   | Main T-Box A                                      | Ass'y             | 3M-148549      |             |         |  |
|   |             |   |   |                   |                |             |         |  |
|   |             |   |   |                   |                |             |         |  |
|   |             | REMARK  |   |                   |                |             |         |  |
|   |             | *.Premium Efficiency(IE3)  *.For use on PWM VFD 10:1VT,3:1CT@1.0S.F&F Temp.rise |   |                   |                |             |         |  |
|   |             |   | *.For use o                                       | on PWM VFD 10:    | 1VT,3:1CT@1    | .0S.F&F Tem | p.rise  |  |
|   |             |   |   |                   |                |             |         |  |
|   |             |   |   |                   |                |             |         |  |
|   |             |   |   |                   |                |             |         |  |
|   |             |   |   |                   |                |             |         |  |
|   |             |   |   |                   |                |             |         |  |
|   |             |   |   |                   |                |             |         |  |
| SPAR                                      | E PARTS     |   | 7   |                   |                |             |         |  |
| 22.1210                                   |             | _   |   |                   |                |             |         |  |
|   |             |   | Date  | DSND              | CHKD           | CHKD        | APPD    |  |
|   |             |   | Date  |                   | ( CINI)        |             |         |  |
|   |             |   | Date  | DSIND             | CHKD           | CIIID       | AITD    |  |
|   |             |   |   |                   |                |             |         |  |
|   |             |   | 2018-11-23  | R.G. KIM          |                | O.J. KIM    |         |  |

Above technical data are only design values and shall be guaranteed with tolerance of applicable standard.

<sup>\*</sup> In case of Inverter-Fed Motor, performance data is based on sine wave tests.

<sup>\*\*</sup> The data are based on rated voltage & frequency, and data are expressed as a percentage of full load value.



## PERFORMANCE CURVE

CURVE NO.

PI-HLP-2.2/4

| Туре            | :                | HLP-2.2/4 |       |
|-----------------|------------------|-----------|-------|
| Full Load Torqu | ie:              | 1.2       | Kg-m  |
| Load moment of  | of Inertia (J):  | 1.826     | Kg-m² |
| Motor moment    | of Inertia (.I): | 0.008     | Ka-m² |

| 2.2kW               | 3HP |      | 4P (     | 60 Hz |  |
|---------------------|-----|------|----------|-------|--|
| Speed at Full Load: |     |      | 1760 RPM |       |  |
| Rated Voltage       |     | 440V | 380V     | 220V  |  |
| Full Load Current   |     | 4.2A | 4.9A     | 8.4A  |  |







