

# AC INDUCTION MOTOR DATA SHEET

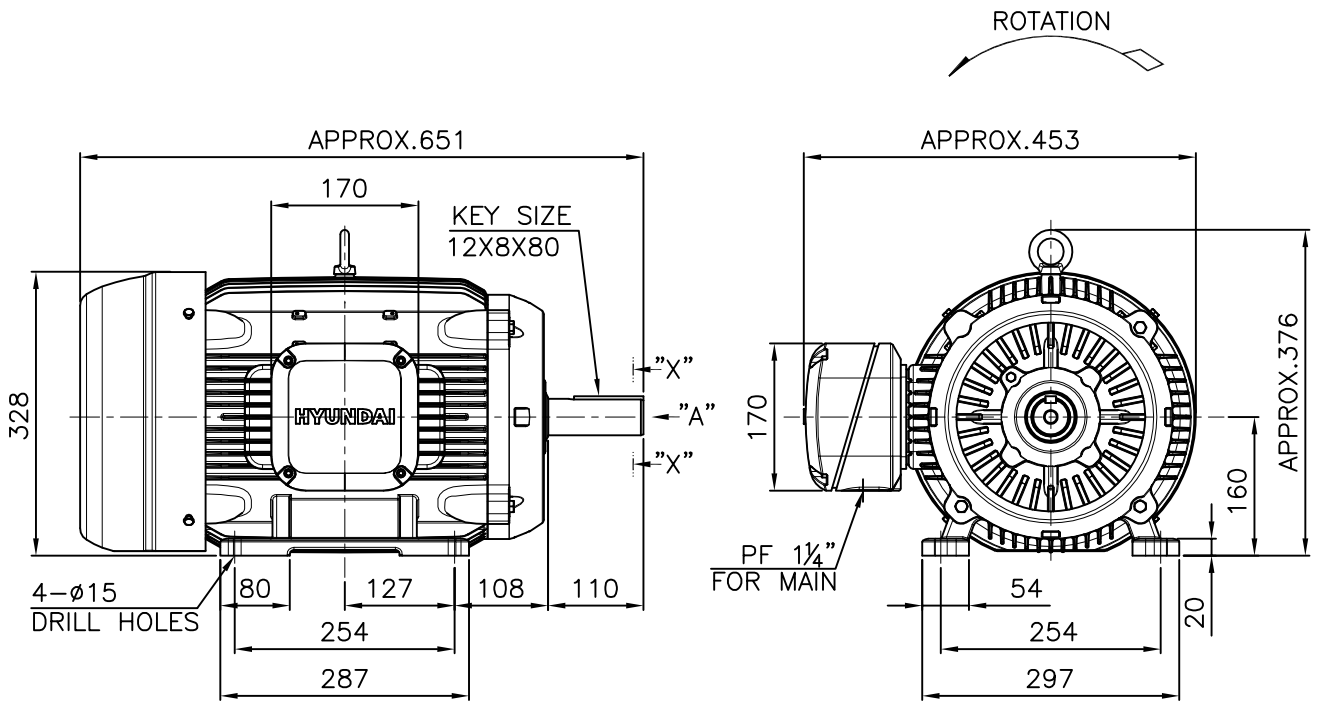
| Model No.or RFQ No.                            |                 | Item No.  |  | Rev. No.  |  | [ 0 ]  |  |    |                 |        |    |  |    |    |  |    |       |  |    |
|--|-----------------|---|--|---|--|--|--|----|-----------------|--------|----|--|----|----|--|----|-------|--|----|
| Project Name                                   |                 | Project No.   |  | Quantity  |  | set  |  |    |                 |        |    |  |    |    |  |    |       |  |    |
| GENERAL SPECIFICATION                          |                 |   |  | PERFORMANCE DATA  |  |  |  |    |                 |        |    |  |    |    |  |    |       |  |    |
| Frame Size                                     |                 | 160L  |  | Rated Output  |  | 11 kW      15 HP   |  |    |                 |        |    |  |    |    |  |    |       |  |    |
| Type   |                 | HLP-11/6  |  | 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      20.7 A      24.0 A      41.4 A                          |  |    |                 |        |    |  |    |    |  |    |       |  |    |
| Insulation Class                               |                 | <input checked="" type="checkbox"/> F <input type="checkbox"/> B <input type="checkbox"/> H                                   |  | Locked-rotor**  |  | 670 %      670 %      670 %  |  |    |                 |        |    |  |    |    |  |    |       |  |    |
| Temp. Rise at full load (by resistance method) |                 | at 1.0 S.F      80 °C   |  | Efficiency  |  | 50% Load      91.0 %   |  |    |                 |        |    |  |    |    |  |    |       |  |    |
| Motor Location                                 |                 | <input checked="" type="checkbox"/> Indoor <input type="checkbox"/> Outdoor   |  |   |  | 75% Load      91.8 %   |  |    |                 |        |    |  |    |    |  |    |       |  |    |
| Altitude                                       |                 | Less than 1000m   |  |   |  | 100% Load      91.7 %  |  |    |                 |        |    |  |    |    |  |    |       |  |    |
| Relative Humidity                              |                 | Less than 80 %  |  | Power Factor(p.u)   |  | 50% Load      0.635  |  |    |                 |        |    |  |    |    |  |    |       |  |    |
| Ambient Temp.                                  |                 | 40 °C MAX.  |  |   |  | 75% Load      0.720  |  |    |                 |        |    |  |    |    |  |    |       |  |    |
| Duty Type                                      |                 | Continuous(S1)  |  |   |  | 100% Load      0.760   |  |    |                 |        |    |  |    |    |  |    |       |  |    |
| Service Factor                                 |                 | 1.15  |  | Speed at Full Load  |  | 1175 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      9.1 kg.m  |  |    |                 |        |    |  |    |    |  |    |       |  |    |
| Bearing  |                 | Type      Anti-Friction   |  |   |  | Locked-rotor**      160 %  |  |    |                 |        |    |  |    |    |  |    |       |  |    |
|  |                 | DE/N-DE      6309ZZC3 / 6309ZZC3  |  |   |  | Breakdown**      240 %   |  |    |                 |        |    |  |    |    |  |    |       |  |    |
|  |                 | Lubricant      Grease(Polyrex-EM)   |  | Moment of Inertia (J)   |  | Load(Max.)      22.79574468 kg·m <sup>2</sup>                          |  |    |                 |        |    |  |    |    |  |    |       |  |    |
| External Thrust                                |                 | Not applicable  |  |   |  | Motor      0.13 kg·m <sup>2</sup>                                      |  |    |                 |        |    |  |    |    |  |    |       |  |    |
| Coupling Method                                |                 | <input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-Belt  |  | Sound Pressure Level (No-load & mean value at 1m from motor)  |  | 56 dB(A)   |  |    |                 |        |    |  |    |    |  |    |       |  |    |
| Shaft Extension                                |                 | <input checked="" type="checkbox"/> Single <input type="checkbox"/> Double  |  | Vibration   |  | 2.2 mm/sec(r.m.s)  |  |    |                 |        |    |  |    |    |  |    |       |  |    |
| Terminal Box                                   |                 | Main <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Cast Iron   |  | Permissible number of consecutive starts  |  | Cold      3 times  |  |    |                 |        |    |  |    |    |  |    |       |  |    |
|  |                 | Aux. <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  |  |   |  | Hot      2 times   |  |    |                 |        |    |  |    |    |  |    |       |  |    |
| Location                                       |                 | Refer to Outline Drawing  |  | Paint   |  | Munsell No.      Panton279C  |  |    |                 |        |    |  |    |    |  |    |       |  |    |
| Application                                    |                 |   |  | <b>SUBMITTAL DRAWING</b>  |  |  |  |    |                 |        |    |  |    |    |  |    |       |  |    |
| Area classification                            |                 | Non-Hazardous   |  | Outline Dimension Drawing \ Motor Weight(Approx.)   |  |  |  |    |                 |        |    |  |    |    |  |    |       |  |    |
| Type of Ex-Protection                          |                 | Not applicable  |  | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">B3</td> <td style="width: 30%;">LM-T1165B3PLV01</td> <td style="width: 40%;">136 kg</td> </tr> <tr> <td>B5</td> <td></td> <td>kg</td> </tr> <tr> <td>V1</td> <td></td> <td>kg</td> </tr> <tr> <td>B3/B5</td> <td></td> <td>kg</td> </tr> </table> |  |  |  | B3 | LM-T1165B3PLV01 | 136 kg | B5 |  | kg | V1 |  | kg | B3/B5 |  | kg |
| B3   | LM-T1165B3PLV01 | 136 kg  |  |   |  |  |  |    |                 |        |    |  |    |    |  |    |       |  |    |
| B5   |                 | kg  |  |   |  |  |  |    |                 |        |    |  |    |    |  |    |       |  |    |
| V1   |                 | kg  |  |   |  |  |  |    |                 |        |    |  |    |    |  |    |       |  |    |
| B3/B5  |                 | kg  |  |   |  |  |  |    |                 |        |    |  |    |    |  |    |       |  |    |
| Applicable Standard                            |                 | KS, IEC, NEMA MG1 Part30(Vpeak)   |  | Main T-Box Ass'y      3M-145860   |  |  |  |    |                 |        |    |  |    |    |  |    |       |  |    |
| ACCESSORIES                                    |                 |   |  | REMARK  |  |  |  |    |                 |        |    |  |    |    |  |    |       |  |    |
|  |                 |   |  | * .Premium Efficiency(IE3)  |  |  |  |    |                 |        |    |  |    |    |  |    |       |  |    |
|  |                 |   |  | * .For use on PWM VFD 10:1VT,3:1CT@1.0S.F&F Temp.rise   |  |  |  |    |                 |        |    |  |    |    |  |    |       |  |    |
| SPARE PARTS                                    |                 |   |  | Date      DSND      CHKD      CHKD      APPD  |  |  |  |    |                 |        |    |  |    |    |  |    |       |  |    |
|  |                 |   |  | 2018-11-23      R.G. KIM      ---      O.J. KIM      S.K.HAN  |  |  |  |    |                 |        |    |  |    |    |  |    |       |  |    |

Note: Others not mentioned in this data sheet shall be in accordance with maker standard. Made in Vietnam  
 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.  
 \*\* The data are based on rated voltage & frequency, and data are expressed as a percentage of full load value.

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

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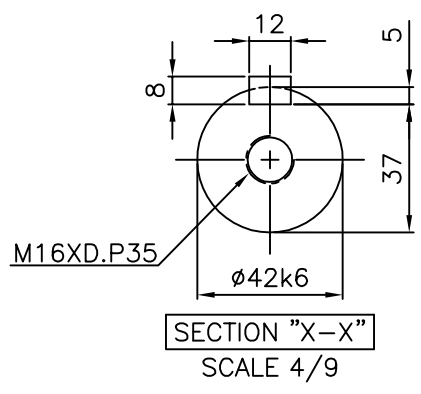
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|------|-------|-----|------|----------|--|---------|---------|---------|---------|
| 1    |       | 2   |      | 3        |  | 4       |         |         |         |
| ▽    | 50S   | REV | DATE | CONTENTS |  | REVD BY | CHKD BY | CHKD BY | APPD BY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



**NOTE**

1. TOLERANCE :

|                |           |  |
|----------------|-----------|--|
| CENTER HEIGHT  | 160       | $\begin{matrix} 0 \\ -0.5 \end{matrix}$        |
| BASE HOLES     | $\phi 15$ | $\begin{matrix} +0.43 \\ 0 \end{matrix}$       |
| SHAFT DIAMETER | $\phi 42$ | $\begin{matrix} +0.018 \\ +0.002 \end{matrix}$ |
| KEYWAY WIDTH   | 12        | $\begin{matrix} 0 \\ -0.043 \end{matrix}$      |
| KEYWAY DEPTH   | 5         | $\begin{matrix} +0.2 \\ 0 \end{matrix}$        |
| KEY WIDTH      | 12        | $\begin{matrix} 0 \\ -0.043 \end{matrix}$      |
| KEY HEIGHT     | 8         | $\begin{matrix} 0 \\ -0.090 \end{matrix}$      |



|         |         |          |                |         |                 |              |            |
|---------|---------|----------|----------------|---------|-----------------|--------------|------------|
| APPD BY | S.K.HAN | UNIT     | mm             | SUBJECT | KS, IEC Fr.160L | DWG SIZE     | A4 ( 1:9 ) |
| CHKD BY | S.Y.KIM | SCALE    | 1/9            | 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-T1165B3PLV01 | Revision No. | 0          |