

Customer :  
Project Name :  
Project No. :  
Revision No. :

---

## **SPECIFICATION for INDUCTION MOTOR**



# Contents

|                                      |           |
|--------------------------------------|-----------|
| 1 . Data Sheet of AC Induction Motor | - 1Sheets |
| 2 . Speed-Torque & Current Curve     | - 1Sheets |
| 3 . Outline Dimension Drawing        | - 1Sheets |
| 4 . Main Terminal Box Drawing        | - 1Sheets |

|                                                                                 |  |                                                                                                                               |  |                                                                                   |  |                                                                        |  |                       |  |          |  |          |  |
|---------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------|--|-----------------------------------------------------------------------------------|--|------------------------------------------------------------------------|--|-----------------------|--|----------|--|----------|--|
|  |  | <h1>AC INDUCTION MOTOR DATA SHEET</h1>                                                                                        |  |                                                                                   |  |                                                                        |  |                       |  |          |  |          |  |
| Model No.or RFQ No.                                                             |  | 4406KSTD40SSDS1STFE3B51DL0SDS                                                                                                 |  | Item No.                                                                          |  | Rev. No.                                                               |  | [      ]              |  |          |  |          |  |
| Project Name                                                                    |  |                                                                                                                               |  | Project No.                                                                       |  | Quantity                                                               |  |                       |  |          |  |          |  |
| GENERAL SPECIFICATION                                                           |  |                                                                                                                               |  | PERFORMANCE DATA                                                                  |  |                                                                        |  |                       |  |          |  |          |  |
| Frame Size                                                                      |  | 90L                                                                                                                           |  | Rated Output                                                                      |  | 0.75 kW                                                                |  | 1 HP                  |  |          |  |          |  |
| Type                                                                            |  | HLP-0.75/6                                                                                                                    |  | 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                                                                  |  |                       |  |          |  |          |  |
| Number of Phases                                                                |  | 3                                                                                                                             |  | Current                                                                           |  | Full Load                                                              |  | 2.0 A                 |  |          |  |          |  |
| Insulation Class                                                                |  | <input checked="" type="checkbox"/> F <input type="checkbox"/> B <input type="checkbox"/> H                                   |  | Locked-rotor**                                                                    |  | 600 %                                                                  |  |                       |  |          |  |          |  |
| Temp. Rise at full load (by resistance method)                                  |  |                                                                                                                               |  | Efficiency                                                                        |  |                                                                        |  |                       |  |          |  |          |  |
| at 1.0 S.F                                                                      |  | 80 deg. C                                                                                                                     |  | 50% Load                                                                          |  | 79.0 %                                                                 |  |                       |  |          |  |          |  |
| Motor Location                                                                  |  | <input checked="" type="checkbox"/> Indoor <input type="checkbox"/> Outdoor                                                   |  | 75% Load                                                                          |  | 82.7 %                                                                 |  |                       |  |          |  |          |  |
| Altitude                                                                        |  | Less than 1000                                                                                                                |  | 100% Load                                                                         |  | 82.5 %                                                                 |  |                       |  |          |  |          |  |
| Relative Humidity                                                               |  | Less than 80 %                                                                                                                |  | Power Factor(p.u)                                                                 |  |                                                                        |  |                       |  |          |  |          |  |
| Ambient Temp.                                                                   |  | 40 deg. C (Max.)                                                                                                              |  | 50% Load                                                                          |  | 0.390                                                                  |  |                       |  |          |  |          |  |
| Duty Type                                                                       |  | Continuous(S1)                                                                                                                |  | 75% Load                                                                          |  | 0.530                                                                  |  |                       |  |          |  |          |  |
| Service Factor                                                                  |  | 1.15                                                                                                                          |  | 100% Load                                                                         |  | 0.596                                                                  |  |                       |  |          |  |          |  |
| Mounting                                                                        |  | <input type="checkbox"/> B3 <input checked="" type="checkbox"/> B5 <input type="checkbox"/> V1 <input type="checkbox"/> B3/B5 |  | Speed at Full Load                                                                |  | 1140 r.p.m                                                             |  |                       |  |          |  |          |  |
| Bearing                                                                         |  | Type                                                                                                                          |  | Anti-Friction                                                                     |  | Torque                                                                 |  |                       |  |          |  |          |  |
|                                                                                 |  | DE/N-DE                                                                                                                       |  | 6205ZZ / 6204ZZ                                                                   |  | Full Load                                                              |  | 0.6 kg·m              |  |          |  |          |  |
|                                                                                 |  | Lubricant                                                                                                                     |  | Grease(HIFLEX L-3)                                                                |  | Locked-rotor**                                                         |  | 250 %                 |  |          |  |          |  |
| External Thrust                                                                 |  | Not applicable                                                                                                                |  | Breakdown**                                                                       |  | 260 %                                                                  |  |                       |  |          |  |          |  |
| 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.)                                                                        |  | 2.000 kg·m²                                                            |  |                       |  |          |  |          |  |
| Terminal Box                                                                    |  | Main                                                                                                                          |  | <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Cast Iron      |  | Motor                                                                  |  | 0.003 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                                                          |  | 55 dB(A)                                                               |  |                       |  |          |  |          |  |
| Application                                                                     |  |                                                                                                                               |  | Vibration                                                                         |  | 1.6 mm/sec (r.m.s)                                                     |  |                       |  |          |  |          |  |
| Area classification                                                             |  | Not applicable                                                                                                                |  | Permissible number of consecutive starts                                          |  | Cold                                                                   |  | 3 times               |  |          |  |          |  |
| Type of Ex-Protection                                                           |  | Non-Hazardous                                                                                                                 |  | Hot                                                                               |  | 2 times                                                                |  |                       |  |          |  |          |  |
| Applicable Standard                                                             |  | KS, IEC, NEMA MG1 Part30(Vpeak)                                                                                               |  | Paint                                                                             |  | Munsell No.                                                            |  | 4.4PB5.5/5.6(VL-451)  |  |          |  |          |  |
| ACCESSORIES                                                                     |  |                                                                                                                               |  | SUBMITTAL DRAWING                                                                 |  |                                                                        |  |                       |  |          |  |          |  |
|                                                                                 |  |                                                                                                                               |  | Outline Dimension Drawing                                                         |  | \                                                                      |  | Motor Weight(Approx.) |  |          |  |          |  |
|                                                                                 |  |                                                                                                                               |  | B5                                                                                |  | LM-A1095B5P1001                                                        |  | 21 kg                 |  |          |  |          |  |
|                                                                                 |  |                                                                                                                               |  | Main T-Box Ass'y                                                                  |  | 3M-148548                                                              |  |                       |  |          |  |          |  |
|                                                                                 |  |                                                                                                                               |  |                                                                                   |  |                                                                        |  |                       |  |          |  |          |  |
|                                                                                 |  |                                                                                                                               |  |                                                                                   |  |                                                                        |  |                       |  |          |  |          |  |
|                                                                                 |  |                                                                                                                               |  |                                                                                   |  |                                                                        |  |                       |  |          |  |          |  |
|                                                                                 |  |                                                                                                                               |  | REMARK                                                                            |  |                                                                        |  |                       |  |          |  |          |  |
|                                                                                 |  |                                                                                                                               |  | *.Premium Efficiency(IE3)<br>*.For use on PWM VFD 10:1VT,3:1CT@1.0S.F&F Temp.rise |  |                                                                        |  |                       |  |          |  |          |  |
|                                                                                 |  |                                                                                                                               |  |                                                                                   |  |                                                                        |  |                       |  |          |  |          |  |
| SPARE PARTS                                                                     |  |                                                                                                                               |  |                                                                                   |  |                                                                        |  |                       |  |          |  |          |  |
|                                                                                 |  |                                                                                                                               |  | Date                                                                              |  | DSND                                                                   |  | CHKD                  |  | CHKD     |  | APPD     |  |
|                                                                                 |  |                                                                                                                               |  | 2018-04-25                                                                        |  | R.G. KIM                                                               |  | -                     |  | O.J. KIM |  | S.K. HAN |  |

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.

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

HEES W230-131-1

\* In case of Inverter or V.V.V.F Motor:Performance data is based on sine wave tests.

A4(210mm X 297mm)

Type : HLP-0.75/6

Full Load Torque : 0.6 kg.m

Motor moment of Inertia (J) : 0.003 kg.m<sup>2</sup>

Load moment of Inertia (J) : 2.000 kg.m<sup>2</sup>

0.75 kW

6 P

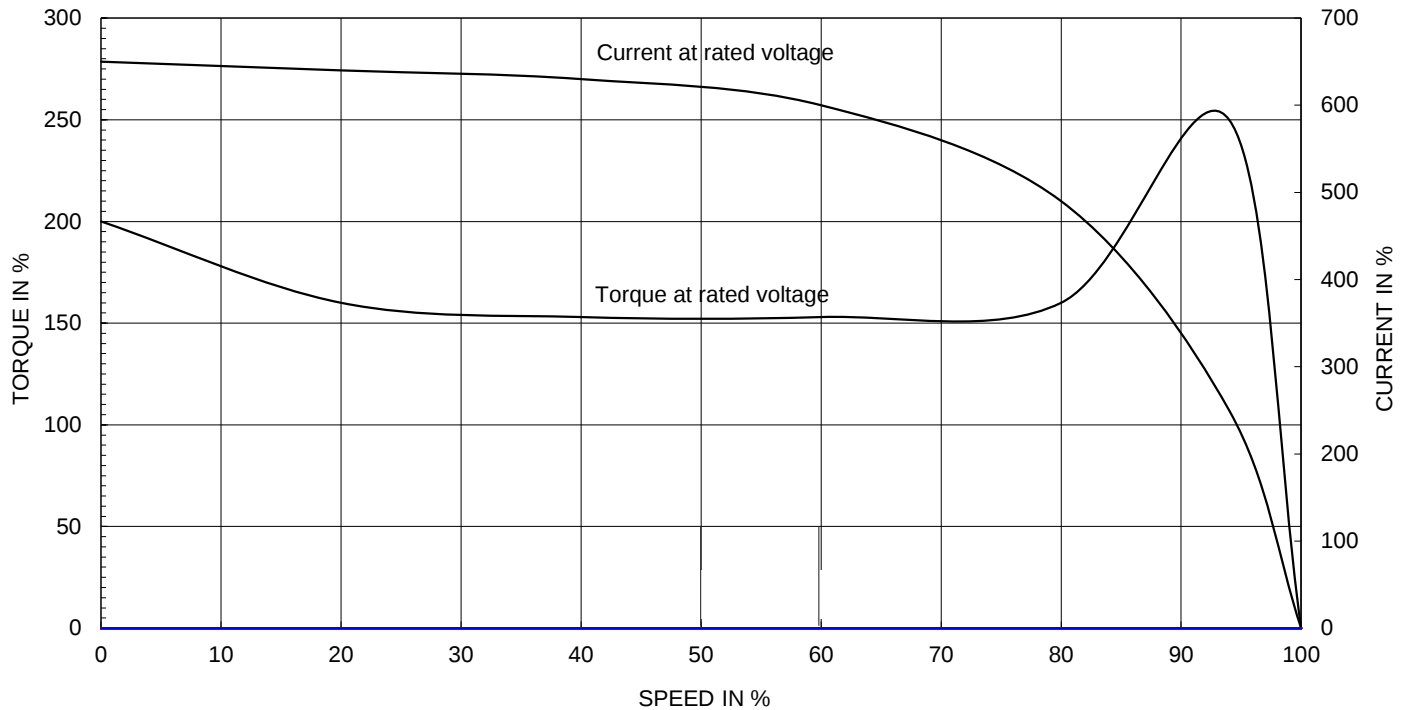
60 Hz

Speed at Full Load : 1140 RPM

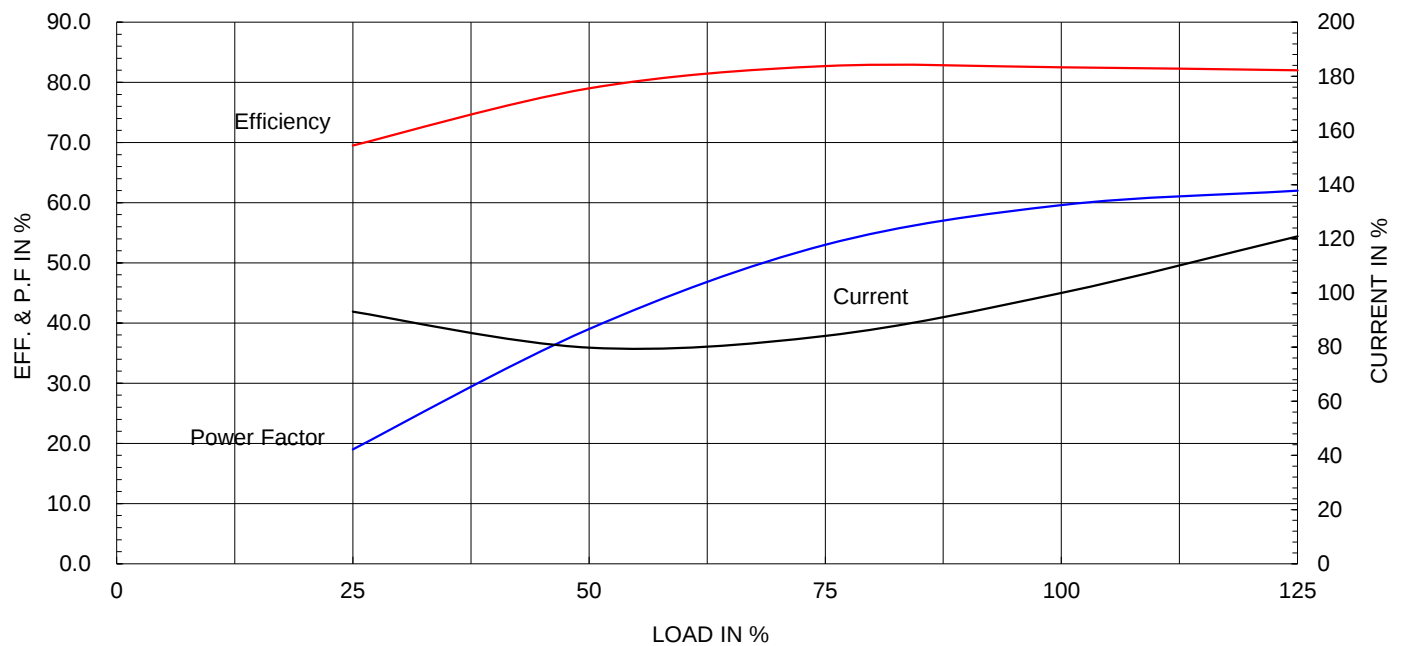
Rated Voltage 440V

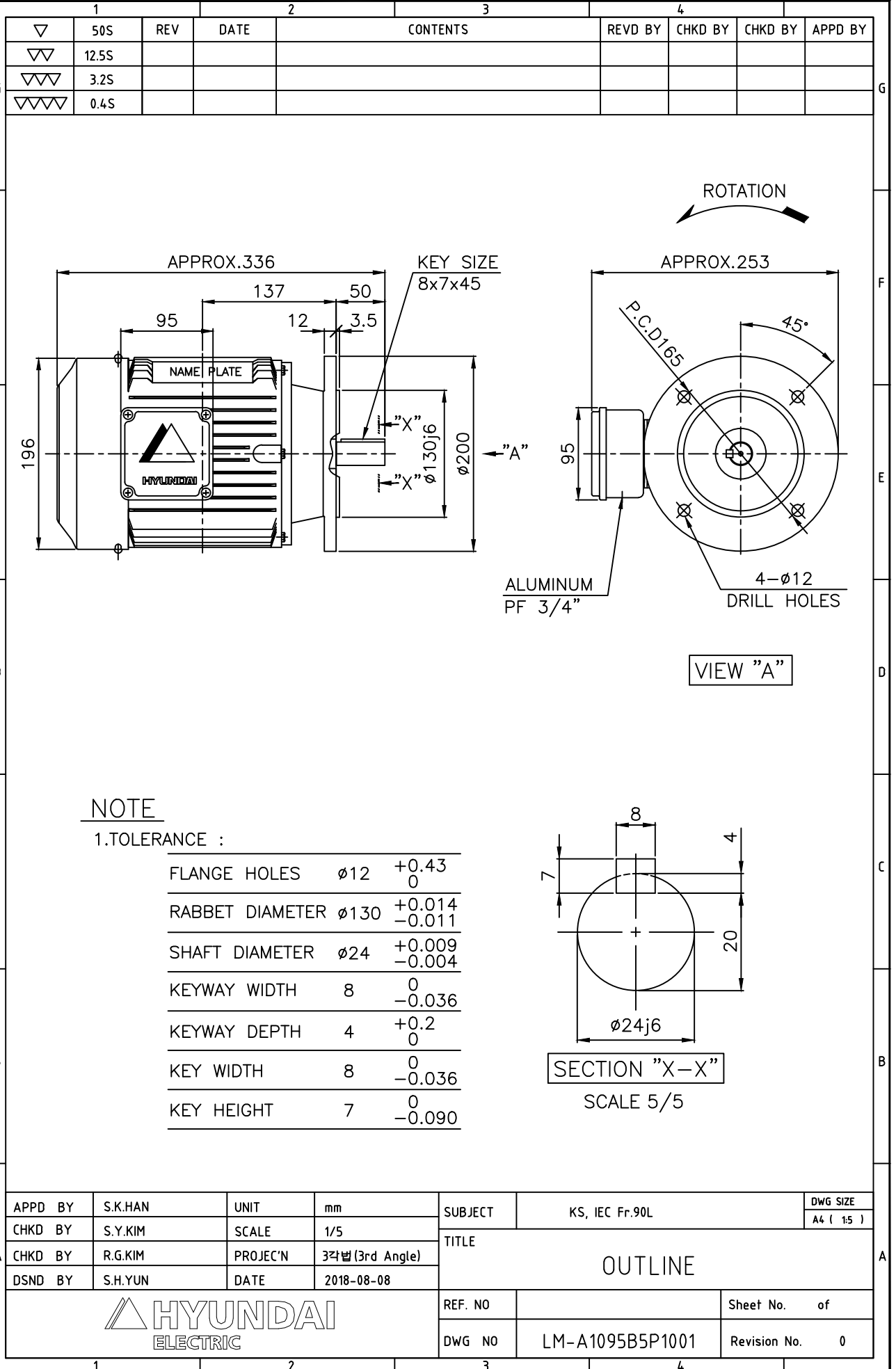
Full Load Current 2.0A

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE





THIS DRAWING IS PROPRIETARY TO HYUNDAI ELECTRIC. NO PART OF THIS DRAWING  
MAYBE REPRODUCED WITHOUT THE PERMISSION OF HYUNDAI ELECTRIC.

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

HYUNDAI  
ELECTRIC



SEC. "A" - "A"

|      |       |
|------|-------|
| ▽    | 50S   |
| ▽▽   | 12.5S |
| ▽▽▽  | 3.2S  |
| ▽▽▽▽ | 0.4S  |

| REV | DATE | CONTENTS | REVD BY | CHKD BY | CHKD BY | APPD BY | 일반가공공차 |      |          |      | 일반재관공차 |      |        |      |
|-----|------|----------|---------|---------|---------|---------|--------|------|----------|------|--------|------|--------|------|
|     |      |          |         |         |         |         | 1-4    | ±0.1 | 6-30     | ±0.5 | 4-18   | ±0.2 | 30-120 | ±0.8 |
|     |      |          |         |         |         |         | 18-63  | ±0.3 | 120-315  | ±1.2 |        |      |        |      |
|     |      |          |         |         |         |         | 63-250 | ±0.5 | 315-1000 | ±2.0 |        |      |        |      |
|     |      |          |         |         |         |         | 250-   | ±0.8 | 1000-    | ±3.0 |        |      |        |      |

| Q'TY                                                                                  | DESCRIPTION |  | MATERIAL | DIMENSION       |  | WEIGHT  | PART NO.                          | REMARK | NO.            |
|---------------------------------------------------------------------------------------|-------------|--|----------|-----------------|--|---------|-----------------------------------|--------|----------------|
| APPD BY                                                                               | S.K.HAN     |  | UNIT     | mm              |  | SUBJECT | FR.71~90 (AL)                     |        | DWG SIZE       |
| CHKD BY                                                                               | S.Y.KIM     |  | SCALE    | 1/1             |  |         | TITLE<br>Terminal Box Arrangement |        | A3 ( 1:1 )     |
| CHKD BY                                                                               | R.G.KIM     |  | PROJEC'N | 3각법 (3rd Angle) |  |         |                                   |        |                |
| DSND BY                                                                               | 이혜경 R       |  | DATE     | 2011-10-26      |  |         |                                   |        |                |
|  |             |  |          |                 |  | REF. NO | 227B1537AA                        |        | Sheet No. of   |
|                                                                                       |             |  |          |                 |  | DWG NO  | 3M-148548                         |        | Revision No. 2 |
| 6                                                                                     |             |  | 7        |                 |  | 8       |                                   | 9      |                |