

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 | HS-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 | 75.6 A 87.5 A 151.1 A |
| Insulation Class | <input checked="" type="checkbox"/> F <input type="checkbox"/> B <input type="checkbox"/> H | | | Locked-rotor** | 630 % 630 % 630 % |
| Temp. Rise at full load (by resistance method) | | | Efficiency | | |
| at 1.0 S.F 80 deg. C | | | 50% Load 93.3 % | | |
| Motor Location | <input type="checkbox"/> Indoor <input checked="" type="checkbox"/> Outdoor | | 75% Load 93.7 % | | |
| Altitude | Less than 1000 meter | | 100% Load 93.6 % | | |
| Relative Humidity | Less than 80 % | | Power Factor(p.u) | | |
| Ambient Temp. | 40 deg. C (Max.) | | 50% Load 0.750 | | |
| Duty Type | Continuous (S1) | | 75% Load 0.825 | | |
| Service Factor | 1.15 | | 100% Load 0.835 | | |
| Mounting | <input type="checkbox"/> B3 <input type="checkbox"/> B5 <input checked="" type="checkbox"/> V1 <input type="checkbox"/> B3/B5 | | Speed at Full Load 1185 r.p.m | | |
| Bearing | Type | Anti-Friction | Torque | | |
| | DE/N-DE | 6314C3 / 6213C3 | Full Load 37.0 kg·m | | |
| | Lubricant | Grease(Gadus S2 V 100 2) | Locked-rotor** 150 % | | |
| External Thrust | Not applicable | | Breakdown** 230 % | | |
| 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.) 101.050 kg·m² | | |
| Terminal Box | Main | <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Cast Iron | Motor 1.555 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 | 73 dB(A) | | |
| Application | | | Vibration 2.2 mm/sec (r.m.s) | | |
| Area classification | Non-Hazardous | | Permissible number of consecutive starts | | |
| Type of Ex-Protection | Not applicable | | Cold 3 times | | |
| Applicable Standard | KS,IEC,NEMA MG1 Part30(Vpeak) | | Hot 2 times | | |
| | | | Paint | Munsell No. | 4.0PB5.4/5.5(VL-451) |
| ACCESSORIES | | | SUBMITTAL DRAWING | | |
| | | | Outline Dimension Drawing \ Motor Weight(Approx.) | | |
| | | | B3 | | kg |
| | | | B5 | | kg |
| | | | V1 | | TJ25PP51 420 kg |
| | | | B3/B5 | | kg |
| | | | Main T-Box Ass'y | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| | | | | | |
| SPARE PARTS | | | REMARK | | |
| | | | High Efficiency | | |
| | | | *. For use on PWM VFD 10:1VT, 3:1CT@1.0S.F&F Temp. rise | | |
| | | | | | |
| | | | Date | DSND | CHKD |
| | | | 2010-05-28 | R.G. KIM | O.J. KIM |
| | | | | | CHKD |
| | | | | | APPD |
| | | | | | K.J. KANG |

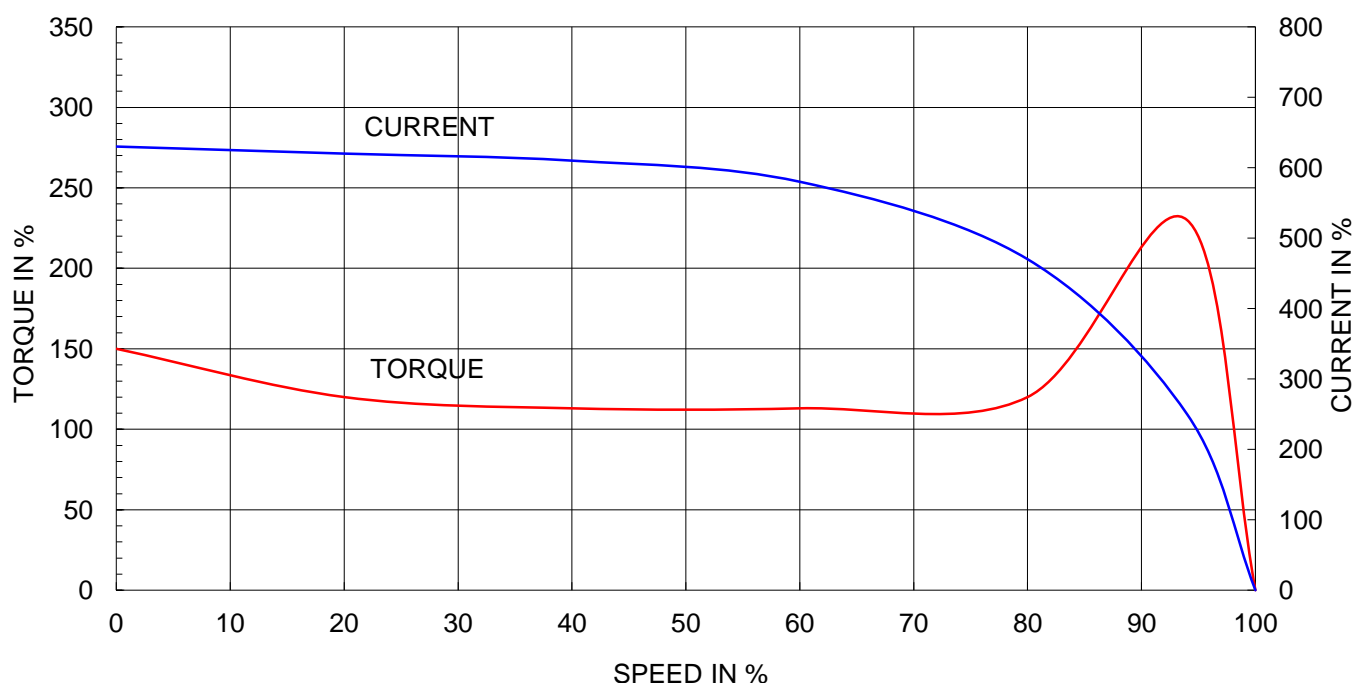
Note: Others not mentioned in this data sheet shall be in accordance with maker standard.
 Above technical data are only design values and shall be guaranteed with tolerance of applicable standard.
 Inspection and performance test shall be maker standard, if not mentioned.
 * In case of Inverter-Fed 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.

HHI 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)

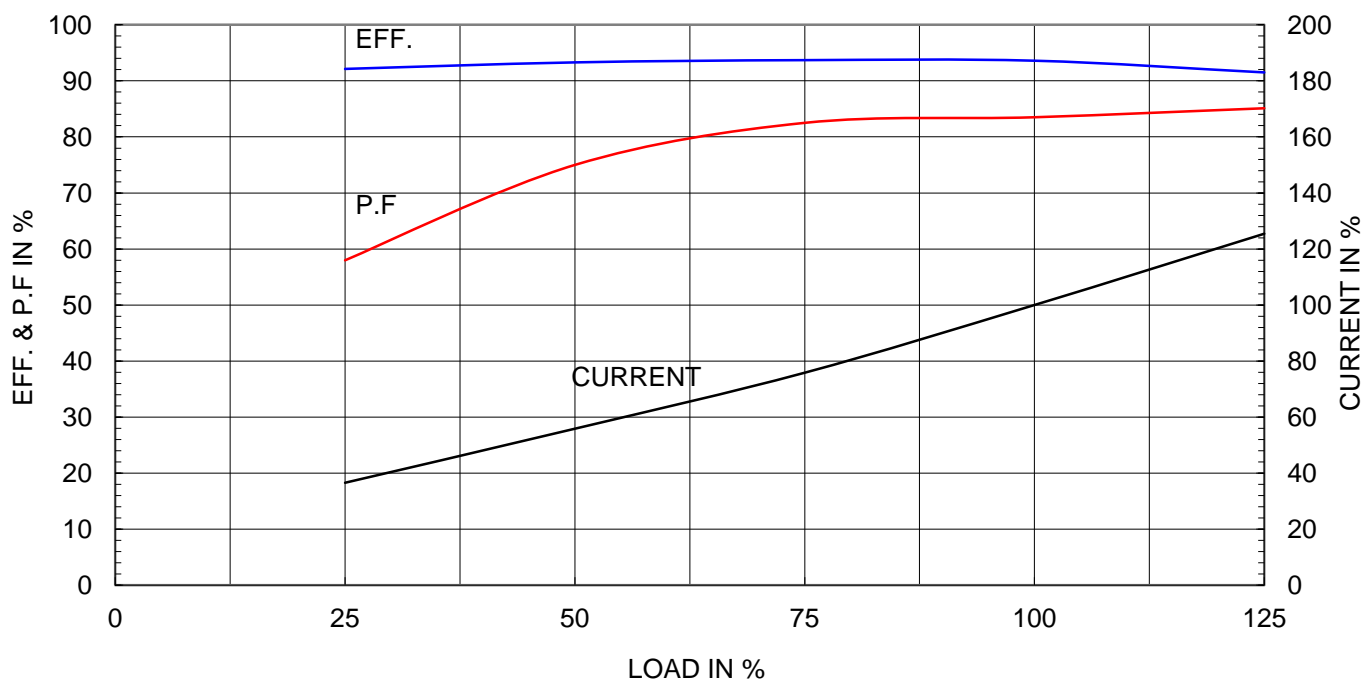
| | | |
|-----------------------------|---|---------------------------|
| Type | : | HS |
| Full Load Torque | : | 37.0 Kg.m |
| Motor moment of Inertia (J) | : | 1.555 Kg.m ² |
| Load moment of Inertia (J) | : | 101.050 Kg.m ² |

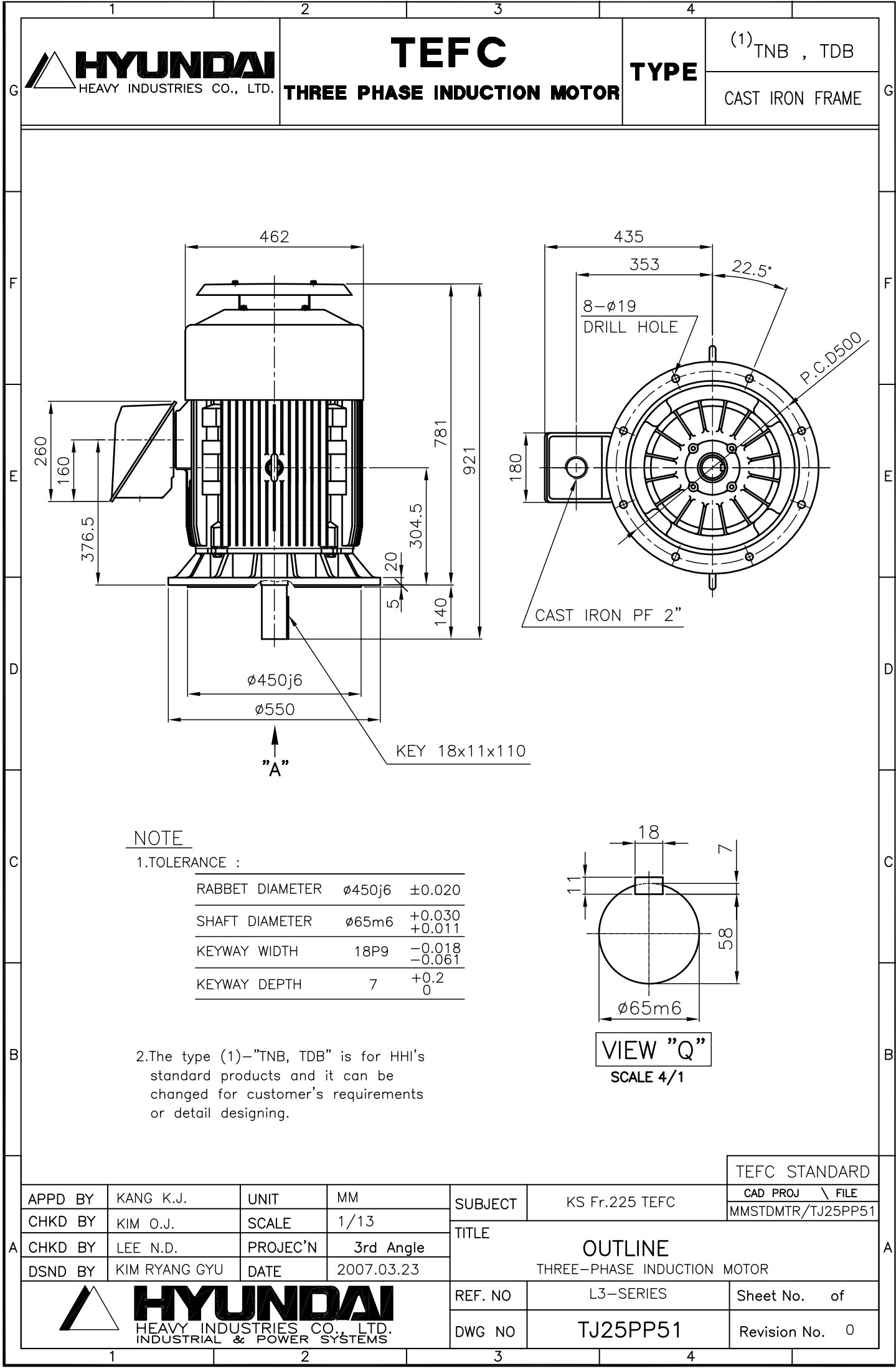
| | | | | | |
|----------------------|-------|-------|--------|----------|--|
| 45 kW | | 6 P | | 60 Hz | |
| Speed at Full Load : | | | | 1185 RPM | |
| Rated Voltage | 440V | 380V | 220V | | |
| Full Load Current | 75.6A | 87.5A | 151.1A | | |

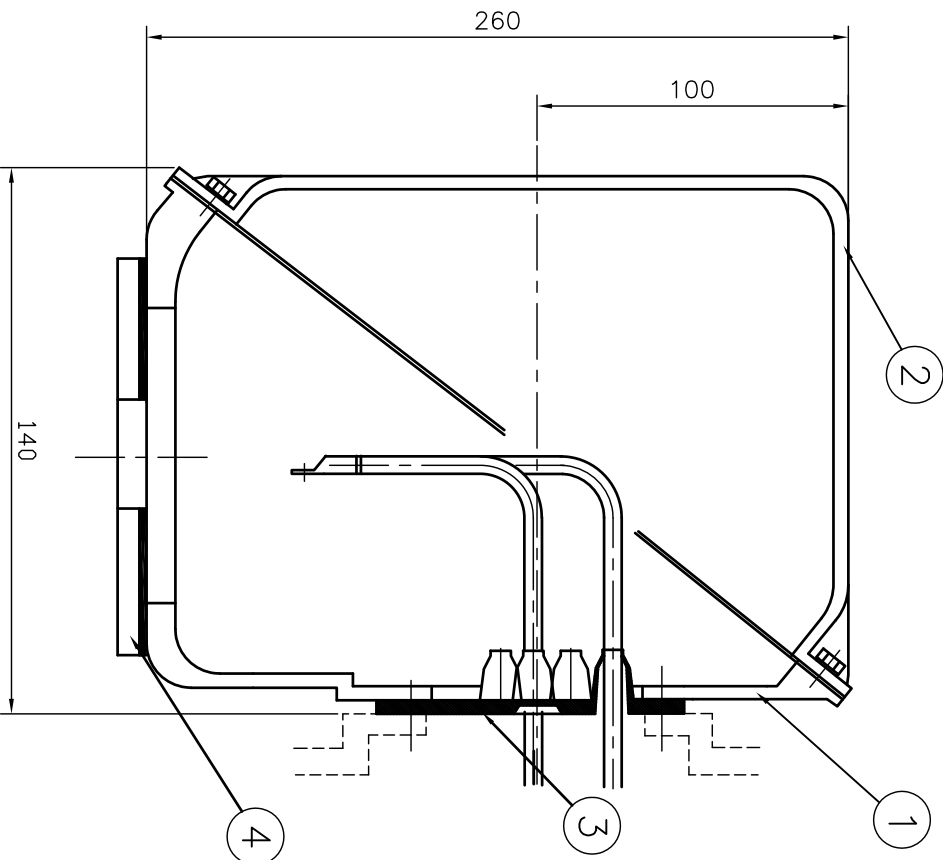
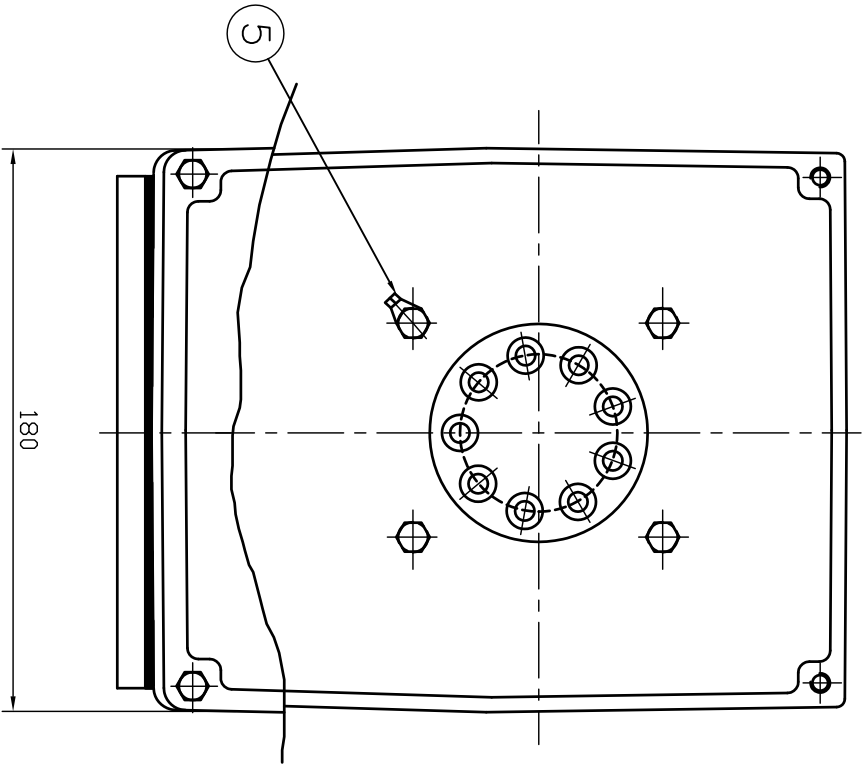
SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE







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

| 1 | EARTH TERMINAL LUG | | | | | 5 |
|----------|--------------------|-----------|-------------------|--------------------|--------------------|---------------------------------------|
| 1 | CABLE ENTRY PLATE | | | | | 4 |
| 1 | GASKET | NBR | | | | 3 |
| 1 | TERMINAL BOX COVER | CAST IRON | | | | 2 |
| 1 | TERMINAL BOX BODY | CAST IRON | | | | 1 |
| Q'TY | DESCRIPTION | MATERIAL | DIMENSION | WEIGHT | PART NO. | REMARK NO. |
| APP'D BY | 김진오 | UNIT | MM | SUBJECT | H/A6 - 200, 225Fr. | CAD PROJ. & FILE & T-BOX-M \ 3M016881 |
| Q.P. CHK | 주영걸 | SCALE | NONE | TITLE | (CAST IRON) | |
| CHK'D BY | 권오철 | PROJEC'T | 3 & 4 (3rd Angle) | TERMINAL BOX ASS'Y | | |
| DSND BY | 김현태 | DATE | 92.06.05 | REF. NO | | Sheet No. of |
| | | | | DWG NO | 3M-016881 | Revision No. 0 |