



|  | | DATA SHEET of AC INDUCTION MOTOR | | | | 75 HP - 4 P TE | | | |
|--|--|--|--|--|--|---|--|---|--|
| | | DESIGN NO : KS C4202-1996 | | | | | | | |
| Model No.or RFQ No. | | Item No. | | Rev. No. | | [0] | | | |
| Project Name | | Project No. | | Quantity : | | | | | |
| GENERAL SPECIFICATION | | | | PERFORMANCE DATA | | | | | |
| Frame No. | | 225S | | Output | | 75 HP 55 KW | | | |
| Type | | TNB | | Poles | | 4 P | | | |
| Enclosure(Protection) | | Totally Enclosed (IP IP54) | | Rotor Type | | Squirrel Cage | | | |
| Cooling Method | | IC411(FC) | | Starting Method(*) | | <input checked="" type="checkbox"/> D.O.L. <input type="checkbox"/> Y-Δ | | | |
| Frequency | | 60 Hz | | Rated Voltage | | 440 V 380 V 220 V | | | |
| Phase | | 3 φ | | Current | | Rated Load | | | |
| Insulation Class | | <input checked="" type="checkbox"/> F <input type="checkbox"/> B <input type="checkbox"/> H | | | | Start'g-D.O.L. | | 92.0 A 106.6 A 184.1 A 598.3 A 692.8 A 1,196.6 A | |
| Temp. Rise at full load (by resistance method) | | | | Efficiency | | | | | |
| at 1.0 S.F | | 105 °C | | 50% Load | | 90.9 % | | | |
| Location | | <input type="checkbox"/> Indoor <input type="checkbox"/> Outdoor | | 75% Load | | 92.0 % | | | |
| Altitude | | Less than 1000 meter | | 100% Load | | 91.7 % | | | |
| Humidity | | Less than 80 % | | Power Factor | | | | | |
| Ambient Temp. | | 40 °C (Max.) | | 50% Load | | 76.8 % | | | |
| Duty | | CONT.(S1) | | 75% Load | | 84.0 % | | | |
| Service Factor | | 1.00 | | 100% Load | | 85.5 % | | | |
| Electric Design | | NEMA Design B | | Speed at Rated Load | | 1765 RPM / SLIP 1.94 % | | | |
| Construction | | <input type="checkbox"/> B3 <input type="checkbox"/> B5 <input type="checkbox"/> V1 <input type="checkbox"/> | | Torque (D.O.L) | | | | | |
| Bearing | | Type | | Anti-friction | | Rated | | | |
| | | DE/ODE | | 6314C3 \ 6213C3 | | Starting | | | |
| | | Lubricant | | GREASE(ALVANIA#2) | | Break down | | | |
| External Thrust | | Not applicable | | Allowable Load GD ² referred to motor shaft | | | | | |
| Coupling Method | | <input checked="" type="checkbox"/> Direct <input type="checkbox"/> V-Belt | | 96.000 Kg.m ² | | | | | |
| Shaft Extension | | <input checked="" type="checkbox"/> Single <input type="checkbox"/> Double | | Motor GD ² | | | | | |
| Terminal Box | | Main | | <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Cast Iron | | Noise Level (dB(A)) | | | |
| | | Aux. | | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | 82 dB(A) at 1m from motor(No-load) | | | |
| | | Location | | <input checked="" type="checkbox"/> Left <input type="checkbox"/> Right (Viewed from Drive End) | | Vibration(Velocity) | | 3.8 mm/sec.(peak) | |
| Starting Duty | | | | Cold 2 times \ Hot 1 time | | | | | |
| Paint | | Munsell No. | | 4.0PB5.4/5.5(VL-451) | | | | | |
| Application | | | | SUBMITTAL DRAWING | | | | | |
| Area Classification | | Not applicable | | Outline Dimension Drawing \ Motor Weight(Approx.) | | | | | |
| Applicable Standard | | KS | | <input type="checkbox"/> B3 TJ2SAP51 370 Kg | | | | | |
| Inspection and Performance Test | | HHI Stand. Maker Test Report | | <input type="checkbox"/> B5 TJ25BP51 400 Kg | | | | | |
| | | | | <input type="checkbox"/> V1 TJ25PP51 400 Kg | | | | | |
| | | | | Main T-Box Ass'y | | | | 3M-016881 | |
| SPARE PARTS | | | | REMARK | | | | | |
| Note: Others not mentioned in this specification shall be in accordance with HHI standard. Above technical data are only design values and shall be guaranteed with tolerance of applicable standard. | | | | Date | | DSND | | CHKD | |
| | | | | 2004.01.27 | | KIM R.G. | |  | |



PERFORMANCE CURVE

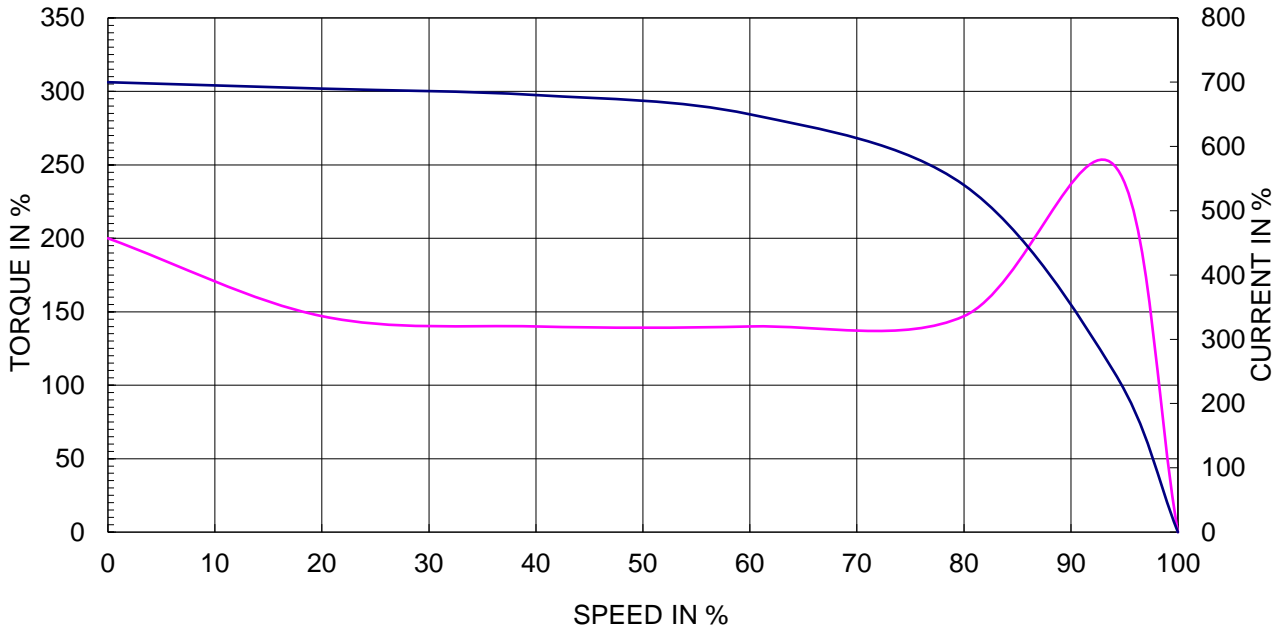
CURVE NO.

P-TNBJ2S04055

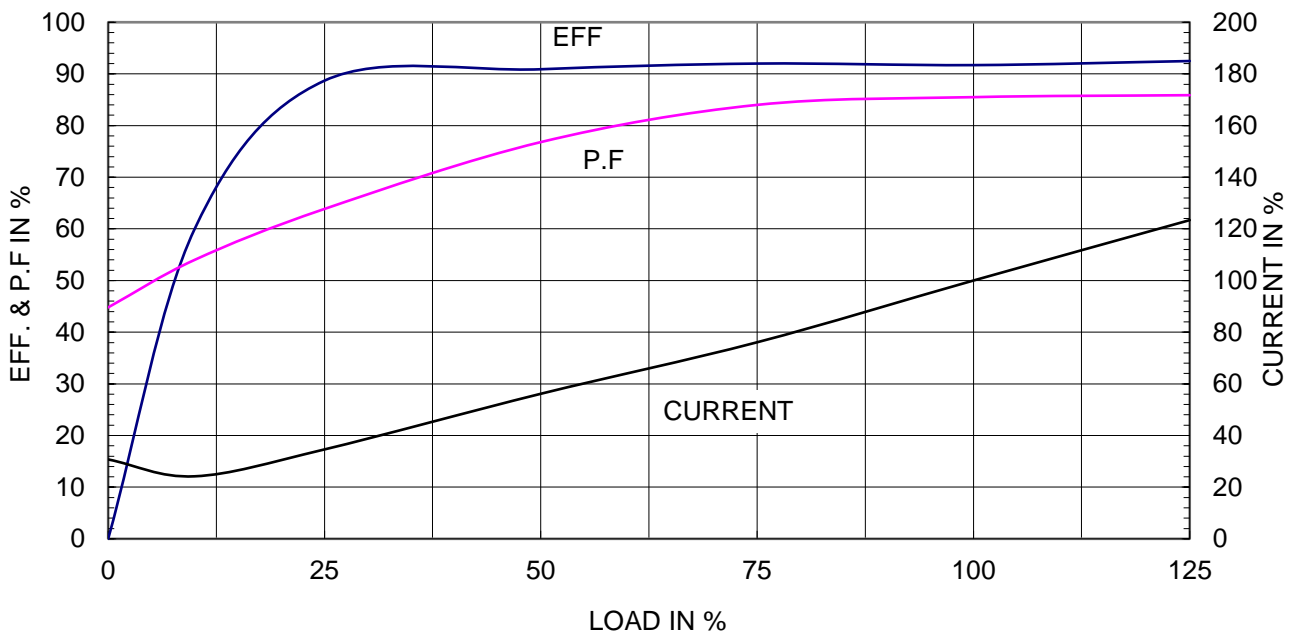
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|------------------------|------|-------------------|
| TYPE : | | |
| RATED TORQUE : | 30.4 | Kg.m |
| GD2 OF MOTOR : | 3.2 | Kg.m ² |
| (ALLOWABLE) GD2 OF LOA | 96.0 | Kg.m ² |

| | | |
|---------------|----------|---------|
| 55 kW | 4 P | 60 Hz |
| RATED SPEED : | 1765 RPM | |
| VOLTAGE | 440V | 380 V |
| RATED CURRENT | 92.0A | 106.6 A |
| | | 220V |
| | | 184.1A |

SPEED VS TORQUE & CURRENT CURVE



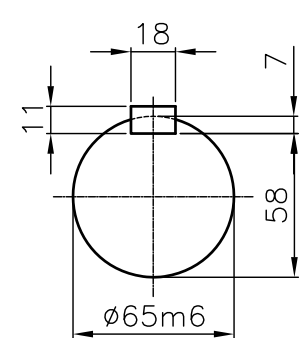
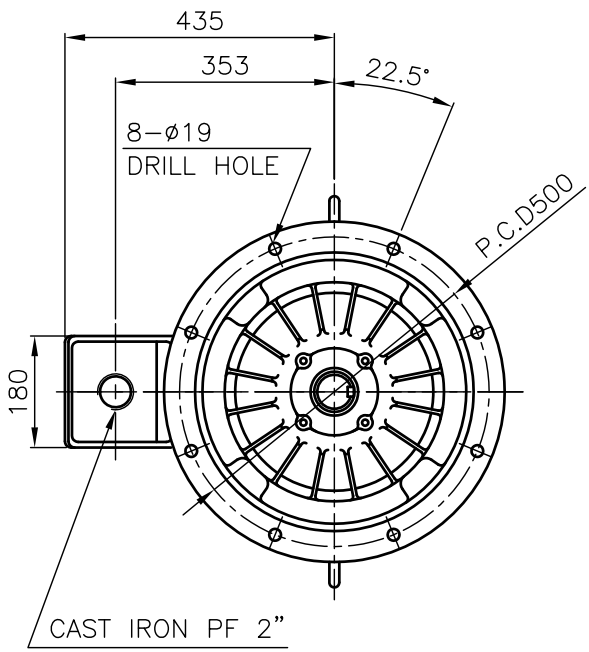
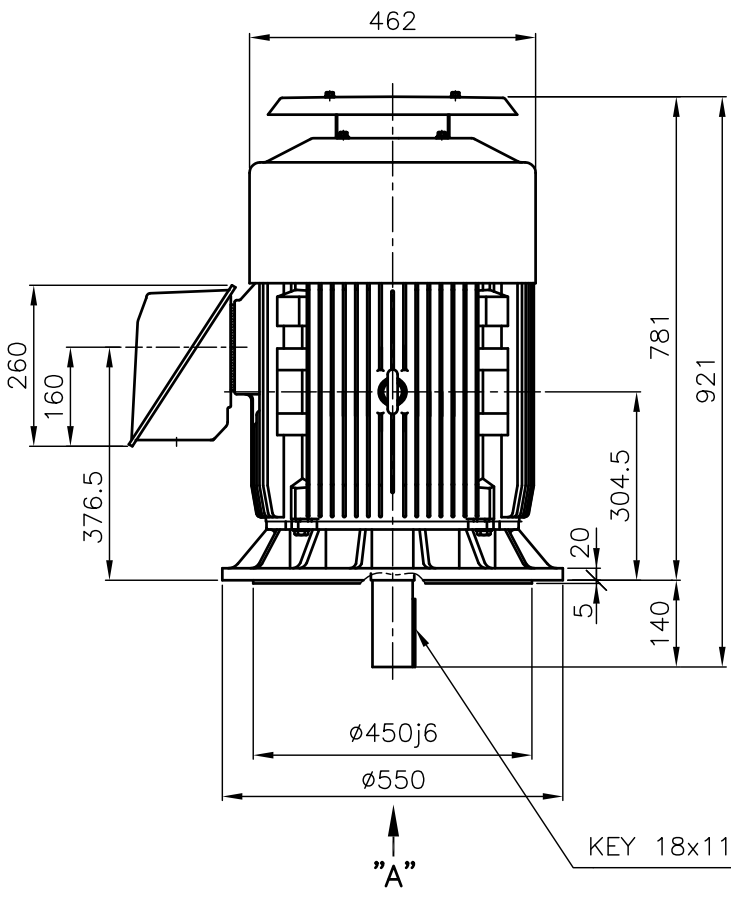
OUTPUT VS EFF., P.F & CURRENT CURVE



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

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| | | | | |
|--|--|--|--|---|
| | | <h1>TEFC</h1> <h2>THREE PHASE INDUCTION MOTOR</h2> | | TYPE (1) TNB , TDB CAST IRON FRAME |
|--|--|--|--|---|



VIEW "Q"
SCALE 4/1

NOTE

1.TOLERANCE :

| | | |
|-----------------|--------|------------------|
| RABBET DIAMETER | ø450j6 | ±0.020 |
| SHAFT DIAMETER | ø65m6 | +0.030 +0.011 |
| KEYWAY WIDTH | 18P9 | -0.018 -0.061 |
| KEYWAY DEPTH | 7 | +0.2 0 |

2.The type (1)-"TNB, TDB" is for HHI's standard products and it can be changed for customer's requirements or detail designing.

| |
|-------------------|
| TEFC STANDARD |
| CAD PROJ \ FILE |
| MMSTDMTR/TJ25PP51 |

| | | | | | | | |
|---------|---------------|----------|------------|---------|----------------|--------|--|
| APPD BY | KANG K.J. | UNIT | MM | SUBJECT | KS Fr.225 TEFC | TITLE | OUTLINE THREE-PHASE INDUCTION MOTOR |
| CHKD BY | KIM O.J. | SCALE | 1/13 | | | | |
| CHKD BY | LEE N.D. | PROJEC'N | 3rd Angle | REF. NO | L3-SERIES | DWG NO | Sheet No. of |
| DSND BY | KIM RYANG GYU | DATE | 2007.03.23 | | | | TJ25PP51 |