# AC INDUCTION MOTOR DATA SHEET
# CROWN SIGNATURE MOTORS

| | | | |
|---|---|---|---|
| MODEL NUMBER | **HSDE300-36-L449TS** | | |
| HORSEPOWER | **300** | | |
| RPM / POLES | **3600 / 2** | | |
| VOLTAGE / PHASE | **460 V / 3** | | |
| FRAME | **L449TS** | | |
| ENCLOSURE / DEGREE OF PROTECTION | **TEFC / IP55** | | |
| FREQUENCY | **60 HZ** | | |
| FULL LOAD SPEED | **3570 RPM** | | |
| SERVICE FACTOR | **1.15** | | |
| INSULATION CLASS | **F Class N Varnish** | | |
| FULL LOAD AMPS | **327.5 A** | | |
| LOCKED ROTOR CURRENT | **2292.5 A** | | |
| NEMA CODE LETTER | **G** | | |
| EFFICIENCY / POWER FACTOR | LOAD<br>**100 %**<br>**75 %**<br>**50 %** | EFF.<br>**95.8 %**<br>**95.4 %**<br>**95.2 %** | P.F.<br>**90.0 %**<br>**88.0 %**<br>**83.0 %** |
| DUTY CYCLE | **S1 / Continuous** | | |
| TORQUE | FULL LOAD<br>**444.0 lb.ft.** | LRT<br>**130 %** | BDT<br>**225 %** |
| NEMA DESIGN | **B** | | |
| MOMENT OF INERTIA | LOAD (Max.)<br>**246 lb.ft.$^2$** | | MOTOR<br>**43.7 lb.ft.$^2$** |
| SOUND PRESSURE LEVEL ( No Load 1 M From Motor) | **87 dB(A)** | | |
| NUMBER OF STARTS (Hot / Cold) | **1 Hot / 2 Cold** | | |
| MAX. AMBIENT TEMPERATURE | **40° C** | | |
| MAX. ELEVATION | **3300 Ft. Above Sea Level** | | |
| TEMPERATURE RISE (At Full Load) | **80° C** | | |
| DRIVE-END BEARING | **6315C3** | | |
| OPPOSITE DRIVE-END BEARING | **6315C3** | | |
| GREASE TYPE | **Mobil Polyrex EM** | | |
| MOUNTING | **F1** | | |
| ROTATION | **Uni-directional (CCW viewed from DE)** | | |
| APPROXIMATE WEIGHT | **2890 lbs.** | | |
| AREA CLASSIFICATION | **Class I, Division 2, Groups A, B, C, D** | | |
| TEMPERATURE CODE | **T3 Up To 45°C** | | |
| INVERTER RATING | **10:1 VT at Full Load / 20:1 VT at 50% Load**<br>**4:1 CT at Full Load / 10:1 CT for 1 Hour Cycle** | | |
| SPECIFICATION - In Accordance With | **NEMA, CSA** | | |

EEV 109973

**CC038A**

REVISED 1/28/19

HYUNDAI HEAVY INDUSTRIES CO., LTD.

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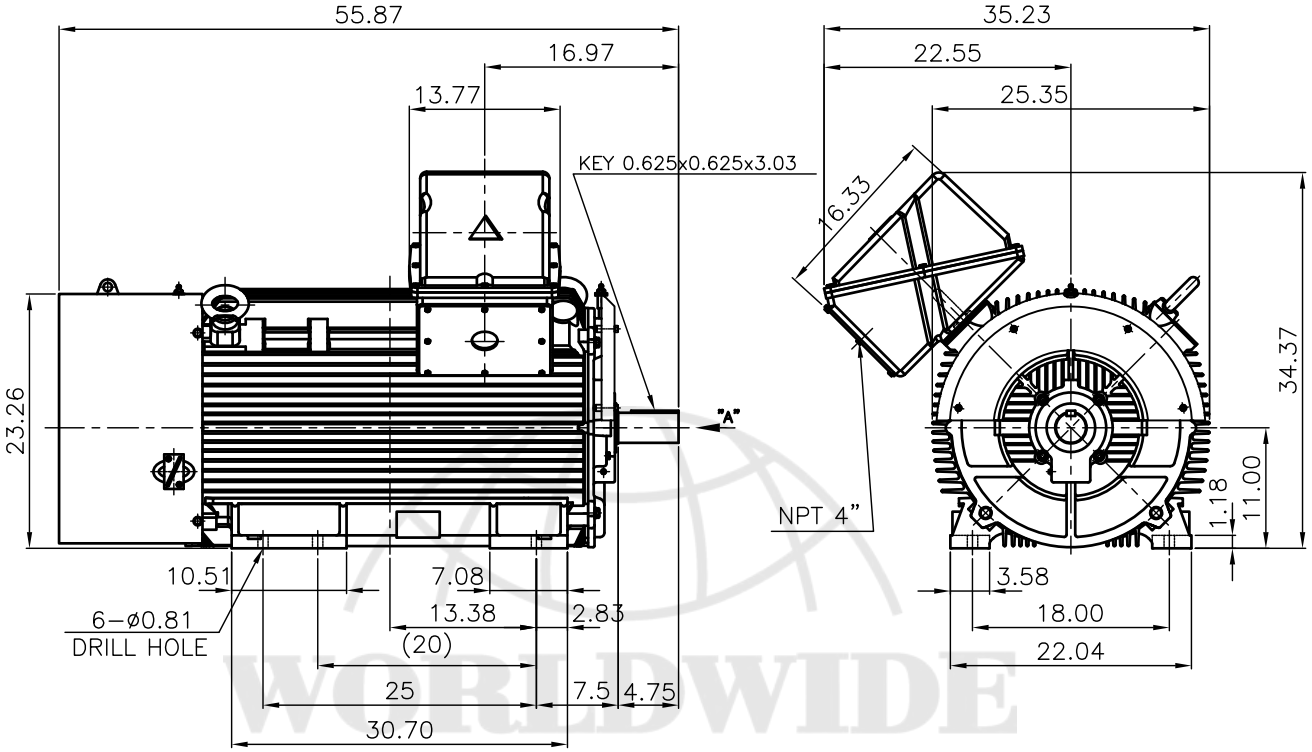
# TEFC

## THREE PHASE INDUCTION MOTOR

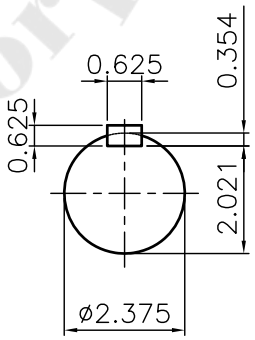
| TYPE | L,J,LP,JP |
|---|---|
| | CAST IRON FRAME |




NOTE

1.TOLERANCE :

| | | |
|---|---|---|
| CENTER HEIGHT | 11 | +0.000 −0.060 |
| SHAFT DIAMETER | ø2.375 | +0.000 −0.001 |
| KEYWAY WIDTH | 0.625 | +0.002 −0.000 |




VIEW "A"

TEFC STANDARD

| Q'TY | DESCRIPTION | MATERIAL | DIMENSION | WEIGHT | PART NO. | REMARK | NO. |
|---|---|---|---|---|---|---|---|

| | | | |
|---|---|---|---|
| APPD BY | 강경중 | UNIT | mm |
| CHKD BY | 김진홍 | SCALE | 1/18 |
| CHKD BY | 김옥진 | PROJEC'N | 3각법(3rd Angle) |
| DSND BY | 김양규 | DATE | 2013-01-05 |

| | | | |
|---|---|---|---|
| SUBJECT | XL SERIES Fr.449TS-2P(44KJH) | | DWG SIZE A4 (1:18) |
| TITLE | NEMA STD SHAFT(AISI 1045 SHAFT) Outline | | |
| REF. NO | | | Sheet No. of |
| DWG NO | LM-T044XB3CL001 | | Revision No. 1 |

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WORLDWIDE Electric Corp

HYUNDAI HEAVY INDUSTRIES CO.,LTD.

# PERFORMANCE CURVE

CURVE NO.

P-PJ44KSR02

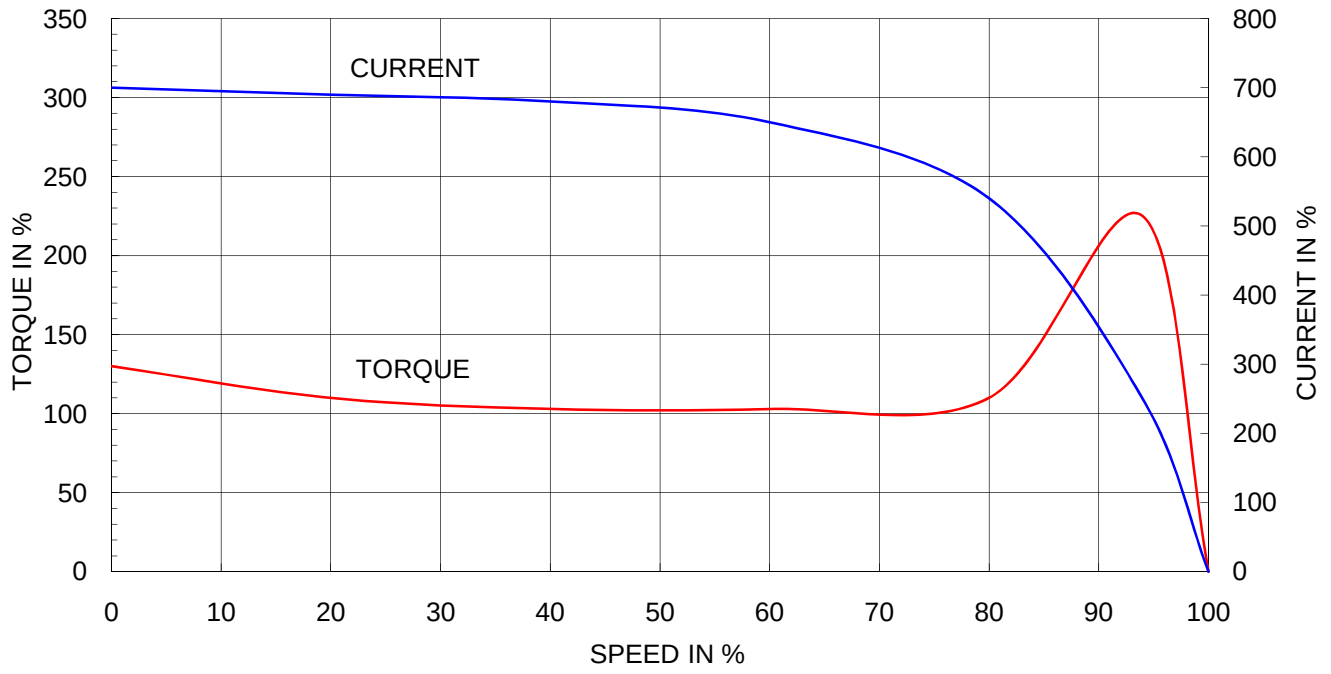
| | | | |
|---|---|---|---|
| Type : | PJ | | |
| Full Load Torque : | 444.0 | lb.ft | |
| Motor moment of Inertia (J) : | 43.7 | lb.ft $^2$ | |
| Load moment of Inertia (J) : | 246.0 | lb.ft $^2$ | |

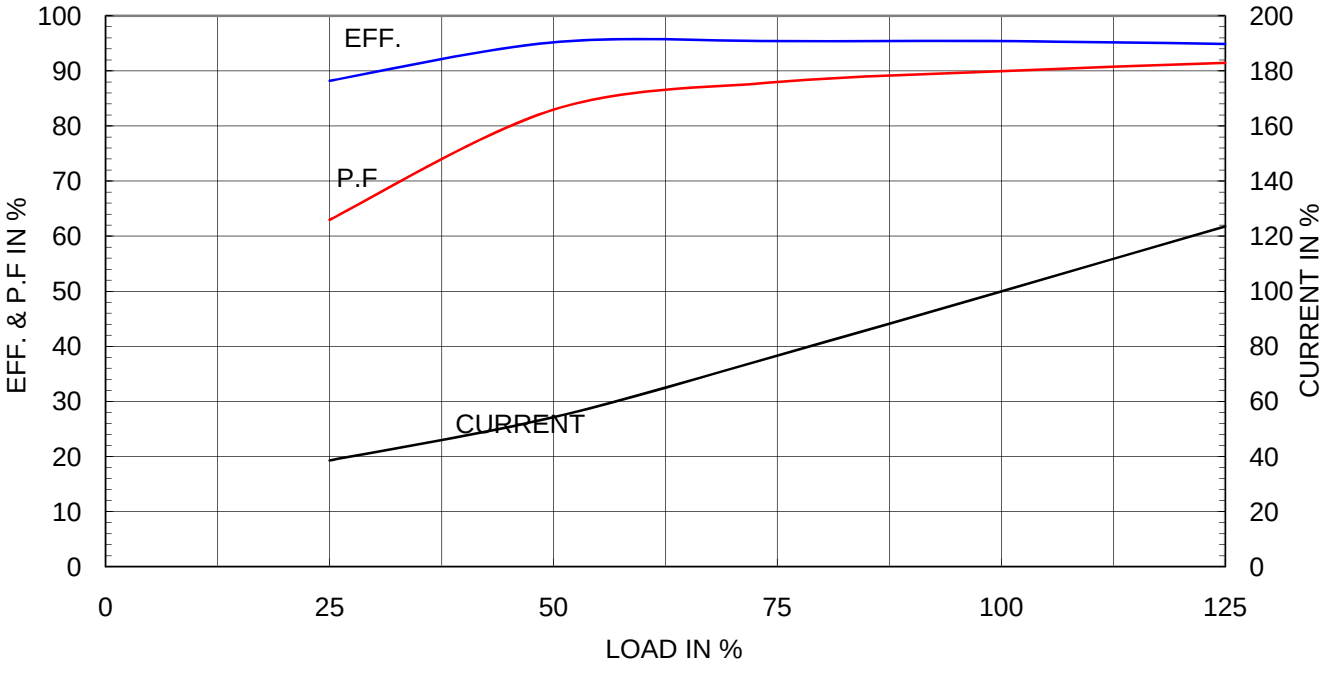
225 kW 300 HP 60 Hz

2 P Rated Speed : 3570 RPM

| Rated Voltage | 575V | 460V | 230V | |
|---|---|---|---|---|
| Full Load Current | 263.1A | 328.9A | 657.8A | |

## SPEED VS TORQUE & CURRENT CURVE




## OUTPUT VS EFF., P.F & CURRENT CURVE