# AC INDUCTION MOTOR DATA SHEET
# UL EXPLOSION PROOF MOTORS

| | | | |
|---|---|---|---|
| MODEL NUMBER | **IXHHI100-18-405TC** | | |
| HORSEPOWER | **100** | | |
| RPM / POLES | **1800 / 4** | | |
| VOLTAGE / PHASE | **230 / 460 V / 3** | | |
| FRAME | **405TC** | | |
| ENCLOSURE / DEGREE OF PROTECTION | **TEFC / IP54** | | |
| FREQUENCY | **60 HZ** | | |
| FULL LOAD SPEED | **1780 RPM** | | |
| SERVICE FACTOR | **1.15** | | |
| INSULATION CLASS | **F Class N Varnish** | | |
| FULL LOAD AMPS; 230 / 460 | **228.1 / 114.1 A Usable On 208 V At 252 A** | | |
| LOCKED ROTOR CURRENT (% Full Load) | **650 / 650 %** | | |
| NEMA CODE LETTER | **G** | | |
| EFFICIENCY / POWER FACTOR | LOAD | EFF. | P.F. |
| | **100 %** | **95.4 %** | **86.5 %** |
| | **75 %** | **95.4 %** | **84.5 %** |
| | **50 %** | **94.1 %** | **78.4 %** |
| DUTY CYCLE | **S1 / Continuous** | | |
| TORQUE | FULL LOAD | LRT | BDT |
| | **296.8 lb.ft.** | **140 %** | **220 %** |
| NEMA DESIGN | **B** | | |
| MOMENT OF INERTIA | LOAD (Max.) | | MOTOR |
| | **1,337.213 lb.ft.$^2$** | | **35.910 lb.ft.$^2$** |
| SOUND PRESSURE LEVEL ( No Load 1 M From Motor) | **82 dB(A)** | | |
| MAX. SHAFT VIBRATION | **0.08 In/Sec – Peak Velocity** | | |
| NUMBER OF STARTS (Hot / Cold) | **2 Hot / 3 Cold** | | |
| MAX. ELEVATION | **3300 Ft. Above Sea Level** | | |
| TEMPERATURE RISE (At Full Load) | **80° C** | | |
| DRIVE-END BEARING | **6316C3** | | |
| OPPOSITE DRIVE-END BEARING | **6313C3** | | |
| GREASE TYPE | **Mobil Polyrex EM** | | |
| MOUNTING | **F1, W6, W8, B3, V5, V6** | | |
| ROTATION | **Bi-Directional** | | |
| APPROXIMATE WEIGHT | **1,830 lbs.** | | |
| AREA CLASSIFICATION | **Class I, Division 1, Groups C and D** | | |
| TEMPERATURE CODE WITH THERMOSTAT USE | **T4** | | |
| TEMPERATURE CODE AT 40°C AMBIENT | **T2C** | | |
| TEMPERATURE CODE AT 55°C AMBIENT | **T2B** | | |
| THERMOSTAT TYPE | **Normally Closed** | | |
| INVERTER RATING | **4:1 CT (Constant) / 10:1 CT (Intermittent-1 Hour) / 10:1 VT** | | |
| INSULATION TYPE | **Hyundai Inverter Shield, Meets NEMA MG1 Part 31** | | |
| UL CERTIFICATION NUMBER | **E216236** | | |

EEV 109973

CC 038A

REVISED 04/01/14

HYUNDAI HEAVY INDUSTRIES CO., LTD.

본 도면은 현대중공업(주) 재산이므로
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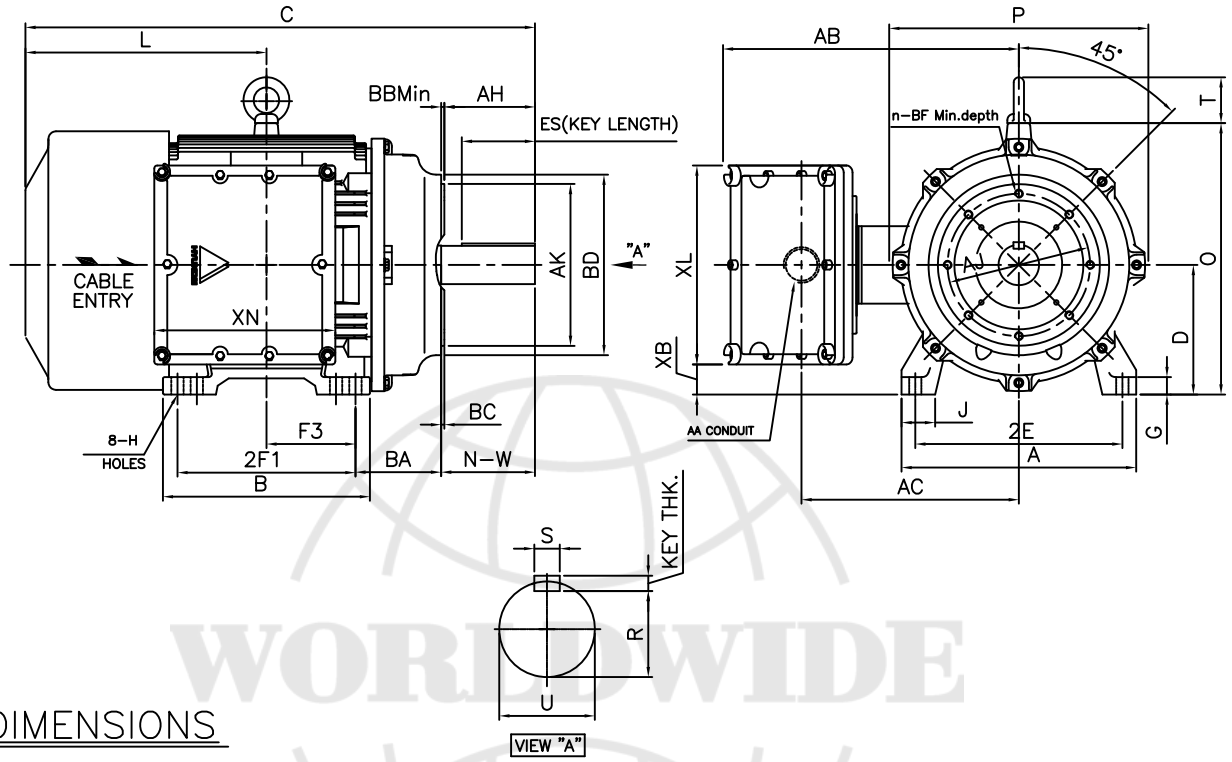
# TEFC

## THREE PHASE INDUCTION MOTOR

**TYPE** XKP,XIP — Cast iron frame

| FRAME SIZE | OUTPUT(HP) | POLES | Hz | TIME RATING |
|---|---|---|---|---|
| 405TC | | | 60 | CONT |




## DIMENSIONS

| MOUNTING | | | | | | | | | CONDUIT BOX | | | | | | APPROX. WGT.(LB) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | B | 2E | 2F1 | 2F2 | F3 | G | J | H | AA | AB | AC | XB | XL | XN | |
| 18.11 | 15.98 | 16.00 | 13.75 | – | 6.870 | 1.18 | 2.59 | 0.81 | 3.00 | 22.83 | 17.32 | 2.16 | 15.35 | 13.97 | 2P: 1864<br>4P: 1852<br>6P: 1852 |

| OVERALL | | | | | | | SHAFT | | | | | KEY | BEARING | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| BA | C | D | L | O | P | T | U | N-W | KEYWAY R | KEYWAY ES | KEYWAY S | THK. | DRIVE END | OPP. DRIVE END |
| 6.62 | 39.33 | 10.00 | 18.60 | 20.94 | 20.00 | 3.55 | 2.875 | 7.25 | 2.450 | 5.65 | 0.750 | 0.750 | NU316 or 6316C3 | 6313C3 |

| C-FACE | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| AJ | AK | BB Min | BC | BD | BF | BF depth | n | AH |
| 11.00 | 12.50 | 0.25 | 0.25 | 13.93 | 5/8-11 | 0.94 | 8 | 7.00 |

## NOTE

1. Dimension "D" tolerance : +0.00inch ~ −0.03inch (143TC−365TC) : +0.000inch ~ −0.06inch (404TC−449TC)
2. Dimension "U" tolerance : +0.000inch ~ −0.0005inch (143TC−215TC): +0.000inch ~ −0.001inch (254TC−449TC)
3. Dimension "R" tolerance : +0.000inch ~ − 0.015inch
4. Dimension "AK" tolerance : +0.000inch ~ −0.003inch (143TC−286TC): +0.000inch ~ −0.005inch (324TC−449TC)

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

| | | | | | |
|---|---|---|---|---|---|
| APPD BY | | UNIT | mm | SUBJECT | 405TC |
| CHKD BY | | SCALE | 1/15 | | |
| CHKD BY | | PROJEC'N | 3각법(3rd Angle) | TITLE | Outline |
| DSND BY | 김중선 | DATE | 2012-05-02 | | |

DWG SIZE: A4 (1:15)

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| | | |
|---|---|---|
| REF. NO | | Sheet No. of |
| DWG NO | LM-U0405C4TL001 | Revision No. 0 |