



WORLDWIDE ELECTRIC MOTOR DATA SHEET

EP100-18-405TC



| | | | |
|---|--|-------------|-------------|
| HORSEPOWER | 100 | | |
| RPM / POLES | 1800 / 4 | | |
| VOLTAGE / PHASE | 230 / 460 V / 3 | | |
| FRAME | 405TC | | |
| ENCLOSURE / DEGREE OF PROTECTION | TEFC / IP55 | | |
| FREQUENCY | 60 HZ Suitable For 50 HZ Operation With 1.0 SF | | |
| FULL LOAD SPEED | 1790 RPM | | |
| SERVICE FACTOR | 1.25 SF at 40° C / 1.0 SF at 55° C | | |
| INSULATION CLASS | F | | |
| FULL LOAD AMPS; 230 / 460 | 228.6 / 114.3 A | | |
| LOCKED ROTOR AMPS (STARTING); 230 / 460 | 1450 / 725 A | | |
| NO LOAD CURRENT | 75.0 / 37.5 A | | |
| NEMA CODE LETTER | G | | |
| EFFICIENCY / POWER FACTOR | <u>LOAD</u> | <u>EFF.</u> | <u>P.F.</u> |
| | 100% | 95.4% | 0.86 |
| | 75% | 95.2% | 0.82 |
| | 50% | 94.7% | 0.72 |
| DUTY CYCLE | S1 / Continuous | | |
| TORQUE | <u>FULL LOAD</u> | <u>LRT</u> | <u>BDT</u> |
| | 293.2 lb.ft. | 220% | 240% |
| | | | |
| SLIP | 0.56% | | |
| NEMA DESIGN | B | | |
| MOMENT OF INERTIA | 45.5 lb.ft. ² | | |
| NUMBER OF STARTS (Hot / Cold) | 2 Hot / 3 Cold | | |
| MAX. AMBIENT TEMPERATURE | 40° C at 1.25 SF / 55° C at 1.0 SF | | |
| MAX. ELEVATION | 3300 Ft. Above Sea Level | | |
| TEMPERATURE RISE (At Full Load) | 80° C | | |
| DE BEARING | 6316 | | |
| ODE BEARING | 6313 | | |
| GREASE TYPE | Mobil Polyrex EM | | |
| MOUNTING | F1 (F2 Suitable) | | |
| ROTATION | Bi-Directional | | |
| APPROXIMATE WEIGHT | 1198 lbs. | | |
| AREA CLASSIFICATION | Class I, Division 2, Groups A, B, C, D | | |
| INVERTER RATING | 10:1 CT / 20:1 VT PWM Type | | |
| SPECIFICATION - In Accordance With | NEMA, CSA | | |



CC067A

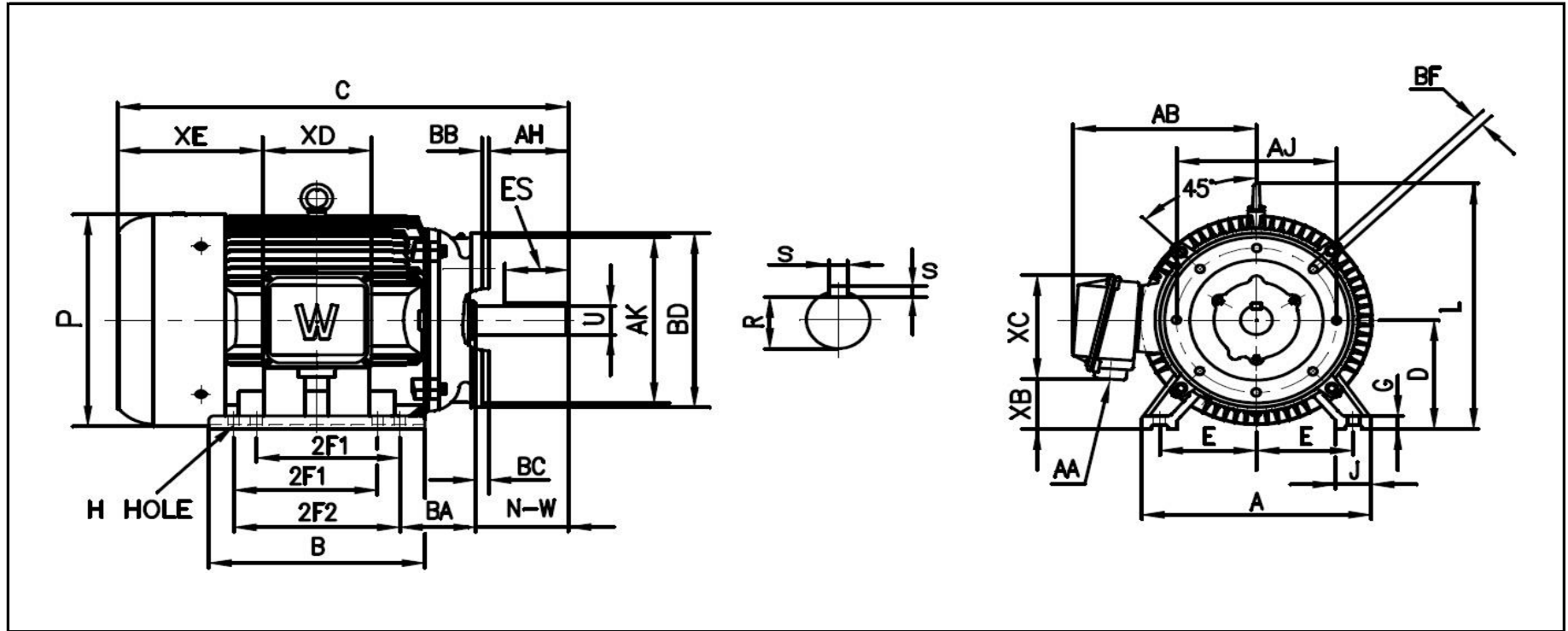


MARCH 10, 2015



WORLDWIDE ELECTRIC MOTOR DRAWING

EP-405TC



DIMENSIONS - INCHES

| MOUNTING | | | | | A | B | C | D | G | J | P | L | AB | AH | BC |
|----------|-------|-------|------|------|-------|------|------|----|------|------|-------|-------|-------|----|------|
| E | 2F1 | 2F2 | H | BA | | | | | | | | | | | |
| 8 | 12.25 | 13.75 | 0.81 | 6.62 | 19.29 | 17.8 | 38.3 | 10 | 1.18 | 3.15 | 20.53 | 23.46 | 18.11 | 7 | 0.25 |

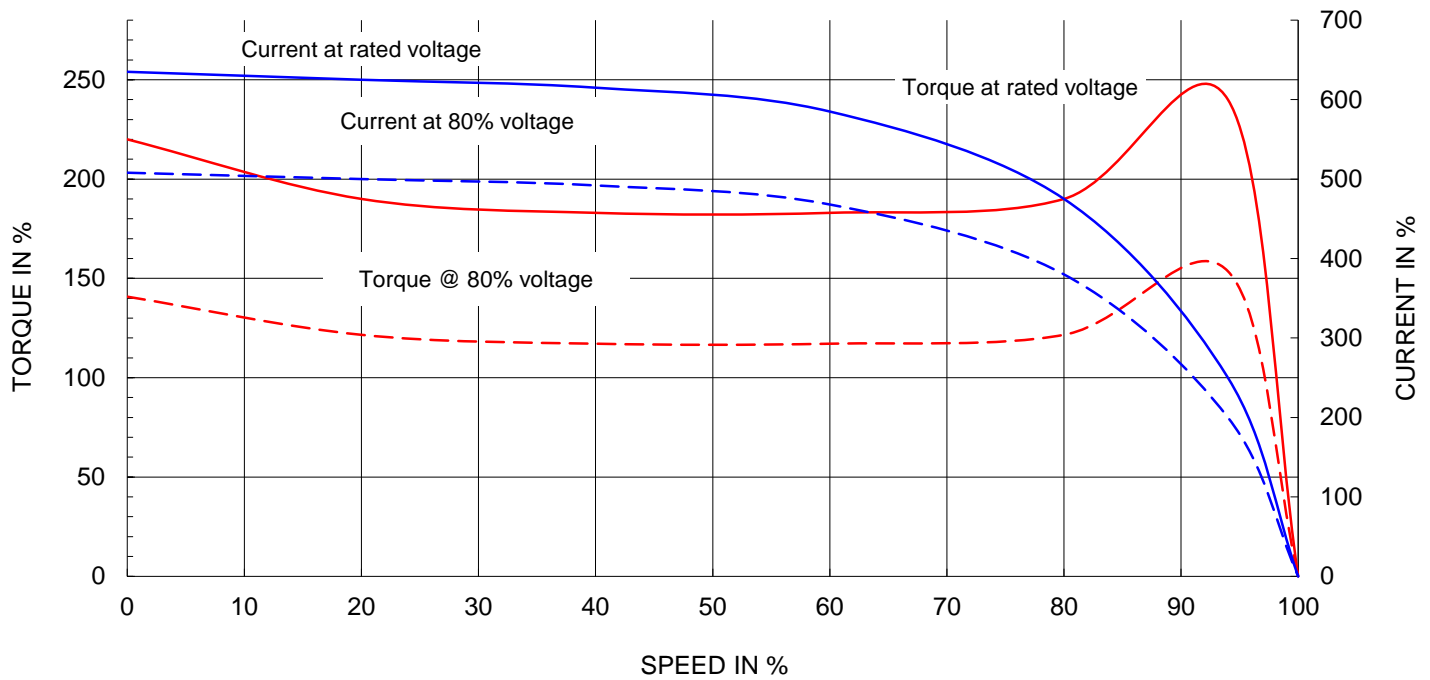
| KEY | | KEYSET | FLANGE | | | | SHAFT | | TERMINAL BOX | | | | | |
|------|------|--------|--------|----|--------|------|-------|------|--------------|----|------|-------|------|-------|
| S | ES | R | AK | AJ | BF | BB | BD | N-W | U | AA | XB | XC | XD | XE |
| 0.75 | 5.65 | 2.45 | 12.5 | 11 | 5/8-11 | 0.25 | 15.5 | 7.25 | 2.875 | 3 | 4.57 | 11.73 | 9.76 | 12.48 |



Motor Performance Curves

| | | | | | |
|-------------------------|-------------------------|--------------|------|---------------|-------|
| Motor type: | EPIC | | | | |
| Output rating (HP) | 100 | FL Speed: | 1790 | | |
| Full Load Torque : | 293 lb.ft | LRT (% FLT): | 220 | 460 volt FLA: | 114.3 |
| Rotor Wk ² : | 45.5 lb-ft ² | BDT (% FLT): | 240 | 230 volt FLA: | 228.6 |

SPEED VS TORQUE & CURRENT CURVE



OUTPUT VS EFF., P.F & CURRENT CURVE

