

# DATA SHEET

Premium Efficiency Motor: **PEWWE20-36-256TC**

**60 Hz**

WorldWide Electric Corporation

1 (800) 808-2131

Worldwideelectric.net



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## MOTOR INFORMATION

|                         |  |
|-------------------------|--|
| HP                      | 20   |
| RPM                     | 3600   |
| Phase                   | 3  |
| Frequency               | 60 Hz  |
| Voltage                 | 230/460 V                                    |
| Frame Size              | 256TC  |
| Enclosure               | TEFC   |
| Degree of Protection    | IP55   |
| Service Factor          | 1.25   |
| Poles                   | 2  |
| Full Load Speed         | 3540   |
| Insulation Class        | F  |
| Temp Rise               | 80°C   |
| NEMA Code Letter        | G  |
| Duty Cycle              | S1 / Continuous                              |
| Slip                    | 1.66%  |
| NEMA Design             | B  |
| Moment of Inertia       | 1.2 lb.ft.^2                                 |
| Locked Rotor Time (Hot) | 18 seconds                                   |
| Sound Pressure Level    | 72 dB(A)                                     |
| Number of Starts        | 2 Cold/ 1 Hot                                |
| Max Ambient Temperature | 40°C   |
| Max Elevation           | 1000 m.a.s.l (3300 f.a.s.l)                  |
| Mounting                | F1   |
| Rotation                | Bi-Directional                               |
| Area of Classification  | Class 1 Division 2 Groups A,B,C,D T3C(160°C) |
| Inverter Rating         | 10:1 CT / 20:1 VT PWM Type                   |
| Standard                | NEMA MG-1                                    |
| Approvals               | CSA-US, CE                                   |

## EFFICIENCY/POWER FACTOR

| LOAD | EFF    | P. F. |
|------|--------|-------|
| 100% | 91.0 % | 0.89  |
| 75%  | 91.5 % | 0.88  |
| 50%  | 91.0 % | 0.83  |

## TORQUE

| FULL LOAD   | LRT   | BDT   |
|-------------|-------|-------|
| 29.7 lb.ft. | 160 % | 230 % |

## AMPERAGE INFORMATION

|                   | 230V  | 460V  |
|-------------------|-------|-------|
| Full Load Amps    | 46.2A | 23.1A |
| Locked Rotor Amps | 290A  | 145A  |
| No Load Current   | 11.6A | 5.8A  |
| Usable at 208V    | 51.1A |       |

## BEARING INFORMATION

|                         |            |
|-------------------------|------------|
| DE Bearing              | 6309 C3    |
| ODE Bearing             | 6209 C3    |
| Grease Type             | SKF LGHP 2 |
| DE Regreasing Interval  | 3000 Hours |
| ODE Regreasing Interval | 3000 Hours |

## ADDITIONAL DATA

|                    |                        |
|--------------------|------------------------|
| F2 Suitable        | Yes                    |
| Shaft Material     | 1045 Carbon Steel      |
| Connection Diagram | 230 / 460 V - 9 Lead Δ |
| Approximate Weight | 288 lbs.               |

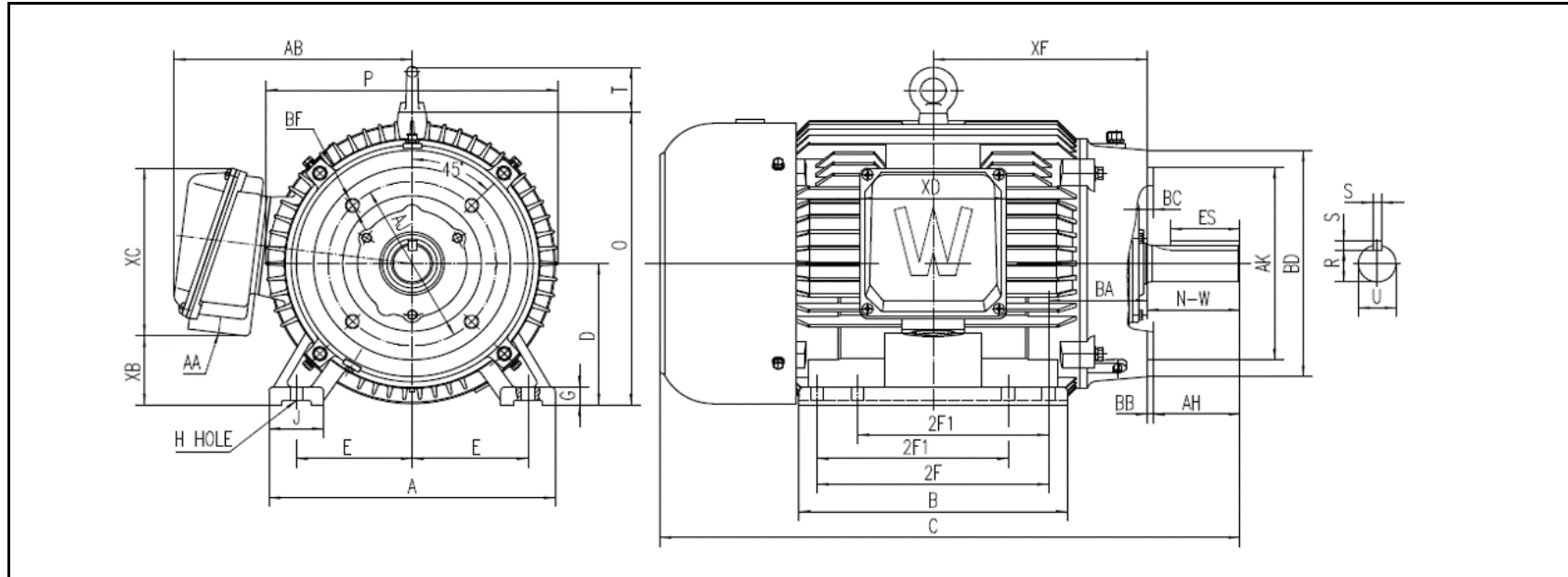
# MOTOR DRAWING

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## DIMENSION - INCHES

| MOUNTING |      |    |      |      | A      | B      | C      | D    | G     | J     | P      | O      | T     | AB     |
|----------|------|----|------|------|--------|--------|--------|------|-------|-------|--------|--------|-------|--------|
| E        | 2F1  | 2F | H    | BA   |        |        |        |      |       |       |        |        |       |        |
| 5        | 8.25 | 10 | 0.53 | 4.25 | 12.362 | 11.575 | 25.041 | 6.25 | 0.787 | 2.362 | 12.598 | 12.894 | 2.006 | 10.276 |

| SHAFT & KEY |      |       |     |      |       |
|-------------|------|-------|-----|------|-------|
| S           | ES   | R     | N-W | AH   | U     |
| 0.375       | 2.91 | 1.416 | 4   | 3.75 | 1.625 |

| TERMINAL BOX |       |       |       |      |
|--------------|-------|-------|-------|------|
| AA           | XB    | XC    | XD    | XF   |
| 1 1/2        | 3.047 | 7.406 | 6.299 | 9.23 |

| FLANGE |     |      |    |        |      |
|--------|-----|------|----|--------|------|
| AJ     | AK  | BB   | BD | BF     | BC   |
| 7.25   | 8.5 | 0.25 | 10 | 1/2-13 | 0.25 |

# PERFORMANCE CURVES

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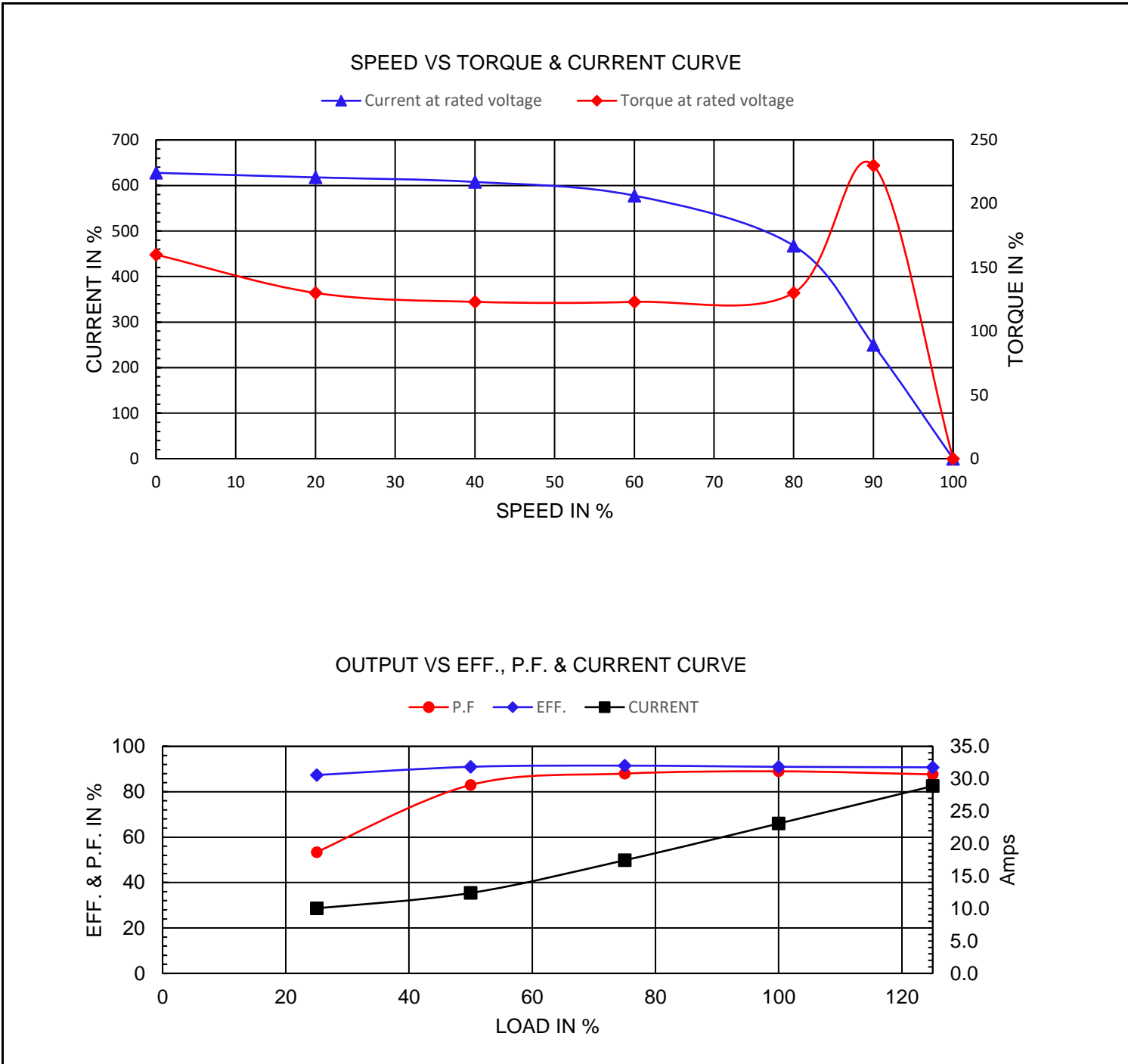
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|                    |       |         |  |            |      |              |      |
|--------------------|-------|---------|--|------------|------|--------------|------|
| Motor Type         | PEWWE |         |  | FL Speed   | 3540 |              |      |
| Output Rating (HP) | 20    |         |  | LRT (%FLT) | 160  | 460 volt FLA | 23.1 |
| Full Load Torque   | 29.7  | lb.ft   |  | BDT (%FLT) | 230  | 230 volt FLA | 46.2 |
| Rotor Wk^2         | 1.2   | lb-ft^2 |  |            |      |              |      |



# NAMEPLATE / WIRING

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Premium Efficiency Motor:

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## SAMPLE NAMEPLATE DATA

|   |                      |                                |                      |  |                                  |
|---|----------------------|--------------------------------|----------------------|--|----------------------------------|
|   |                      | <b>3-PHASE INDUCTION MOTOR</b> |                      | 259277<br>   |                                  |
| Model   | <input type="text"/> | Ser No.                        | <input type="text"/> | Low Voltage<br>50Hz<br>1.0SF<br>HP<br>%<br>V<br>A<br>rpm |                                  |
| HP  | <input type="text"/> | S.F.                           | <input type="text"/> | Rating   | <input type="text"/> °C Amb Cont |
| Frame   | <input type="text"/> | P.F.                           | <input type="text"/> | IP   | <input type="text"/>             |
| Voltage   | 230/460              | Hz                             | <input type="text"/> | Code   | <input type="text"/>             |
| Amps  | <input type="text"/> | RPM                            | <input type="text"/> | Ins Cl   | <input type="text"/>             |
| Nom.Eff.  | FL                   | % 3/4                          | <input type="text"/> | Design   | <input type="text"/>             |
| Class I DIV. 2 Groups A B C D<br>Class I Zone 2 IIC |                      | Amb.40°C                       | T3C(160°C)           | 10:1 CT 20:1 VT PWM VFD 1.0SF<br>Date                    |                                  |
| Grease type:  |                      | DE Brng<br>ODE Brng            |                      |  |                                  |
| <b>WorldWide Electric Corporation</b>               |                      |                                |                      |  |                                  |

|  |                  |           |       |           |                         |
|--|------------------|-----------|-------|-----------|-------------------------|
| Model  | PEWWE20-36-256TC |           |       |           |                         |
| HP   | 20               | S.F.      | 1.25  | IP        | IP55                    |
| Frame  | 256TC            | P.F.      | 0.89  | Code      | G                       |
| Voltage                                      | 230/460 V        | Hz        | 60 Hz | Ins Cl    | F                       |
| Amps   | 46.2/23.1        | RPM       | 3540  | Design    | B                       |
| Nom.Eff.                                     | FL               | 91.0%     | 3/4   | 91.5%     | DE Brng 6309 C3         |
| Class 1 Division 2 Groups A,B,C,D T3C(160°C) |                  |           |       |           | ODE Brng 6209 C3        |
|  |                  |           |       |           | Grease type: SKF LGHP 2 |
| 50Hz   |                  |           |       |           |                         |
| 20 HP  |                  | 200/400 V |       | 53.6/26 A |                         |
| 2935 rpm                                     |                  |           |       |           |                         |
| Eff. 90.3%                                   |                  |           |       |           |                         |