



# DATA SHEET

Premium Efficiency Motor: **PEWWE2-18-145TC**

**60 Hz**

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| MOTOR INFORMATION       |  |
|-------------------------|--|
| HP                      | 2  |
| RPM                     | 1800   |
| Phase                   | 3  |
| Frequency               | 60 Hz  |
| Voltage                 | 230/460 V                                    |
| Frame Size              | 145TC  |
| Enclosure               | TEFC   |
| Degree of Protection    | IP55   |
| Service Factor          | 1.25   |
| Poles                   | 4  |
| Full Load Speed         | 1755   |
| Insulation Class        | F  |
| Temp Rise               | 80°C   |
| NEMA Code Letter        | L  |
| Duty Cycle              | S1 / Continuous                              |
| Slip                    | 2.50%  |
| NEMA Design             | B  |
| Moment of Inertia       | 0.105 lb.ft.^2                               |
| Locked Rotor Time (Hot) | 12 seconds                                   |
| Sound Pressure Level    | 62 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%                    | 86.5 % | 0.73  |
| 75%                     | 86.4 % | 0.6   |
| 50%                     | 4      |       |
| 83.8 %                  |        | 0.51  |

| TORQUE      |       |     |
|-------------|-------|-----|
| FULL LOAD   | LRT   | BDT |
| 5.98 lb.ft. | 270 % | 350 |
| %           |       |     |

| AMPERAGE INFORMATION           |       |      |
|--------------------------------|-------|------|
|                                | 230V  | 460V |
| Full Load Amps                 | 5.93A | 2.97 |
| Locked Rotor Amps              | A     |      |
| No Load Current                | 50A   | 25A  |
| Usable at 208V 3.9A 6.56A 1.95 |       |      |
| A                              |       |      |

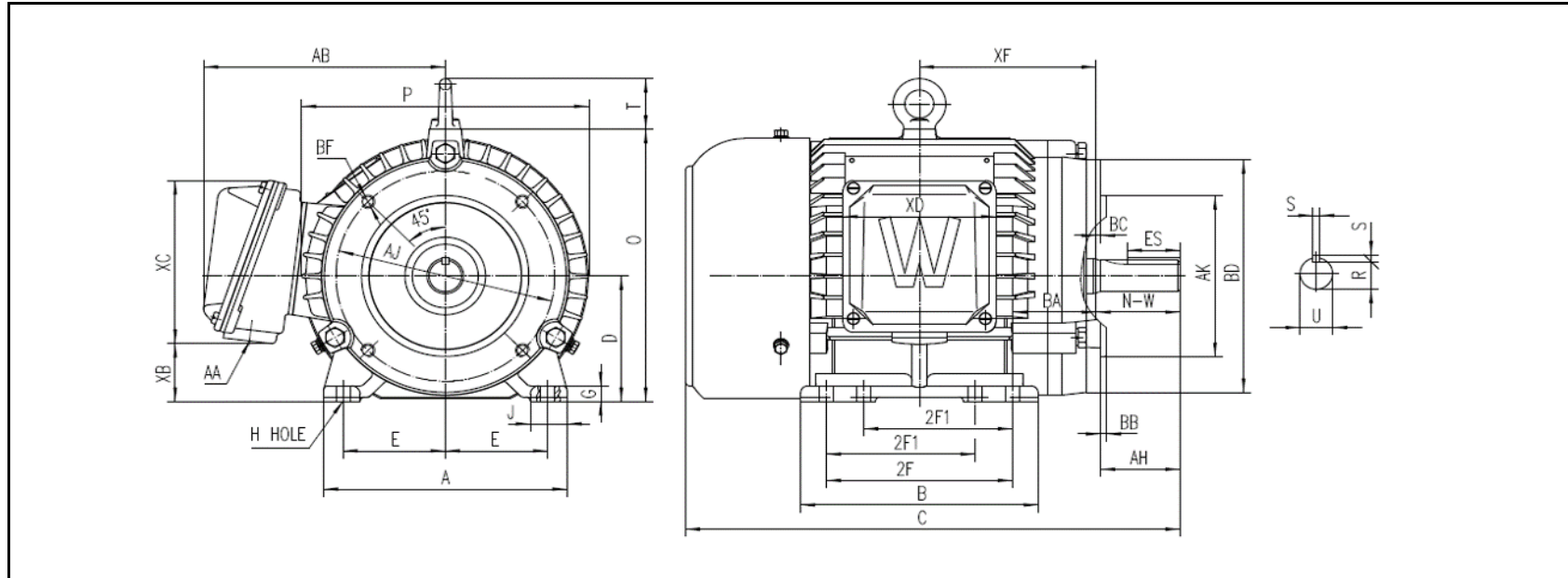
| BEARING INFORMATION     |           |
|-------------------------|-----------|
| DE Bearing              | 6205ZZ C3 |
| ODE Bearing Grease Ty   | 6205ZZ C3 |
| pe DE Regreasing        | --        |
| Interval                | - Hours   |
| ODE Regreasing Interval | - Hours   |

| ADDITIONAL DATA    |                        |
|--------------------|------------------------|
| F2 Suitable        | Yes                    |
| Shaft Material     | 1045 Carbon Steel      |
| Connection Diagram | 230 / 460 V - 9 Lead Y |
| Approximate Weight | 56 lbs.                |



# MOTOR DRAWING

Premium Efficiency Motor: **PEWWE2-18-145TC**



## DIMENSION - INCHES

| MOUNTING |     |    |      |      | A     | B     | C      | D   | G     | J     | P     | O   | T     | AB    |
|----------|-----|----|------|------|-------|-------|--------|-----|-------|-------|-------|-----|-------|-------|
| E        | 2F1 | 2F | H    | BA   |       |       |        |     |       |       |       |     |       |       |
| 2.75     | 4   | 5  | 0.34 | 2.25 | 6.535 | 6.378 | 13.276 | 3.5 | 0.433 | 0.984 | 7.717 | 7.6 | 1.417 | 6.491 |

| SHAFT & KEY |      |       |      |      |       |
|-------------|------|-------|------|------|-------|
| S           | ES   | R     | N-W  | AH   | U     |
| 0.188       | 1.41 | 0.771 | 2.25 | 2.12 | 0.875 |

| TERMINAL BOX |      |      |       |       |
|--------------|------|------|-------|-------|
| AA           | XB   | XC   | XD    | XF    |
| 3/4          | 1.61 | 4.55 | 4.094 | 4.748 |

| FLANGE |     |      |       |        |      |
|--------|-----|------|-------|--------|------|
| AJ     | AK  | BB   | BD    | BF     | BC   |
| 5.875  | 4.5 | 0.16 | 6.496 | 3/8-16 | 0.12 |



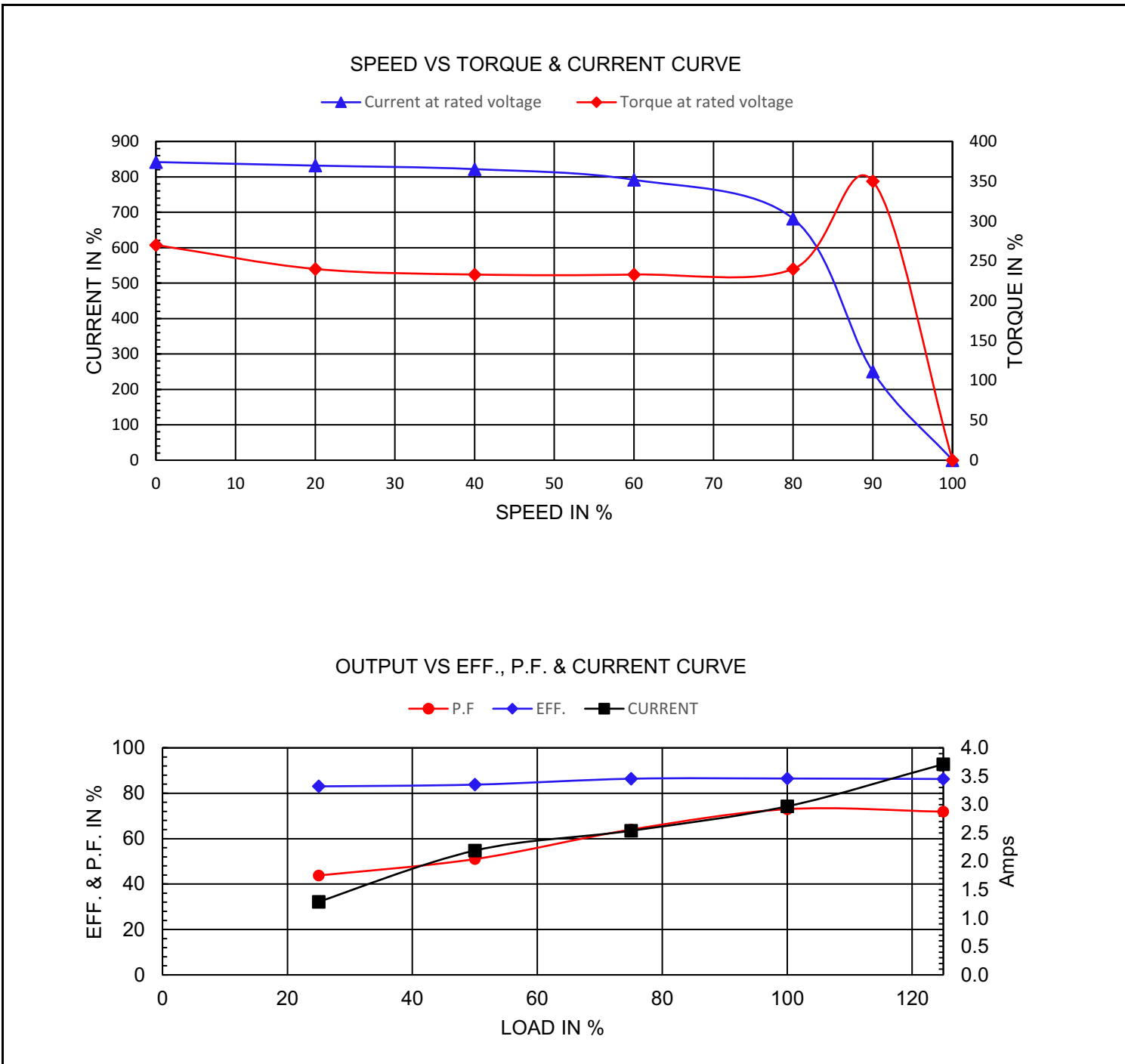
# PERFORMANCE CURVES

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|                    |       |         |            |      |                   |
|--------------------|-------|---------|------------|------|-------------------|
| Motor Type         | PEWWE |         | FL Speed   | 1755 |                   |
| Output Rating (HP) | 2     |         | LRT (%FLT) | 270  | 460 volt FLA 2.97 |
| Full Load Torque   | 5.98  | lb.ft   | BDT (%FLT) | 350  | 230 volt FLA 5.93 |
| Rotor Wk^2         | 0.105 | lb-ft^2 |            |      |                   |





# NAMEPLATE / WIRING

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## SAMPLE NAMEPLATE DATA

|                                       |         |                                |            |             |             |       |     |
|---------------------------------------|---------|--------------------------------|------------|-------------|-------------|-------|-----|
|                                       |         | <b>3-PHASE INDUCTION MOTOR</b> |            | 259277      |             |       |     |
| Model                                 |         | Ser No.                        |            | Low Voltage |             | 50Hz  |     |
| HP                                    |         | S.F.                           |            | Rating      | °C Amb Cont | 1.0SF |     |
| Frame                                 |         | P.F.                           |            | IP          | Encl        | HP    |     |
| Voltage                               | 230/460 | Hz                             |            | Code        | Type        | %     |     |
| Amps                                  |         | RPM                            |            | Ins Cl      | Design      | V     |     |
| Nom. Eff.                             | FL      | % 3/4                          | %          | 10:1 CT     | 20:1 VT     | PWM   | VFD |
| Class I DIV. 2 Groups A B C D         |         | Amb.40°C                       | T3C(160°C) | Date        |             | rpm   |     |
| Class I Zone 2 IIC                    |         | Amb.55°C                       | T3A(180°C) |             |             |       |     |
| Grease type:                          | DE Bmg  |                                |            |             |             |       |     |
|                                       | ODE Bmg |                                |            |             |             |       |     |
| <b>WorldWide Electric Corporation</b> |         |                                |            |             |             |       |     |

|                                   |            |           |       |           |            |                 |        |        |
|-----------------------------------|------------|-----------|-------|-----------|------------|-----------------|--------|--------|
| Model                             | PEWWE2-18- |           |       |           |            |                 |        |        |
| 145TC HP                          | 2          | S.F.      | 1.25  | IP        | IP55       | Encl            | TEFC   |        |
| Frame                             | 145TC      | P.F.      | 0.73  | Code      | L          | Type            |        |        |
| Voltage                           | 230/460 V  | Hz        | 60 Hz | Ins Cl    | F          | Ambient         | 40°C   |        |
| Amps                              | 5.93/2.97  | RPM       | 1755  | Design    | B          | DE Brng         | 6205ZZ |        |
| C3 Nom. Eff.                      | FL         | 86.5%     | 3/4   | 86.4%     | ODE Brng   |                 |        | 6205ZZ |
| Class 1 Division 2 Groups A,B,C,D |            |           |       |           | T3C(160°C) | Grease type: -- |        |        |
| 50Hz                              |            |           |       |           |            |                 |        |        |
| 2 HP                              |            | 200/400 V |       | 7.13/3.5A |            | 1450 rpm        |        |        |
| Eff. 82.8%                        |            |           |       |           |            |                 |        |        |