

**Electrical Helper.org**For All Your Electric Needs Since 1928  
411 N Platte Ave. York, NE. 68467AC-DC MOTORS :: SALES & SERVICE  
REWINDING :: CUSTOM CONTROL PANELKelly MacMillan  
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# DATA SHEET

Premium Efficiency Motor: **PEWWE25-18-284TZ-GD,****60 Hz**

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## MOTOR INFORMATION

|                         |                                         |
|-------------------------|-----------------------------------------|
| HP                      | 25                                      |
| RPM                     | 1800                                    |
| Phase                   | 3                                       |
| Frequency               | 60                                      |
| Voltage                 | 230/460                                 |
| Frame Size              | 284TZ                                   |
| Enclosure               | TEFC                                    |
| Degree of Protection    | IP55                                    |
| Service Factor          | 1.25                                    |
| Poles                   | 4                                       |
| Full Load Speed         | 1770                                    |
| Insulation Class        | F                                       |
| Temp Rise               | 80°C                                    |
| NEMA Code Letter        | G                                       |
| Duty Cycle              | S1 / Continuous                         |
| Slip                    | 1.67%                                   |
| NEMA Design             | B                                       |
| Moment of Inertia       | 3.07 lb.ft.^2                           |
| Locked Rotor Time (Hot) | 15 seconds                              |
| Sound Pressure Level    | 70 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 |
| Inverter Rating         | 10:1 CT / 20:1 VT                       |
| Standard                | NEMA MG-1                               |
| Approvals               | CSA, CE                                 |

## EFFICIENCY/POWER FACTOR

| LOAD | EFF    | P. F. |
|------|--------|-------|
| 100% | 93.6 % | 0.85  |
| 75%  | 93.9 % | 0.82  |
| 50%  | 93.3 % | 0.73  |

## TORQUE

| FULL LOAD   | LRT   | BDT   |
|-------------|-------|-------|
| 74.2 lb.ft. | 160 % | 240 % |

## AMPERAGE INFORMATION

|                   | 230V  | 460V   |
|-------------------|-------|--------|
| Full Load Amps    | 58.8A | 29.4A  |
| Locked Rotor Amps | 365A  | 182.5A |
| No Load Current   | 21.2A | 10.6A  |

## BEARING INFORMATION

|             |           |
|-------------|-----------|
| DE Bearing  | 6311ZZ C3 |
| ODE Bearing | 6309ZZ C3 |

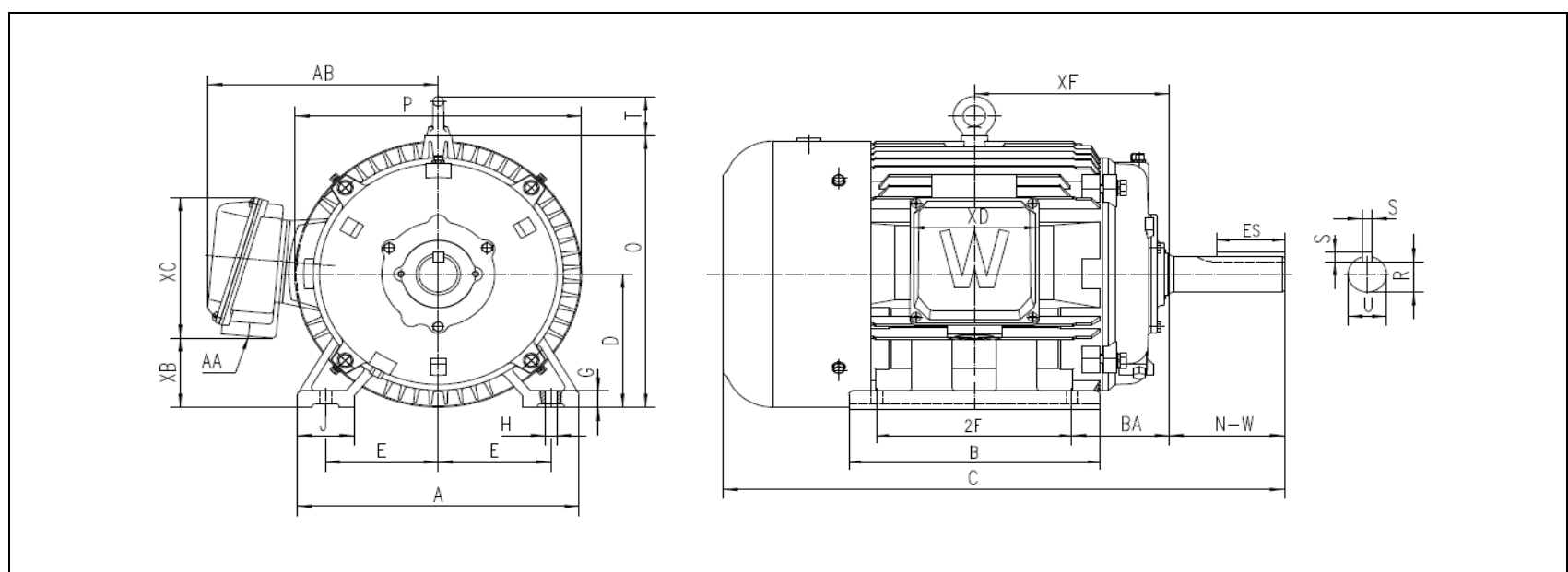
## ADDITIONAL DATA

|                    |                         |
|--------------------|-------------------------|
| F2 Suitable        | Y                       |
| Shaft Material     | 1045 Carbon Steel       |
| Connection Diagram | 230 / 460 V - 12 Lead Δ |
| Lead Length        | 72 inches               |
| Approximate Weight | 370 lbs.                |



# MOTOR DRAWING

Premium Efficiency Motor: **PEWWE25-18-284TZ-GD**



## DIMENSION - INCHES

| MOUNTING |     |     |      |      | A     | B      | C      | D | G     | J     | P      | O      | T     | AB     |
|----------|-----|-----|------|------|-------|--------|--------|---|-------|-------|--------|--------|-------|--------|
| E        | 2F1 | 2F2 | H    | BA   |       |        |        |   |       |       |        |        |       |        |
| 5.5      | --  | 9.5 | 0.53 | 4.75 | 13.74 | 12.244 | 27.362 | 7 | 0.866 | 2.756 | 13.976 | 14.283 | 2.047 | 11.239 |

| SHAFT & KEY |      |       |      |       |
|-------------|------|-------|------|-------|
| S           | ES   | R     | N-W  | U     |
| 0.5         | 3.28 | 1.591 | 5.62 | 1.875 |

| TERMINAL BOX |       |       |       |     |
|--------------|-------|-------|-------|-----|
| AA           | XB    | XC    | XD    | XE  |
| 1-1/2        | 3.645 | 7.381 | 6.299 | 9.5 |



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# PERFORMANCE CURVES

Premium Efficiency Motor:

**PEWWE25-18-284TZ-GD**

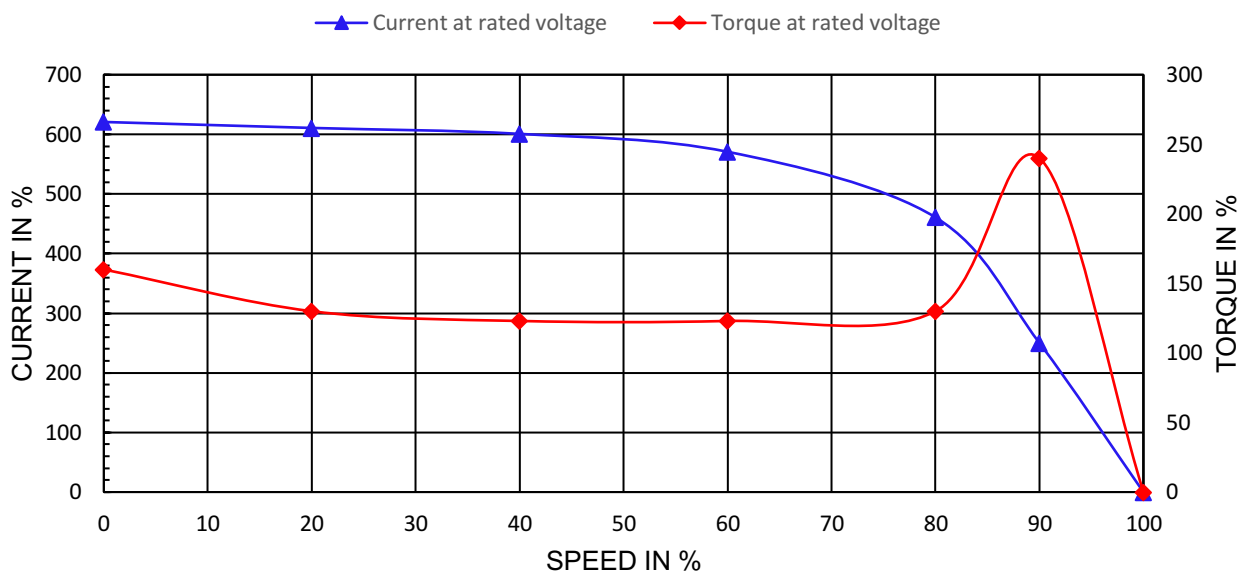
Document Generated: 11-Dec-2023

Document ID:

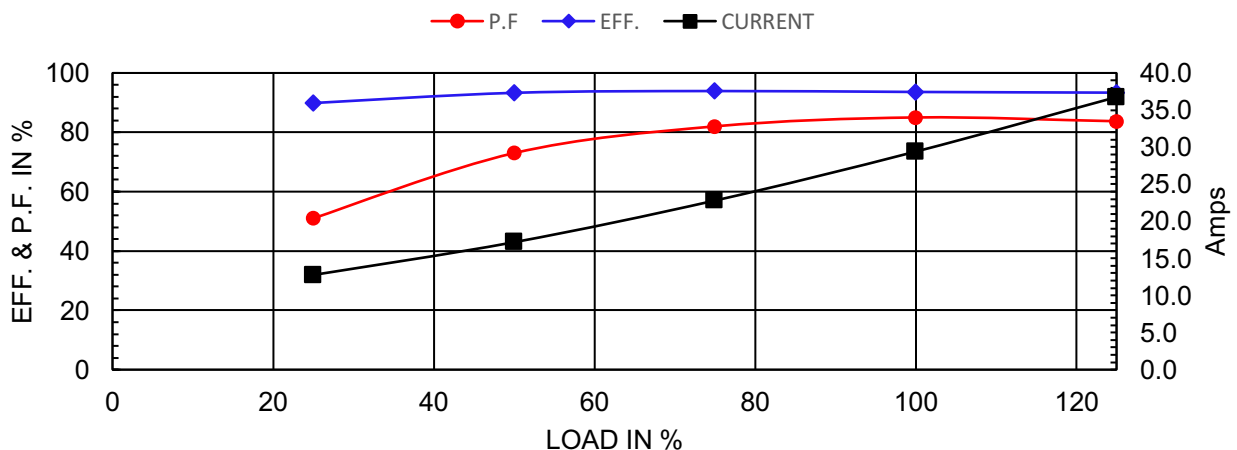
Customer:

|                    |       |         |            |      |                   |
|--------------------|-------|---------|------------|------|-------------------|
| Motor Type         | PEWWE |         |            |      |                   |
| Output Rating (HP) | 25    |         | FL Speed   | 1770 |                   |
| Full Load Torque   | 74.2  | lb.ft   | LRT (%FLT) | 160  | 460 volt FLA 29.4 |
| Rotor Wk^2         | 3.07  | lb-ft^2 | BDT (%FLT) | 240  | 230 volt FLA 58.8 |

SPEED VS TORQUE & CURRENT CURVE



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





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# NAMEPLATE / WIRING

Premium Efficiency Motor: **PEWWE25-18-284TZ-GD**

|                                 |           |
|---------------------------------|-----------|
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## SAMPLE NAMEPLATE DATA

|                                                                                                                                                                                                                                                                                                                        |          |                     |   |                                    |                         |               |                    |          |            |                     |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |   |   |   |   |   |    |    |    |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------------------|---|------------------------------------|-------------------------|---------------|--------------------|----------|------------|---------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|---|---|---|---|---|---|----|----|----|---|---|---|---|---|---|---|---|---|----|----|----|---|---|---|
|                                                                                                                                                                                                                                                                                                                        |          | <b>NEMA Premium</b> |   | <b>3-PHASE<br/>INDUCTION MOTOR</b> |                         | 259277<br>    | CE<br>CC006A       |          |            |                     |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |   |   |   |   |   |    |    |    |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |
| <b>Model</b>                                                                                                                                                                                                                                                                                                           |          |                     |   | <b>Ser No.</b>                     |                         |               |                    |          |            |                     |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |   |   |   |   |   |    |    |    |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |
| <b>HP</b>                                                                                                                                                                                                                                                                                                              |          | <b>S.F.</b>         |   | <b>IP</b>                          |                         | <b>Encl</b>   |                    |          |            |                     |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |   |   |   |   |   |    |    |    |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |
| <b>Frame</b>                                                                                                                                                                                                                                                                                                           |          | <b>P.F.</b>         |   | <b>Code</b>                        |                         | <b>Type</b>   |                    |          |            |                     |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |   |   |   |   |   |    |    |    |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |
| <b>Voltage</b>                                                                                                                                                                                                                                                                                                         | 230/460  | <b>Hz</b>           |   | <b>Ins Cl</b>                      |                         | <b>Rating</b> | °C Amb Cont        |          |            |                     |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |   |   |   |   |   |    |    |    |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |
| <b>Amps</b>                                                                                                                                                                                                                                                                                                            |          | <b>RPM</b>          |   | <b>Design</b>                      |                         | <b>Date</b>   |                    |          |            |                     |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |   |   |   |   |   |    |    |    |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |
| <b>Nom.Eff.</b>                                                                                                                                                                                                                                                                                                        | FL       | % 3/4               | % | 230/460V                           | 10:1 CT 20:1 VT PWM VFD | 1.0SF         |                    |          |            |                     |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |   |   |   |   |   |    |    |    |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |
| <table border="1" style="width: 100%;"> <tr> <td>Class I DIV. 2 Groups A B C D</td> <td>Amb.40°C</td> <td>T3C(160°C)</td> </tr> <tr> <td>Class I Zone 2 IIC</td> <td>Amb.55°C</td> <td>T3A(180°C)</td> </tr> </table>                                                                                                  |          |                     |   | Class I DIV. 2 Groups A B C D      | Amb.40°C                | T3C(160°C)    | Class I Zone 2 IIC | Amb.55°C | T3A(180°C) | DE Brng<br>ODE Brng |  | <div style="border: 1px solid black; padding: 5px;"> <b>Low Voltage</b><br/> <table style="width: 100%; text-align: center;"> <tr><td>6</td><td>4</td><td>5</td></tr> <tr><td>7</td><td>8</td><td>9</td></tr> <tr><td>12</td><td>10</td><td>11</td></tr> <tr><td>1</td><td>2</td><td>3</td></tr> </table> <b>High Voltage</b><br/> <table style="width: 100%; text-align: center;"> <tr><td>4</td><td>5</td><td>6</td></tr> <tr><td>7</td><td>8</td><td>9</td></tr> <tr><td>12</td><td>10</td><td>11</td></tr> <tr><td>1</td><td>2</td><td>3</td></tr> </table> </div> |  | 6 | 4 | 5 | 7 | 8 | 9 | 12 | 10 | 11 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 12 | 10 | 11 | 1 | 2 | 3 |
| Class I DIV. 2 Groups A B C D                                                                                                                                                                                                                                                                                          | Amb.40°C | T3C(160°C)          |   |                                    |                         |               |                    |          |            |                     |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |   |   |   |   |   |    |    |    |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |
| Class I Zone 2 IIC                                                                                                                                                                                                                                                                                                     | Amb.55°C | T3A(180°C)          |   |                                    |                         |               |                    |          |            |                     |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |   |   |   |   |   |    |    |    |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |
| 6                                                                                                                                                                                                                                                                                                                      | 4        | 5                   |   |                                    |                         |               |                    |          |            |                     |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |   |   |   |   |   |    |    |    |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |
| 7                                                                                                                                                                                                                                                                                                                      | 8        | 9                   |   |                                    |                         |               |                    |          |            |                     |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |   |   |   |   |   |    |    |    |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |
| 12                                                                                                                                                                                                                                                                                                                     | 10       | 11                  |   |                                    |                         |               |                    |          |            |                     |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |   |   |   |   |   |    |    |    |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |
| 1                                                                                                                                                                                                                                                                                                                      | 2        | 3                   |   |                                    |                         |               |                    |          |            |                     |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |   |   |   |   |   |    |    |    |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |
| 4                                                                                                                                                                                                                                                                                                                      | 5        | 6                   |   |                                    |                         |               |                    |          |            |                     |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |   |   |   |   |   |    |    |    |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |
| 7                                                                                                                                                                                                                                                                                                                      | 8        | 9                   |   |                                    |                         |               |                    |          |            |                     |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |   |   |   |   |   |    |    |    |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |
| 12                                                                                                                                                                                                                                                                                                                     | 10       | 11                  |   |                                    |                         |               |                    |          |            |                     |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |   |   |   |   |   |    |    |    |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |
| 1                                                                                                                                                                                                                                                                                                                      | 2        | 3                   |   |                                    |                         |               |                    |          |            |                     |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |   |   |   |   |   |    |    |    |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |
| <div style="display: flex; justify-content: space-between; align-items: center;"> <span>50Hz</span> <span>HP</span> <span>V</span> <span>A</span> <span>rpm</span> <span>S.F1.0</span> </div> <p style="font-size: 1.2em; margin: 0;"><b>WorldWide Electric Corporation</b></p> <div style="text-align: right;"></div> |          |                     |   |                                    |                         |               |                    |          |            |                     |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |   |   |   |   |   |   |    |    |    |   |   |   |   |   |   |   |   |   |    |    |    |   |   |   |

|                 |                     |                |       |               |      |                 |           |
|-----------------|---------------------|----------------|-------|---------------|------|-----------------|-----------|
| <b>Model</b>    | PEWWE25-18-284TZ-GD |                |       |               |      |                 |           |
| <b>HP</b>       | 25                  | <b>S.F.</b>    | 1.25  | <b>IP</b>     | IP55 | <b>Encl</b>     | TEFC      |
| <b>Frame</b>    | 284TZ               | <b>P.F.</b>    | 0.85  | <b>Code</b>   | G    | <b>Type</b>     | BJPE      |
| <b>Voltage</b>  | 230/460             | <b>Hz</b>      | 60    | <b>Ins Cl</b> | F    | <b>Rating</b>   | 40°C      |
| <b>Amps</b>     | 58.8/29.4           | <b>RPM</b>     | 1770  | <b>Design</b> | B    | <b>DE Brng</b>  | 6311ZZ C3 |
| <b>Nom.Eff.</b> | 93.6%               | <b>3/4 Eff</b> | 93.9% |               |      | <b>ODE Brng</b> | 6309ZZ C3 |

| 50Hz |    |       |         |          |       |     |      |
|------|----|-------|---------|----------|-------|-----|------|
| HP   | 25 | Volts | 200/400 | 200V FLA | 69.5A | RPM | 1465 |
|      |    |       |         | 400V FLA | 34.7  |     |      |