

Technical Documentation

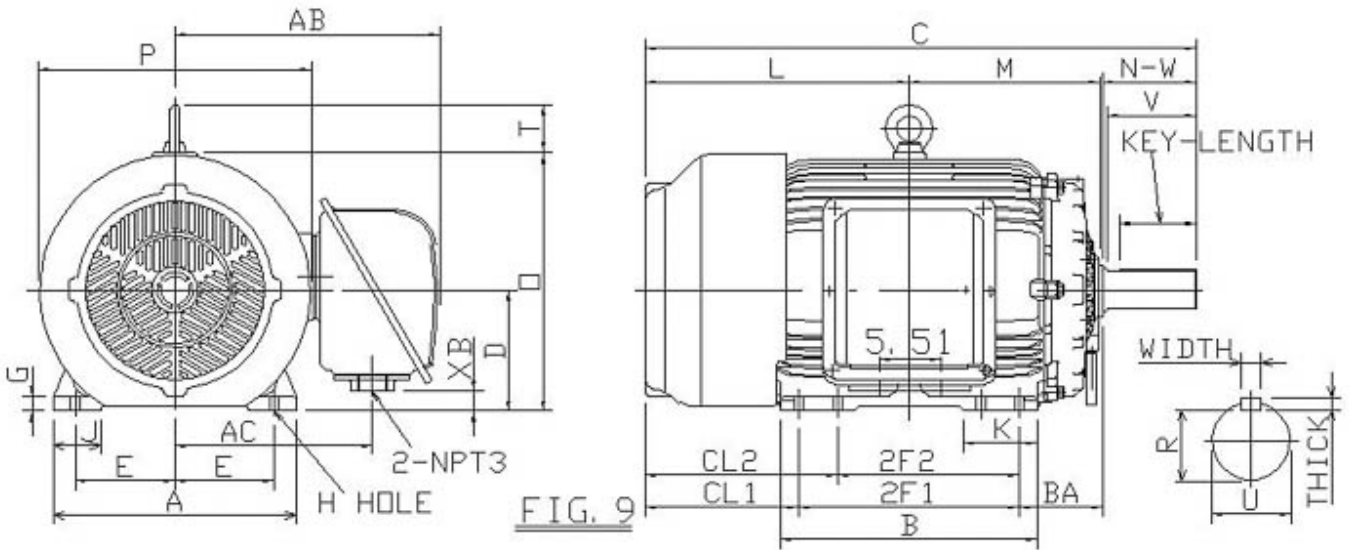
PDX30065R

Optim TEFC | AEHH8N

Date: July 2, 2021

Dimensional Drawing

| | | | | | | |
|-----------|--------|-----|------|---------|----|------------|
| Catalogue | Type | HP | RPM | Voltage | Hz | Frame Size |
| PDX30065R | AEHH8N | 300 | 1200 | 575 | 60 | 449T(X) |




| Mounting | | | | | A | B | C | CL1 | CL2 | D | G |
|----------|-----|-----|------|-----|-------|-------|------|-----|-----|----|-----|
| E | 2F1 | 2F2 | H | BA | | | | | | | |
| 9 | 25 | 20 | 0.81 | 7.5 | 22.05 | 27.95 | 54.9 | | | 11 | 1.4 |

| J | K | L | M | O | P | T |
|------|---|------|-------|-------|-------|------|
| 4.35 | | 26.4 | 19.65 | 23.52 | 24.76 | 4.33 |

| Terminal Housing | | | |
|------------------|-------|-------|------|
| AA | AB | AC | XB |
| 2-3 | 24.02 | 17.91 | 1.83 |

| Shaft Extension | | | Key | | | Keyseat |
|-----------------|-------|---|-------|-------|--------|---------|
| N-W | U | V | Width | Thick | Length | R |
| 8.5 | 3.375 | 8 | 0.875 | 0.875 | 6.93 | 2.88 |

| Bearings | | Weight Lbs | Drive Method | Dimensions |
|----------|------|------------|------------------------------|------------|
| DE | NDE | | | |
| NU320 | 6316 | 3130 | Direct Coupling / Belt Drive | Inches |

| | |
|---|--------------------|
|  MOTORS (CANADA) INC. | |
| | |
| | Date: July 2, 2021 |

Technical Data Sheet

| | |
|--------------------|-------------------------|
| Motor Type: AEHH8N | Catalogue No: PDX30065R |
|--------------------|-------------------------|

Nameplate Information

| | | | | | | |
|-----------|------------|----------------|-------------|-------------|--------------|----------------|
| HP | Pole | RPM | Frame | Voltage | Hz | Phase |
| 300 | 6 | 1186 | 449T(X) | 575 | 60 | 3 |
| Enclosure | Ins. Class | Service Factor | Time Rating | NEMA Design | Rated Amb. | Rated Altitude |
| TEFC | F | 1.15 | Continuous | 0 | -40 to 40 °C | <1000 m |

Typical Performance

| Efficiency (%) | | | | Power Factor (%) | | |
|-------------------|-----------------------------|---------------------------------|--------------------------------------|---------------------|-----------|--------------------------------|
| Full Load | | 3/4 Load | 1/2 Load | Full Load | 3/4 Load | 1/2 Load |
| Nom. | Min. | | | | | |
| 95.80 | 0.00 | 96.00 | 95.80 | 84.50 | 81.00 | 73.00 |
| Torque | | | | Current (A) | | |
| Full Load (lb-ft) | Locked Rotor (% FLT) | Pull Up (% FLT) | Break Down (% FLT) | No Load | Full Load | Locked Rotor |
| 1325.79 | 150 | 120 | 250 | 0.0 | 277.6 | 1896.00 |
| NEMA KVA Code | Inertia (WR ²) | | | Safe Stall Time (s) | | Noise Level Sound Press. dB(A) |
| | Rotor (lb-ft ²) | NEMA Load (lb-ft ²) | Max. Allowable (lb-ft ²) | Cold | Hot | |
| 0 | 199.000 | 0.00 | 0.00 | 0 | 0 | 0.0 |

VFD Duty Information

| Speed Range | | | VFD | | S.F. |
|-----------------|-----------------|----------------|---------|--------------|----------|
| Constant Torque | Variable Torque | Constant Power | Carrier | Type | |
| 20-60Hz | 3-60Hz | 60-90Hz | 0 | VPWM or CPWM | 1.0 Only |

Hazardous Locations Information

| |
|--|
| CSA Certified |
| Class I, Div 2, Groups B, C & D Class I, Zone 2, Groups IIB+H2, IIB & IIA |
| Temp Code (Sinewave / VFD) T3 / T2C |

Additional Certifications

| |
|-------------------------------|
| Other Certification |
| Class II, Div 2, Groups F & G |

Additional Information

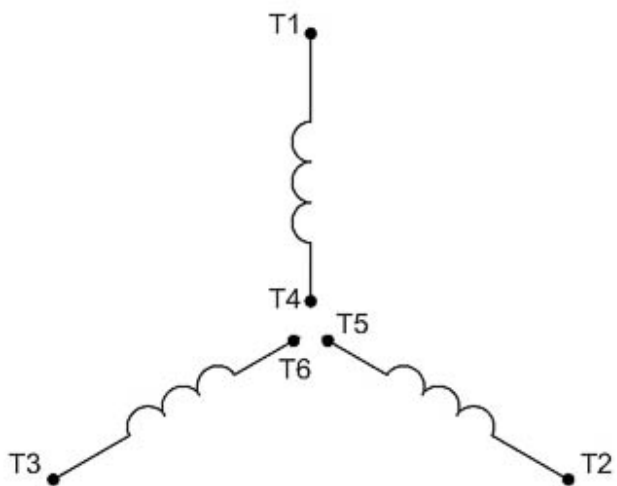
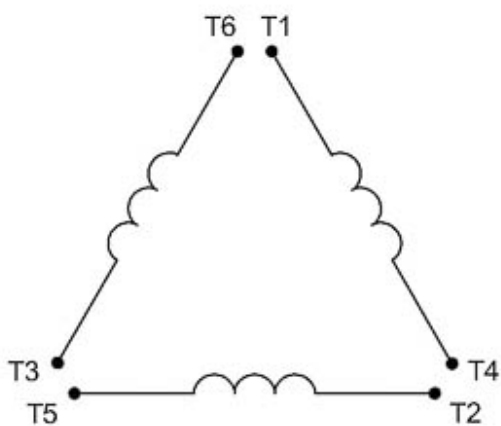
| Bearings | | Approx. Weight |
|----------|------|----------------|
| DE | NDE | lbs |
| NU320 | 6316 | 3130 |

Nameplate Drawing

Optim TEFC

| | | | | | |
|-----------------|------------------|-----------------|-----------|----------------|------|
| TYPE | AEHH8N | CAT. NO. | PDX30065R | | |
| OUTPUT | 300 HP 223.80 kW | FRAME | 449T(X) | TEFC | |
| R.P.M. | 1186 | POLE | 6 | INS. | F |
| VOLTS | 575 | PHASE | 3 | Hz | 60 |
| AMPS | 277.6 | CODE | 0 | S.F. | 1.15 |
| AMBIENT | 40 °C | NOM. EFF. 95.80 | | MIN. EFF. 0.00 | |
| BEARINGS | NU320 / 6316 | | | RATING Cont. | |
| SER. NO. | TBD | DESIGN | 0 | WT. 3130 LBS | |
| PWM VFD DUTY | VT | CT | CP | S.F. | |
| | 3-60Hz | 20-60Hz | 60-90Hz | 1.0 Only | |

Connection Diagram



| 6 LEAD | | SINGLE VOLTAGE | | | WYE/DELTA |
|------------|-------|----------------|-----|-----|-----------|
| CONNECTION | | L1 | L2 | L3 | JOIN |
| START | WYE | 1 | 2 | 3 | 4&5&6 |
| RUN | DELTA | 1,6 | 2,4 | 3,5 | - |

WD_6YD