

Technical Documentation

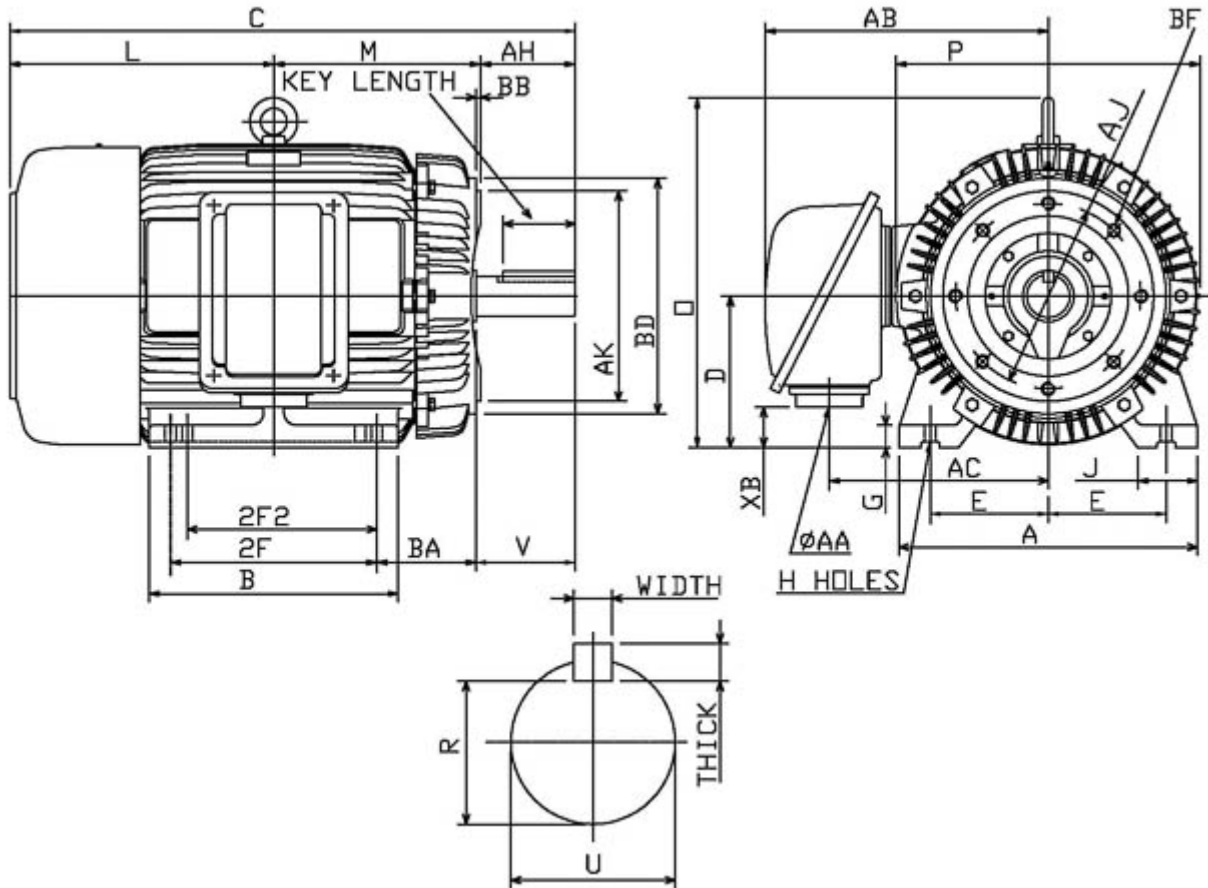
PDX02585C

Optim TEFC | AEHH8N

Date: July 2, 2021

Dimensional Drawing

| | | | | | | |
|-----------|--------|----|-----|---------|----|------------|
| Catalogue | Type | HP | RPM | Voltage | Hz | Frame Size |
| PDX02585C | AEHH8N | 25 | 900 | 575 | 60 | 326TC(X) |




| Mounting | | | | | A | B | C | CL1 | CL2 | D | G |
|----------|-----|------|------|------|-------|-------|-------|-----|-----|---|-----|
| E | 2F1 | 2F2 | H | BA | | | | | | | |
| 6.25 | 12 | 10.5 | 0.66 | 5.25 | 15.75 | 14.35 | 31.42 | | | 8 | 1.1 |

| J | K | AK | AJ | L | M | O | P | T | BD | BB |
|------|---|------|----|-------|-------|-------|-------|------|-------|------|
| 3.15 | | 12.5 | 11 | 14.92 | 11.04 | 16.27 | 16.54 | 2.32 | 13.58 | 0.25 |

| Terminal Housing | | | |
|------------------|-------|------|------|
| AA | AB | AC | XB |
| 2 NPT | 14.65 | 11.3 | 3.59 |

| Shaft Extension | | | Key | | | Keyseat |
|-----------------|-------|------|-------|-------|--------|---------|
| N-W | U | V | Width | Thick | Length | R |
| 5.25 | 2.125 | 5.15 | 0.5 | 0.5 | | |

| Bearings | | Weight Lbs | Drive Method | Dimensions |
|----------|------|------------|------------------------------|------------|
| DE | NDE | | | |
| 6312 | 6310 | 569 | Direct Coupling / Belt Drive | Inches |

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

Technical Data Sheet

| | |
|--------------------|-------------------------|
| Motor Type: AEHH8N | Catalogue No: PDX02585C |
|--------------------|-------------------------|

Nameplate Information

| | | | | | | |
|-----------|------------|----------------|-------------|-------------|--------------|----------------|
| HP | Pole | RPM | Frame | Voltage | Hz | Phase |
| 25 | 8 | 875 | 326TC(X) | 575 | 60 | 3 |
| Enclosure | Ins. Class | Service Factor | Time Rating | NEMA Design | Rated Amb. | Rated Altitude |
| TEFC | F | 1.15 | Continuous | C | -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. | | | | | |
| 91.00 | 89.50 | 91.70 | 91.70 | 80.00 | 75.00 | 65.00 |
| Torque | | | | Current (A) | | |
| Full Load (lb-ft) | Locked Rotor (% FLT) | Pull Up (% FLT) | Break Down (% FLT) | No Load | Full Load | Locked Rotor |
| 150.00 | 210 | 170 | 230 | 11.0 | 25.7 | 146.00 |
| 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 | |
| G | 9.856 | 647.00 | 1759.00 | 29 | 20 | 70.0 |

VFD Duty Information

| Speed Range | | | VFD | | S.F. |
|-----------------|-----------------|----------------|---------|--------------|----------|
| Constant Torque | Variable Torque | Constant Power | Carrier | Type | |
| 6-60Hz | 3-60Hz | 60-120Hz | 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 / T3 |

Additional Certifications

| |
|---------------------|
| Other Certification |
|---------------------|

Additional Information

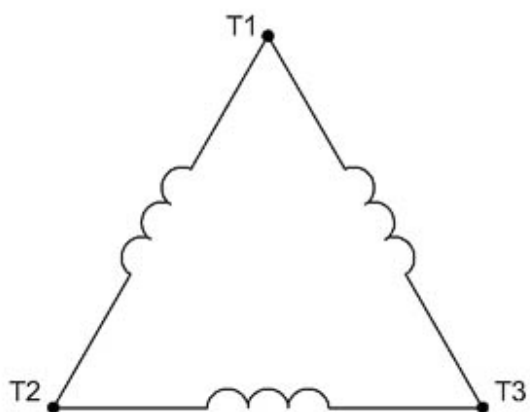
| Bearings | | Approx. Weight |
|----------|------|----------------|
| DE | NDE | lbs |
| 6312 | 6310 | 569 |

Nameplate Drawing

Optim TEFC

| | | | | | | |
|--------------|-------------|----------|-----------------|-----------|-----------------|------|
| TYPE | AEHH8N | | CAT. NO. | PDX02585C | | |
| OUTPUT | 25 HP | 18.65 kW | FRAME | 326TC(X) | TEFC | |
| R.P.M. | 875 | | POLE | 8 | INS. | F |
| VOLTS | 575 | | PHASE | 3 | Hz | 60 |
| AMPS | 25.7 | | CODE | G | S.F. | 1.15 |
| AMBIENT | 40 °C | | NOM. EFF. 91.00 | | MIN. EFF. 89.50 | |
| BEARINGS | 6312 / 6310 | | | | RATING Cont. | |
| SER. NO. | TBD | | DESIGN | C | WT. 569 LBS | |
| PWM VFD DUTY | VT | CT | CP | | S.F. | |
| | 3-60Hz | 6-60Hz | 60-120Hz | | 1.0 Only | |

Connection Diagram

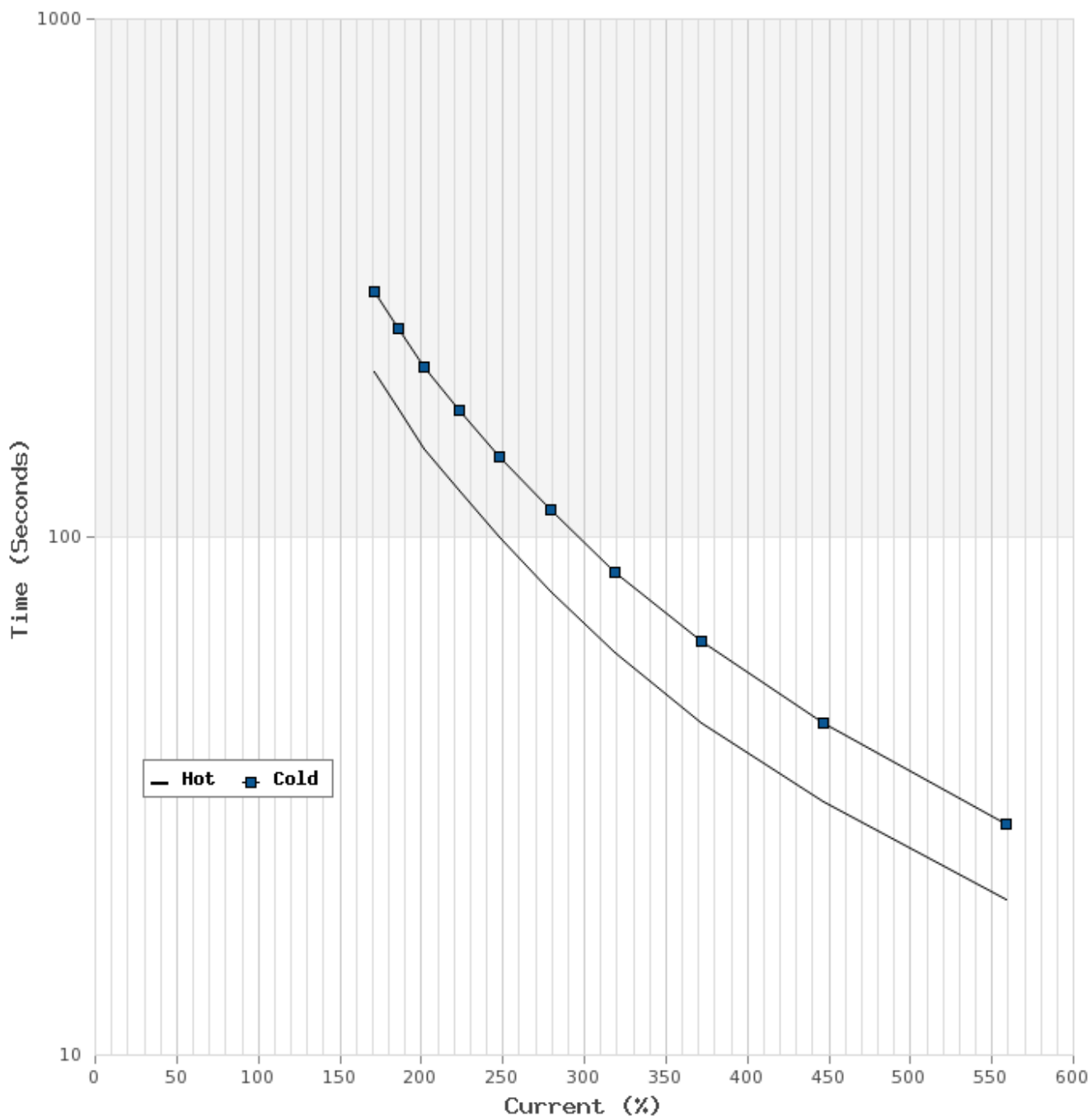


| 3 LEAD | | SINGLE VOLTAGE | | | DELTA |
|---------|-------|----------------|----|----|-------|
| VOLTAGE | CONN. | L1 | L2 | L3 | |
| - | DELTA | 1 | 2 | 3 | |

WD_3D

Thermal Limit Curves

| | | | | | |
|--------------------|-----------|-------------------------|------|--------------------|----------|
| Motor Type: AEHH8N | | Catalogue No: PDX02585C | | Family: Optim TEFC | |
| HP | 25 | Safe Stall Time | | Full Load A | 25.7 A |
| Voltage | 575V 60Hz | Hot | 20 s | % Inrush | 568 % |
| RPM | 900 | Cold | 29 s | Locked Rotor A | 146.00 A |



T-N and I-N Curves

| | | | | | |
|--------------------|-----------|-------------------------|--------------|--------------------|---------|
| Motor Type: AEHH8N | | Catalogue No: PDX02585C | | Family: Optim TEFC | |
| HP | 25 | Full Load T | 150.00 lb-ft | Full Load A | 25.7 A |
| Voltage | 575V 60Hz | Locked Rotor T | 210 % | Locked Rotor A | 146.0 A |
| RPM | 900 | Pull Up T | 170 % | Break Down T | 230 % |

