

Technical Documentation

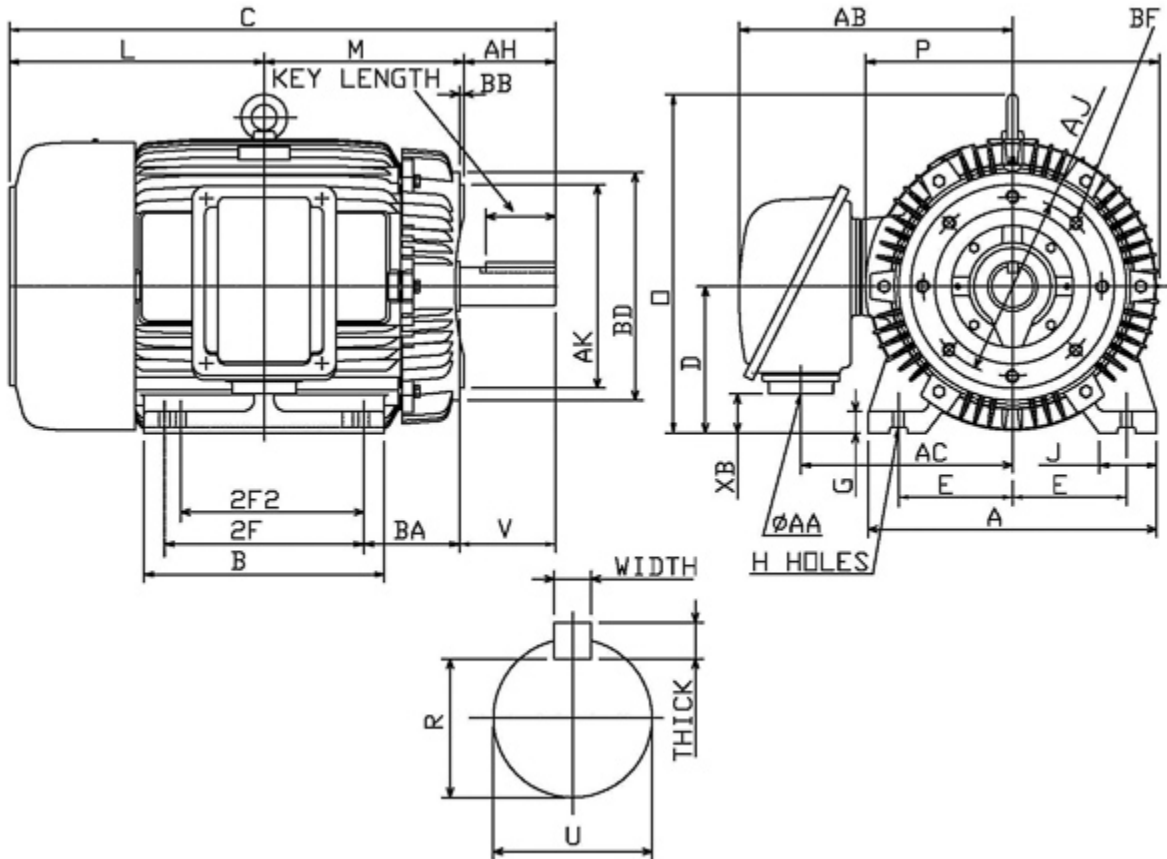
PDH02585C

Optim TEFC | AEHH8N

Date: November 30, 2016

Dimensional Drawing

| Catalogue | Model | HP | Pole | kW | Rating | Voltage | Hz | RPM |
|-----------|--------|----|------|----|------------|---------|----|-----|
| PDH02585C | AEHH8N | 25 | 8 | 19 | Continuous | 575 V | 60 | 900 |



| Frame Size | Mounting | | | | | A | B | C | CD | D | |
|------------------|----------|------|----------|---------|--------------------|-------------|------------|-------|------------------------------|------------|-----------|
| | E | 2F | 2F2 | H | BA | | | | | | |
| 326TC | 6.25 | 12 | 10.5 | 0.66 | 5.25 | 15.75 | 14.35 | 31.42 | | 8 | |
| G | J | K | L | M | O | P | T | Key | | | Keyseat |
| 1.1 | 3.15 | | 14.92 | 11.04 | 16.27 | 16.54 | 2.32 | Width | Thick | Length | R |
| | | | | | | | | 0.5 | 0.5 | 3.91 | 1.845 |
| Terminal Housing | | | | Aux Box | | C/D Flange | | | | | |
| AA | AB | AC | XB | AE | AX | BB | AH | AK | BD | AJ | BF |
| 2 NPT | 14.65 | 11.3 | 3.59 | | | 0.25 | 5 | 12.5 | 13.58 | 11 | 5/8-11UNC |
| Shaft Extension | | | Bearings | | Approx. Weight Lbs | SPL dBA/3ft | Ins. Class | S.F. | Drive Method | Dimensions | |
| N-W | U | V | DE | NDE | | | | | | | |
| 5.25 | 2.125 | 5.15 | 6312 | 6212 | 700 | 70 | F | 1.15 | Direct Coupling / Belt Drive | Inches | |

Technical Data Sheet

Motor Type: AEHH8N

Catalogue No: PDH02585C

Nameplate Information

| | | | | | | |
|-----------|------------|----------------|-------------|-------------|--------------|----------------|
| HP | Pole | RPM | Frame | Voltage | Hz | Phase |
| 25 | 8 | 875 | 326TC | 575 | 60 | 3 |
| Enclosure | Ins. Class | Service Factor | Time Rating | NEMA Design | Rated Amb. | Rated Altitude |
| TEFC | F | 1.15 | Continuous | B | -40 to 40 °C | <3300 ft |

Typical Performance

| Efficiency (%) | | | | Power Factor (%) | | |
|-------------------|-----------------------------|---------------------------------|--------------------------------------|---------------------|-----------|--------------------------------|
| Full Load | | 3/4 Load | 1/2 Load | Full Load | 3/4 Load | 1/2 Load |
| Nom. | Min. | | | | | |
| 90.2 | 88.5 | 91.0 | 91.0 | 79.5 | 76.0 | 66.5 |
| Torque | | | | Current (A) | | |
| Full Load (lb-ft) | Locked Rotor (% FLT) | Pull Up (% FLT) | Break Down (% FLT) | No Load | Full Load | Locked Rotor |
| 150.00 | 200 | 175 | 220 | 10.5 | 26.1 | 146 |
| 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 | 12.373 | 647.0 | 1153.0 | 28 | 20 | 70 |

VFD Duty Information

| Speed Range | | | VFD | | S.F. |
|-----------------|-----------------|----------------|---------|--------------|----------|
| Constant Torque | Variable Torque | Constant Power | Carrier | Type | |
| 6-60Hz | 3-60Hz | 60-120Hz | ≤ 5 kHz | VPWM or CPWM | 1.0 Only |

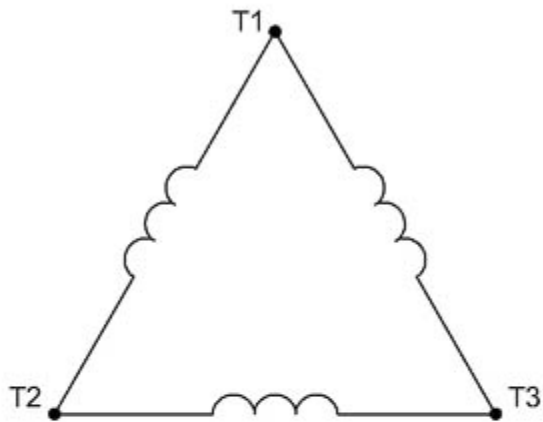
Additional Information

| Bearings | | Approx. Weight |
|----------|------|----------------|
| DE | NDE | lbs |
| 6312 | 6212 | 700 |

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) | T3A / T3A |

Connection Diagram

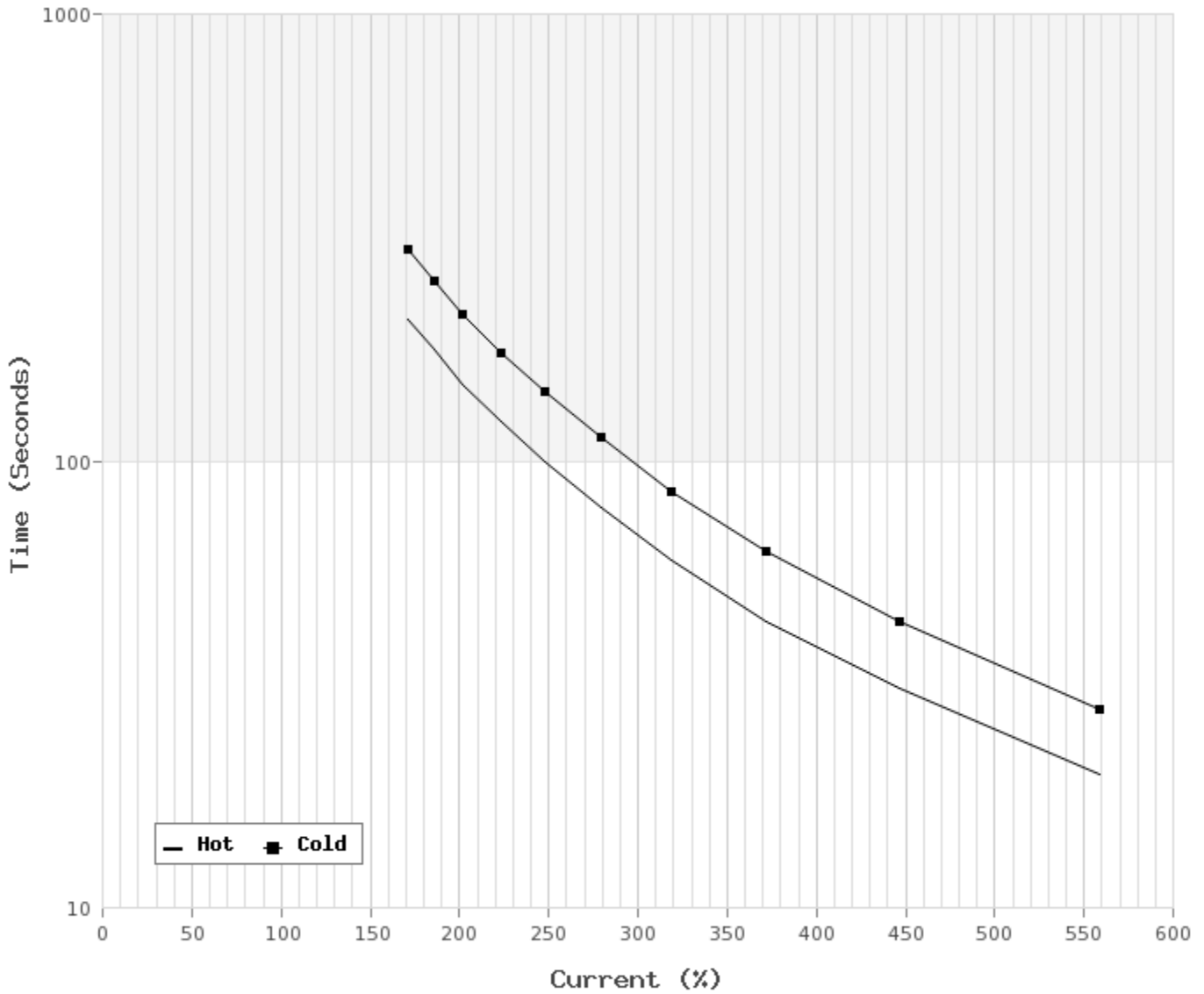


| 3 LEAD SINGLE VOLTAGE DELTA | | | | | |
|-----------------------------|-------|----|----|----|--|
| VOLTAGE | CONN. | L1 | L2 | L3 | |
| - | DELTA | 1 | 2 | 3 | |

WD_3D

Thermal Limit Curves

| | | | | | |
|--------------------|---------------|-------------------------|------|--------------------|--------------|
| Motor Type: AEHH8N | | Catalogue No: PDH02585C | | Family: Optim TEFC | |
| HP | 25 | Safe Stall Time | | Full Load A | 0.0 / 26.1 A |
| Voltage | 0 / 575V 60Hz | Hot | 20 s | Locked Rotor A | 559 % |
| RPM | 900 | Cold | 28 s | Locked Rotor A | 0.0 / 146 A |



T-N and I-N Curves

| | | | | | |
|--------------------|-----------|-------------------------|--------------|--------------------|---------|
| Motor Type: AEHH8N | | Catalogue No: PDH02585C | | Family: Optim TEFC | |
| HP | 25 | Full Load T | 150.00 lb-ft | Full Load A | 26.1 A |
| Voltage | 575V 60Hz | Locked Rotor T | 200 % | Locked Rotor A | 146.0 A |
| RPM | 900 | Pull Up T | 175 % | Break Down T | 220 % |

