

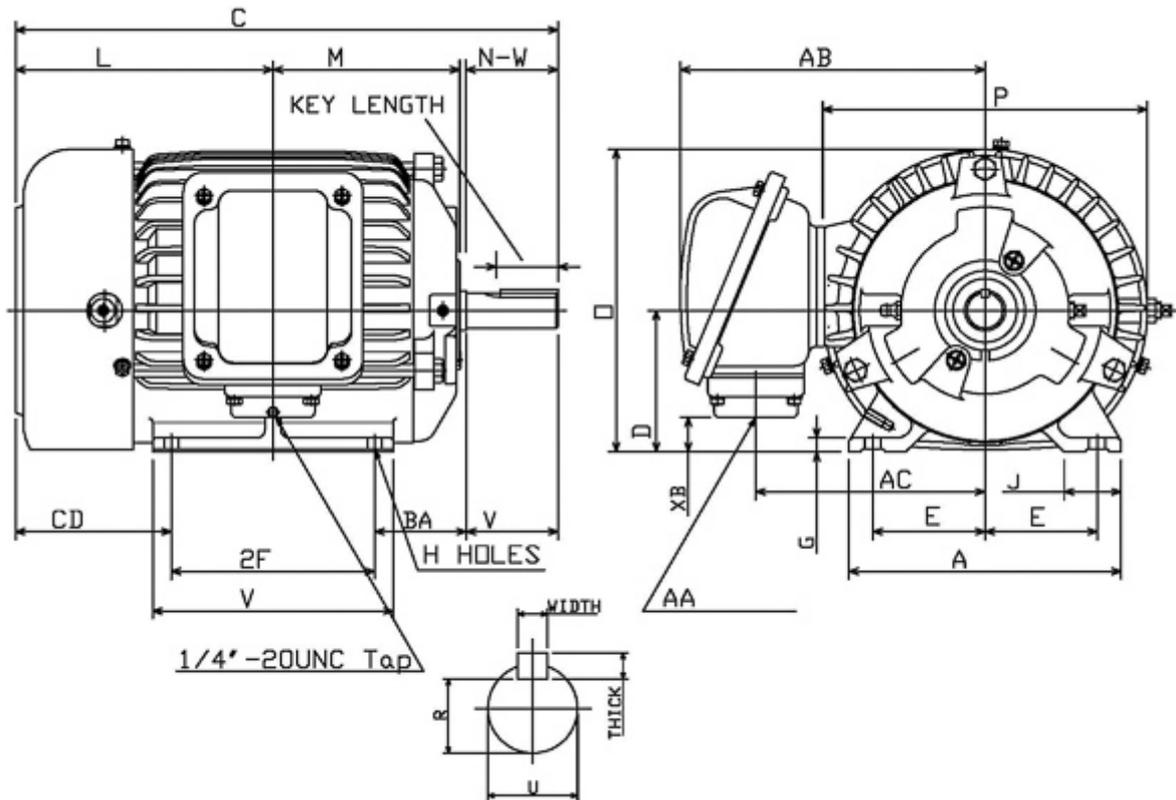
Technical Documentation

APH0014-841
Advantage Plus IEEE 841 | AEHH8B

Date: June 26, 2020

Dimensional Drawing

| Catalogue | Model | HP | Pole | kW | Rating | Voltage | Hz | RPM |
|-------------|--------|----|------|------|------------|---------|----|------|
| APH0014-841 | AEHH8B | 1 | 4 | 0.75 | Continuous | 460 | 60 | 1800 |



| Frame Size | Mounting | | | | | A | B | C | CD | D | |
|------------------|----------|------|----------|---------|--------------------|-------------|------------|-------|------------------------------|------------|---------|
| | E | 2F | 2F2 | H | BA | | | | | | |
| 143T | 2.75 | 4 | | 0.34 | 2.25 | 6.7 | 5.1 | 12.56 | | 3.5 | |
| G | J | K | L | M | O | P | T | Key | | | Keyseat |
| 0.35 | 1.4 | | 6.06 | 4.03 | 7.48 | 7.95 | | Width | Thick | Length | R |
| | | | | | | | | 0.188 | 0.188 | 1.41 | 0.771 |
| Terminal Housing | | | Aux Box | | | C/D Flange | | | | | |
| AA | AB | AC | XB | AE | AX | BB | AH | AK | BD | AJ | BF |
| NPT3/4" | 7.56 | 5.63 | 0.86 | | | | | | | | |
| Shaft Extension | | | Bearings | | Approx. Weight Lbs | SPL dBA/3ft | Ins. Class | S.F. | Drive Method | Dimensions | |
| N-W | U | V | DE | NDE | | | | | | | |
| 2.25 | 0.875 | 2.2 | 6205ZC3 | 6205ZC3 | 55 | 49 | F | 1.15 | Direct Coupling / Belt Drive | Inches | |

| | |
|---|---------------------|
|  | |
| | |
| | Date: June 26, 2020 |

Technical Data Sheet

| | |
|--------------------|---------------------------|
| Motor Type: AEHH8B | Catalogue No: APH0014-841 |
|--------------------|---------------------------|

Nameplate Information

| | | | | | | |
|-----------|------------|----------------|-------------|-------------|--------------|----------------|
| HP | Pole | RPM | Frame | Voltage | Hz | Phase |
| 1 | 4 | 1745 | 143T | 460 | 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 | <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. | | | | | |
| 85.5 | 82.5 | 84.0 | 81.5 | 73.0 | 64.5 | 51.5 |
| Torque | | | | Current (A) | | |
| Full Load (lb-ft) | Locked Rotor (% FLT) | Pull Up (% FLT) | Break Down (% FLT) | No Load | Full Load | Locked Rotor |
| 3.01 | 310 | 280 | 410 | 0.8 | 1.5 | 15 |
| 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 | |
| N | 0.086 | 5.80 | 46.00 | 71 | 50 | 49 |

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 |

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) | T3C / T3C |

Additional Certifications

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

Additional Information

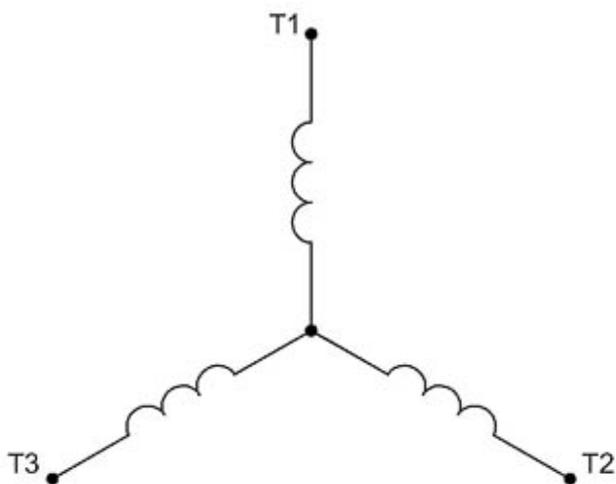
| Bearings | | Approx. Weight |
|----------|---------|----------------|
| DE | NDE | lbs |
| 6205ZC3 | 6205ZC3 | 55 |

Nameplate Drawing

Advantage Plus IEEE 841

| | | | | | |
|-----------------|-------------------|----------------|-------------|----------------|------|
| TYPE | AEHH8B | CAT. NO. | APH0014-841 | | |
| OUTPUT | 1 HP 0.75 kW | FRAME | 143T | TEFC | |
| R.P.M. | 1745 | POLE | 4 | INS. | F |
| VOLTS | 460 | PHASE | 3 | Hz | 60 |
| AMPS | 1.5 | CODE | N | S.F. | 1.15 |
| AMBIENT | 40 °C | NOM. EFF. 85.5 | | MIN. EFF. 82.5 | |
| BEARINGS | 6205ZC3 / 6205ZC3 | | | RATING Cont. | |
| SER. NO. | TBD | DESIGN | B | WT. 55 LBS | |
| PWM VFD DUTY | VT | CT | CP | S.F. | |
| | 3-60Hz | 6-60Hz | 60-120Hz | 1.0 Only | |

Connection Diagram

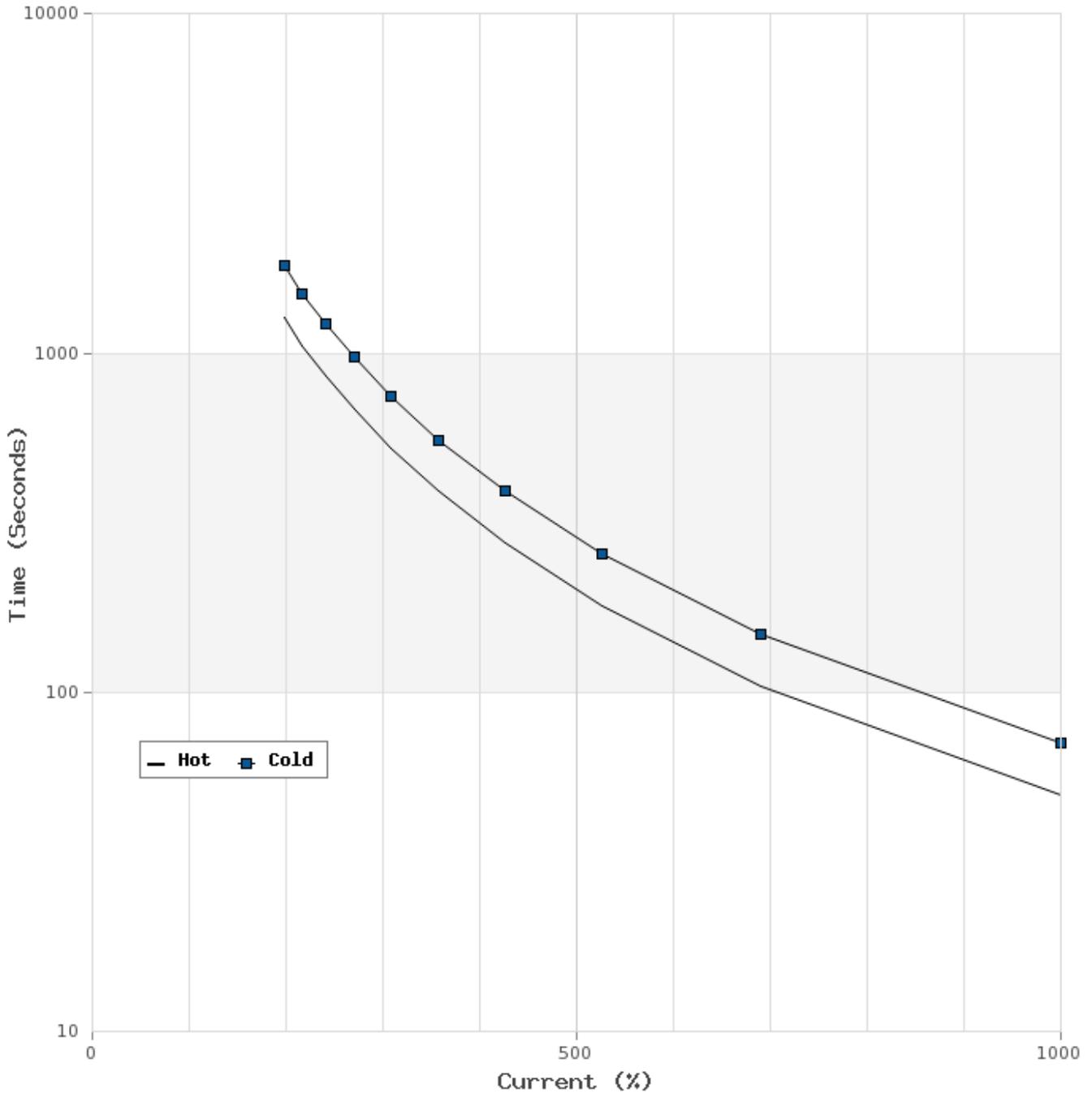


| 3 LEAD | | SINGLE VOLTAGE | | | WYE |
|---------|-------|----------------|----|----|-----|
| VOLTAGE | CONN. | L1 | L2 | L3 | |
| - | WYE | 1 | 2 | 3 | |

WD_3Y

Thermal Limit Curves

| | | | | | |
|--------------------|-----------|---------------------------|------|---------------------------------|---------|
| Motor Type: AEHH8B | | Catalogue No: APH0014-841 | | Family: Advantage Plus IEEE 841 | |
| HP | 1 | Safe Stall Time | | Full Load A | 1.5 A |
| Voltage | 460V 60Hz | Hot | 50 s | % Inrush | 1,000 % |
| RPM | 1800 | Cold | 71 s | Locked Rotor A | 15 A |



T-N and I-N Curves

| | | | | | |
|--------------------|-----------|---------------------------|------------|---------------------------------|--------|
| Motor Type: AEHH8B | | Catalogue No: APH0014-841 | | Family: Advantage Plus IEEE 841 | |
| HP | 1 | Full Load T | 3.01 lb-ft | Full Load A | 1.5 A |
| Voltage | 460V 60Hz | Locked Rotor T | 310 % | Locked Rotor A | 15.0 A |
| RPM | 1800 | Pull Up T | 280 % | Break Down T | 410 % |

