

Technical Documentation

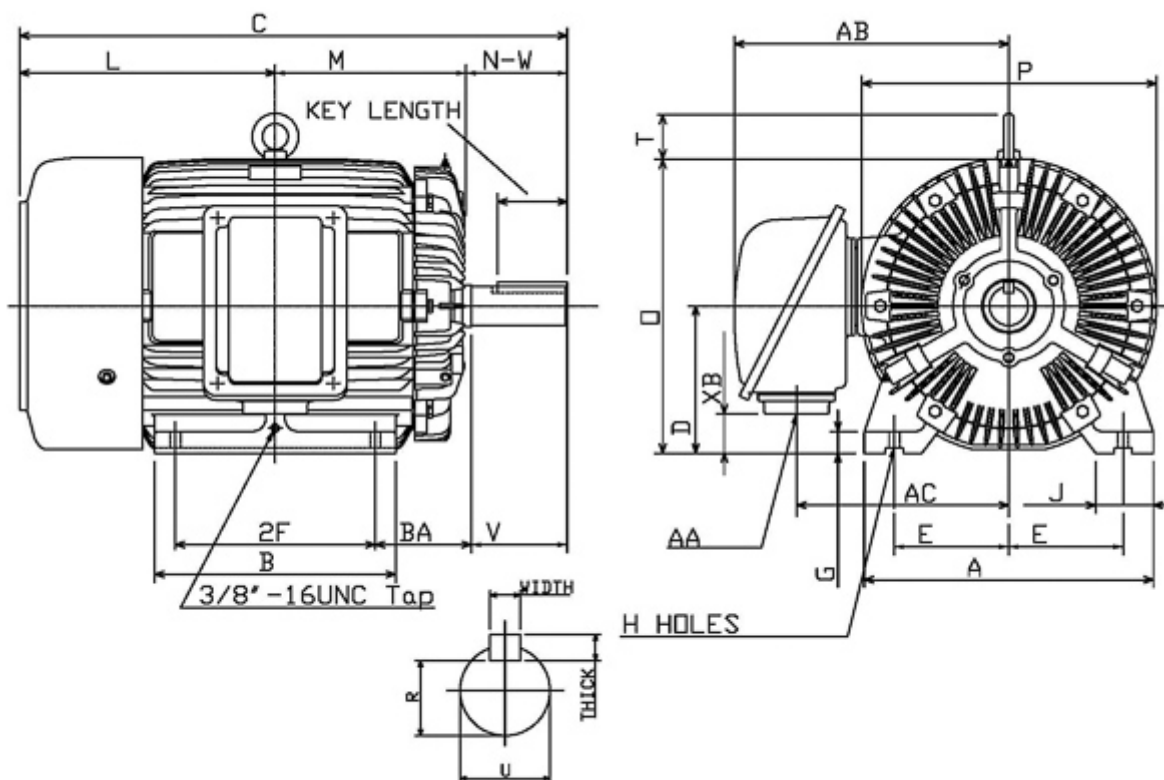
APH06025

Advantage Plus IEEE Ready | AEHH8R


Date: June 26, 2020

Dimensional Drawing

| Catalogue | Model | HP | Pole | kW | Rating | Voltage | Hz | RPM |
|-----------|--------|----|------|----|------------|---------|----|------|
| APH06025 | AEHH8R | 60 | 2 | 45 | Continuous | 575 | 60 | 3600 |



| Frame Size | Mounting | | | | | A | B | C | CD | D | |
|------------------|----------|-------|----------|---------|--------------------|-------------|------------|-------|-----------------|------------|---------|
| | E | 2F | 2F2 | H | BA | | | | | | |
| 364TS | 7 | 11.25 | | 0.66 | 5.88 | 17.7 | 13.78 | 30.44 | | 9 | |
| G | J | K | L | M | O | P | T | Key | | | Keyseat |
| 1.32 | 3.54 | | 15.17 | 11.09 | 17.99 | 18.03 | 2.76 | Width | Thick | Length | R |
| | | | | | | | | 0.5 | 0.5 | 2.03 | 1.591 |
| Terminal Housing | | | | Aux Box | | C/D Flange | | | | | |
| AA | AB | AC | XB | AE | AX | BB | AH | AK | BD | AJ | BF |
| NPT3" | 16.81 | 12.99 | 2.39 | | | | | | | | |
| Shaft Extension | | | Bearings | | Approx. Weight Lbs | SPL dBA/3ft | Ins. Class | S.F. | Drive Method | Dimensions | |
| N-W | U | V | DE | NDE | | | | | | | |
| 3.75 | 1.875 | 3.65 | 6312ZC3 | 6212ZC3 | 759 | 82 | F | 1.15 | Direct Coupling | Inches | |

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

Technical Data Sheet

| | |
|--------------------|------------------------|
| Motor Type: AEHH8R | Catalogue No: APH06025 |
|--------------------|------------------------|

Nameplate Information

| | | | | | | |
|-----------|------------|----------------|-------------|-------------|--------------|----------------|
| HP | Pole | RPM | Frame | Voltage | Hz | Phase |
| 60 | 2 | 3545 | 364TS | 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 | <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. | | | | | |
| 94.1 | 93.0 | 94.5 | 94.1 | 93.0 | 92.0 | 88.5 |
| Torque | | | | Current (A) | | |
| Full Load (lb-ft) | Locked Rotor (% FLT) | Pull Up (% FLT) | Break Down (% FLT) | No Load | Full Load | Locked Rotor |
| 88.74 | 145 | 130 | 240 | 10.0 | 51.4 | 348 |
| 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 | 7.379 | 58.00 | 117.00 | 17 | 12 | 82 |

VFD Duty Information

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

Additional Certifications

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

Additional Information

| Bearings | | Approx. Weight |
|----------|---------|----------------|
| DE | NDE | lbs |
| 6312ZC3 | 6212ZC3 | 759 |

Nameplate Drawing

Advantage Plus IEEE Ready

| | | | | | |
|-----------------|-------------------|----------------|----------|----------------|------|
| TYPE | AEHH8R | CAT. NO. | APH06025 | | |
| OUTPUT | 60 HP 45 kW | FRAME | 364TS | TEFC | |
| R.P.M. | 3545 | POLE | 2 | INS. | F |
| VOLTS | 575 | PHASE | 3 | Hz | 60 |
| AMPS | 51.4 | CODE | G | S.F. | 1.15 |
| AMBIENT | 40 °C | NOM. EFF. 94.1 | | MIN. EFF. 93.0 | |
| BEARINGS | 6312ZC3 / 6212ZC3 | | | RATING Cont. | |
| SER. NO. | TBD | DESIGN | B | WT. 759 LBS | |
| PWM VFD DUTY | VT | CT | CP | S.F. | |
| | 3-60Hz | 6-60Hz | 60-60Hz | 1.0 Only | |

Connection Diagram

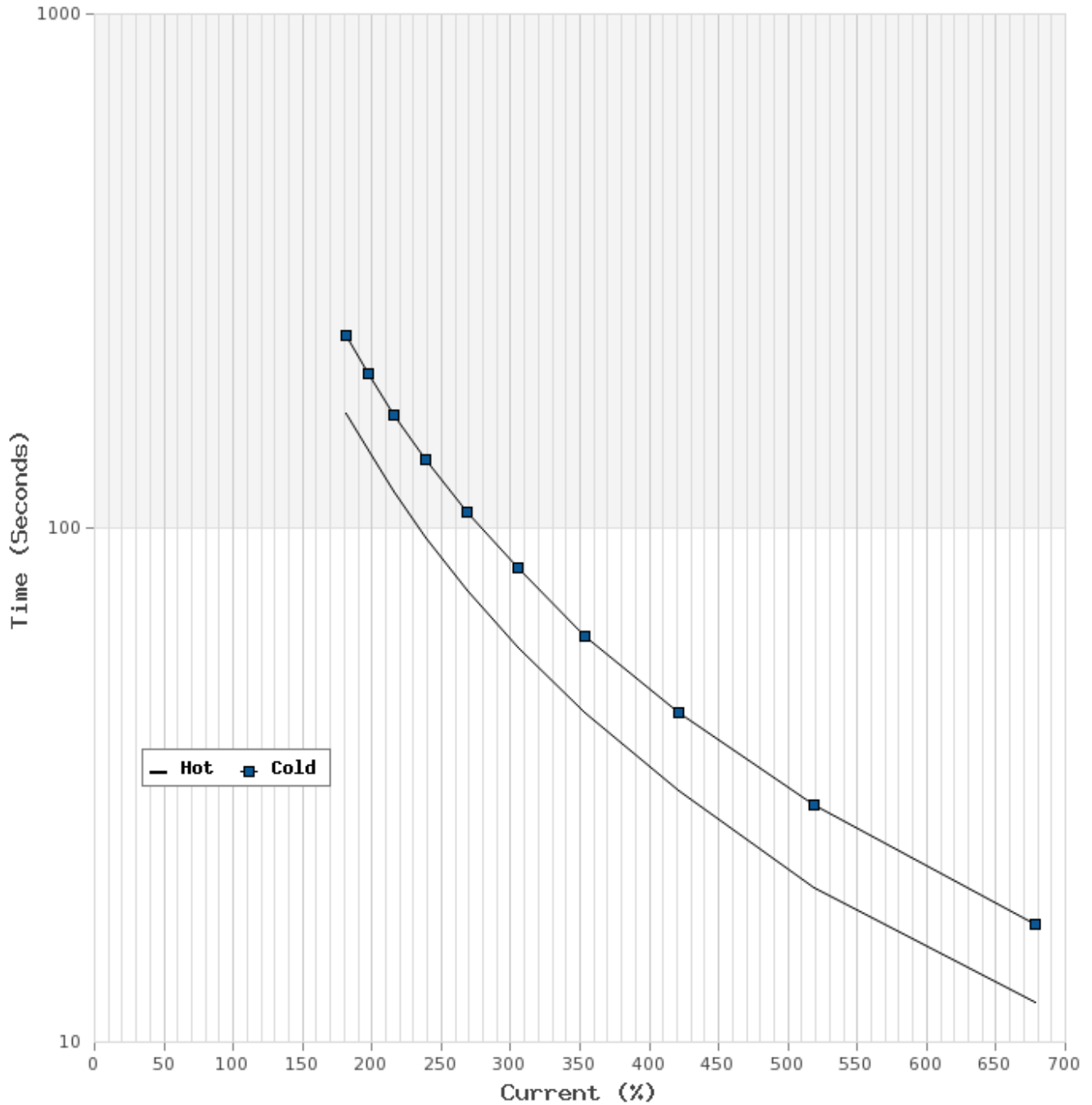


| 3 LEAD | | SINGLE VOLTAGE | | | DELTA |
|---------|-------|----------------|----|----|-------|
| VOLTAGE | CONN. | L1 | L2 | L3 | |
| - | DELTA | 1 | 2 | 3 | |

WD_3D

Thermal Limit Curves

| | | | | | |
|--------------------|-----------|------------------------|------|-----------------------------------|--------|
| Motor Type: AEHH8R | | Catalogue No: APH06025 | | Family: Advantage Plus IEEE Ready | |
| HP | 60 | Safe Stall Time | | Full Load A | 51.4 A |
| Voltage | 575V 60Hz | Hot | 12 s | % Inrush | 678 % |
| RPM | 3600 | Cold | 17 s | Locked Rotor A | 348 A |



T-N and I-N Curves

| | | | | | |
|--------------------|-----------|------------------------|-------------|-----------------------------------|---------|
| Motor Type: AEHH8R | | Catalogue No: APH06025 | | Family: Advantage Plus IEEE Ready | |
| HP | 60 | Full Load T | 88.74 lb-ft | Full Load A | 51.4 A |
| Voltage | 575V 60Hz | Locked Rotor T | 145 % | Locked Rotor A | 348.0 A |
| RPM | 3600 | Pull Up T | 130 % | Break Down T | 240 % |

