

Technical Documentation

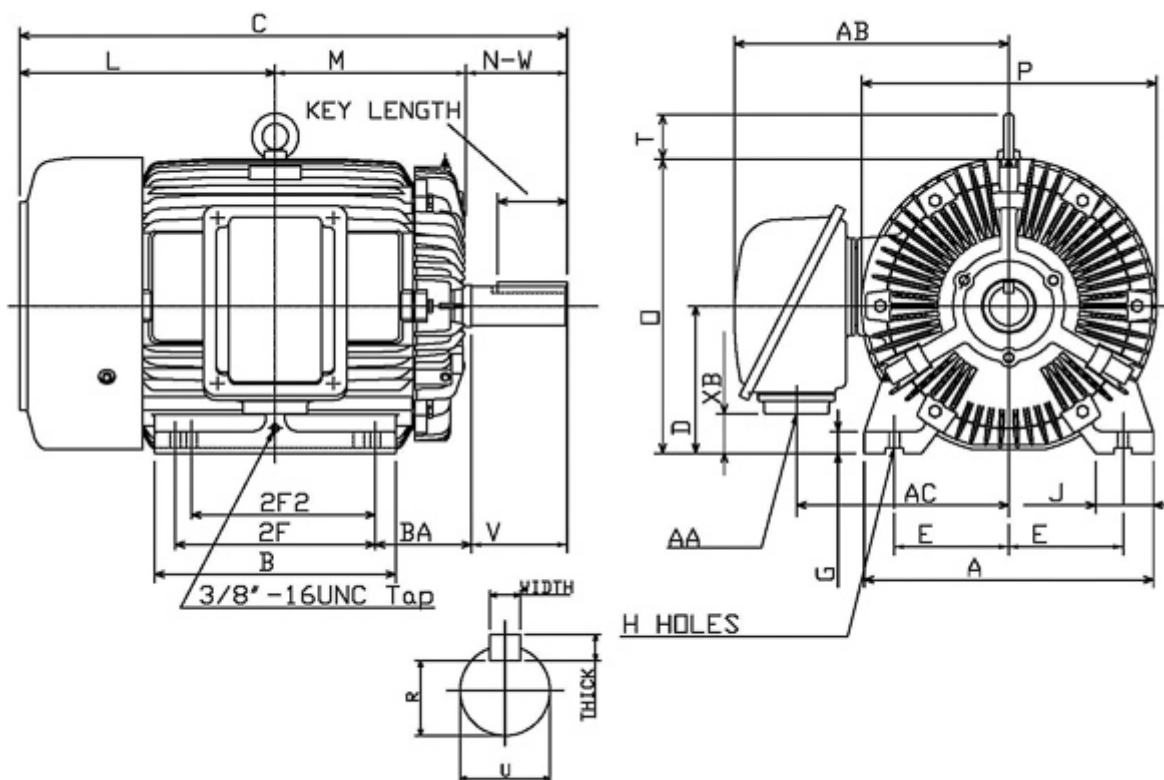
APH0258

Advantage Plus IEEE Ready | AEHH8R


Date: June 25, 2020

Dimensional Drawing

| Catalogue | Model | HP | Pole | kW | Rating | Voltage | Hz | RPM |
|-----------|--------|----|------|----|------------|---------|----|-----|
| APH0258 | AEHH8R | 25 | 8 | 19 | Continuous | 460 | 60 | 900 |



| Frame Size | Mounting | | | | | A | B | C | CD | D | |
|------------------|----------|------|----------|---------|--------------------|-------------|------------|-------|------------------------------|------------|---------|
| | E | 2F | 2F2 | H | BA | | | | | | |
| 326T | 6.25 | 12 | 10.5 | 0.66 | 5.25 | 15.75 | 14.37 | 31.43 | | 8 | |
| G | J | K | L | M | O | P | T | Key | | | Keyseat |
| 1.1 | 3.15 | | 14.93 | 10.85 | 16.22 | 16.55 | 2.36 | 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 |
| NPT2" | 14.72 | 11.3 | 3.59 | | | | | | | | |
| 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 | 6312ZC3 | 6212ZC3 | 724 | 70 | F | 1.15 | Direct Coupling / Belt Drive | Inches | |

| | |
|---|---------------------|
|  | |
| | |
| | |
| | Date: June 25, 2020 |

Technical Data Sheet

| | |
|--------------------|-----------------------|
| Motor Type: AEHH8R | Catalogue No: APH0258 |
|--------------------|-----------------------|

Nameplate Information

| | | | | | | |
|-----------|------------|----------------|-------------|-------------|--------------|----------------|
| HP | Pole | RPM | Frame | Voltage | Hz | Phase |
| 25 | 8 | 875 | 326T | 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. | | | | | |
| 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 | 13.1 | 32.6 | 183 |
| 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 | 647.00 | 1153.00 | 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 |

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 / T3A |

Additional Certifications

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

Additional Information

| Bearings | | Approx. Weight |
|----------|---------|----------------|
| DE | NDE | lbs |
| 6312ZC3 | 6212ZC3 | 724 |

Nameplate Drawing

Advantage Plus IEEE Ready

| | | | | | |
|--------------|-------------------|----------------|----------|----------------|------|
| TYPE | AEHH8R | CAT. NO. | APH0258 | | |
| OUTPUT | 25 HP 19 kW | FRAME | 326T | TEFC | |
| R.P.M. | 875 | POLE | 8 | INS. | F |
| VOLTS | 460 | PHASE | 3 | Hz | 60 |
| AMPS | 32.6 | CODE | G | S.F. | 1.15 |
| AMBIENT | 40 °C | NOM. EFF. 90.2 | | MIN. EFF. 88.5 | |
| BEARINGS | 6312ZC3 / 6212ZC3 | | | RATING Cont. | |
| SER. NO. | TBD | DESIGN | B | WT. 724 LBS | |
| PWM VFD DUTY | VT | CT | CP | S.F. | |
| | 3-60Hz | 6-60Hz | 60-120Hz | 1.0 Only | |

Connection Diagram

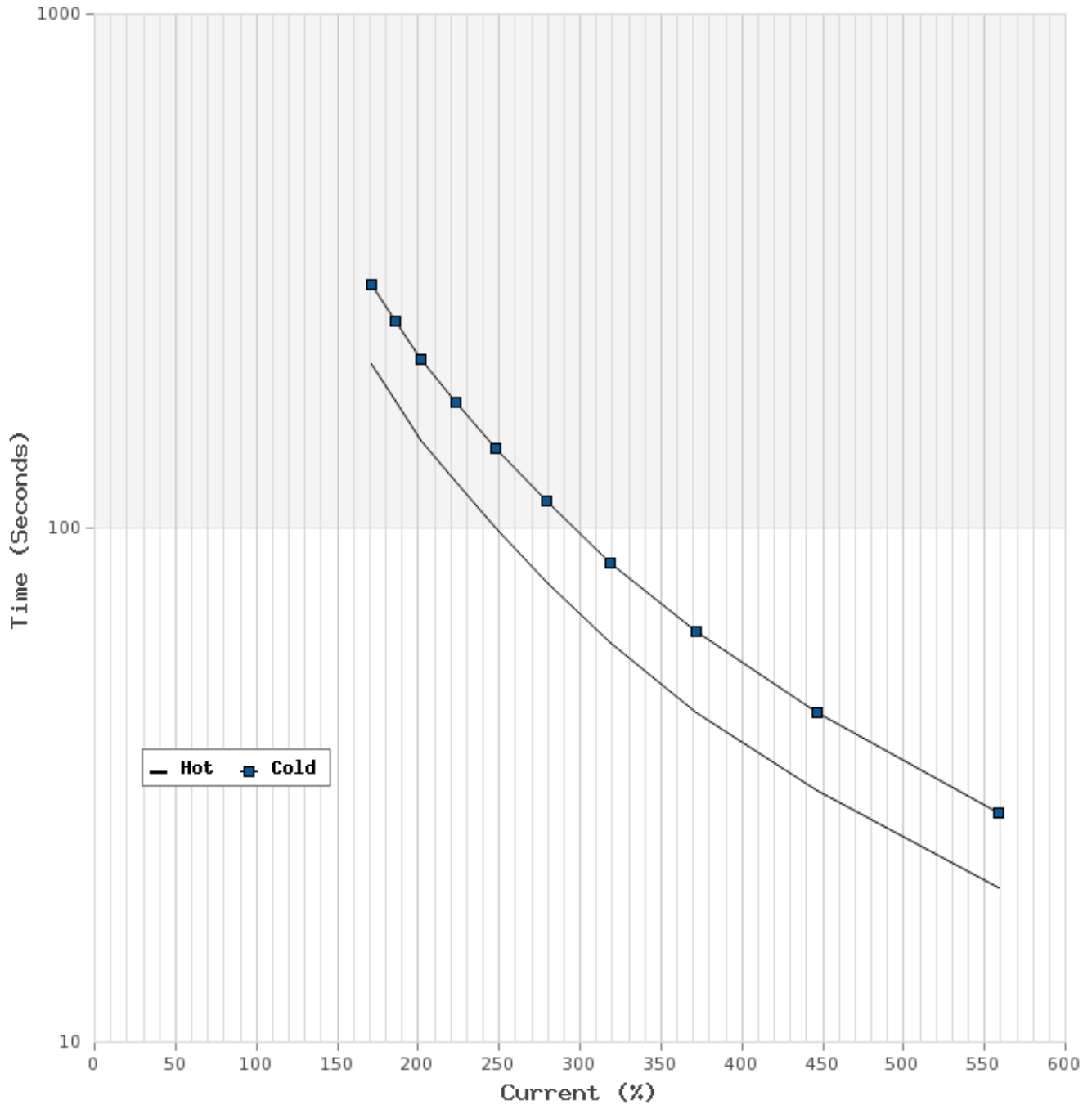


| 3 LEAD | | SINGLE VOLTAGE | | | DELTA |
|---------|-------|----------------|----|----|-------|
| VOLTAGE | CONN. | L1 | L2 | L3 | |
| - | DELTA | 1 | 2 | 3 | |

WD_3D

Thermal Limit Curves

| | | | | | |
|--------------------|-----------|-----------------------|------|-----------------------------------|--------|
| Motor Type: AEHH8R | | Catalogue No: APH0258 | | Family: Advantage Plus IEEE Ready | |
| HP | 25 | Safe Stall Time | | Full Load A | 32.6 A |
| Voltage | 460V 60Hz | Hot | 20 s | % Inrush | 561 % |
| RPM | 900 | Cold | 28 s | Locked Rotor A | 183 A |



T-N and I-N Curves

| | | | | | |
|--------------------|-----------|-----------------------|--------------|-----------------------------------|---------|
| Motor Type: AEHH8R | | Catalogue No: APH0258 | | Family: Advantage Plus IEEE Ready | |
| HP | 25 | Full Load T | 150.00 lb-ft | Full Load A | 32.6 A |
| Voltage | 460V 60Hz | Locked Rotor T | 200 % | Locked Rotor A | 183.0 A |
| RPM | 900 | Pull Up T | 175 % | Break Down T | 220 % |

