

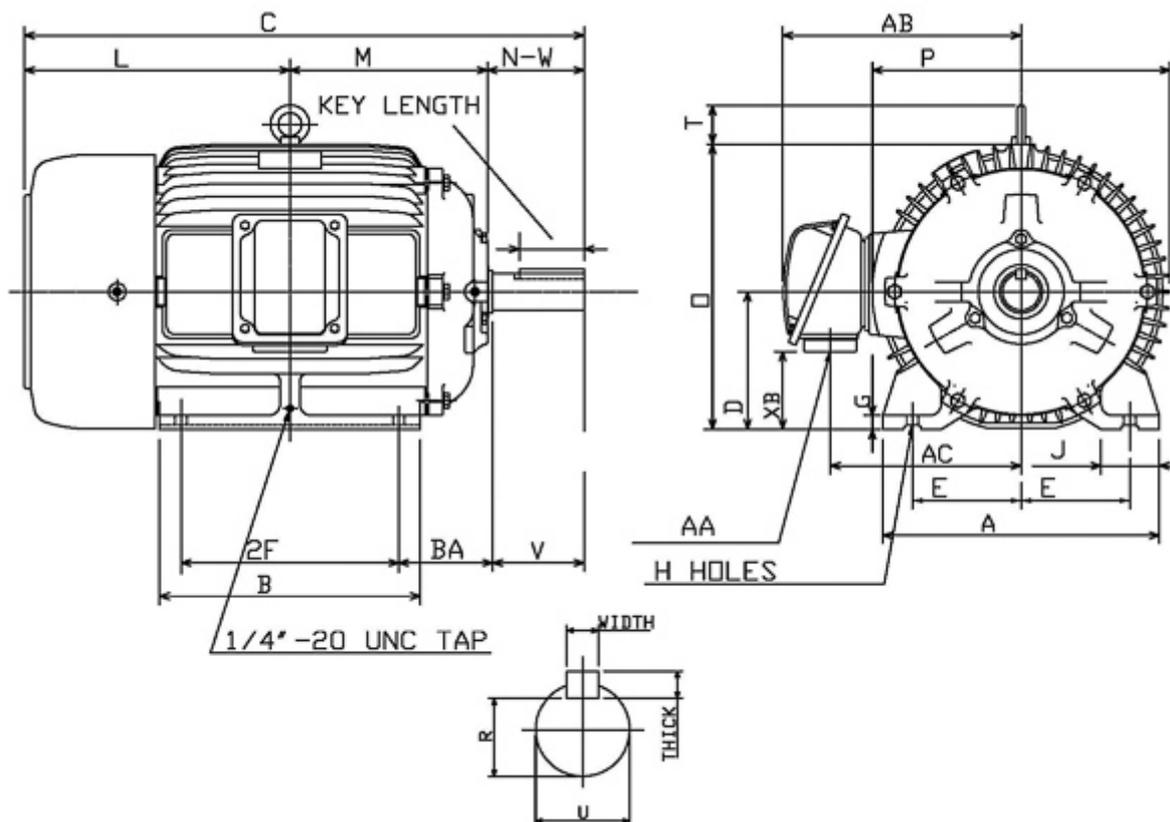
Technical Documentation

**APH7/565-841**  
**Advantage Plus IEEE 841 | AEHH8B**

Date: June 27, 2020

**Dimensional Drawing**

| Catalogue    | Model  | HP  | Pole | kW  | Rating     | Voltage | Hz | RPM  |
|--------------|--------|-----|------|-----|------------|---------|----|------|
| APH7/565-841 | AEHH8B | 7.5 | 6    | 5.6 | Continuous | 575     | 60 | 1200 |



| Frame Size       | Mounting |      |          |         |                       | A              | B             | C     | CD                                 | D          |              |
|------------------|----------|------|----------|---------|-----------------------|----------------|---------------|-------|------------------------------------|------------|--------------|
|                  | E        | 2F   | 2F2      | H       | BA                    |                |               |       |                                    |            |              |
| 254T             | 5        | 8.25 |          | 0.53    | 4.25                  | 11.81          | 9.85          | 23.78 |                                    | 6.25       |              |
| G                | J        | K    | L        | M       | O                     | P              | T             | Key   |                                    |            | Keyseat<br>R |
|                  |          |      |          |         |                       |                |               | Width | Thick                              | Length     |              |
| 0.66             | 1.95     |      | 11.41    | 8.06    | 12.8                  | 13.15          | 2.01          | 0.375 | 0.375                              | 2.91       | 1.416        |
| Terminal Housing |          |      | Aux Box  |         |                       | C/D Flange     |               |       |                                    |            |              |
| AA               | AB       | AC   | XB       | AE      | AX                    | BB             | AH            | AK    | BD                                 | AJ         | BF           |
| NPT11/4<br>"     | 11.3     | 8.86 | 3.22     |         |                       |                |               |       |                                    |            |              |
| Shaft Extension  |          |      | Bearings |         | Approx.<br>Weight Lbs | SPL<br>dBA/3ft | Ins.<br>Class | S.F.  | Drive Method                       | Dimensions |              |
| N-W              | U        | V    | DE       | NDE     |                       |                |               |       |                                    |            |              |
| 4                | 1.625    | 3.9  | 6309ZC3  | 6307ZC3 | 282                   | 59             | F             | 1.15  | Direct<br>Coupling / Belt<br>Drive | Inches     |              |

|   |                     |
|---|---------------------|
|  |                     |
|   |                     |
|   | Date: June 27, 2020 |

### Technical Data Sheet

|                    |                            |
|--------------------|----------------------------|
| Motor Type: AEHH8B | Catalogue No: APH7/565-841 |
|--------------------|----------------------------|

#### Nameplate Information

|           |            |                |             |             |              |                |
|-----------|------------|----------------|-------------|-------------|--------------|----------------|
| HP        | Pole       | RPM            | Frame       | Voltage     | Hz           | Phase          |
| 7.5       | 6          | 1170           | 254T        | 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.                        |                                 |                                      |                     |           |                                |
| 91.0              | 89.5                        | 91.0                            | 89.5                                 | 80.5                | 75.0      | 64.0                           |
| Torque            |                             |                                 |                                      | Current (A)         |           |                                |
| Full Load (lb-ft) | Locked Rotor (% FLT)        | Pull Up (% FLT)                 | Break Down (% FLT)                   | No Load             | Full Load | Locked Rotor                   |
| 33.66             | 240                         | 215                             | 270                                  | 3.5                 | 7.7       | 51                             |
| NEMA KVA Code     | Inertia (WR <sup>2</sup> )  |                                 |                                      | Safe Stall Time (s) |           | Noise Level Sound Press. dB(A) |
|                   | Rotor (lb-ft <sup>2</sup> ) | NEMA Load (lb-ft <sup>2</sup> ) | Max. Allowable (lb-ft <sup>2</sup> ) | Cold                | Hot       |                                |
| H                 | 2.158                       | 104.00                          | 375.00                               | 36                  | 25        | 59                             |

#### 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<br>Class I, Zone 2, Groups IIB+H2, IIB & IIA |           |
| Temp Code (Sinewave / VFD)   | T3C / T3B |

#### Additional Certifications

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

#### Additional Information

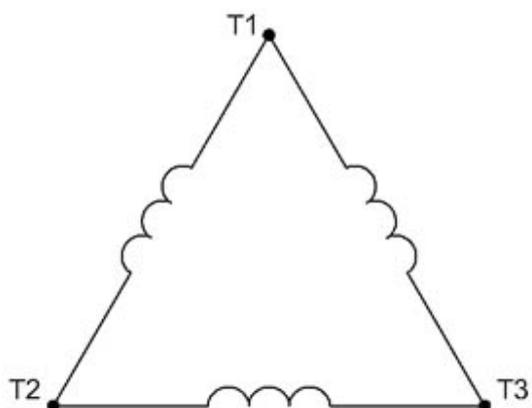
| Bearings |         | Approx. Weight |
|----------|---------|----------------|
| DE       | NDE     | lbs            |
| 6309ZC3  | 6307ZC3 | 282            |

**Nameplate Drawing**

# Advantage Plus IEEE 841

|              |                   |                |              |                |      |
|--------------|-------------------|----------------|--------------|----------------|------|
| TYPE         | AEHH8B            | CAT. NO.       | APH7/565-841 |                |      |
| OUTPUT       | 7.5 HP 5.6 kW     | FRAME          | 254T         | TEFC           |      |
| R.P.M.       | 1170              | POLE           | 6            | INS.           | F    |
| VOLTS        | 575               | PHASE          | 3            | Hz             | 60   |
| AMPS         | 7.7               | CODE           | H            | S.F.           | 1.15 |
| AMBIENT      | 40 °C             | NOM. EFF. 91.0 |              | MIN. EFF. 89.5 |      |
| BEARINGS     | 6309ZC3 / 6307ZC3 |                |              | RATING Cont.   |      |
| SER. NO.     | TBD               | DESIGN         | B            | WT. 282 LBS    |      |
| PWM VFD DUTY | VT                | CT             | CP           | S.F.           |      |
|              | 3-60Hz            | 6-60Hz         | 60-120Hz     | 1.0 Only       |      |

**Connection Diagram**

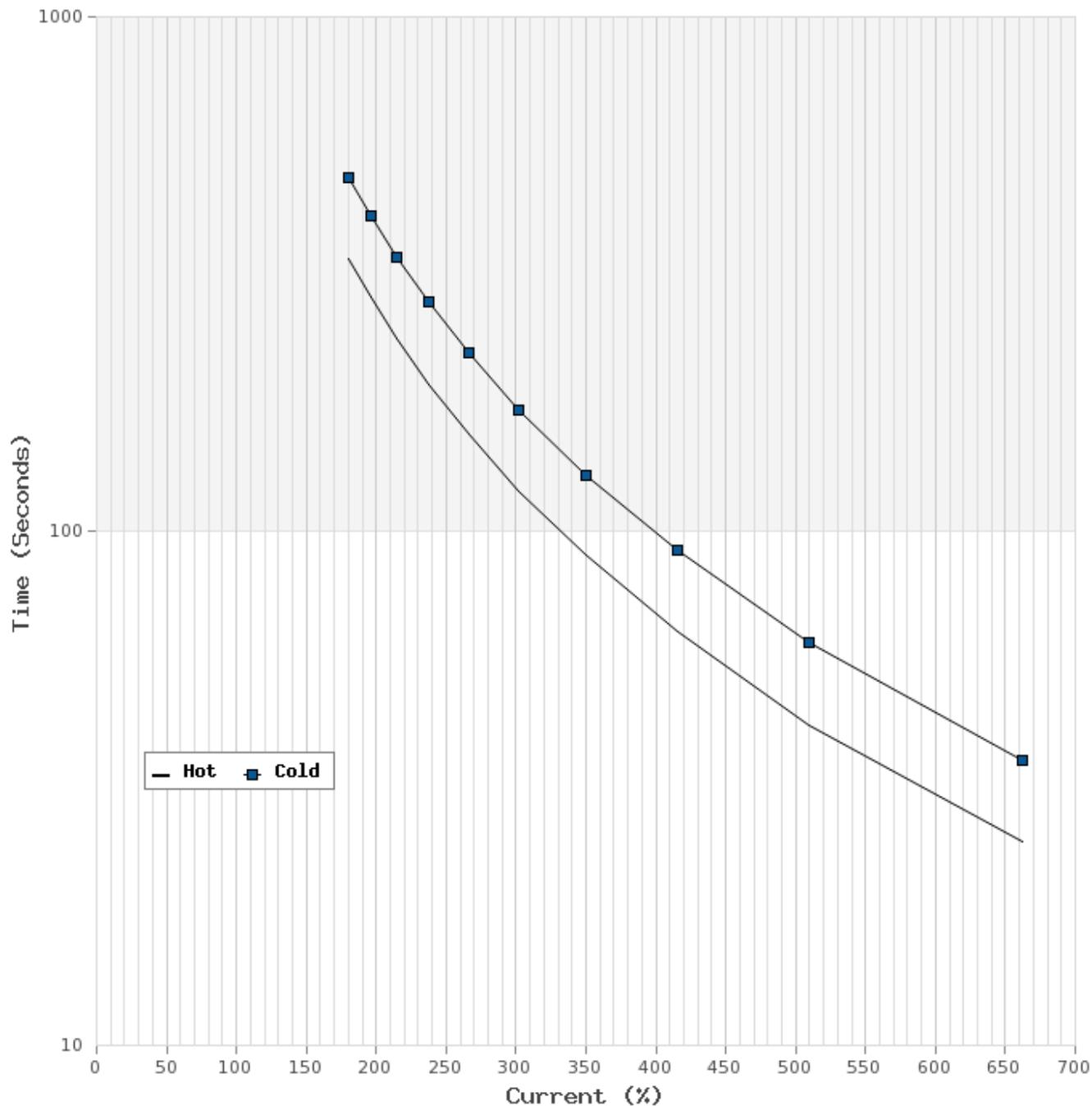


| 3 LEAD  |       | SINGLE VOLTAGE |    |    | DELTA |
|---------|-------|----------------|----|----|-------|
| VOLTAGE | CONN. | L1             | L2 | L3 |       |
| -       | DELTA | 1              | 2  | 3  |       |

WD\_3D

### Thermal Limit Curves

|                    |           |                            |      |                                 |       |
|--------------------|-----------|----------------------------|------|---------------------------------|-------|
| Motor Type: AEHH8B |           | Catalogue No: APH7/565-841 |      | Family: Advantage Plus IEEE 841 |       |
| HP                 | 7.5       | Safe Stall Time            |      | Full Load A                     | 7.7 A |
| Voltage            | 575V 60Hz | Hot                        | 25 s | % Inrush                        | 665 % |
| RPM                | 1200      | Cold                       | 36 s | Locked Rotor A                  | 51 A  |



**T-N and I-N Curves**

|                    |           |                            |             |                                 |        |
|--------------------|-----------|----------------------------|-------------|---------------------------------|--------|
| Motor Type: AEHH8B |           | Catalogue No: APH7/565-841 |             | Family: Advantage Plus IEEE 841 |        |
| HP                 | 7.5       | Full Load T                | 33.66 lb-ft | Full Load A                     | 7.7 A  |
| Voltage            | 575V 60Hz | Locked Rotor T             | 240 %       | Locked Rotor A                  | 51.0 A |
| RPM                | 1200      | Pull Up T                  | 215 %       | Break Down T                    | 270 %  |

