

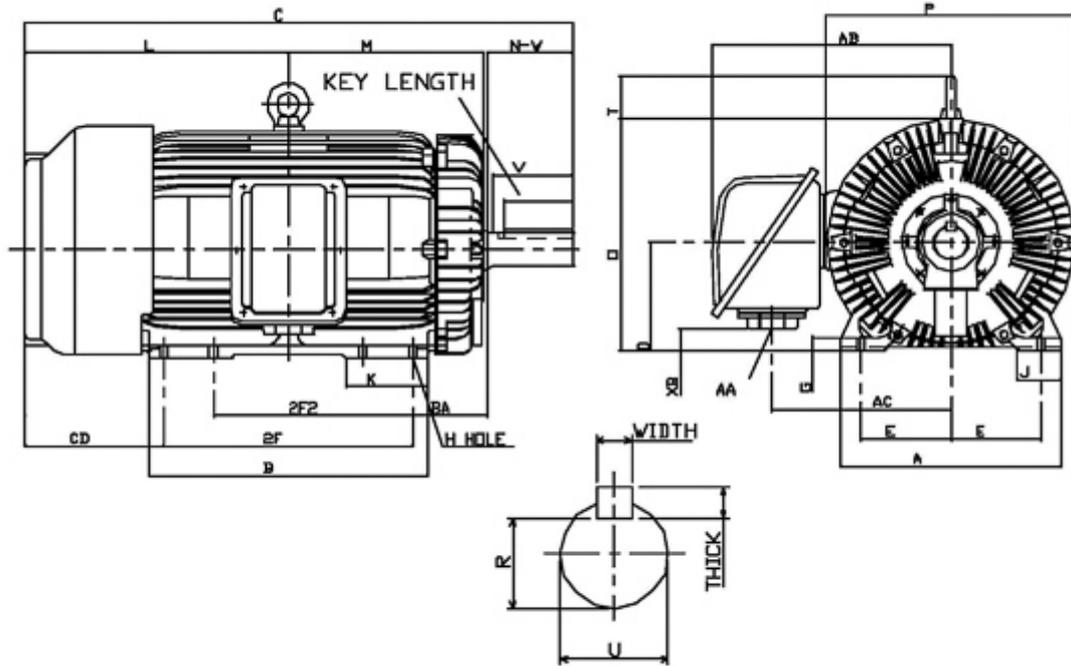
Technical Documentation

**APH15045-841**  
**Advantage Plus IEEE 841 | AEHH8B**

Date: June 29, 2020

**Dimensional Drawing**

| Catalogue    | Model  | HP  | Pole | kW  | Rating     | Voltage | Hz | RPM  |
|--------------|--------|-----|------|-----|------------|---------|----|------|
| APH15045-841 | AEHH8B | 150 | 4    | 112 | Continuous | 575     | 60 | 1800 |



| Frame Size       | Mounting |      |          |        |                    | A           | B          | C     | CD                           | D          |         |
|------------------|----------|------|----------|--------|--------------------|-------------|------------|-------|------------------------------|------------|---------|
|                  | E        | 2F   | 2F2      | H      | BA                 |             |            |       |                              |            |         |
| 445T             | 9        | 16.5 | 14.5     | 0.81   | 7.5                | 22.05       | 19.5       | 46.4  | 13.9                         | 11         |         |
| G                | J        | K    | L        | M      | O                  | P           | T          | Key   |                              |            | Keyseat |
| 1.4              | 4.35     | 5.1  | 22.15    | 15.4   | 23.55              | 24.75       | 4.35       | Width | Thick                        | Length     | R       |
|                  |          |      |          |        |                    |             |            | 0.875 | 0.875                        | 6.91       | 2.88    |
| Terminal Housing |          |      | Aux Box  |        |                    | C/D Flange  |            |       |                              |            |         |
| AA               | AB       | AC   | XB       | AE     | AX                 | BB          | AH         | AK    | BD                           | AJ         | BF      |
| NPT3"            | 24       | 17.9 | 2.4      |        |                    |             |            |       |                              |            |         |
| Shaft Extension  |          |      | Bearings |        | Approx. Weight Lbs | SPL dBA/3ft | Ins. Class | S.F.  | Drive Method                 | Dimensions |         |
| N-W              | U        | V    | DE       | NDE    |                    |             |            |       |                              |            |         |
| 8.5              | 3.375    | 8    | 6318C3   | 6316C3 | 1811               | 81          | F          | 1.15  | Direct Coupling / Belt Drive | Inches     |         |

|   |                     |
|---|---------------------|
|  |                     |
|   |                     |
|   | Date: June 29, 2020 |

### Technical Data Sheet

|                    |                            |
|--------------------|----------------------------|
| Motor Type: AEHH8B | Catalogue No: APH15045-841 |
|--------------------|----------------------------|

#### Nameplate Information

|           |            |                |             |             |              |                |
|-----------|------------|----------------|-------------|-------------|--------------|----------------|
| HP        | Pole       | RPM            | Frame       | Voltage     | Hz           | Phase          |
| 150       | 4          | 1783           | 445T        | 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.                        |                                 |                                      |                     |           |                                |
| 95.8              | 95.0                        | 95.4                            | 94.5                                 | 84.0                | 82.0      | 78.0                           |
| Torque            |                             |                                 |                                      | Current (A)         |           |                                |
| Full Load (lb-ft) | Locked Rotor (% FLT)        | Pull Up (% FLT)                 | Break Down (% FLT)                   | No Load             | Full Load | Locked Rotor                   |
| 442.00            | 130                         | 100                             | 220                                  | 37.3                | 139.6     | 868                            |
| 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       |                                |
| G                 | 52.000                      | 640.00                          | 1280.00                              | 25                  | 17        | 81                             |

#### VFD Duty Information

| Speed Range     |                 |                | VFD     |              | S.F.     |
|-----------------|-----------------|----------------|---------|--------------|----------|
| Constant Torque | Variable Torque | Constant Power | Carrier | Type         |          |
| 12-60Hz         | 3-60Hz          | 60-90Hz        | ≤ 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 / T3 |

#### Additional Certifications

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

#### Additional Information

| Bearings |        | Approx. Weight |
|----------|--------|----------------|
| DE       | NDE    | lbs            |
| 6318C3   | 6316C3 | 1811           |

**Nameplate Drawing**

# Advantage Plus IEEE 841

|                 |                 |                |              |                |      |
|-----------------|-----------------|----------------|--------------|----------------|------|
| TYPE            | AEHH8B          | CAT. NO.       | APH15045-841 |                |      |
| OUTPUT          | 150 HP 112 kW   | FRAME          | 445T         | TEFC           |      |
| R.P.M.          | 1783            | POLE           | 4            | INS.           | F    |
| VOLTS           | 575             | PHASE          | 3            | Hz             | 60   |
| AMPS            | 139.6           | CODE           | G            | S.F.           | 1.15 |
| AMBIENT         | 40 °C           | NOM. EFF. 95.8 |              | MIN. EFF. 95.0 |      |
| BEARINGS        | 6318C3 / 6316C3 |                |              | RATING Cont.   |      |
| SER. NO.        | TBD             | DESIGN         | B            | WT. 1811 LBS   |      |
| PWM VFD<br>DUTY | VT              | CT             | CP           | S.F.           |      |
|                 | 3-60Hz          | 12-60Hz        | 60-90Hz      | 1.0 Only       |      |

**Connection Diagram**

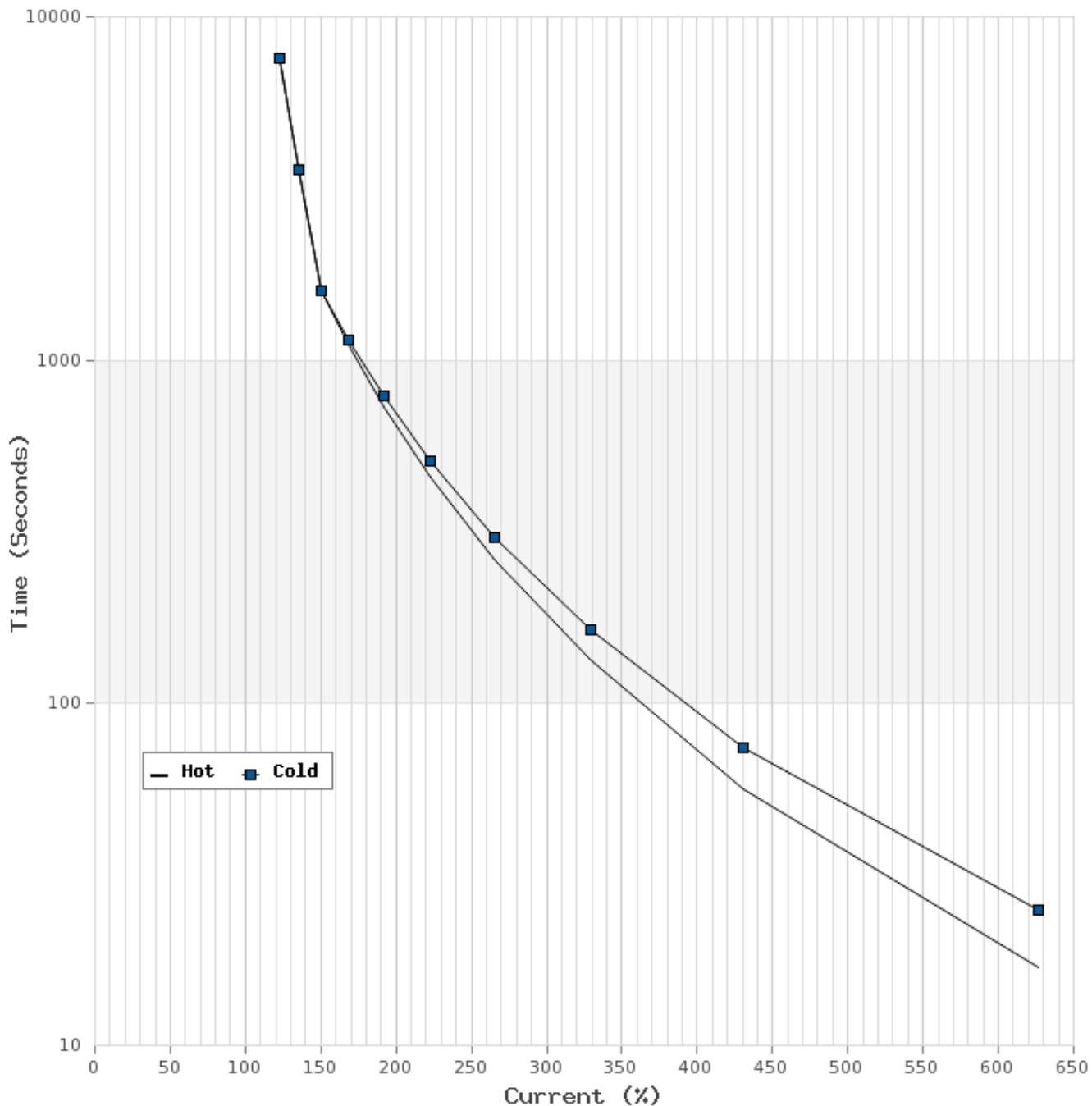


| 3 LEAD  |       | SINGLE VOLTAGE |    |    | DELTA |
|---------|-------|----------------|----|----|-------|
| VOLTAGE | CONN. | L1             | L2 | L3 |       |
| -       | DELTA | 1              | 2  | 3  |       |

WD\_3D

### Thermal Limit Curves

|                    |           |                            |      |                                 |         |
|--------------------|-----------|----------------------------|------|---------------------------------|---------|
| Motor Type: AEHH8B |           | Catalogue No: APH15045-841 |      | Family: Advantage Plus IEEE 841 |         |
| HP                 | 150       | Safe Stall Time            |      | Full Load A                     | 139.6 A |
| Voltage            | 575V 60Hz | Hot                        | 17 s | % Inrush                        | 622 %   |
| RPM                | 1800      | Cold                       | 25 s | Locked Rotor A                  | 868 A   |



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

|                    |           |                            |              |                                 |         |
|--------------------|-----------|----------------------------|--------------|---------------------------------|---------|
| Motor Type: AEHH8B |           | Catalogue No: APH15045-841 |              | Family: Advantage Plus IEEE 841 |         |
| HP                 | 150       | Full Load T                | 442.00 lb-ft | Full Load A                     | 139.6 A |
| Voltage            | 575V 60Hz | Locked Rotor T             | 130 %        | Locked Rotor A                  | 868.0 A |
| RPM                | 1800      | Pull Up T                  | 100 %        | Break Down T                    | 220 %   |

