


Technical Documentation

APH03085D-841
Advantage Plus IEEE 841 | AEHH8B

Date: August 10, 2020

| | |
|---|-----------------------|
|  MOTORS (CANADA) INC. | |
| | |
| | Date: August 10, 2020 |

Technical Data Sheet

| | |
|--------------------|-----------------------------|
| Motor Type: AEHH8B | Catalogue No: APH03085D-841 |
|--------------------|-----------------------------|

Nameplate Information

| | | | | | | |
|-----------|------------|----------------|-------------|-------------|--------------|----------------|
| HP | Pole | RPM | Frame | Voltage | Hz | Phase |
| 30 | 8 | 885 | 364TD | 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. | | | | | |
| 93.0 | 91.7 | 93.0 | 92.4 | 77.5 | 72.0 | 62.0 |
| Torque | | | | Current (A) | | |
| Full Load (lb-ft) | Locked Rotor (% FLT) | Pull Up (% FLT) | Break Down (% FLT) | No Load | Full Load | Locked Rotor |
| 178.00 | 200 | 170 | 200 | 14.5 | 31.2 | 174 |
| 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 | 17.938 | 769.00 | 1833.00 | 50 | 35 | 71 |

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) T3A / T3A |

Additional Certifications

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

Additional Information

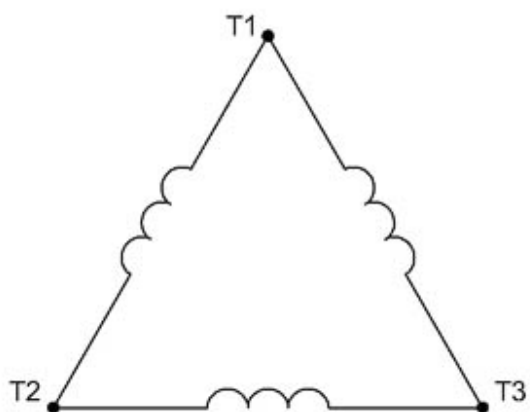
| Bearings | | Approx. Weight |
|----------|---------|----------------|
| DE | NDE | lbs |
| 6313ZC3 | 6213ZC3 | 856 |

Nameplate Drawing

Advantage Plus IEEE 841

| | | | | | |
|-----------------|-------------------|----------------|---------------|----------------|------|
| TYPE | AEHH8B | CAT. NO. | APH03085D-841 | | |
| OUTPUT | 30 HP 22 kW | FRAME | 364TD | TEFC | |
| R.P.M. | 885 | POLE | 8 | INS. | F |
| VOLTS | 575 | PHASE | 3 | Hz | 60 |
| AMPS | 31.2 | CODE | G | S.F. | 1.15 |
| AMBIENT | 40 °C | NOM. EFF. 93.0 | | MIN. EFF. 91.7 | |
| BEARINGS | 6313ZC3 / 6213ZC3 | | | RATING Cont. | |
| SER. NO. | TBD | DESIGN | B | WT. 856 LBS | |
| PWM VFD DUTY | VT | CT | CP | S.F. | |
| | 3-60Hz | 6-60Hz | 60-120Hz | 1.0 Only | |

Connection Diagram

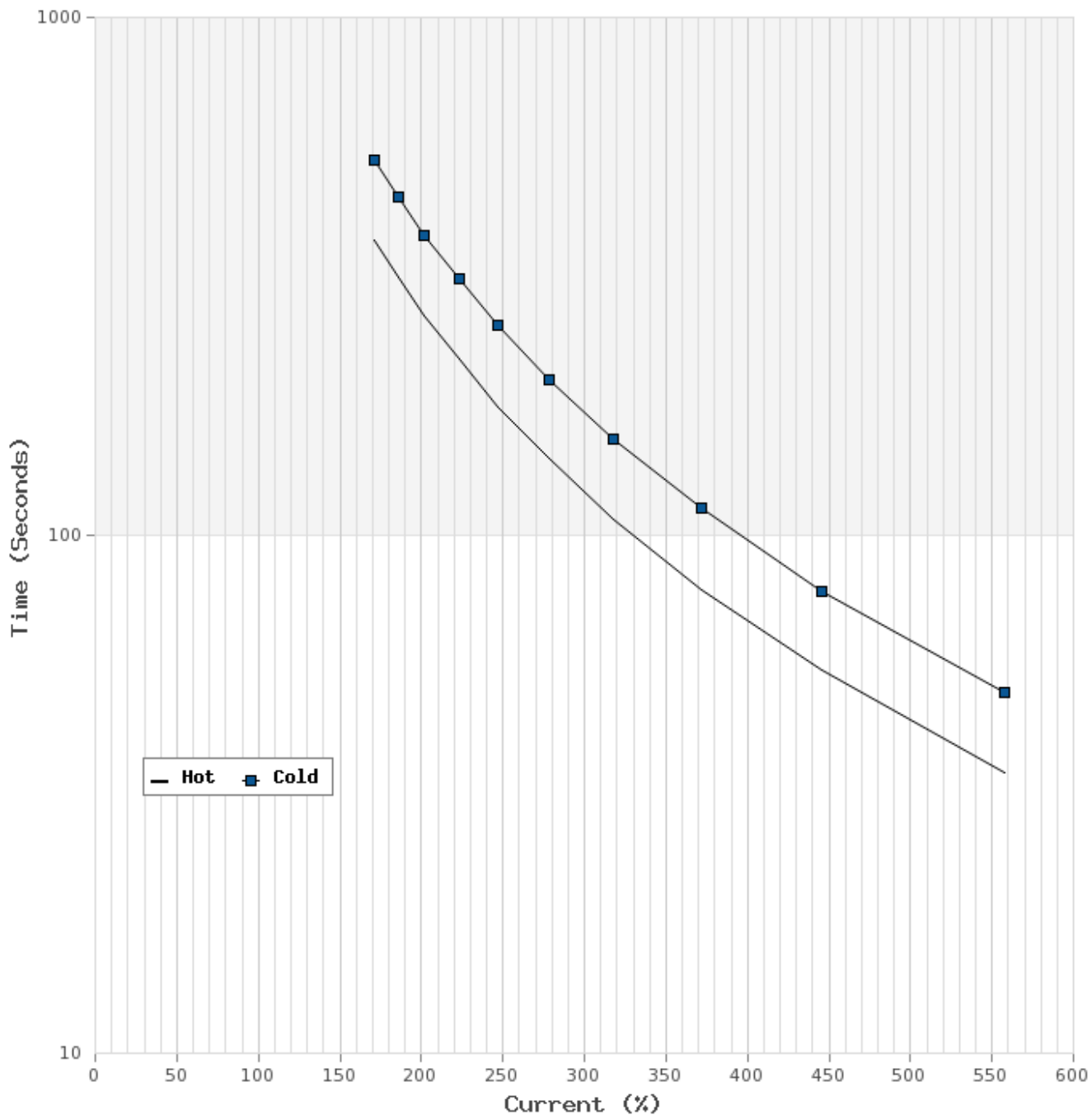


| 3 LEAD | | SINGLE VOLTAGE | | | DELTA |
|---------|-------|----------------|----|----|-------|
| VOLTAGE | CONN. | L1 | L2 | L3 | |
| - | DELTA | 1 | 2 | 3 | |

WD_3D

Thermal Limit Curves

| | | | | | |
|--------------------|-----------|-----------------------------|------|---------------------------------|--------|
| Motor Type: AEHH8B | | Catalogue No: APH03085D-841 | | Family: Advantage Plus IEEE 841 | |
| HP | 30 | Safe Stall Time | | Full Load A | 31.2 A |
| Voltage | 575V 60Hz | Hot | 35 s | % Inrush | 558 % |
| RPM | 900 | Cold | 50 s | Locked Rotor A | 174 A |



T-N and I-N Curves

| | | | | | |
|--------------------|-----------|-----------------------------|--------------|---------------------------------|---------|
| Motor Type: AEHH8B | | Catalogue No: APH03085D-841 | | Family: Advantage Plus IEEE 841 | |
| HP | 30 | Full Load T | 178.00 lb-ft | Full Load A | 31.2 A |
| Voltage | 575V 60Hz | Locked Rotor T | 200 % | Locked Rotor A | 174.0 A |
| RPM | 900 | Pull Up T | 170 % | Break Down T | 200 % |

