

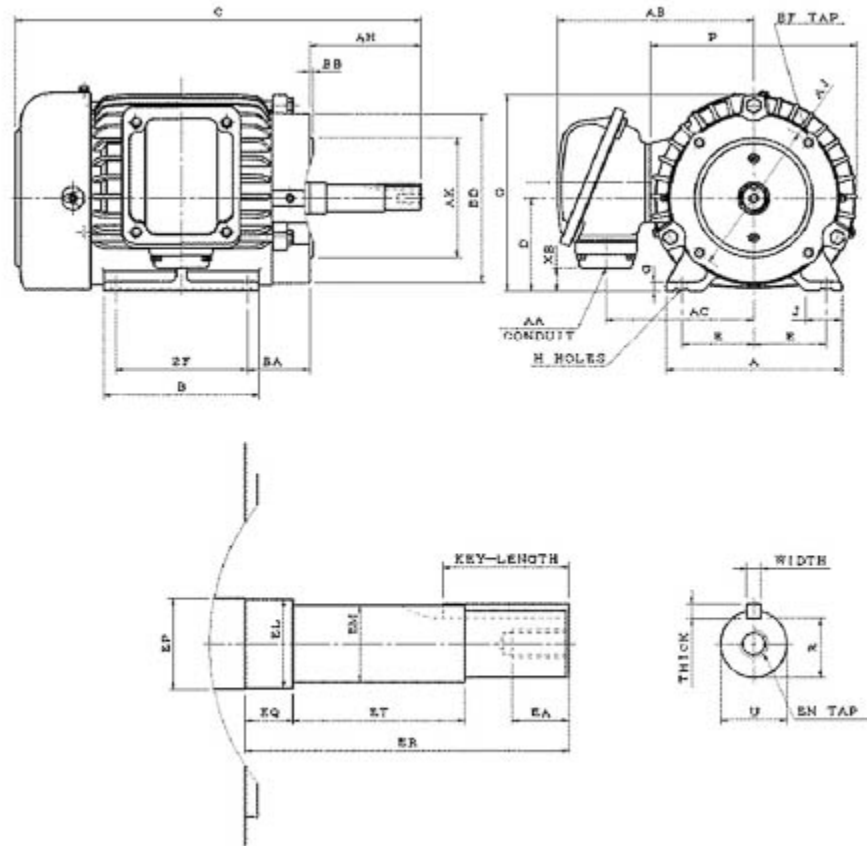
Technical Documentation

CJM00125
Optim JM | AEHH8N_JM

Date: November 29, 2016

Dimensional Drawing

| | | | | | | | | |
|-----------|-----------|----|------|------|------------|---------|----|------|
| Catalogue | Model | HP | Pole | kW | Rating | Voltage | Hz | RPM |
| CJM00125 | AEHH8N_JM | 1 | 2 | 0.75 | Continuous | 575 V | 60 | 3600 |



AEHH8N-JM-SMP-1

| Frame Size | Mounting | | | | | A | B | C | CD | D | |
|------------------|----------|------|----------|--------|--------------------|-------------|------------|-------|----------------|------------|--------------|
| | E | 2F | 2F2 | H | BA | | | | | | |
| 143JM | 2.75 | 4 | | 0.34 | 2.38 | 6.7 | 5.12 | 14.69 | | 3.5 | |
| G | J | K | L | M | O | P | T | Key | | | Keyseat |
| 0.35 | 1.4 | | | | 7.45 | 7.87 | | Width | Thick | Length | R |
| | | | | | | | | 0.188 | 0.188 | 1.65 | 0.771 |
| Terminal Housing | | | Aux Box | | | C/D Flange | | | | | |
| AA | AB | AC | XB | AE | AX | BB | AH | AK | BD | AJ | BF |
| 3/4" | 7.56 | 5.63 | 0.86 | | | 0.156 | 4.25 | 4.5 | 6.38 | 5.875 | 4-3/8"-16UNC |
| Shaft Extension | | | Bearings | | Approx. Weight Lbs | SPL dBA/3ft | Ins. Class | S.F. | Drive Method | Dimensions | |
| N-W | U | V | DE | NDE | | | | | | | |
| | 0.875 | | 6205ZZ | 6205ZZ | 51 | 49 | F | 1.15 | DirectCoupling | Inches | |

Technical Data Sheet

Motor Type: AEHH8N_JM

Catalogue No: CJM00125

Nameplate Information

| | | | | | | |
|-----------|------------|----------------|-------------|-------------|--------------|----------------|
| HP | Pole | RPM | Frame | Voltage | Hz | Phase |
| 1 | 2 | 3465 | 143JM | 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 | <3300 ft |

Typical Performance

| Efficiency (%) | | | | Power Factor (%) | | |
|-------------------|-----------------------------|---------------------------------|--------------------------------------|---------------------|-----------|--------------------------------|
| Full Load | | 3/4 Load | 1/2 Load | Full Load | 3/4 Load | 1/2 Load |
| Nom. | Min. | | | | | |
| 82.5 | 80.0 | 81.5 | 78.5 | 85.0 | 79.5 | 68.5 |
| Torque | | | | Current (A) | | |
| Full Load (lb-ft) | Locked Rotor (% FLT) | Pull Up (% FLT) | Break Down (% FLT) | No Load | Full Load | Locked Rotor |
| 1.52 | 350 | 365 | 400 | 0.5 | 1.1 | 12 |
| 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 | |
| N | 0.046 | 1.2 | 5.3 | 17 | 12 | 49 |

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 |

Additional Information

| Bearings | | Approx. Weight |
|----------|--------|----------------|
| DE | NDE | lbs |
| 6205ZZ | 6205ZZ | 51 |

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 / T3C |

Connection Diagram

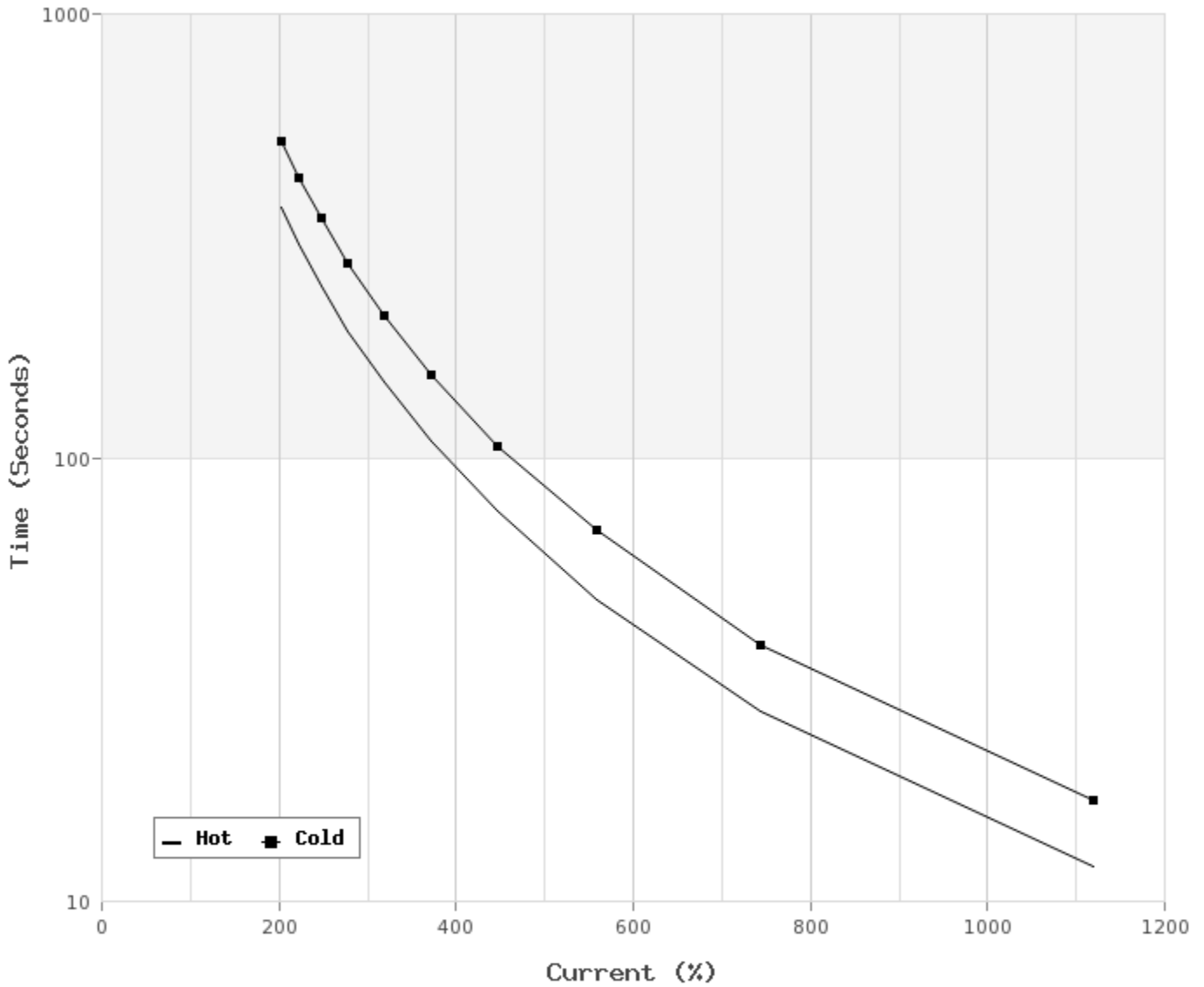


| 3 LEAD | | SINGLE VOLTAGE | | | WYE |
|---------|-------|----------------|----|----|-----|
| VOLTAGE | CONN. | L1 | L2 | L3 | |
| - | WYE | 1 | 2 | 3 | |

WD_3Y

Thermal Limit Curves

| | | | | | |
|-----------------------|---------------|------------------------|------|------------------|-------------|
| Motor Type: AEHH8N JM | | Catalogue No: CJM00125 | | Family: Optim JM | |
| HP | 1 | Safe Stall Time | | Full Load A | 0.0 / 1.1 A |
| Voltage | 0 / 575V 60Hz | Hot | 12 s | Locked Rotor A | 1,121 % |
| RPM | 3600 | Cold | 17 s | Locked Rotor A | 0.0 / 12 A |



T-N and I-N Curves

| | | | | | |
|-----------------------|-----------|------------------------|------------|------------------|--------|
| Motor Type: AEHH8N JM | | Catalogue No: CJM00125 | | Family: Optim JM | |
| HP | 1 | Full Load T | 1.52 lb-ft | Full Load A | 1.1 A |
| Voltage | 575V 60Hz | Locked Rotor T | 350 % | Locked Rotor A | 12.0 A |
| RPM | 3600 | Pull Up T | 365 % | Break Down T | 400 % |

