


Technical Documentation

CJM01045

Optim JM | AEHH8N_JM

Date: April 14, 2021

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|---|----------------------|
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| | |
| | Date: April 14, 2021 |

Technical Data Sheet

| | |
|-----------------------|------------------------|
| Motor Type: AEHH8N_JM | Catalogue No: CJM01045 |
|-----------------------|------------------------|

Nameplate Information

| | | | | | | |
|-----------|------------|----------------|-------------|-------------|----------------|----------------|
| HP | Pole | RPM | Frame | Voltage | Hz | Phase |
| 10 | 4 | 1755 | 215JM | 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 °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. | | | | | |
| 91.70 | 90.20 | 91.00 | 91.00 | 88.00 | 84.00 | 75.50 |
| Torque | | | | Current (A) | | |
| Full Load (lb-ft) | Locked Rotor (% FLT) | Pull Up (% FLT) | Break Down (% FLT) | No Load | Full Load | Locked Rotor |
| 29.92 | 250 | 145 | 260 | 2.7 | 9.3 | 64.80 |
| 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 | |
| H | 1.082 | 51.00 | 175.00 | 40 | 28 | 60.0 |

VFD Duty Information

| Speed Range | | | VFD | | S.F. |
|-----------------|-----------------|----------------|---------|--------------|----------|
| Constant Torque | Variable Torque | Constant Power | Carrier | Type | |
| 6-60Hz | 3-60Hz | 60-120Hz | 0 | 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 / T3B |

Additional Certifications

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

Additional Information

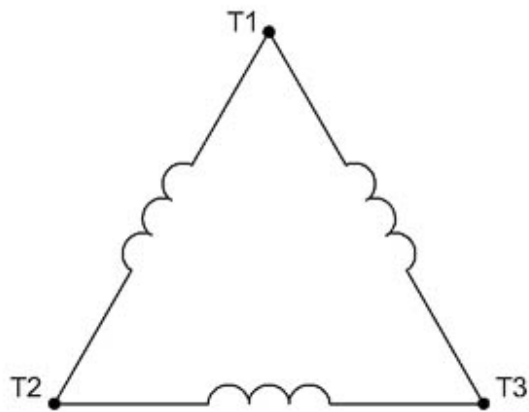
| Bearings | | Approx. Weight |
|----------|--------|----------------|
| DE | NDE | lbs |
| 6309ZZ | 6307ZZ | 200 |

Nameplate Drawing

Optim JM

| | | | | | | |
|--------------|-----------------|--------|-----------------|----------|-----------------|------|
| TYPE | AEHH8N JM | | CAT. NO. | CJM01045 | | |
| OUTPUT | 10 HP 7.46 kW | | FRAME | 215JM | TEFC | |
| R.P.M. | 1755 | | POLE | 4 | INS. | F |
| VOLTS | 575 | | PHASE | 3 | Hz | 60 |
| AMPS | 9.3 | | CODE | H | S.F. | 1.15 |
| AMBIENT | 40 °C | | NOM. EFF. 91.70 | | MIN. EFF. 90.20 | |
| BEARINGS | 6309ZZ / 6307ZZ | | | | RATING Cont. | |
| SER. NO. | TBD | | DESIGN | B | WT. 200 LBS | |
| PWM VFD DUTY | VT | CT | CP | | S.F. | |
| | 3-60Hz | 6-60Hz | 60-120Hz | | 1.0 Only | |

Connection Diagram

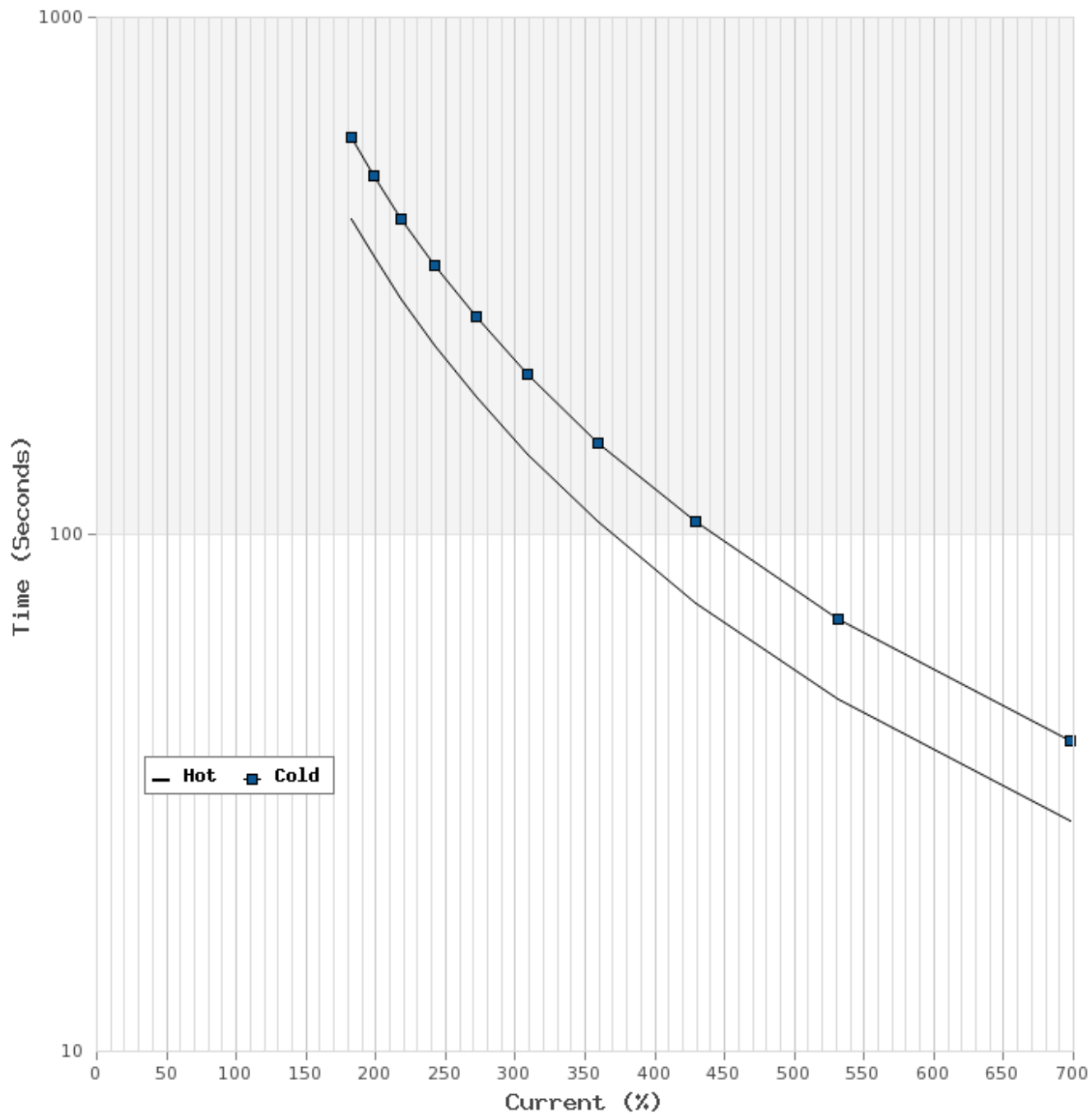


| 3 LEAD | | SINGLE VOLTAGE | | | DELTA |
|---------|-------|----------------|----|----|-------|
| VOLTAGE | CONN. | L1 | L2 | L3 | |
| - | DELTA | 1 | 2 | 3 | |

WD_3D

Thermal Limit Curves

| | | | | | |
|-----------------------|-----------|------------------------|------|------------------|---------|
| Motor Type: AEHH8N_JM | | Catalogue No: CJM01045 | | Family: Optim JM | |
| HP | 10 | Safe Stall Time | | Full Load A | 9.3 A |
| Voltage | 575V 60Hz | Hot | 28 s | % Inrush | 698 % |
| RPM | 1800 | Cold | 40 s | Locked Rotor A | 64.80 A |



T-N and I-N Curves

| | | | | | |
|-----------------------|-----------|------------------------|-------------|------------------|--------|
| Motor Type: AEHH8N_JM | | Catalogue No: CJM01045 | | Family: Optim JM | |
| HP | 10 | Full Load T | 29.92 lb-ft | Full Load A | 9.3 A |
| Voltage | 575V 60Hz | Locked Rotor T | 250 % | Locked Rotor A | 64.8 A |
| RPM | 1800 | Pull Up T | 145 % | Break Down T | 260 % |

