

Technical Documentation

XH06045C
Optim TEXP | AEHHXF

Date: May 28, 2018

Technical Data Sheet

Motor Type: AEHHXF

Catalogue No: XH06045C

Nameplate Information

| | | | | | | |
|-----------|------------|----------------|-------------|-------------|----------------|----------------|
| HP | Pole | RPM | Frame | Voltage | Hz | Phase |
| 60 | 4 | 1775 | 364TC | 575 | 60 | 3 |
| Enclosure | Ins. Class | Service Factor | Time Rating | NEMA Design | Rated Amb. | Rated Altitude |
| TEXP | F | 1.15 | Continuous | C | -40 to 40°C °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. | | | | | |
| 95.0 | 94.1 | 95.5 | 95.0 | 88.0 | 86.0 | 80.5 |
| Torque | | | | Current (A) | | |
| Full Load (lb-ft) | Locked Rotor (% FLT) | Pull Up (% FLT) | Break Down (% FLT) | No Load | Full Load | Locked Rotor |
| 177.5 | 200.0 | 170.0 | 245.0 | 14.6 | 53.8 | 348 |
| 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 | 11.7 | 275.0 | 519.0 | 17.0 | 12.0 | 75.0 |

VFD Duty Information

| Speed Range | | | VFD | | S.F. |
|-----------------|-----------------|----------------|---------|--------------|----------|
| Constant Torque | Variable Torque | Constant Power | Carrier | Type | |
| 6-60Hz | 3-60Hz | 60-90Hz | ≤ 5 kHz | VPWM or CPWM | 1.0 Only |

Additional Information

| Bearings | | Approx. Weight |
|----------|------|----------------|
| DE | NDE | lbs |
| 6313 | 6213 | 946 |

Hazardous Locations Information

| CSA/UL Certified | |
|-----------------------------------------------------------------------------------------------------------------------------|-----------|
| Class I, Div 1, Groups D; Class II, Div 1, Groups E, F & G Class I, Zone 1, Groups IIA; Class II, Div 1, Groups E, F & G | |
| Temp Code (Sinewave / VFD) | T3B / T3B |

Nameplate Drawing

Optim TEXP

| | | | | | |
|--------------|-------------|----------------|----------|----------------|------|
| TYPE | AEHHXF | CAT. NO. | XH06045C | | |
| OUTPUT | 60 HP 45 kW | FRAME | 364TC | TEXP | |
| R.P.M. | 1775 | POLE | 4 | INS. | F |
| VOLTS | 575 | PHASE | 3 | Hz | 60 |
| AMPS | 53.8 | CODE | G | S.F. | 1.15 |
| AMBIENT | 40 °C | NOM. EFF. 95.0 | | MIN. EFF. 94.1 | |
| BEARINGS | 6313 / 6213 | | | RATING Cont. | |
| SER. NO. | TBD | DESIGN | C | WT. 946 LBS | |
| PWM VFD DUTY | VT | CT | CP | S.F. | |
| | 3-60Hz | 6-60Hz | 60-90Hz | 1.0 Only | |

Connection Diagram

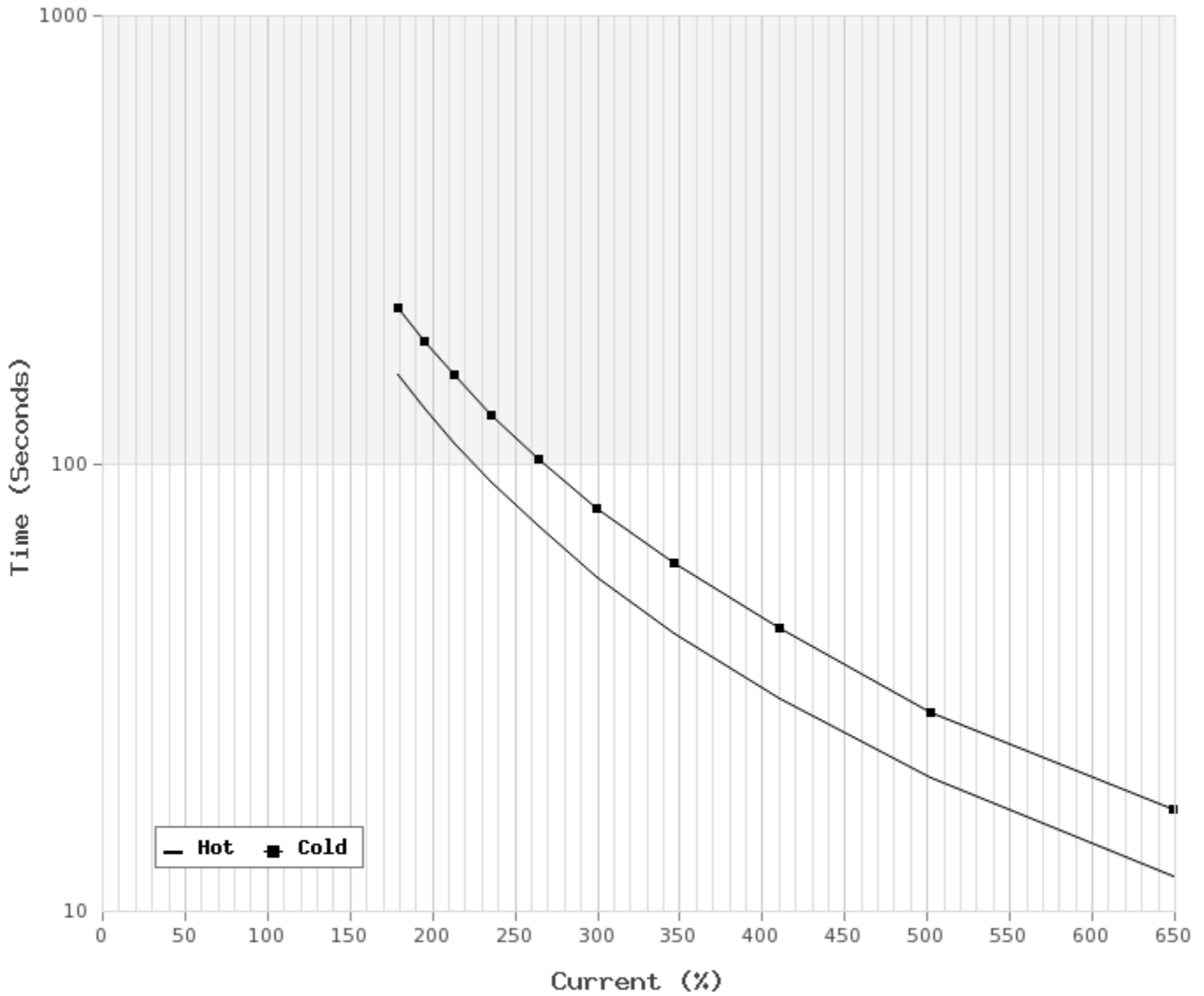


| 3 LEAD SINGLE VOLTAGE DELTA | | | | | |
|-----------------------------|-------|----|----|----|--|
| VOLTAGE | CONN. | L1 | L2 | L3 | |
| - | DELTA | 1 | 2 | 3 | |

WD_3D

Thermal Limit Curves

| | | | | | |
|--------------------|---------------|------------------------|--------|--------------------|--------------|
| Motor Type: AEHHXF | | Catalogue No: XH06045C | | Family: Optim TEXP | |
| HP | 60 | Safe Stall Time | | Full Load A | 0.0 / 53.8 A |
| Voltage | 0 / 575V 60Hz | Hot | 12.0 s | Locked Rotor A | 647 % |
| RPM | 1800 | Cold | 17.0 s | Locked Rotor A | 0.0 / 348 A |



T-N and I-N Curves

| | | | | | |
|--------------------|-----------|------------------------|-------------|--------------------|---------|
| Motor Type: AEHHXF | | Catalogue No: XH06045C | | Family: Optim TEXP | |
| HP | 60 | Full Load T | 177.5 lb-ft | Full Load A | 53.8 A |
| Voltage | 575V 60Hz | Locked Rotor T | 200.0 % | Locked Rotor A | 348.0 A |
| RPM | 1800 | Pull Up T | 170.0 % | Break Down T | 245.0 % |

