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# Severe Duty Motors

**Model No:** 449THFCD19079
**Catalog No:** W630A

Severe Duty Motor, 200 HP, 3 Ph, 60 Hz, 575 V, 1200 RPM, 447/449T Frame, TEFC

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## Product Information Packet: Model No: 449THFCD19079, Catalog No: W630A  Severe Duty Motor, 200 HP, 3 Ph, 60 Hz, 575 V, 1200 RPM, 447/449T Frame, TEFC

### Nameplate Specifications

| | | | |
|---|---|---|---|
| Phase | **3** | Output HP | **200 Hp** |
| Output KW | **149.0 kW** | Voltage | **575 V** |
| Speed | **1190 r/min** | Synchronous RPM | **1200 r/min** |
| Service Factor | **1.15** | Frame | **447/449T** |
| Enclosure | **Totally Enclosed Fan Cooled** | Thermal Protection | **No Protection** |
| Efficiency | **95.8 %** | Ambient Temperature | **40 °C** |
| Frequency | **60 Hz** | Current | **184.0 A** |
| Power Factor | **85** | Duty | **Continuous** |
| Insulation Class | **H** | Design Code | **B** |
| KVA Code | **G** | Drive End Bearing Size | **NU319** |
| Opp Drive End Bearing Size | **6317** | UL | **Listed** |
| CSA | **Y** | CE | **Y** |
| IP Code | **56** | Number of Speeds | **1** |
| Hazardous Location | **DIVISION 2 T2B** | | |

### Technical Specifications

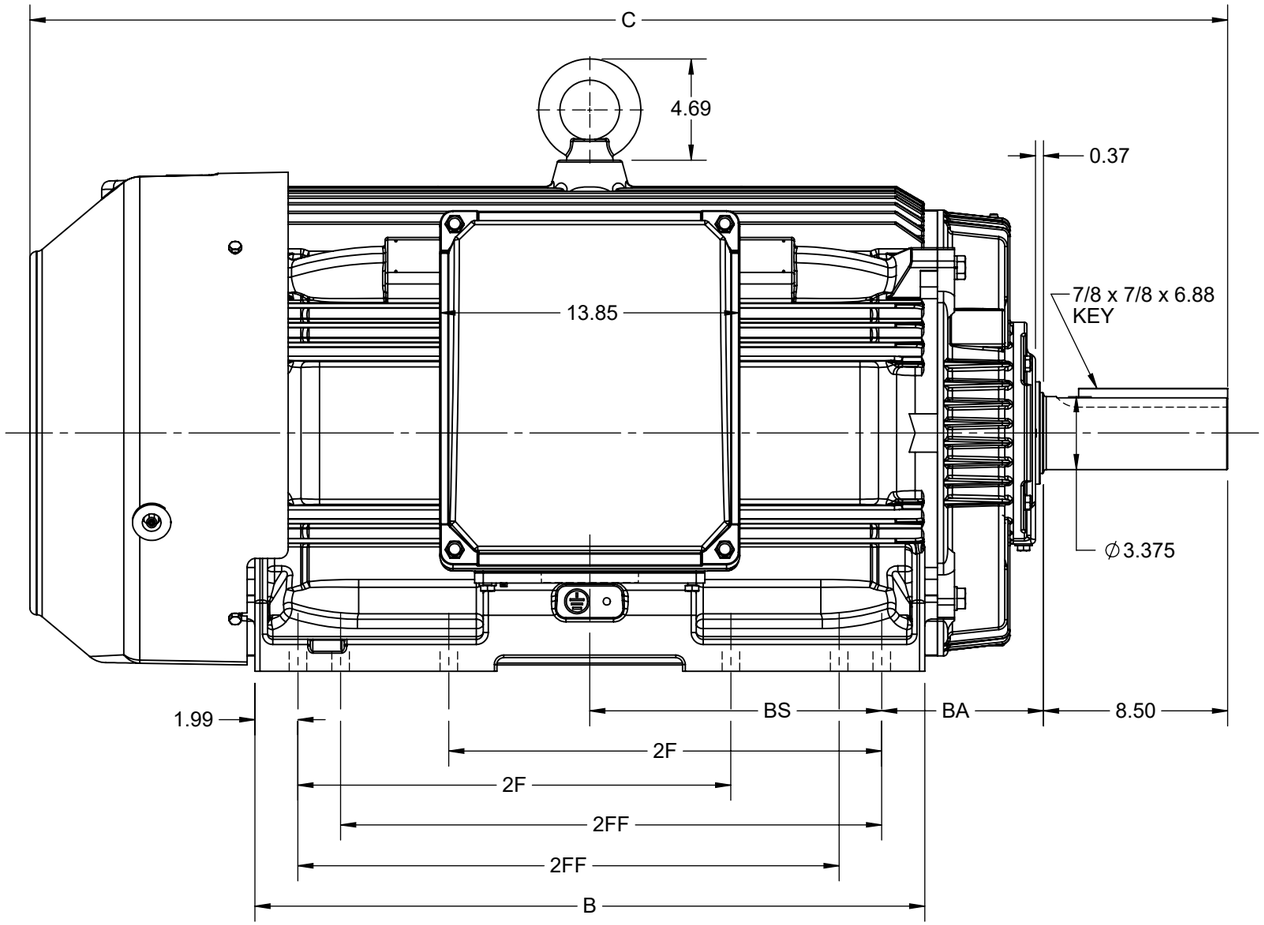
| | | | |
|---|---|---|---|
| Electrical Type | **Squirrel Cage Inverter Rated** | Starting Method | **Line Or Inverter** |
| Poles | **6** | Rotation | **Reversible** |
| Resistance Main | **.0171 O** | Mounting | **Rigid Base** |
| Motor Orientation | **Horizontal** | Drive End Bearing | **Roller** |
| Opp Drive End Bearing | **Ball** | Frame Material | **Cast Iron** |
| Shaft Type | **T** | Shaft Diameter | **3.375 in** |
| Assembly/Box Mounting | **F1/F2 Capable** | Inverter Load | **Constant 2:1/Variable 10:1** |

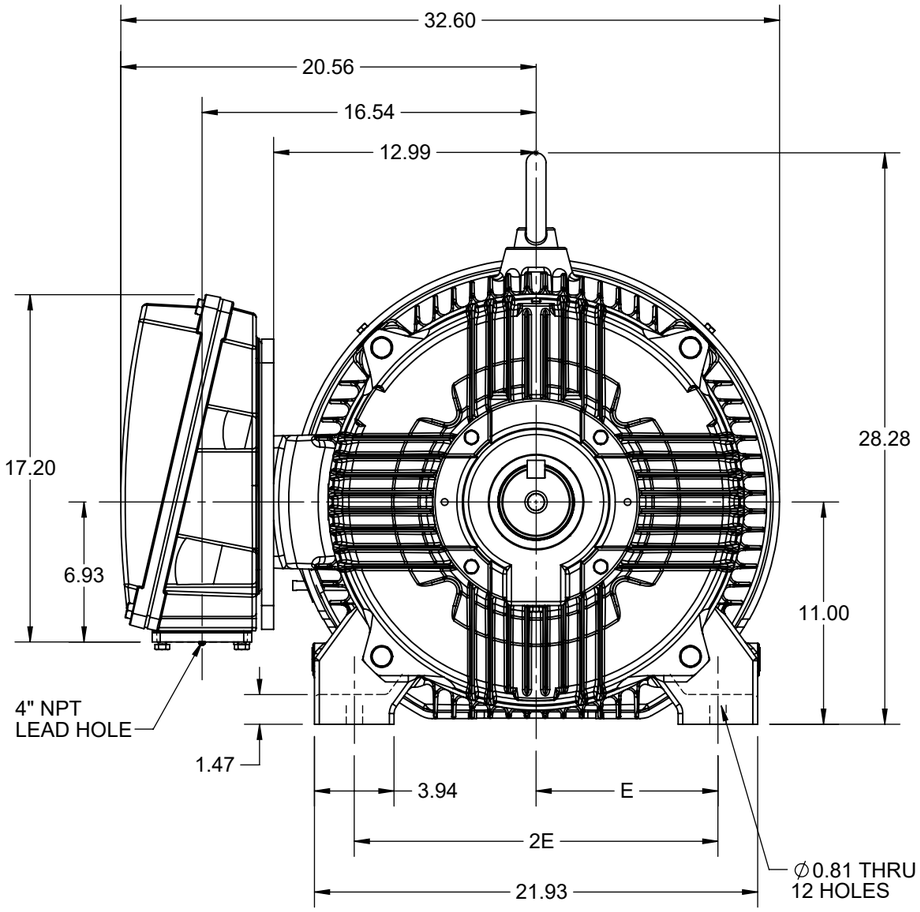
### Drawings

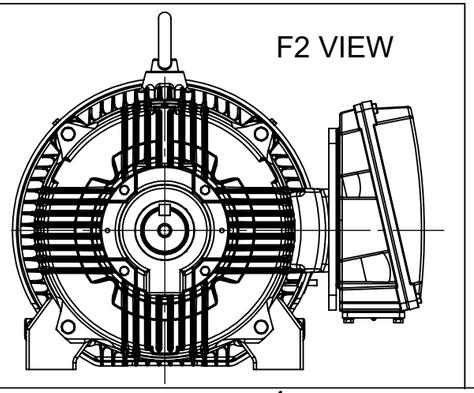
| | | | |
|---|---|---|---|
| Connection Drawing | **EE7300U** | Outline Drawing | **SS557671** |

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| B | C | E | 2E | 2F | 2FF | BA | BS | MOUNTING |
|---|---|---|---|---|---|---|---|---|
| 30.94 | 55.33 | 9.00 | 18.00 | 20.00 | 25.00 | 7.50 | 13.48 | F1 OR F2 |




| DRAWING REVISION | REVISION BY | REV DATE/© DATE |
|---|---|---|
| C | SB | 07/23/2025 |
| REQUEST NUMBER | APPROVED BY | DATE |
| CR-0023556 | SBD | 07/23/2025 |

REQUEST NUMBER DESCRIPTION
DRAWING TITLE BLOCK UPDATED

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| | |
|---|---|
| DRAWN BY | BISWA |
| DATE | 04/05/2019 |
| APPROVED BY | SBD |
| DATE | 04/05/2019 |
| REFERENCE | |
| THIRD ANGLE PROJECTION | |

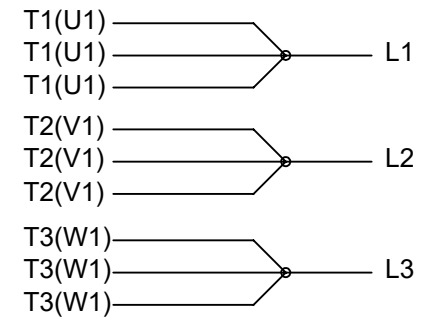
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DESCRIPTION
OUTLINE
447/449T FR-SD & IEEE 841

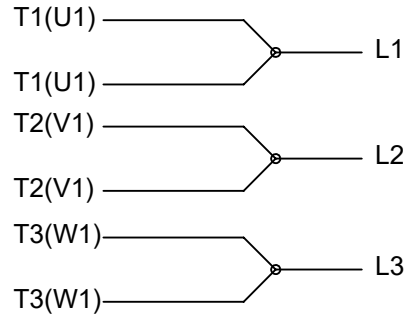
MATERIAL | PROCESS/FINISH

| SIZE | DRAWING NUMBER | SHEET |
|---|---|---|
| B | SS557671 | 1 OF 1 |

IF MOTOR HAS 9 LEADS

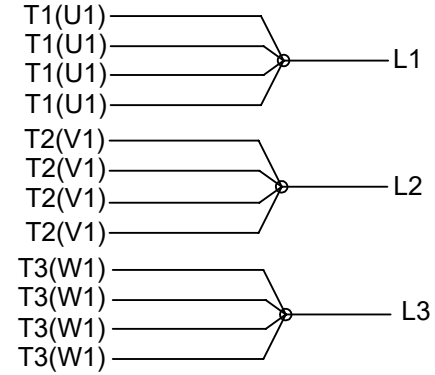


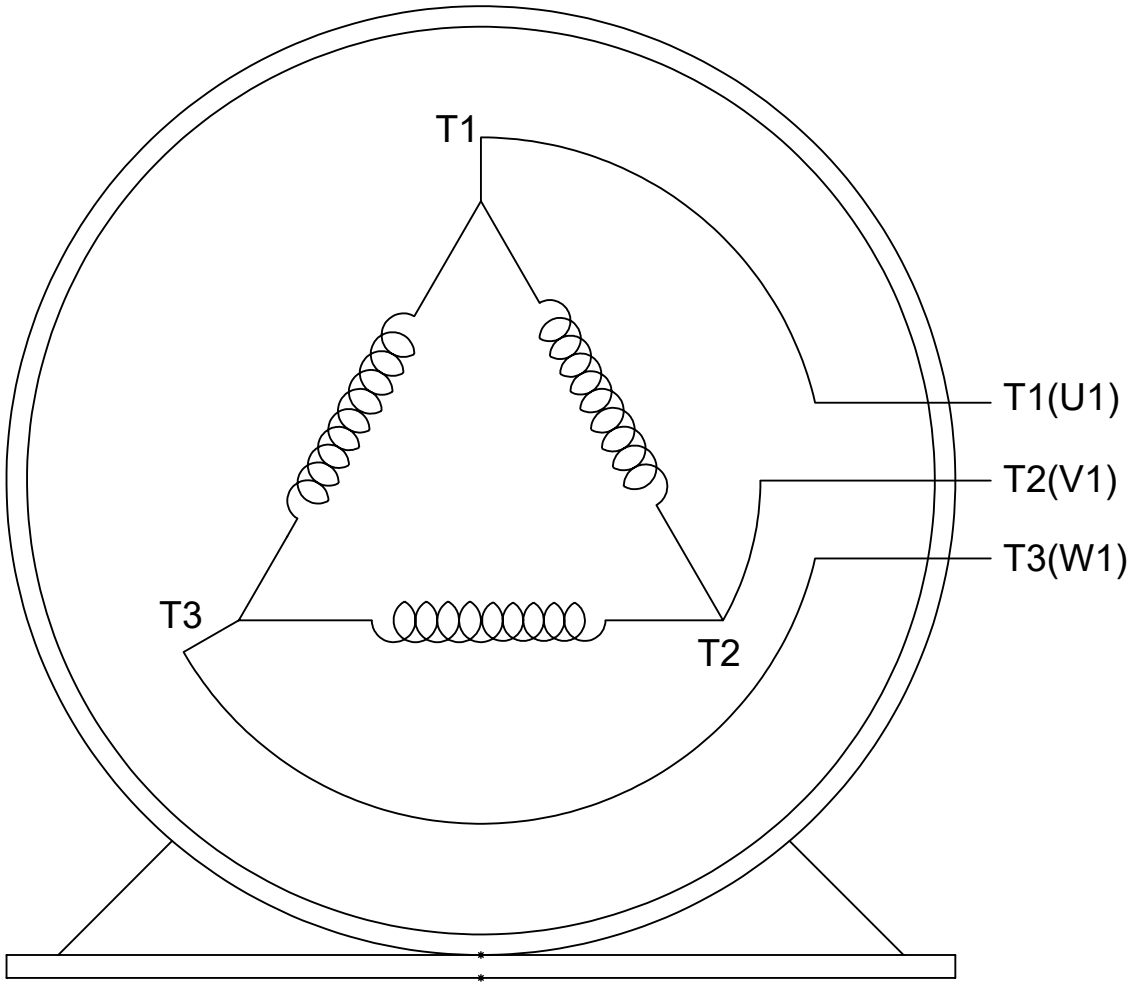

IF MOTOR HAS 6 LEADS




A-9806 DECAL IF CALLED FOR

IF MOTOR HAS 12 LEADS




VIEW OF TERMINAL END

| DRAWING REVISION | REVISION BY | REV DATE/© DATE |
|---|---|---|
| M | SB | 08/01/2025 |
| REQUEST NUMBER | APPROVED BY | DATE |
| CR-0023654 | SBD | 08/01/2025 |

REQUEST NUMBER DESCRIPTION
DRAWING TITLE BLOCK UPDATED

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| | |
|---|---|
| DRAWN BY | DRS |
| DATE | 09-27-1996 |
| APPROVED BY | GK |
| DATE | 09-30-1996 |
| REFERENCE | |
| THIRD ANGLE PROJECTION | |

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DESCRIPTION
CONN DIAGRAM-EXTERNAL
3Ø SINGLE VOLTAGE

| MATERIAL | PROCESS/FINISH |
|---|---|
| | |

| SIZE | DRAWING NUMBER | SHEET |
|---|---|---|
| A | EE7300U | 1 OF 1 |

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# Data Sheet

Date: 5/6/2020
Customer:
Attention:
Submitted by:

449THFCD19079

**Submittal**

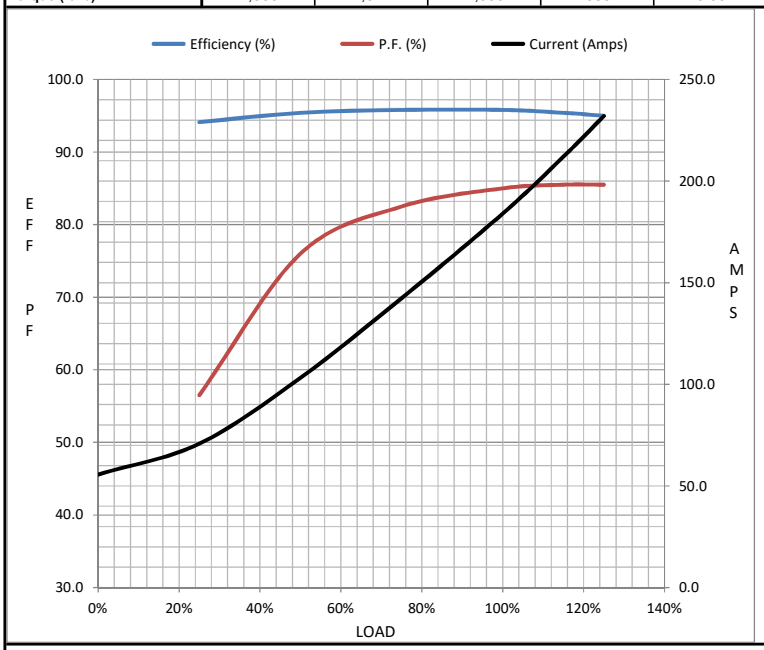
Data @ 575 V

## Motor Load Data

| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR | |
|---|---|---|---|---|---|---|---|---|---|
| Current (Amps) | 55.6 | 70.8 | 103 | 142 | 184 | 212 | 232 | 1,140 | |
| Torque (ft-lb) | 0.00 | 220 | 440 | 661 | 883 | 1,018 | 1,106 | 1,550 | |
| RPM | 1200 | 1198 | 1195 | 1192 | 1190 | 1,188 | 1188 | 0 | |
| Efficiency (%) | | 94.1 | 95.4 | 95.8 | 95.8 | 95.4 | 95.0 | | |
| P.F. (%) | 4.0 | 56.5 | 76.0 | 82.5 | 85.0 | 85.5 | 85.5 | 31.0 | |

## Motor Speed Data

| | LR | Pull-Up | BD | Rated | Idle |
|---|---|---|---|---|---|
| Speed (RPM) | 0 | 600 | 1155 | 1190 | 1200 |
| Current (Amps) | 1,140 | 928 | 624 | 184 | 55.6 |
| Torque (ft-lb) | 1,550 | 1,372 | 2,350 | 883 | 0.00 |




## Information Block

| | | |
|---|---|---|
| HP | 200.0 | |
| Sync. RPM | 1200 | |
| Frame | 449 | |
| Enclosure | TEFC | |
| Construction | TFC | |
| Voltage | 575 | V |
| Frequency | 60 | Hz |
| Design | B | |
| LR Code letter | G | |
| Service Factor | 1.15 | |
| Temp Rise @ FL | 75 | ° C |
| Duty | CONT | |
| Ambient | 40 | ° C |
| Elevation | 3,300 | feet |
| Rotor/Shaft wk² | 145 | Lb-Ft² |
| Ref Wdg | HA32806008 NONE | |
| Sound Pressure @ 1M | 75 | dBA |
| VFD Rating | CONSTANT 2:1/VARIABLE 10:1 | |
| Outline Dwg | SS557671 | |
| Conn. Diag | EE7300U | |

Additional Specifications:

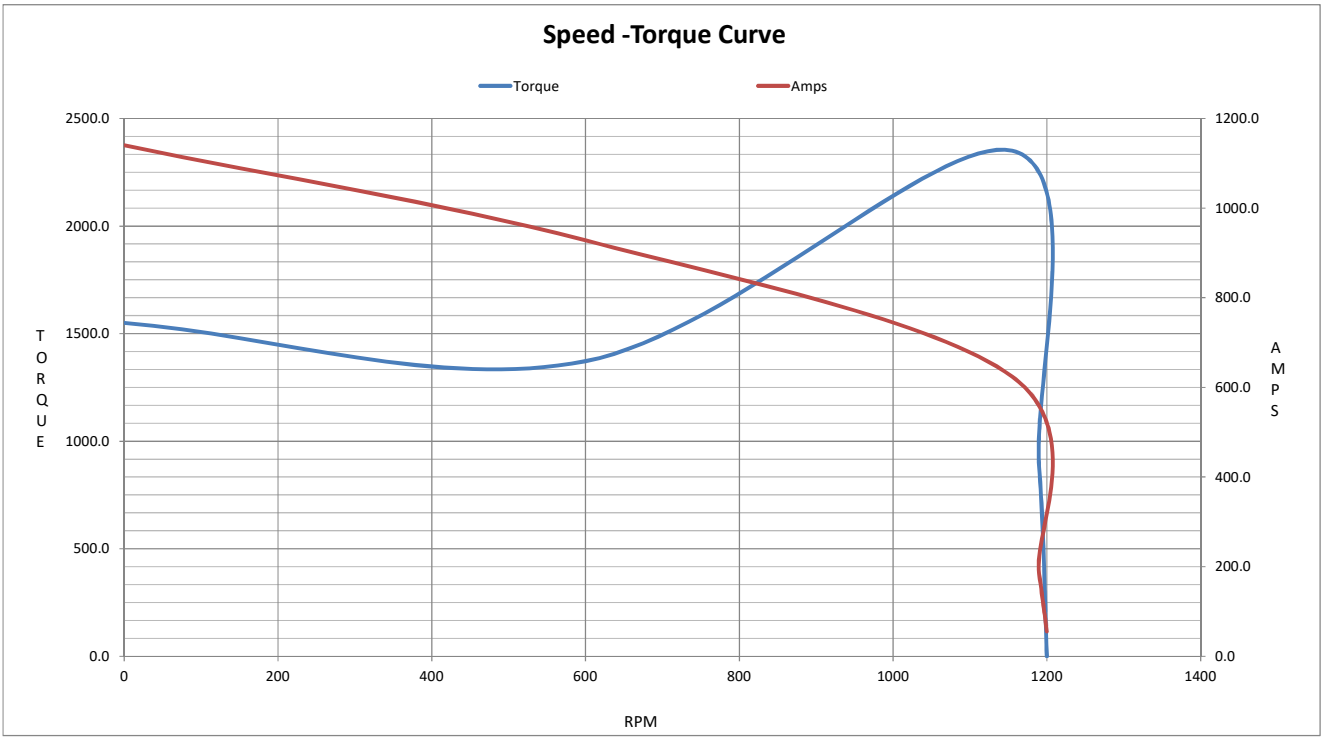
0

0

EQUIV CKT (OHMS / PHASE)

| R1 | R2 | X1 | X2 | Xm |
|---|---|---|---|---|
| 0.0170 | 0.0160 | 0.1710 | 0.2880 | 5.9910 |

## Speed -Torque Curve



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**DATA VOLTS:** 575

## CERTIFICATION DATA SHEET

**REFERENCE MODEL #:** 449THFCD19079
**CONN. DIAGRAM:** EE7300U **CAT #:** W630A
**OUTLINE:** SS557671
**WINDING:** HA32806008 NONE 3 **MOUNTING:** F1/F2 CAPABLE

## TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNC RPM | FL RPM | FRAME | ENCLOSURE | TYPE | KVA CODE | DESIGN |
|---|---|---|---|---|---|---|---|---|
| 200 | 149 | 1200 | 1190 | 447/449T | TEFC | TFC | G | B |

| PH | HZ | VOLTS | AMPS | START TYPE | DUTY | INSL | S.F. | AMB (° C) | ELEV. (Ft) |
|---|---|---|---|---|---|---|---|---|---|
| 3 | 60 | 575 | 184 | LINE OR INVERTER | CONT | H | 1.15 | 40 | 3300 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| F.L. EFF | 95.8 | 3/4 LD EFF | 95.8 | 1/2 LD EFF | 95.4 | GTD EFF | ELECT. TYPE |
| F.L. PF | 85.0 | 3/4 LD PF | 82.5 | 1/2 LD PF | 76.0 | 95.4 | SQ CAGE INV RATED |

| F.L. TORQUE | LR AMPS | L.R. TORQUE | B.D. TORQUE | F.L. RISE (° C) | |
|---|---|---|---|---|---|
| 883 LB-FT | 1,140 | 1,550 LB-FT 176% | 2,350 LB-FT 266% | 75 | |

| SOUND PRESSURE | SOUND | ROTOR WK² | MAX. LOAD WK² | SAFE STALL TIME | STARTS/HOUR | APROX. |
|---|---|---|---|---|---|---|
| 75 dBA | 84 dBA | 145 LB-FT² | 1700 LB-FT² | 25 SEC. | 2 | 2570 LB. |

### *** SUPPLEMENTAL INFORMATION ***

| DE BRACKET TYPE | ODE BRACKET TYPE | MOUNT TYPE | MOTOR ORIENTATION | SEVERE DUTY | HAZARDOUS LOCATION | DRIP COVER | SCREENS | PAINT |
|---|---|---|---|---|---|---|---|---|
| STANDARD | STANDARD | RIGID | HORIZONTAL | PREMIUM SEVERE DUTY | DIVISION 2 T2B | NO | NONE | BLUE (EPOXY) |

| BEARINGS DE | BEARINGS ODE | GREASE | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT MATERIAL | FRAME MATERIAL |
|---|---|---|---|---|---|---|---|
| ROLLER | BALL | POLYREX EM | T | NONE | NONE | 1045 HOT ROLLED (C-204) | CAST IRON |
| NU319 | 6317 | | | | | | |

| THERMOSTATS | PROTECTORS | WDG RTD's | BRG RTD's | THERMISTORS | CONTROL | SPACE HEATERS |
|---|---|---|---|---|---|---|
| NONE | NOT | NONE | NONE | NONE | FALSE | NA |

| R1 (ohms/ph) | R2 (ohms/ph) | X1 (ohms/ph) | X2 (ohms/ph) | Xm (ohms/ph) | VIBRATION (in/sec) | |
|---|---|---|---|---|---|---|
| 0.0265625 | 0.025 | 0.2671875 | 0.45 | 9.3609375 | 0.080 | |

**NOTES**
*
*

If Inverter equals NONE, contact factory for further information
**INVERTER TORQUE:** CONSTANT 2:1/VARIABLE 10:1
**INV. HP SPEED RANGE:** NONE

**ENCODER:** NONE
NONE
NONE NONE **PPR**

**BRAKE:** NONE
NONE NONE
**FT-LB:** NA
**VOLTAGE:** NONE **HZ:**

**PREPARED BY:**
**DATE:** 5/13/2020

FORM: 3531 REV_4 2/27/06
** Subject to change without notice.