marathon®

# Cooling Tower Motors

**Model No:** 444TTTCD16535
**Catalog No:** U1880A

Cooling Tower Motor, 125 & 100 HP, 3 Ph, 60 & 50 Hz, 460 & 380 V, 1800 RPM, 444TV Frame, TEAO

©2026 Marathon, All Rights Reserved.

marathon®

## Product Information Packet: Model No: 444TTTCD16535, Catalog No: U1880A  Cooling Tower Motor, 125 & 100 HP, 3 Ph, 60 & 50 Hz, 460 & 380 V, 1800 RPM, 444TV Frame, TEAO

### Nameplate Specifications

| | | | |
|---|---|---|---|
| Phase | **3** | Output HP | **125 & 100 Hp** |
| Output KW | **93.0 & 75.0 kW** | Voltage | **460 & 380 V** |
| Speed | **1790 & 1490 r/min** | Synchronous RPM | **1800 & 1500 r/min** |
| Service Factor | **1.15 & 1.15** | Frame | **444TV** |
| Enclosure | **Totally Enclosed Air Over** | Thermal Protection | **No Protection** |
| Efficiency | **95.4 & 95.2 %** | Ambient Temperature | **40 °C** |
| Frequency | **60 & 50 Hz** | Current | **140 & 136 A** |
| Power Factor | **87.5** | Duty | **Continuous** |
| Insulation Class | **H** | Design Code | **B** |
| KVA Code | **G** | Drive End Bearing Size | **6319** |
| Opp Drive End Bearing Size | **6317** | UL | **Recognized** |
| CSA | **Y** | CE | **Y** |
| IP Code | **56** | Number of Speeds | **1** |

### Technical Specifications

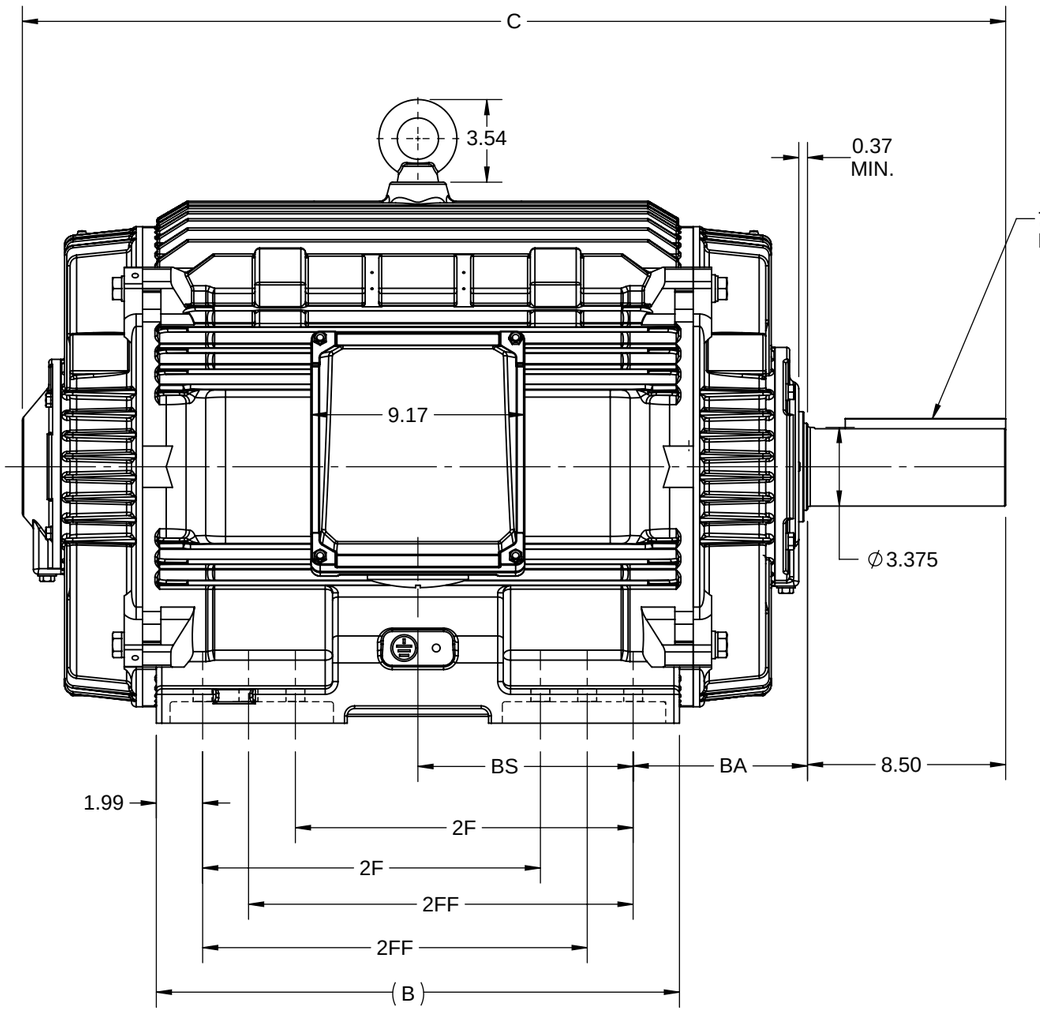
| | | | |
|---|---|---|---|
| Electrical Type | **Squirrel Cage Inverter Rated** | Starting Method | **Part Wdg Start & Wye Start Delta Run Or Inverter** |
| Poles | **4** | Rotation | **Reversible** |
| Resistance Main | **.0374 O** | Mounting | **Rigid Base** |
| Motor Orientation | **Horizontal Or Up Or Down** | Drive End Bearing | **Ball** |
| 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** |

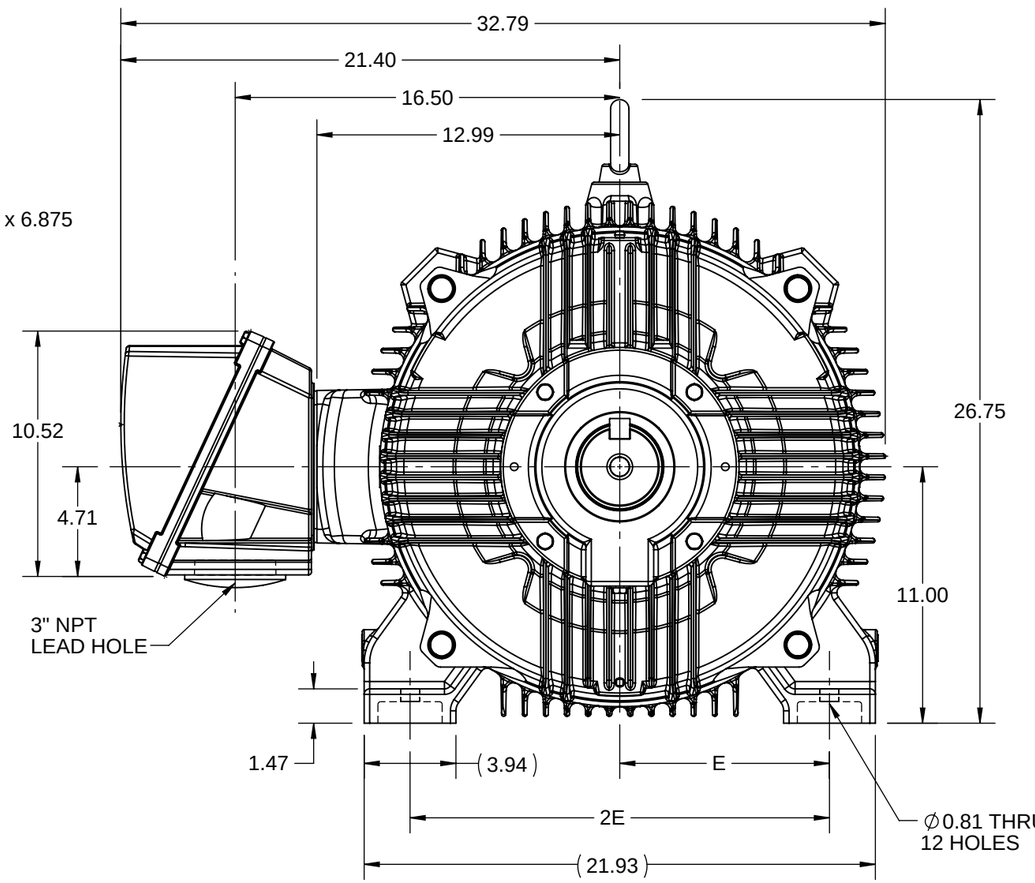
### Drawings

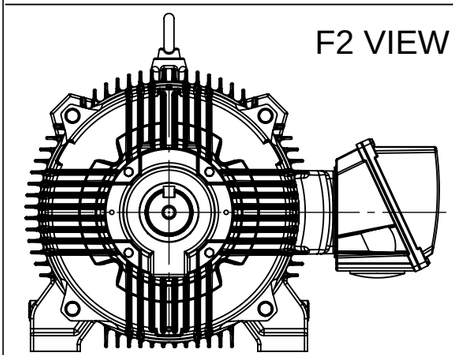
| | | | |
|---|---|---|---|
| Connection Drawing | **EE7300BH** | Outline Drawing | **SS620964** |

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created: 16/10/2026

| B | C | E | 2E | 2F | 2FF | BA | BS | MOUNTING |
|---|---|---|---|---|---|---|---|---|
| 22.44 | 42.18 | 9.00 | 18.00 | 14.50 | 16.50 | 7.50 | 9.24 | F1 OR F2 |




| DRAWING REVISION | REVISION BY | REV DATE/© DATE |
|---|---|---|
| C | SB | 05/20/2026 |
| REQUEST NUMBER | APPROVED BY | DATE |
| CR-0026330 | RMS | 05/20/2026 |

REQUEST NUMBER DESCRIPTION
DRAWING TITLE BLOCK UPDATED

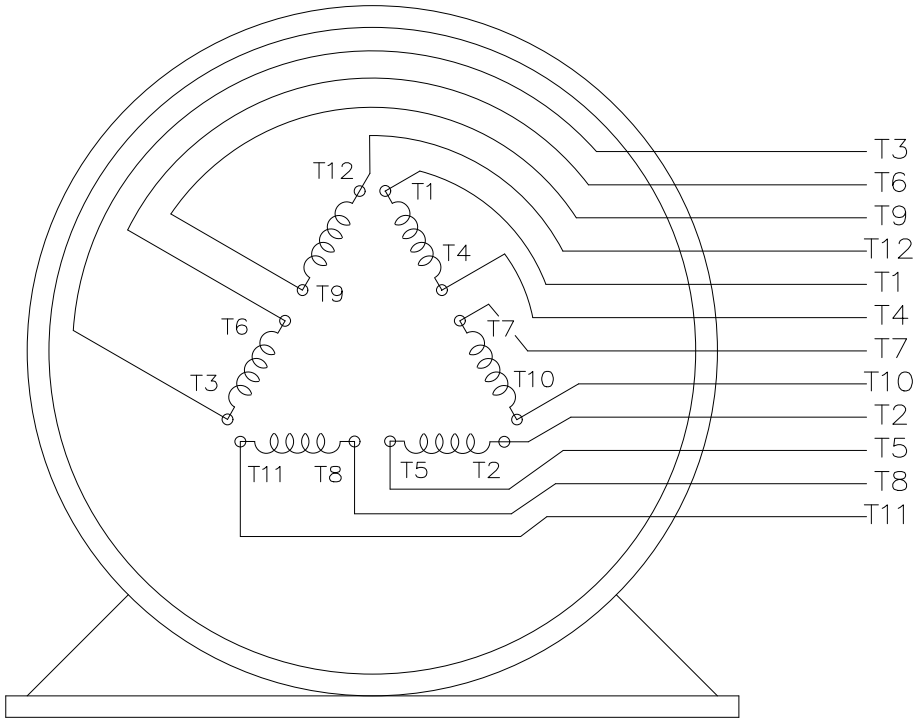
COPYRIGHT (PER REVISION DATE) MARATHON ELECTRIC, LLC. ALL RIGHTS RESERVED. PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF MARATHON ELECTRIC, LLC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.

PRIMARY DIMENSIONS ARE INCH
mm DIMENSIONS IN [BRACKETS]
ARE FOR REFERENCE ONLY

| DRAWN BY | DESCRIPTION |
|---|---|
| SAI | OUTLINE |
| DATE | 444/445T FR-NEMA-TEAO/TENV |
| 29/01/2020 | |
| APPROVED BY | |
| SBD | |
| DATE | |
| 29/01/2020 | |
| REFERENCE | MATERIAL / PROCESS/FINISH |
| THIRD ANGLE PROJECTION | SIZE B / DRAWING NUMBER SS620964 / SHEET 1 OF 1 |

marathon™

Uncontrolled Copy




VIEW OF TERMINAL END

T12(W4)
T1(U1)
T6(W2)
T7(U3)
LINE 1

T2(V1)
T4(U2)
T8(V3)
T10(U4)
LINE 2

T3(W1)
T5(V2)
T9(W3)
T11(V4)
LINE 3

| | | |
|---|---|---|
| DRAWING REVISION: E | REVISION BY: SB | REV DATE/ © DATE: 08/04/2025 |
| REQUEST NUMBER: CR-0023654 | APPROVED BY: SBD | DATE: 08/04/2025 |
| REQUEST NUMBER DESCRIPTION: DRAWING TITLE BLOCK UPDATED | | |

COPYRIGHT (PER REVISION DATE) MARATHON ELECTRIC, LLC. ALL RIGHTS RESERVED.
PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF MARATHON ELECTRIC, LLC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.

PRIMARY DIMENSIONS ARE INCH
mm DIMENSIONS IN [BRACKETS]
ARE FOR REFERENCE ONLY

| | | |
|---|---|---|
| DRAWN BY: RJW | marathon™ | |
| DATE: 02/11/2005 | | |
| APPROVED BY: GK | DESCRIPTION: CONNECTION DIAGRAM<br>12 LEAD - SINGLE VOLTAGE | |
| DATE: 02/11/2005 | | |
| REFERENCE | MATERIAL | PROCESS/FINISH |
| THIRD ANGLE PROJECTION | SIZE: A / DRAWING NUMBER: EE7300BH | SHEET: 1 OF 1 |

# Data Sheet

Date: 10/29/2021
Customer:
Attention:
Submitted by:

marathon® Motors

444TTTCD16535

**Submittal**

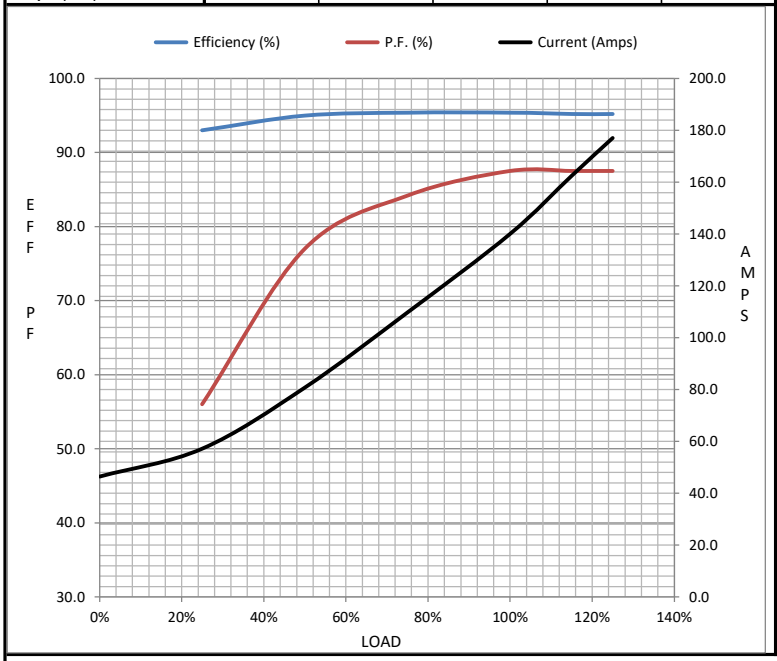
Data @ 460 V

## Motor Load Data

| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR | |
|---|---|---|---|---|---|---|---|---|---|
| Current (Amps) | 46.5 | 57.2 | 80.8 | 110 | 140 | 163 | 177 | 905 | |
| Torque (ft-lb) | 0.00 | 91.5 | 183 | 275 | 367 | 423 | 460 | 679 | |
| RPM | 1800 | 1796 | 1794 | 1792 | 1790 | 1,788 | 1786 | 0 | |
| Efficiency (%) | | 93.0 | 95.0 | 95.4 | 95.4 | 95.2 | 95.2 | | |
| P.F. (%) | 5.0 | 56.0 | 77.0 | 84.2 | 87.5 | 87.5 | 87.5 | 36.0 | |

## Motor Speed Data

| | LR | Pull-Up | BD | Rated | Idle |
|---|---|---|---|---|---|
| Speed (RPM) | 0 | 900 | 1755 | 1790 | 1800 |
| Current (Amps) | 905 | 720 | 510 | 140 | 46.5 |
| Torque (ft-lb) | 679 | 570 | 991 | 367 | 0.00 |




## Information Block

| | | |
|---|---|---|
| HP | 125.0 | |
| Sync. RPM | 1800 | |
| Frame | 444 | |
| Enclosure | TEAO | |
| Construction | TTC | |
| Voltage | 460#380 | V |
| Frequency | 60 | Hz |
| Design | B | |
| LR Code letter | G | |
| Service Factor | 1.15 | |
| Temp Rise @ FL | 0 | ° C |
| Duty | CONT | |
| Ambient | 40 | ° C |
| Elevation | 3,300 | feet |
| Rotor/Shaft wk² | 60.0 | Lb-Ft² |
| Ref Wdg | HA32804010 R1 | |
| Sound Pressure @ 1M | 75 | dBA |
| VFD Rating | CONSTANT 2:1/VARIABLE 10:1 | |
| Outline Dwg | SS620964 | |
| Conn. Diag | EE7300BH | |

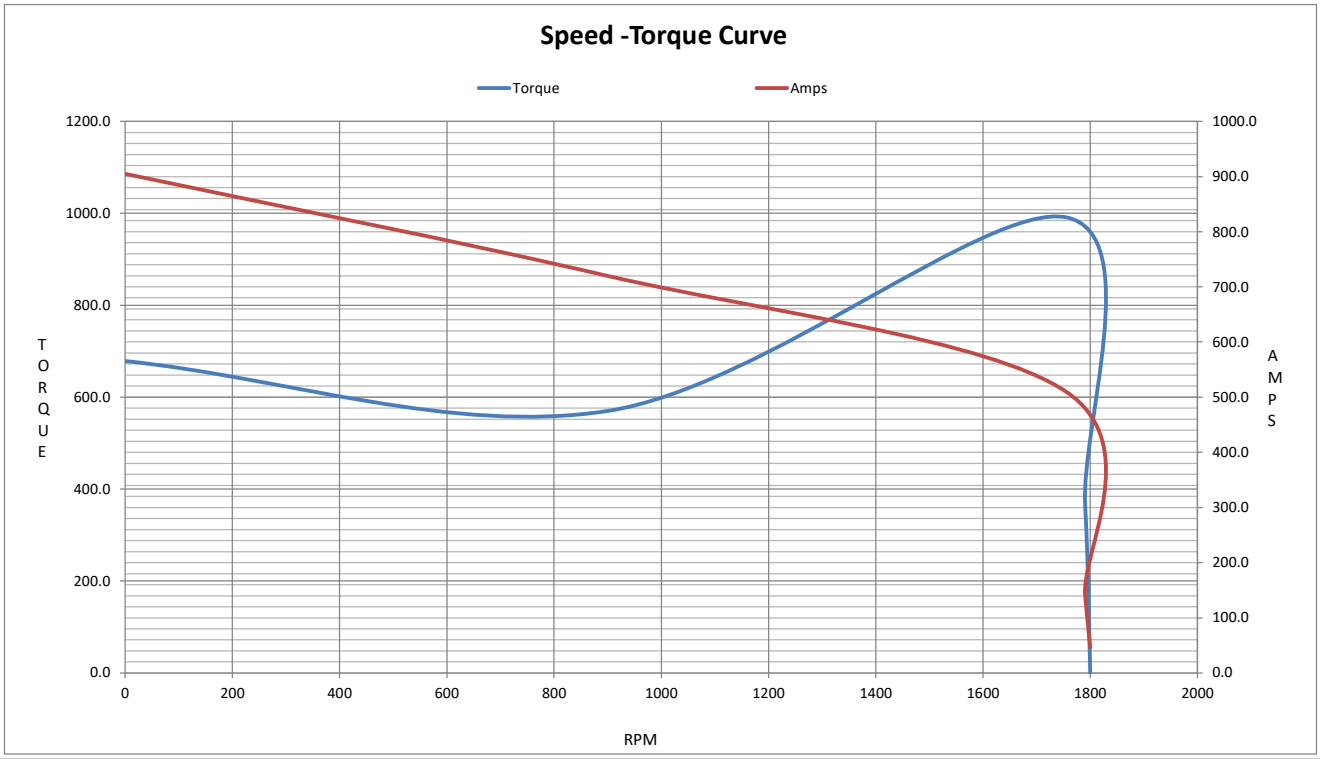
Additional Specifications:

0

0

EQUIV CKT (OHMS / PHASE)

| R1 | R2 | X1 | X2 | Xm |
|---|---|---|---|---|
| 0.0230 | 0.0110 | 0.1520 | 0.2790 | 5.7890 |



P.O. BOX 8003
WAUSAU, WI 54401-8003
PH. 715-675-3311

marathon® Motors

DATA VOLTS: 460

## CERTIFICATION DATA SHEET

CUSTOMER:
ORDER #:
CONN. DIAGRAM: EE7300BH
OUTLINE: SS620964
WINDING: HA32804010 R1 6
SPEED:

CUSTOMER P.O. #:
REFERENCE MODEL #: 444TTTCD16535
CAT #: U1880A
CUSTOMER PART #:
MOUNTING: F1/F2 CAPABLE

### TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNC RPM | FL RPM | FRAME | ENCLOSURE | TYPE | KVA CODE | DESIGN |
|---|---|---|---|---|---|---|---|---|
| 125 | 93 | 1800 | 1790 | 444TV | TEAO | TTC | G | B |

| PH | HZ | VOLTS | AMPS | START TYPE | DUTY | INSL | S.F. | AMB | ELEV. |
|---|---|---|---|---|---|---|---|---|---|
| 3 | 60/50 | 460#380 | 140&136 | PWS & YDRUN OR INV | CONT | H | 1.15 | 40 | 3300 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| F.L. EFF | 95.4 | 3/4 LD EFF | 95.4 | 1/2 LD EFF | 95.0 | GTD EFF | ELECT. TYPE |
| F.L. PF | 87.5 | 3/4 LD PF | 84.2 | 1/2 LD PF | 77.0 | 95.0 | SQ CAGE INV RATED |

| F.L. TORQUE | LR AMPS @ 460 V | L.R. TORQUE | B.D. TORQUE | F.L. RISE (° C) | |
|---|---|---|---|---|---|
| 367 LB-FT | 905 | 679 LB-FT 185% | 991 LB-FT 270% | 0 | |

| SOUND PRESSURE @ 3 FT. | SOUND POWER | ROTOR WK² | MAX. LOAD WK² | SAFE STALL TIME | STARTS/HOUR | APROX. MOTOR WGT |
|---|---|---|---|---|---|---|
| 75 dBA | 84 dBA | 60.0 LB-FT² | 750 LB-FT² | 25 SEC. | 2 | 2375 LB. |

### *** SUPPLEMENTAL INFORMATION ***

| DE BRACKET TYPE | ODE BRACKET TYPE | MOUNT TYPE | MOTOR ORIENTATION | SEVERE DUTY | HAZARDOUS LOCATION | DRIP COVER | SCREENS | PAINT |
|---|---|---|---|---|---|---|---|---|
| STANDARD | STANDARD | RIGID | RIZONTAL OR UP OR DO | PREMIUM SEVERE DUTY | NONE | NO | NONE | BLUE - RAL 5003 (EPOXY) |

| BEARINGS DE | BEARINGS ODE | GREASE | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT MATERIAL | FRAME MATERIAL |
|---|---|---|---|---|---|---|---|
| BALL | BALL | POLYREX EM | T | NONE | NONE | 1045 HOT ROLLED (C-204) | CAST IRON |
| 6319 | 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) | FLOAT |
|---|---|---|---|---|---|---|
| 0.023 | 0.011 | 0.152 | 0.279 | 5.789 | 0.080 | ODE |

* NOTES *

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: 10/29/2021

UL: V - LI,ME-INS,CONST UL REC

FORM: 3531 REV_4 2/27/06