

# Explosion Proof Motors

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**Model No:** 215TTGN16534

**Catalog No:** C371A

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Explosion Proof Motor, 10 HP, 3 Ph, 60 Hz, 575 V, 1800 RPM, 215TC Frame, EPFC

**Product Information Packet: Model No: 215TTGN16534, Catalog No: C371A Explosion Proof Motor, 10 HP, 3 Ph, 60 Hz, 575 V, 1800 RPM, 215TC Frame, EPFC**

### Nameplate Specifications

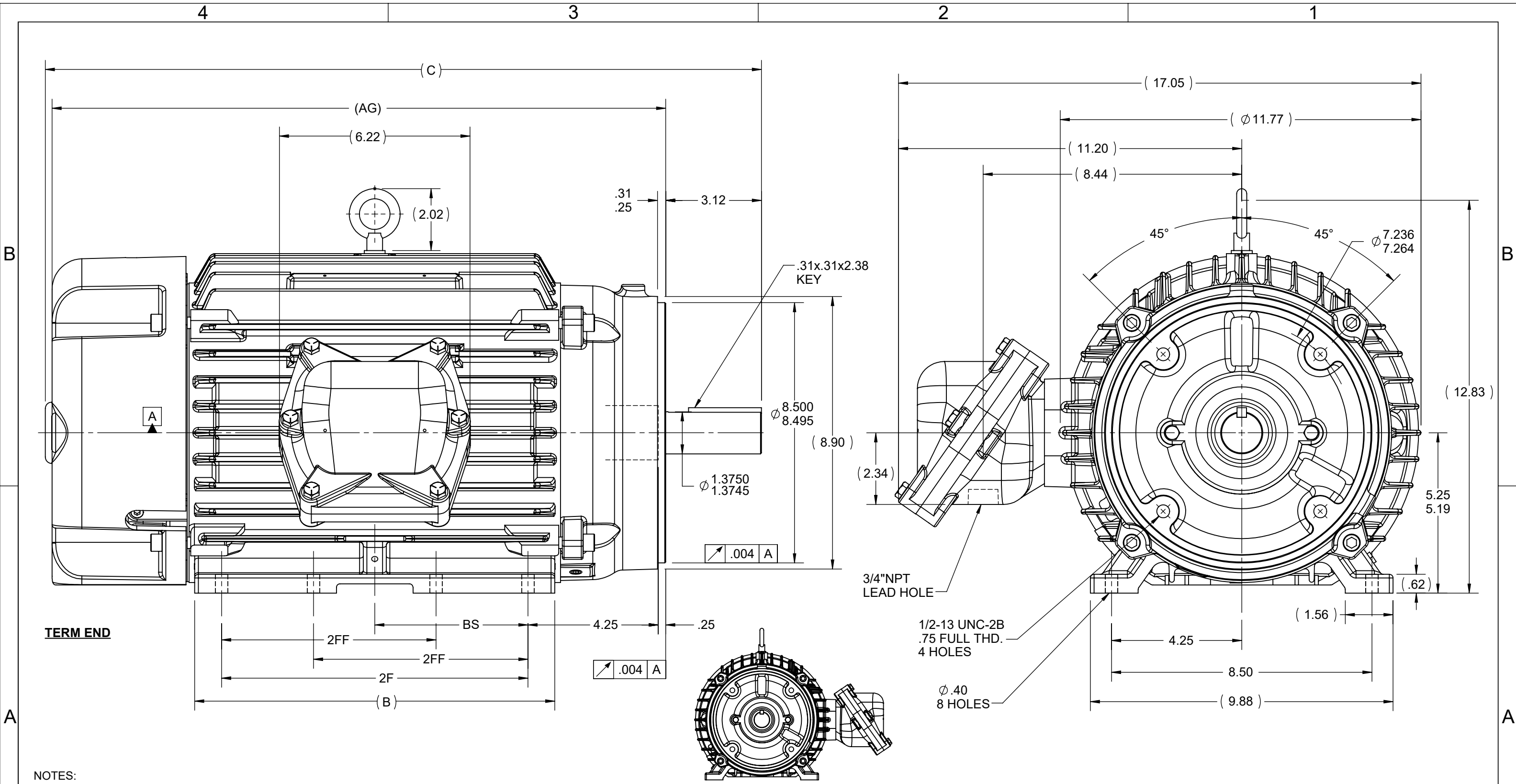
|                            |                                            |                        |                                          |
|----------------------------|--------------------------------------------|------------------------|------------------------------------------|
| Phase                      | 3                                          | Output HP              | 10 Hp                                    |
| Output KW                  | 7.5 kW                                     | Voltage                | 575 V                                    |
| Speed                      | 1765 r/min                                 | Synchronous RPM        | 1800 r/min                               |
| Service Factor             | 1.15                                       | Frame                  | 215TC                                    |
| Enclosure                  | Explosion Proof Fan cooled                 | Thermal Protection     | Thermostat                               |
| Efficiency                 | 91.7 %                                     | Ambient Temperature    | 40 °C                                    |
| Frequency                  | 60 Hz                                      | Current                | 10.0 A                                   |
| Power Factor               | 82                                         | Duty                   | Continuous                               |
| Insulation Class           | F                                          | Design Code            | B                                        |
| KVA Code                   | G                                          | Drive End Bearing Size | 309                                      |
| Opp Drive End Bearing Size | 208                                        | UL                     | UL Listed; also, UL Certified for Canada |
| CSA                        | N                                          | CE                     | N                                        |
| IP Code                    | 54                                         | Number of Speeds       | 1                                        |
| Hazardous Location         | DIV 1 EXP PROOF CL I GR CD CL II GR FG T3B |                        |                                          |

### Technical Specifications

|                       |                              |                       |                  |
|-----------------------|------------------------------|-----------------------|------------------|
| Electrical Type       | Squirrel Cage Inverter Rated | Starting Method       | Line Or Inverter |
| Poles                 | 4                            | Rotation              | Reversible       |
| Resistance Main       | .894 O                       | Mounting              | Rigid Base       |
| Motor Orientation     | Horizontal                   | Drive End Bearing     | Ball             |
| Opp Drive End Bearing | Ball                         | Frame Material        | Cast Iron        |
| Shaft Type            | T                            | Overall Length        | 23.45 in         |
| Frame Length          | 12.12 in                     | Shaft Diameter        | 1 3/8 in         |
| Shaft Extension       | 3.12 in                      | Assembly/Box Mounting | F1 Only          |
| Inverter Load         | Constant 2:1                 |                       |                  |

### Drawings

|                    |           |                 |             |
|--------------------|-----------|-----------------|-------------|
| Connection Drawing | A-EE7300T | Outline Drawing | 037702-1212 |
|--------------------|-----------|-----------------|-------------|



NOTES:

- CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
- CONDUIT BOX CAN BE MOUNTED IN OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°. THIS MODIFICATION CAN BE PERFORMED ONLY BY THE ORIGINAL EQUIPMENT MANUFACTURER, OR BY A FACILITY THAT IS COVERED UNDER UNDERWRITERS LABORATORIES INC. CATEGORY PTKQ, TITLED "MOTOR AND GENERATORS, REBUILT FOR USE IN HAZARDOUS LOCATION".
- NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

|      |         |       |       |    |     |     |       |
|------|---------|-------|-------|----|-----|-----|-------|
| 1212 | 215     | 23.38 | 11.76 | 10 | 7   | 5   | 20.03 |
| 912  | 213/215 | 20.38 | 8.63  | 7  | 5.5 | 3.5 | 17.03 |
| DASH | FRAME   | C     | B     | 2F | 2FF | BS  | AG    |

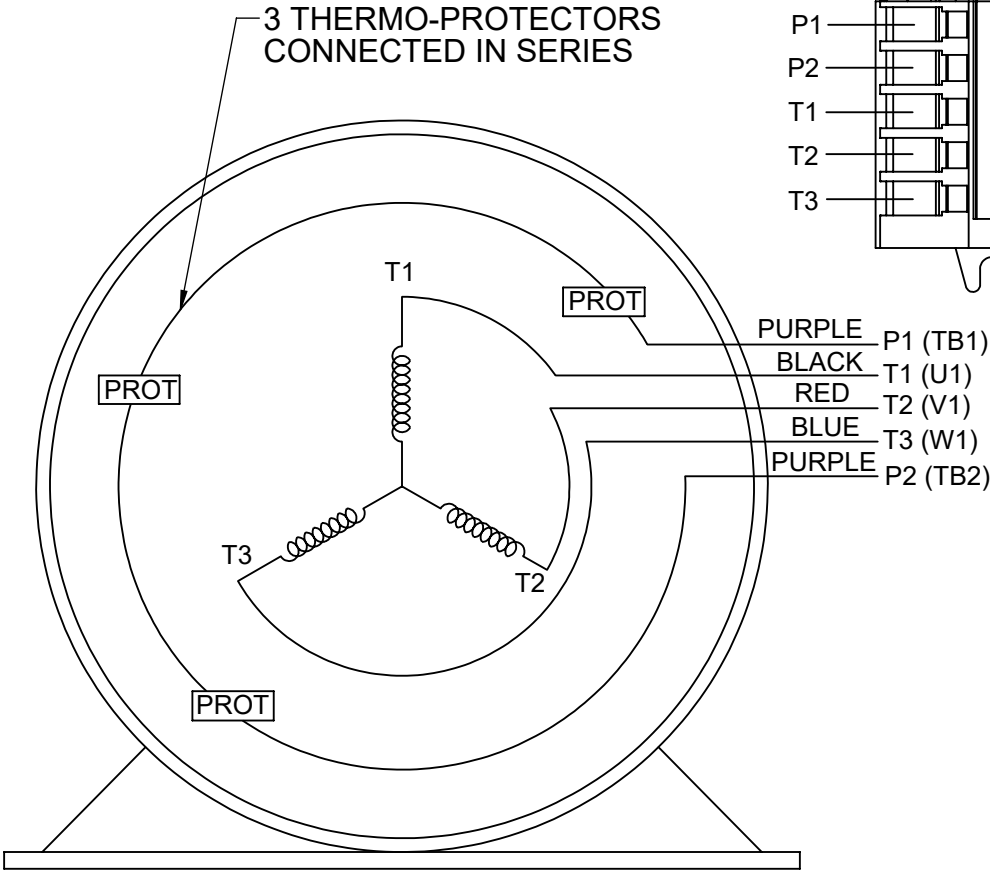
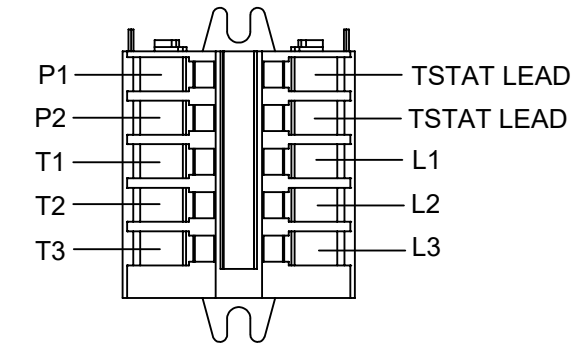
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                    |  |                               |  |                                                                                                                                                                                                                                                                                                                                                |  |                        |  |                  |  |                                            |  |                |  |                 |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--------------------|--|-------------------------------|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|------------------------|--|------------------|--|--------------------------------------------|--|----------------|--|-----------------|--|
| DRAWING REVISION<br>G                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |  | REVISION BY<br>SB  |  | REV DATE/© DATE<br>09/05/2025 |  | TOLERANCES (EXCEPT AS NOTED):<br>DEC. INCH mm ANGLE<br>.X ±0.1 [±3] ±7° 30"<br>.XX ±0.03 [±0.8]<br>.XXX ±0.005 [±0.13]<br>.XXXX ±0.0005 [±0.013]<br>REMOVE BURRS & BREAK SHARP<br>EDGES: .003/.015 [.08/.38] X 45°<br>CORNER FILLETS: R.02 [.5]<br>MACHINED SURFACES: 200 INCH mm 5.1<br>mm DIMENSIONS IN [BRACKETS]<br>ARE FOR REFERENCE ONLY |  |                        |  | DRAWN BY<br>PN   |  | marathon™<br><br>OUTLINE<br>210 FR. - EPFC |  |                |  |                 |  |
| REQUEST NUMBER<br>CR-0023556                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  | APPROVED BY<br>SBD |  | DATE<br>09/05/2025            |  |                                                                                                                                                                                                                                                                                                                                                |  |                        |  | DATE<br>9/2/2010 |  |                                            |  |                |  |                 |  |
| REQUEST NUMBER DESCRIPTION<br>DRAWING TITLE BLOCK UPDATED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |  |                    |  |                               |  |                                                                                                                                                                                                                                                                                                                                                |  | APPROVED BY            |  | DESCRIPTION      |  |                                            |  |                |  |                 |  |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                    |  |                               |  |                                                                                                                                                                                                                                                                                                                                                |  | REFERENCE<br>037660    |  | MATERIAL         |  |                                            |  | PROCESS/FINISH |  |                 |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |                    |  |                               |  |                                                                                                                                                                                                                                                                                                                                                |  | THIRD ANGLE PROJECTION |  | SIZE<br>B        |  | DRAWING NUMBER<br>037702                   |  |                |  | SHEET<br>1 OF 1 |  |

THREE PHASE - SINGLE VOLTAGE  
MOTOR - CONDUIT BOX @ 'A'

TO REVERSE ROTATION:  
INTERCHANGE ANY TWO LINE  
LEAD CONNECTIONS

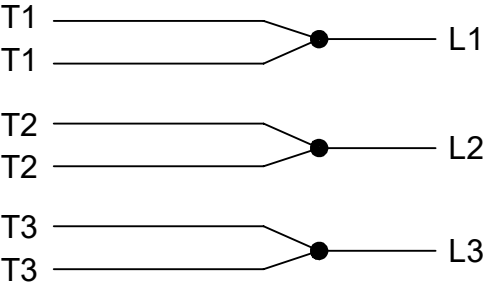
NOTE FOR FACTORY USE ONLY:  
TO SURGE TEST:  
FOR 3 LEAD COMMON CONNECT:  
CONNECT P1 TO T1 THEN P2 TO L1  
FOR 6 LEAD COMMON CONNECT:  
CONNECT P1 TO BOTH T1  
THEN P2 TO L1

TERMINAL BLOCK WHEN SPECIFIED



T2BM  
T6AW  
T6AL  
T6Z  
T4EG  
T4BF  
T8A  
T6H  
T6A  
T4AX  
T4A  
T2A  
T2F

IF MOTOR HAS MULTIPLE  
T'S PER LEAD CONNECT  
TOGETHER LIKE T'S



A-9806 DECAL

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                    |                               |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-------------------------------|
| DRAWING REVISION<br>AC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | REVISION BY<br>SB  | REV DATE/© DATE<br>08/01/2025 |
| REQUEST NUMBER<br>CR-0023654                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | APPROVED BY<br>SBD | DATE<br>08/01/2025            |
| REQUEST NUMBER DESCRIPTION<br>DRAWING TITLE BLOCK UPDATED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                    |                               |
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PRIMARY DIMENSIONS ARE INCH  
mm DIMENSIONS IN [BRACKETS]  
ARE FOR REFERENCE ONLY

|                           |
|---------------------------|
| DRAWN BY<br>LZ            |
| DATE<br>01-04-1994        |
| APPROVED BY<br>GK         |
| DATE<br>01-20-1994        |
| REFERENCE                 |
| THIRD ANGLE<br>PROJECTION |

|                                                                             |                           |                 |
|-----------------------------------------------------------------------------|---------------------------|-----------------|
| <b>marathon™</b>                                                            |                           |                 |
| DESCRIPTION<br>CONN DIAGRAM-EXTERNAL<br>3Ø-SINGLE VOLT-MOTOR WITH PROTECTOR |                           |                 |
| MATERIAL                                                                    | PROCESS/FINISH            |                 |
| SIZE<br>A                                                                   | DRAWING NUMBER<br>EE7300T | SHEET<br>1 OF 1 |

## Data Sheet

Date: 6/19/2017

Customer: \_\_\_\_\_

Attention: \_\_\_\_\_

Submitted by: FAREEDA DUDEKULA



215TTGN16534

Submittal

Data @ 575 V

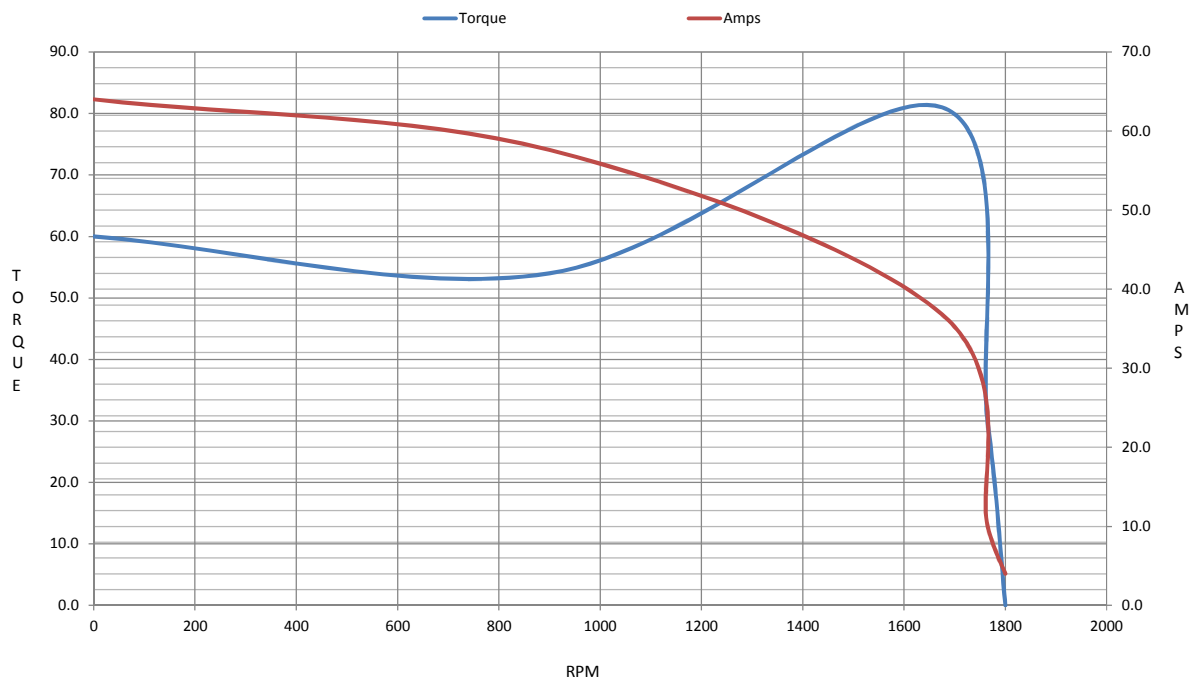
## Motor Load Data

| Load           | 0%   | 25%  | 50%  | 75%  | 100% | 115%  | 125% | LR   |  |
|----------------|------|------|------|------|------|-------|------|------|--|
| Current (Amps) | 4.0  | 4.4  | 6.0  | 8.0  | 10.0 | 11.2  | 12.4 | 64.0 |  |
| Torque (ft-lb) | 0.00 | 7.5  | 14.5 | 22.0 | 29.8 | 34.5  | 37.5 | 60.0 |  |
| RPM            | 1800 | 1790 | 1785 | 1775 | 1765 | 1,755 | 1750 | 0    |  |
| Efficiency (%) |      | 87.5 | 91.0 | 91.7 | 91.7 | 91.0  | 90.2 |      |  |
| P.F. (%)       | 6.5  | 47.0 | 68.0 | 78.0 | 82.0 | 83.5  | 83.5 | 42.0 |  |

## Motor Speed Data

|                                                                                                                                                                          |        |         |        |         |      |                             |                         |  |  |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|---------|--------|---------|------|-----------------------------|-------------------------|--|--|--|
|                                                                                                                                                                          | LR     | Pull-Up | BD     | Rated   | Idle | Information Block           |                         |  |  |  |
| Speed (RPM)                                                                                                                                                              | 0      | 900     | 1675   | 1765    | 1800 | HP                          | 10.0                    |  |  |  |
| Current (Amps)                                                                                                                                                           | 64.0   | 57.6    | 36.8   | 10.0    | 4.0  | Sync. RPM                   | 1800                    |  |  |  |
| Torque (ft-lb)                                                                                                                                                           | 60.0   | 54.0    | 81.0   | 29.8    | 0.00 | Frame                       | 215                     |  |  |  |
| <div><div>Efficiency (%)</div><div>P.F. (%)</div><div>Current (Amps)</div></div> <div>EFFICIENCY (%)</div> <div>P.F. (%)</div> <div>CURRENT (AMPS)</div> <div>LOAD</div> |        |         |        |         |      | Enclosure                   | TEFC                    |  |  |  |
|                                                                                                                                                                          |        |         |        |         |      | Construction                | TFN                     |  |  |  |
|                                                                                                                                                                          |        |         |        |         |      | Voltage                     | 575 V                   |  |  |  |
|                                                                                                                                                                          |        |         |        |         |      | Frequency                   | 60 Hz                   |  |  |  |
|                                                                                                                                                                          |        |         |        |         |      | Design                      | B                       |  |  |  |
|                                                                                                                                                                          |        |         |        |         |      | LR Code letter              | G                       |  |  |  |
|                                                                                                                                                                          |        |         |        |         |      | Service Factor              | 1.15                    |  |  |  |
|                                                                                                                                                                          |        |         |        |         |      | Temp Rise @ FL              | 55 ° C                  |  |  |  |
|                                                                                                                                                                          |        |         |        |         |      | Duty                        | CONT                    |  |  |  |
|                                                                                                                                                                          |        |         |        |         |      | Ambient                     | 40 ° C                  |  |  |  |
|                                                                                                                                                                          |        |         |        |         |      | Elevation                   | 1,000 feet              |  |  |  |
|                                                                                                                                                                          |        |         |        |         |      | Rotor/Shaft wk <sup>2</sup> | 1.20 Lb-Ft <sup>2</sup> |  |  |  |
|                                                                                                                                                                          |        |         |        |         |      | Ref Wdg                     | K2154249 NONE           |  |  |  |
|                                                                                                                                                                          |        |         |        |         |      | Sound Pressure @ 1M         | 62 dBA                  |  |  |  |
|                                                                                                                                                                          |        |         |        |         |      | VFD Rating                  | CONSTANT 2:1            |  |  |  |
|                                                                                                                                                                          |        |         |        |         |      | Outline Dwg                 | 037702-1212             |  |  |  |
|                                                                                                                                                                          |        |         |        |         |      | Conn. Diag                  | A-EE7300T               |  |  |  |
| Additional Specifications:                                                                                                                                               |        |         |        |         |      |                             |                         |  |  |  |
| 0                                                                                                                                                                        |        |         |        |         |      |                             |                         |  |  |  |
| 0                                                                                                                                                                        |        |         |        |         |      |                             |                         |  |  |  |
| EQUIV CKT (OHMS / PHASE)                                                                                                                                                 |        |         |        |         |      |                             |                         |  |  |  |
| R1                                                                                                                                                                       | R2     | X1      | X2     | Xm      |      |                             |                         |  |  |  |
| 0.8430                                                                                                                                                                   | 0.7630 | 3.2700  | 5.0140 | 79.8750 |      |                             |                         |  |  |  |

## Speed -Torque Curve



## CERTIFICATION DATA SHEET

Model#: 215TTGN16534 AA  
 CONN. DIAGRAM: A-EE7300T  
 OUTLINE: 037702-1212

WINDING#: K2154249 NONE 4  
 ASSEMBLY: F1 ONLY

## TYPICAL MOTOR PERFORMANCE DATA

| HP | KW  | SYNC. RPM | F.L. RPM | FRAME | ENCLOSURE | KVA CODE | DESIGN |
|----|-----|-----------|----------|-------|-----------|----------|--------|
| 10 | 7.5 | 1800      | 1765     | 215TC | EPFC      | G        | B      |

| PH | Hz | VOLTS | FL AMPS | START TYPE          | DUTY       | INSL | S.F  | AMB°C | ELEVATION |
|----|----|-------|---------|---------------------|------------|------|------|-------|-----------|
| 3  | 60 | 575   | 10      | LINE OR<br>INVERTER | CONTINUOUS | F3   | 1.15 | 40    | 3300      |

|                     |                    |                  |          |                   |              |
|---------------------|--------------------|------------------|----------|-------------------|--------------|
| FULL LOAD EFF: 91.7 | 3/4 LOAD EFF: 91.7 | 1/2 LOAD EFF: 91 | GTD. EFF | ELEC. TYPE        | NO LOAD AMPS |
| FULL LOAD PF: 82    | 3/4 LOAD PF: 78    | 1/2 LOAD PF: 68  | 91       | SQ CAGE INV RATED | 4            |

|             |                   |              |              |             |
|-------------|-------------------|--------------|--------------|-------------|
| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE  | B.D. TORQUE  | F.L. RISE°C |
| 29.8 LB-FT  | 64                | 60 LB-FT 201 | 81 LB-FT 272 | 55          |

|                           |             |             |             |                 |                 |                      |
|---------------------------|-------------|-------------|-------------|-----------------|-----------------|----------------------|
| SOUND PRESSURE<br>@ 3 FT. | SOUND POWER | ROTOR WK^2  | MAX. WK^2   | SAFE STALL TIME | STARTS<br>/HOUR | APPROX. MOTOR<br>WGT |
| 62 dBA                    | 72 dBA      | 1.2 LB-FT^2 | 192 LB-FT^2 | 20 SEC.         | 2               | 240 LBS.             |

## \*\*\* SUPPLEMENTAL INFORMATION \*\*\*

| DE BRACKET<br>TYPE | ODE BRACKET<br>TYPE | MOUNT<br>TYPE | ORIENTATION | SEVERE<br>DUTY         | HAZARDOUS<br>LOCATION                      | DRIP<br>COVER | SCREENS | PAINT        |
|--------------------|---------------------|---------------|-------------|------------------------|--------------------------------------------|---------------|---------|--------------|
| C-FACE             | STANDARD            | RIGID         | HORIZONTAL  | PREMIUM<br>SEVERE DUTY | EXP PROOF CL<br>I GR D CL II GR<br>F&G T3B | FALSE         | NONE    | BLUE (EPOXY) |

| BEARINGS |      | GREASE     | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT<br>MATERIAL          | FRAME<br>MATERIAL |
|----------|------|------------|------------|------------|-------------|----------------------------|-------------------|
| DE       | OPE  |            |            |            |             |                            |                   |
| BALL     | BALL |            |            |            |             |                            |                   |
| 309      | 208  | POLYREX EM | T          | NONE       | NONE        | 1045 HOT<br>ROLLED (C-204) | CAST IRON         |

| THERMO-PROTECTORS |            |          |          | THERMISTORS | CONTROL | SPACE /n HEATERS |
|-------------------|------------|----------|----------|-------------|---------|------------------|
| THERMOSTATS       | PROTECTORS | WDG RTDs | BRG RTDs |             |         |                  |
| TSTATS (N/C)      | NOT        | NONE     | NONE     | NONE        | FALSE   | NONE VOLTS       |

If Inverter equals NONE, contact factory for further  
information

INVERTER TORQUE: CONSTANT 2:1  
 INV. HP SPEED RANGE: NONE

ENCODER: NONE  
 NONE NONE  
 NONE NONE PPR

BRAKE: NONE NONE  
 NONE P/N NONE  
 NONE NONE  
 - FT-LB NONE V NONE Hz

\*  
N  
O  
T  
E  
S  
\*

DATE: 06/22/2017 08:31:55 AM  
 FORM 3531 REV.3 02/07/99  
 \*\* Subject to change without notice.