

# Inverter (Vector) Duty Motors

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**Model No:** 213THFBD7726

**Catalog No:** Y994A

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Inverter (Vector) Duty Motor, 7.50 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 213TC Frame, TEFC

**Product Information Packet: Model No: 213THFBD7726, Catalog No: Y994A Inverter (Vector) Duty Motor, 7.50 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 213TC Frame, TEFC**

### Nameplate Specifications

|                            |                                    |                        |                      |
|----------------------------|------------------------------------|------------------------|----------------------|
| Phase                      | <b>3</b>                           | Output HP              | <b>7.50 Hp</b>       |
| Output KW                  | <b>5.6 kW</b>                      | Voltage                | <b>230/460 V</b>     |
| Speed                      | <b>1770 r/min</b>                  | Synchronous RPM        | <b>1800 r/min</b>    |
| Service Factor             | <b>1.00</b>                        | Frame                  | <b>213TC</b>         |
| Enclosure                  | <b>Totally Enclosed Fan Cooled</b> | Thermal Protection     | <b>No Protection</b> |
| Efficiency                 | <b>90.6 %</b>                      | Ambient Temperature    | <b>40 °C</b>         |
| Frequency                  | <b>60 Hz</b>                       | Current                | <b>19.0/9.5 A</b>    |
| Power Factor               | <b>80.5</b>                        | Duty                   | <b>Continuous</b>    |
| Insulation Class           | <b>H</b>                           | Design Code            | <b>INV</b>           |
| KVA Code                   | <b>L</b>                           | Drive End Bearing Size | <b>6307</b>          |
| Opp Drive End Bearing Size | <b>6206</b>                        | UL                     | <b>Recognized</b>    |
| CSA                        | <b>Y</b>                           | CE                     | <b>Y</b>             |
| IP Code                    | <b>43</b>                          | Number of Speeds       | <b>1</b>             |

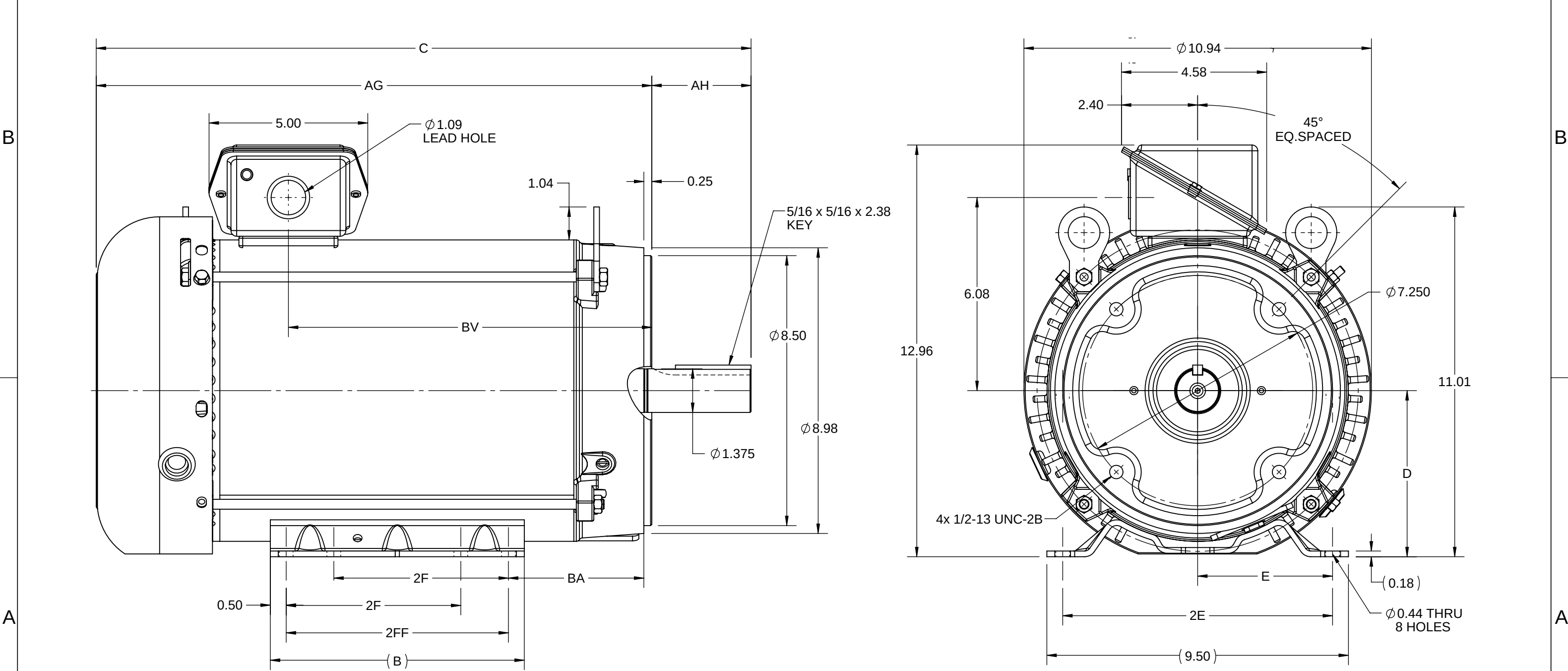
### Technical Specifications

|                       |                                    |                   |                      |
|-----------------------|------------------------------------|-------------------|----------------------|
| Electrical Type       | <b>Squirrel Cage Inverter Duty</b> | Starting Method   | <b>Inverter Only</b> |
| Poles                 | <b>4</b>                           | Rotation          | <b>Reversible</b>    |
| Resistance Main       | <b>1.1352 O</b>                    | Mounting          | <b>Rigid Base</b>    |
| Motor Orientation     | <b>Horizontal</b>                  | Drive End Bearing | <b>Ball</b>          |
| Opp Drive End Bearing | <b>Ball</b>                        | Frame Material    | <b>Rolled Steel</b>  |
| Shaft Type            | <b>T</b>                           | Shaft Diameter    | <b>1.375 in</b>      |
| Assembly/Box Mounting | <b>F3</b>                          | Inverter Load     | <b>Constant 20:1</b> |

### Drawings

|                    |               |                 |                     |
|--------------------|---------------|-----------------|---------------------|
| Connection Drawing | <b>EE7308</b> | Outline Drawing | <b>SS621036-100</b> |
|--------------------|---------------|-----------------|---------------------|

| 4        |      |       |      | 3    |      |      |      |       |      | 2    |       |          | 1     |  |
|----------|------|-------|------|------|------|------|------|-------|------|------|-------|----------|-------|--|
| DASH NO. | B    | C     | D    | E    | 2E   | 2F   | 2FF  | AG    | AH   | BA   | BV    | MOUNTING | FRAME |  |
| 100      | 8.00 | 19.12 | 5.25 | 4.25 | 8.50 | 5.50 | 7.00 | 16.00 | 3.12 | 4.25 | 9.95  | F3       | 213TC |  |
| 200      |      | 20.62 |      |      |      |      |      | 17.50 |      |      | 11.45 |          | 215TC |  |



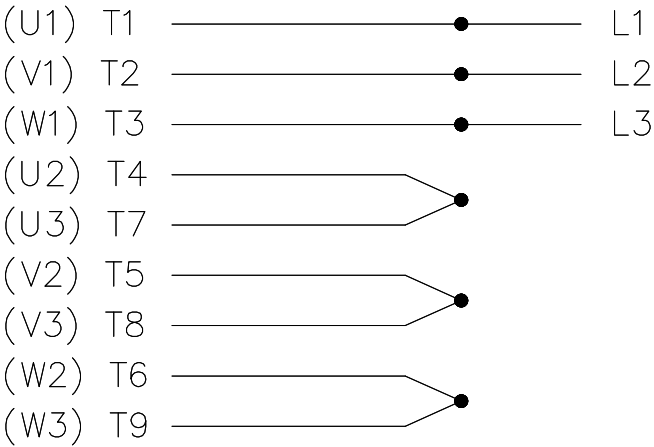
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|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-------------------------------|
| DRAWING REVISION<br>E                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | REVISION BY<br>SB  | REV DATE/© DATE<br>05/19/2026 |
| REQUEST NUMBER<br>CR-0026322                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | APPROVED BY<br>RMS | DATE<br>05/19/2026            |
| REQUEST NUMBER DESCRIPTION<br>DRAWING TITLE BLOCK UPDATED                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                    |                               |
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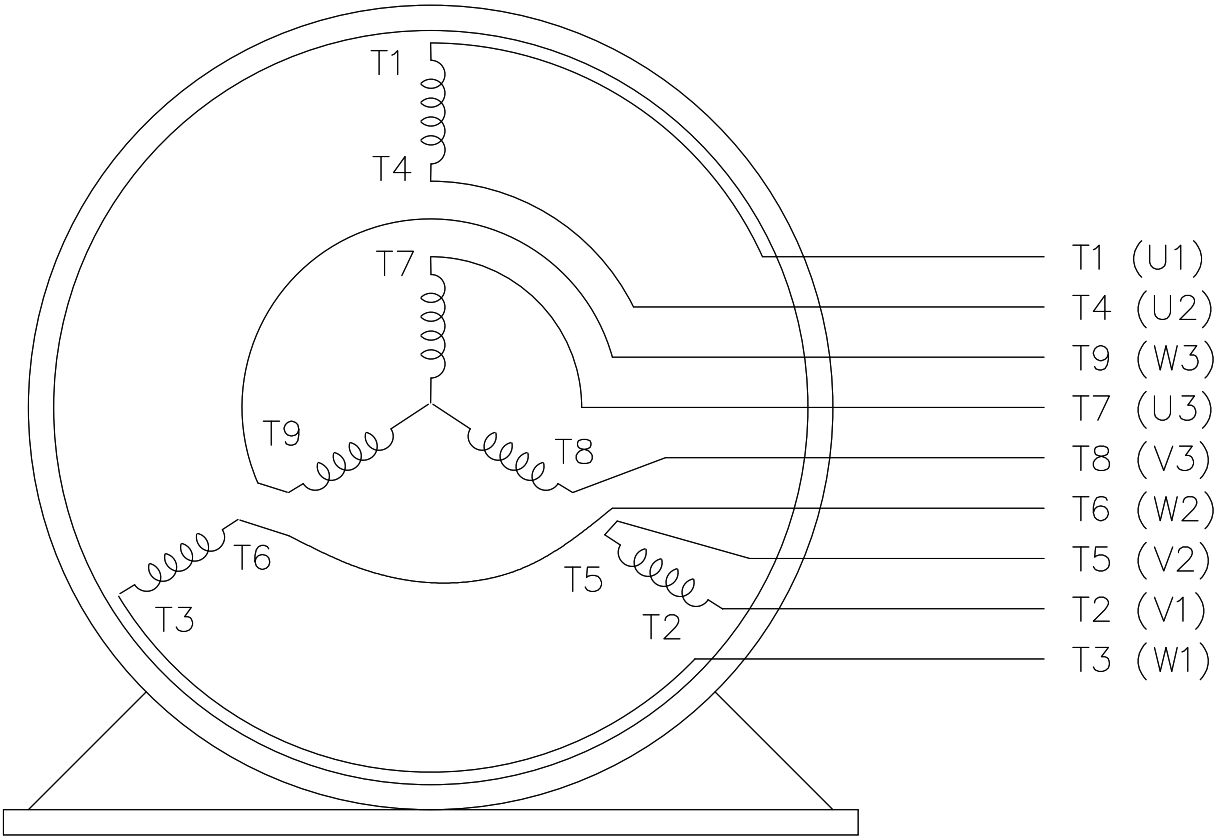
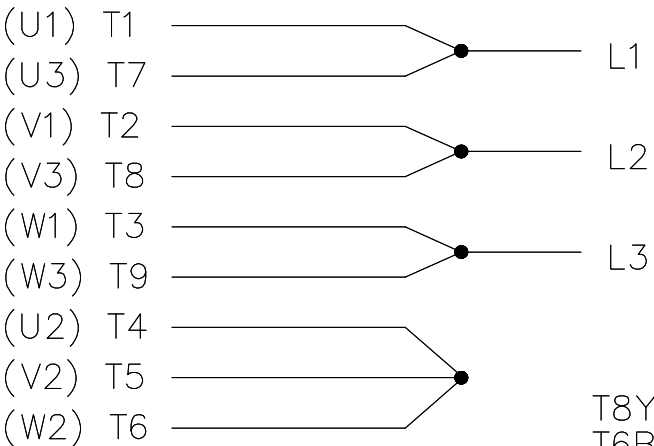
|                           |                                  |                                   |                 |
|---------------------------|----------------------------------|-----------------------------------|-----------------|
| DRAWN BY<br>SRS           | <b>marathon™</b>                 |                                   |                 |
| DATE<br>16/06/2020        |                                  |                                   |                 |
| APPROVED BY<br>GNK        | DESCRIPTION<br><b>OUTLINE</b>    |                                   |                 |
| DATE<br>16/06/2020        | 213/215TC FR NEMA TEFC RS F3 MTG |                                   |                 |
| REFERENCE                 | MATERIAL                         | PROCESS/FINISH                    |                 |
| THIRD ANGLE<br>PROJECTION | SIZE<br>B                        | DRAWING NUMBER<br><b>SS621036</b> | SHEET<br>1 OF 1 |

THREE PHASE  
DUAL VOLTAGE MOTOR

HIGH VOLTAGE



LOW VOLTAGE



VIEW OF TERMINAL END

REF.  
WINDING DIAGRAM

T8Y, T2Y, T2BL, T4BX, T2EC, T2G  
T6BZ, T2B, T6BL, T4AV, T6B, T4B

OPTIONAL CORD  
CONNECTION

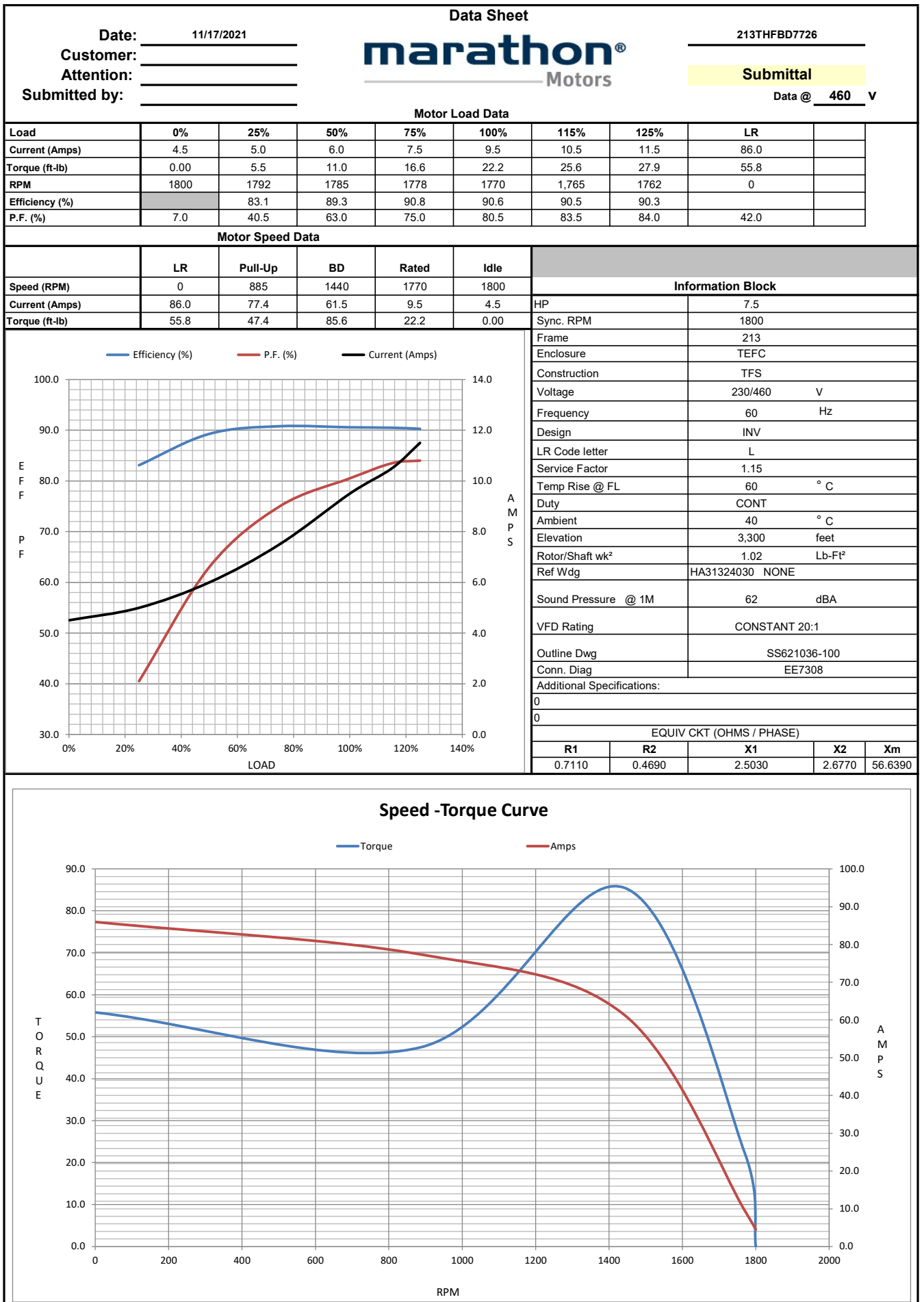
L1 WHITE  
L2 RED  
L3 BLACK

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                    |                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------------------------|
| DRAWING REVISION<br>J                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 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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|                           |
|---------------------------|
| DRAWN BY<br>RM            |
| DATE<br>11/20/1990        |
| APPROVED BY<br>SAS        |
| DATE<br>04/24/2003        |
| REFERENCE                 |
| THIRD ANGLE<br>PROJECTION |

|                                                                 |                          |                 |
|-----------------------------------------------------------------|--------------------------|-----------------|
| marathon™                                                       |                          |                 |
| DESCRIPTION<br>CONN DIAGRAM-EXTERNAL<br>3Ø - DUAL VOLTAGE MOTOR |                          |                 |
| MATERIAL                                                        |                          | PROCESS/FINISH  |
| SIZE<br>A                                                       | DRAWING NUMBER<br>EE7308 | SHEET<br>1 OF 1 |
| 4 of 6                                                          |                          |                 |





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

DATA VOLTS: 460

### CERTIFICATION DATA SHEET

**CUSTOMER:****ORDER #:****CONN. DIAGRAM:****OUTLINE:****WINDING:****SPEED:**

EE7308

SS621036-100

HA31324030

NONE

2

**CUSTOMER P.O. #:****REFERENCE MODEL #:****CAT #:****CUSTOMER PART #:****MOUNTING:**

213THFBD7726

Y994A

F3

### TYPICAL MOTOR PERFORMANCE DATA

| HP  | KW  | SYNC RPM | FL RPM | FRAME | ENCLOSURE | TYPE | KVA CODE | DESIGN |
|-----|-----|----------|--------|-------|-----------|------|----------|--------|
| 7.5 | 5.6 | 1800     | 1770   | 213TC | TEFC      | TFS  | L        | INV    |

| PH | HZ | VOLTS   | AMPS   | START TYPE    | DUTY | INSL | S.F. | AMB | ELEV. |
|----|----|---------|--------|---------------|------|------|------|-----|-------|
| 3  | 60 | 230/460 | 19/9.5 | INVERTER ONLY | CONT | H    | 1.15 | 40  | 3300  |

|          |      |            |      |            |      |         |                  |
|----------|------|------------|------|------------|------|---------|------------------|
| F.L. EFF | 90.6 | 3/4 LD EFF | 90.8 | 1/2 LD EFF | 89.3 | GTD EFF | ELECT. TYPE      |
| F.L. PF  | 80.5 | 3/4 LD PF  | 75.0 | 1/2 LD PF  | 63.0 | 89.9    | SQ CAGE INV DUTY |

|             |                 |             |             |                |
|-------------|-----------------|-------------|-------------|----------------|
| F.L. TORQUE | LR AMPS @ 460 V | L.R. TORQUE | B.D. TORQUE | F.L. RISE (°C) |
| 22.2 LB-FT  | 86.0            | 55.8 LB-FT  | 85.6 LB-FT  | 60             |

|                        |        |       |                         |                           |                 |             |         |           |
|------------------------|--------|-------|-------------------------|---------------------------|-----------------|-------------|---------|-----------|
| SOUND PRESSURE @ 3 FT. | SOUND  | POWER | ROTOR WK <sup>2</sup>   | MAX. LOAD WK <sup>2</sup> | SAFE STALL TIME | STARTS/HOUR | APPROX. | MOTOR WGT |
| 62 dBA                 | 71 dBA |       | 1.02 LB-FT <sup>2</sup> | 16 LB-FT <sup>2</sup>     | 30 SEC.         | 2           | 180     | LB.       |

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

|                 |                  |            |                   |             |                    |            |         |               |
|-----------------|------------------|------------|-------------------|-------------|--------------------|------------|---------|---------------|
| DE BRACKET TYPE | ODE BRACKET TYPE | MOUNT TYPE | MOTOR ORIENTATION | SEVERE DUTY | HAZARDOUS LOCATION | DRIP COVER | SCREENS | PAINT         |
| C-FACE          | STANDARD         | RIGID      | HORIZONTAL        | NO          | NONE               | YES        | NONE    | BLUE (ENAMEL) |

|           |            |            |            |             |                         |          |                |
|-----------|------------|------------|------------|-------------|-------------------------|----------|----------------|
| BEARINGS  | GREASE     | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT                   | MATERIAL | FRAME MATERIAL |
| DE ODE    |            |            |            |             |                         |          |                |
| BALL BALL | POLYREX EM | T          | NONE       | NONE        | 1045 HOT ROLLED (C-204) |          | ROLLED STEEL   |
| 6307 6206 |            |            |            |             |                         |          |                |

|             |            |           |           |             |         |       |         |
|-------------|------------|-----------|-----------|-------------|---------|-------|---------|
| 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 |
| 0.711        | 0.469        | 2.503        | 2.677        | 56.639       | 0.150              | ODE   |

|                                  |                                                             |  |  |  |
|----------------------------------|-------------------------------------------------------------|--|--|--|
| *<br>N<br>O<br>T<br>E<br>s       | INVERTER TORQUE: CONSTANT 20:1<br>INV. HP SPEED RANGE: NONE |  |  |  |
|                                  | ENCODER: NONE<br>NONE<br>NONE                               |  |  |  |
|                                  | BRAKE: NONE<br>NONE<br>NONE                                 |  |  |  |
|                                  | FT-LB: NA<br>VOLTAGE: NONE                                  |  |  |  |
|                                  | UL: V-INS, CONST UL REC                                     |  |  |  |
| PREPARED BY: 11/17/2021<br>DATE: |                                                             |  |  |  |

FORM: 3531 REV\_4

2/27/06