marathon®

# Severe Duty Motors

**Model No:** 256TTFCD6540
**Catalog No:** E045

Severe Duty Motor, 20 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 256TC Frame, TEFC

©2026 Marathon, All Rights Reserved.

marathon®

## Product Information Packet: Model No: 256TTFCD6540, Catalog No: E045  Severe Duty Motor, 20 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 256TC Frame, TEFC

### Nameplate Specifications

| | | | |
|---|---|---|---|
| Phase | **3** | Output HP | **20 Hp** |
| Output KW | **14.9 kW** | Voltage | **230/460 V** |
| Speed | **1768 r/min** | Synchronous RPM | **1800 r/min** |
| Service Factor | **1.15** | Frame | **256TC** |
| Enclosure | **Totally Enclosed Fan Cooled** | Thermal Protection | **No Protection** |
| Efficiency | **93 %** | Ambient Temperature | **40 °C** |
| Frequency | **60 Hz** | Current | **48.5/24.2 A** |
| Power Factor | **83.5** | Duty | **Continuous** |
| Insulation Class | **H** | Design Code | **B** |
| KVA Code | **G** | Drive End Bearing Size | **6309** |
| Opp Drive End Bearing Size | **6209** | UL | **Listed** |
| CSA | **Y** | CE | **Y** |
| IP Code | **55** | Number of Speeds | **1** |
| Hazardous Location | **DIVISION 2 T2B** | | |

### Technical Specifications

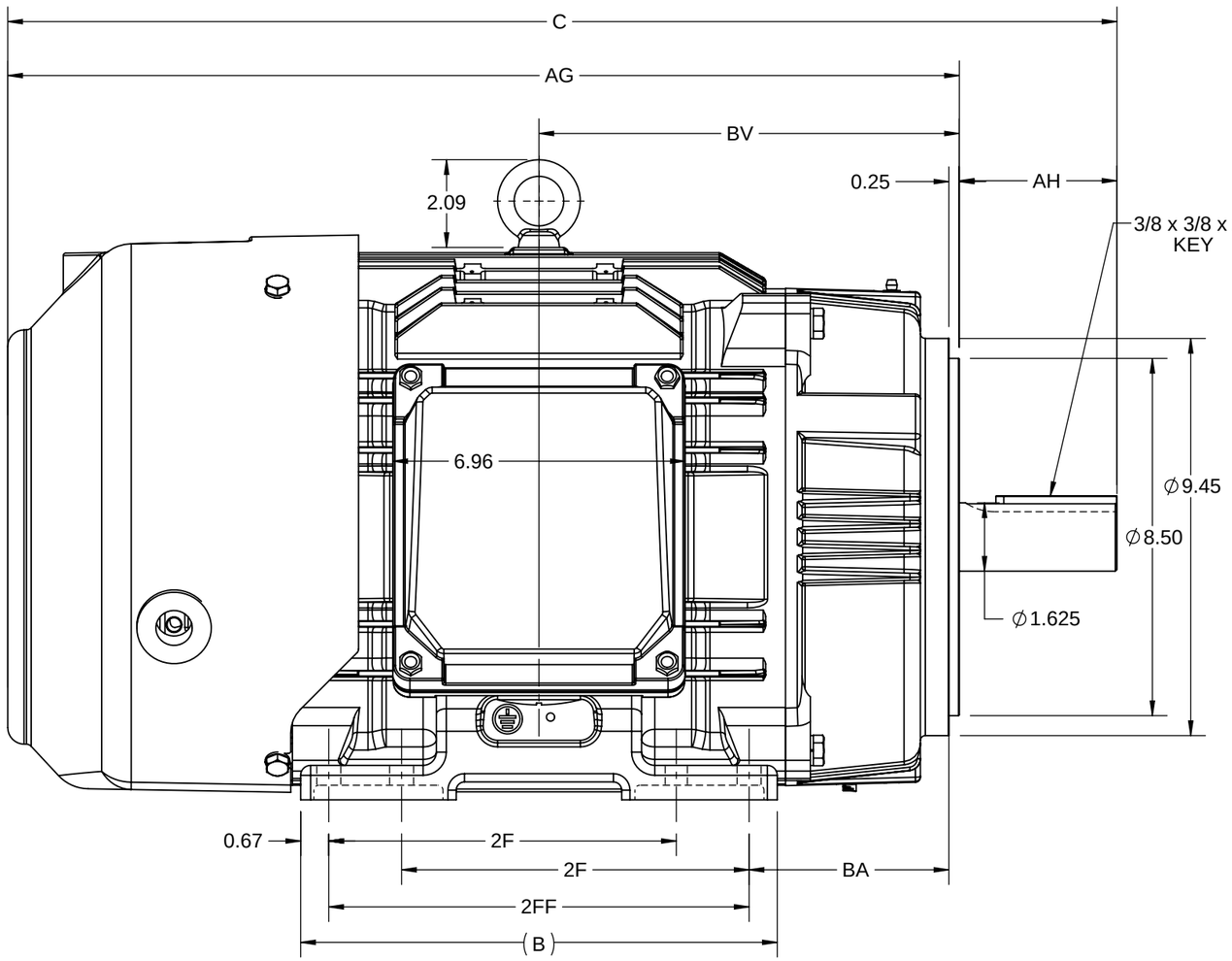
| | | | |
|---|---|---|---|
| Electrical Type | **Squirrel Cage Inverter Rated** | Starting Method | **Line Or Inverter** |
| Poles | **4** | Rotation | **Reversible** |
| Resistance Main | **.513 O** | Mounting | **Rigid Base** |
| Motor Orientation | **Horizontal** | Drive End Bearing | **Ball** |
| Opp Drive End Bearing | **Ball** | Frame Material | **Cast Iron** |
| Shaft Type | **T** | Shaft Diameter | **1.626 in** |
| Assembly/Box Mounting | **F1/F2 Capable** | Inverter Load | **Constant 10:1/Variable 10:1** |

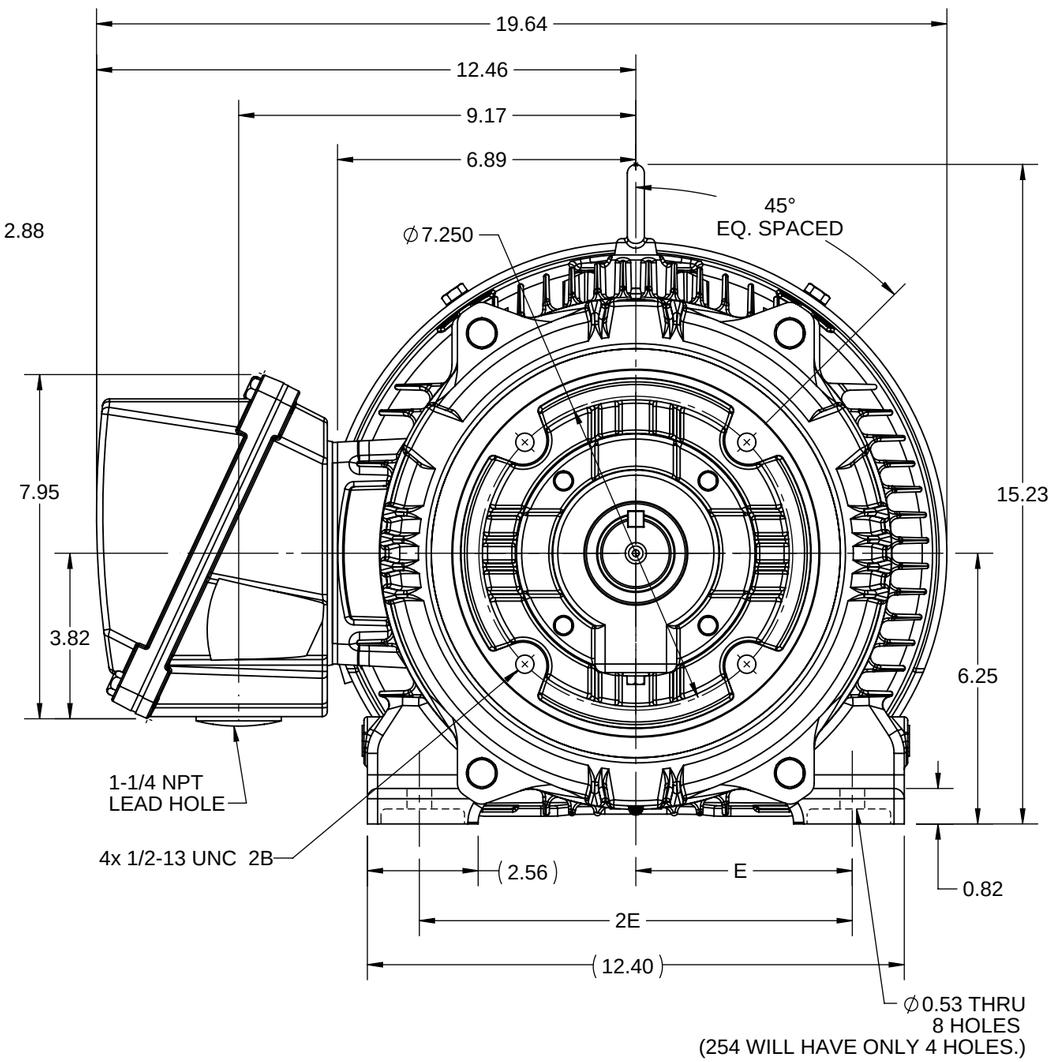
### Drawings

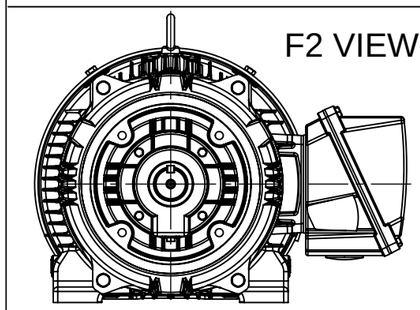
| | | | |
|---|---|---|---|
| Connection Drawing | **EE7308** | Outline Drawing | **SS208571-200** |

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created: 15/10/2026

| DASH NO. | B | C | E | 2E | 2F | 2FF | AG | AH | BA | BV | MOUNTING | FRAME |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 100 | 9.60 | 24.65 | 5.00 | 10.00 | --- | 8.25 | 20.90 | 3.75 | 4.75 | 9.14 | F1 OR F2 | 254TC |
| 200 | 11.34 | 26.39 | | | 8.25 | 10.00 | 22.64 | | | 10.00 | | 254/256TC |




| DRAWING REVISION | REVISION BY | REV DATE/© DATE |
|---|---|---|
| C | SB | 12/22/2025 |
| REQUEST NUMBER | APPROVED BY | DATE |
| CR-0024964 | RMS | 12/22/2025 |

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 | DESCRIPTION |
|---|---|
| BISWA | OUTLINE |
| DATE | 254/256TC FR-NEMA-SD & IEEE841 |
| 13/03/2019 | |
| APPROVED BY | |
| SBD | |
| DATE | |
| 13/03/2019 | |
| REFERENCE | MATERIAL / PROCESS/FINISH |

THIRD ANGLE PROJECTION

| SIZE | DRAWING NUMBER | SHEET |
|---|---|---|
| B | SS208571 | 1 OF 1 |

Uncontrolled Copy

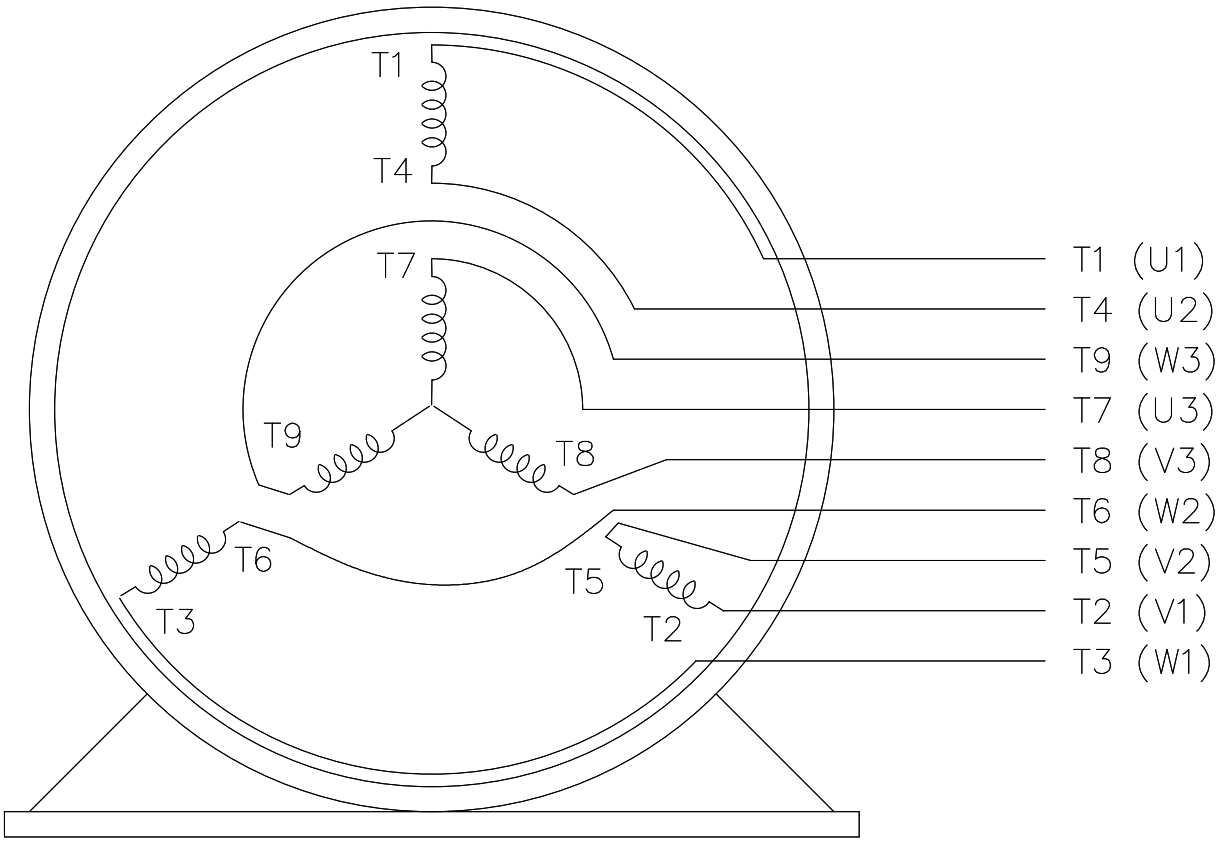
# THREE PHASE
# DUAL VOLTAGE MOTOR

## HIGH VOLTAGE

(U1) T1 — L1
(V1) T2 — L2
(W1) T3 — L3
(U2) T4
(U3) T7
(V2) T5
(V3) T8
(W2) T6
(W3) T9

## LOW VOLTAGE

(U1) T1
(U3) T7 — L1
(V1) T2
(V3) T8 — L2
(W1) T3
(W3) T9 — L3
(U2) T4
(V2) T5
(W2) T6




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

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 | RM |
|---|---|
| DATE | 11/20/1990 |
| APPROVED BY | SAS |
| DATE | 04/24/2003 |
| REFERENCE | |
| THIRD ANGLE PROJECTION | |

marathon™

DESCRIPTION
CONN DIAGRAM-EXTERNAL
3Ø - DUAL VOLTAGE MOTOR

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

| SIZE | DRAWING NUMBER | SHEET |
|---|---|---|
| A | 4 of 4 EE7308 | 1 OF 1 |