marathon®

General Purpose Motors

Model No: 254TTDBD6081
Catalog No: GT0317

General Purpose Motor, 7.50 & 5 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1200 RPM, 254TC Frame, DP

©2026 Marathon, All Rights Reserved.

marathon®

Product Information Packet: Model No: 254TTDBD6081, Catalog No: GT0317 General Purpose Motor, 7.50 & 5 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1200 RPM, 254TC Frame, DP

Nameplate Specifications

Phase	**3**	Output HP	**7.50 & 5 Hp**
Output KW	**5.6 & 3.7 kW**	Voltage	**230/460 & 190/380 V**
Speed	**1182 & 984 r/min**	Synchronous RPM	**1200 & 1000 r/min**
Service Factor	**1.15 & 1.15**	Frame	**254TC**
Enclosure	**Drip Proof**	Thermal Protection	**No Protection**
Efficiency	**90.2 & 89.5 %**	Ambient Temperature	**40 °C**
Frequency	**60 & 50 Hz**	Current	**20.2/10.1 & 17.6/8.8 A**
Power Factor	**77**	Duty	**Continuous**
Insulation Class	**F**	Design Code	**B**
KVA Code	**H**	Drive End Bearing Size	**6309**
Opp Drive End Bearing Size	**6208**	UL	**Recognized**
CSA	**Y**	CE	**Y**
IP Code	**22**	Number of Speeds	**1**

Technical Specifications

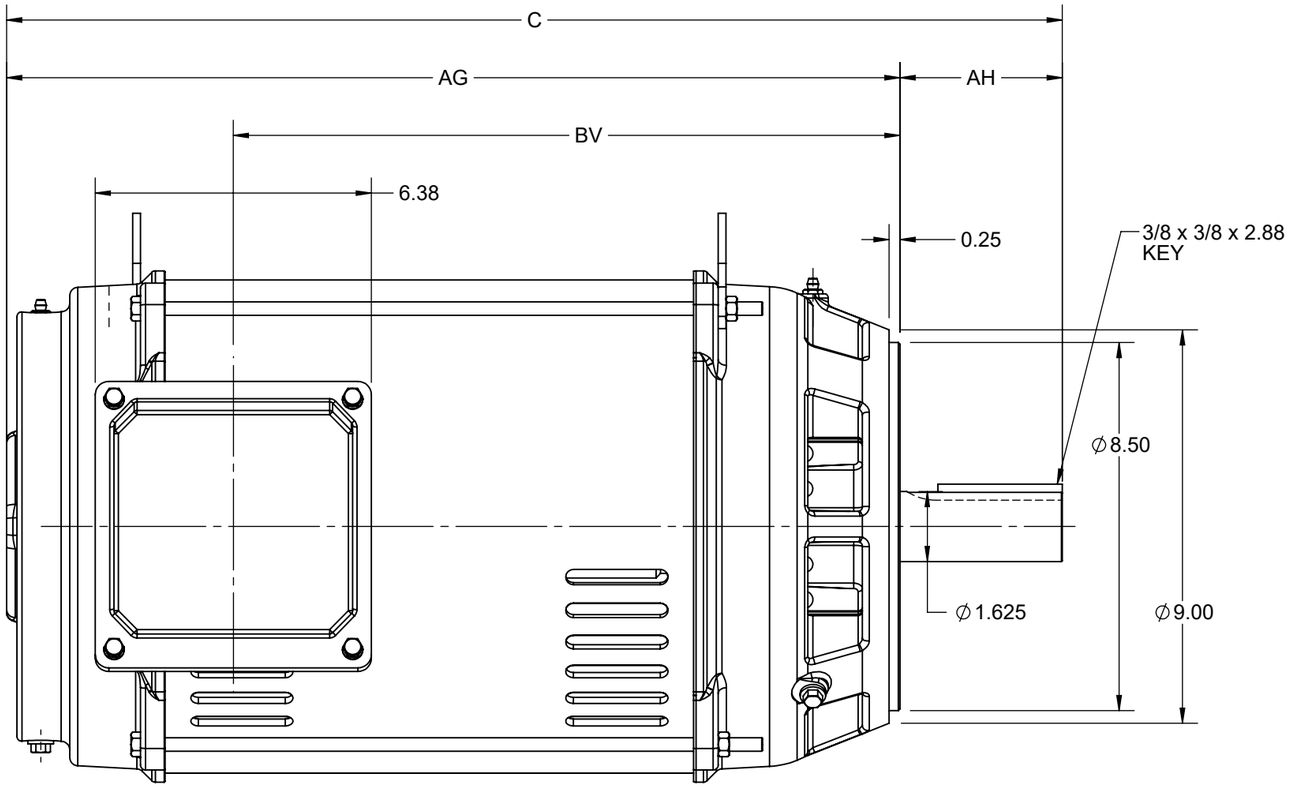
Electrical Type	**Squirrel Cage Inverter Rated**	Starting Method	**Line Or Inverter**
Poles	**6**	Rotation	**Reversible**
Resistance Main	**1.659 O**	Mounting	**Round**
Motor Orientation	**Horizontal**	Drive End Bearing	**Ball**
Opp Drive End Bearing	**Ball**	Frame Material	**Rolled Steel**
Shaft Type	**T**	Assembly/Box Mounting	**F1/F2 Capable**
Inverter Load	**Constant 2:1/Variable 10:1**		

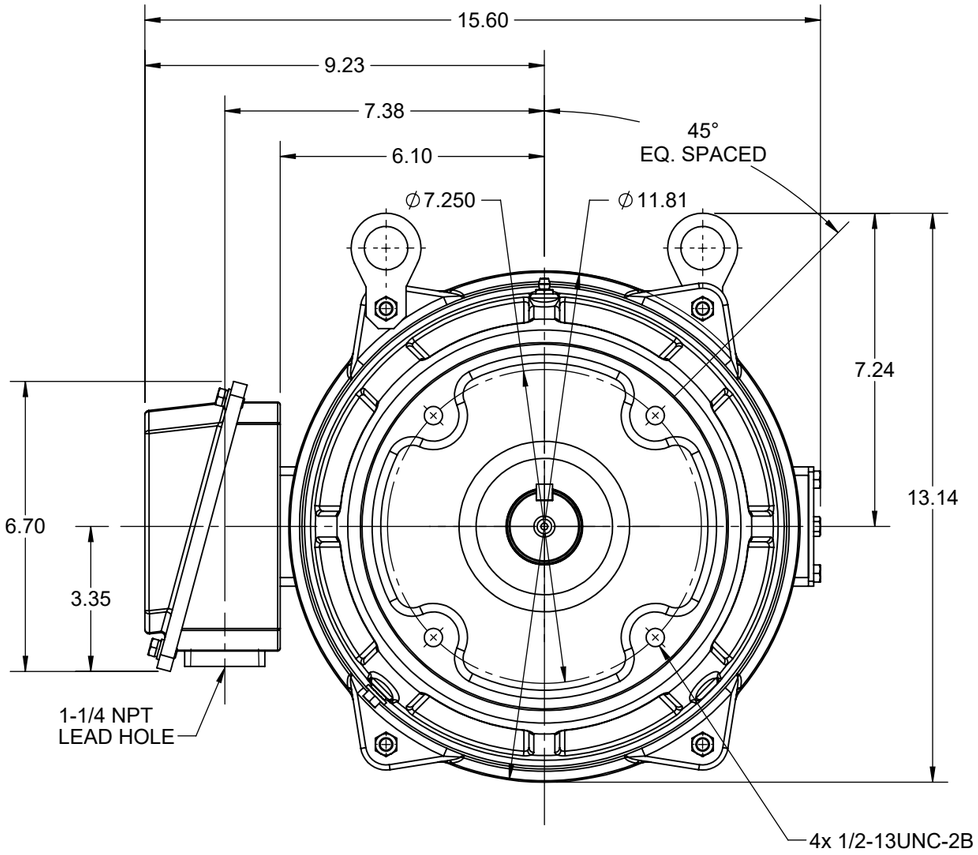
Drawings

Connection Drawing	**EE7308K**	Outline Drawing	**SS621130-100**

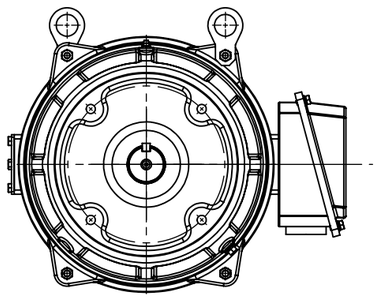
This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created: 16/10/2026

DASH NO.	C	AG	AH	BV	MOUNTING	FRAME
100	22.81	19.06	3.75	13.82	F1 OR F2	254TC
200	24.38	20.63		15.40		256TC





F2 VIEW



DRAWING REVISION	REVISION BY	REV DATE/© DATE
D	MN	07/11/2025
REQUEST NUMBER	APPROVED BY	DATE
CR-0023491	VS	07/11/2025

REQUEST NUMBER DESCRIPTION
F2 MOUNTING PLATE ADDED

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.

TOLERANCES (EXCEPT AS NOTED):

DEC.	INCH	mm	ANGLE
.X	±0.1	[±3]	±7' 30"
.XX	±0.03	[±0.8]	
.XXX	±0.005	[±0.13]	
.XXXX	±0.0005	[±0.013]	

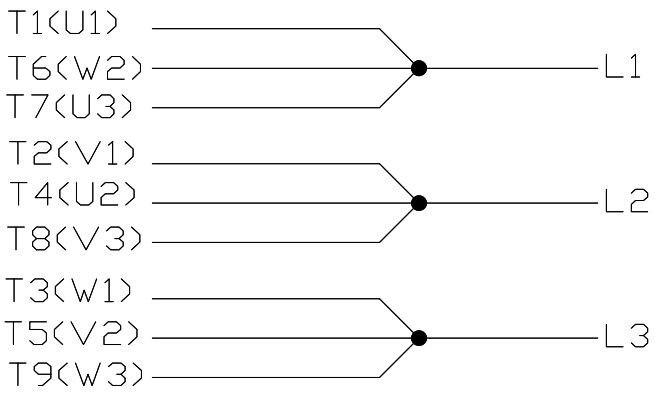
REMOVE BURRS & BREAK SHARP
EDGES: .003/.015 [.08/.38] X 45°
CORNER FILLETS: R.02 [.5]
MACHINED SURFACES: 200 / 5.1 /
INCH / mm
mm DIMENSIONS IN [BRACKETS]
ARE FOR REFERENCE ONLY

DRAWN BY	DESCRIPTION
VS	OUTLINE
DATE: 01-02-2021	254/256TC FR NEMA ODP RS
APPROVED BY: GNK	
DATE: 01-02-2021	
REFERENCE	MATERIAL / PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE: B / DRAWING NUMBER: SS621130 / SHEET: 1 OF 1

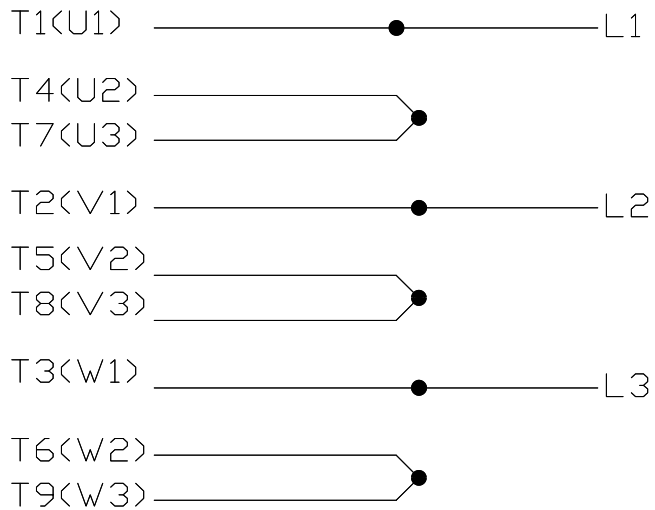
marathon™

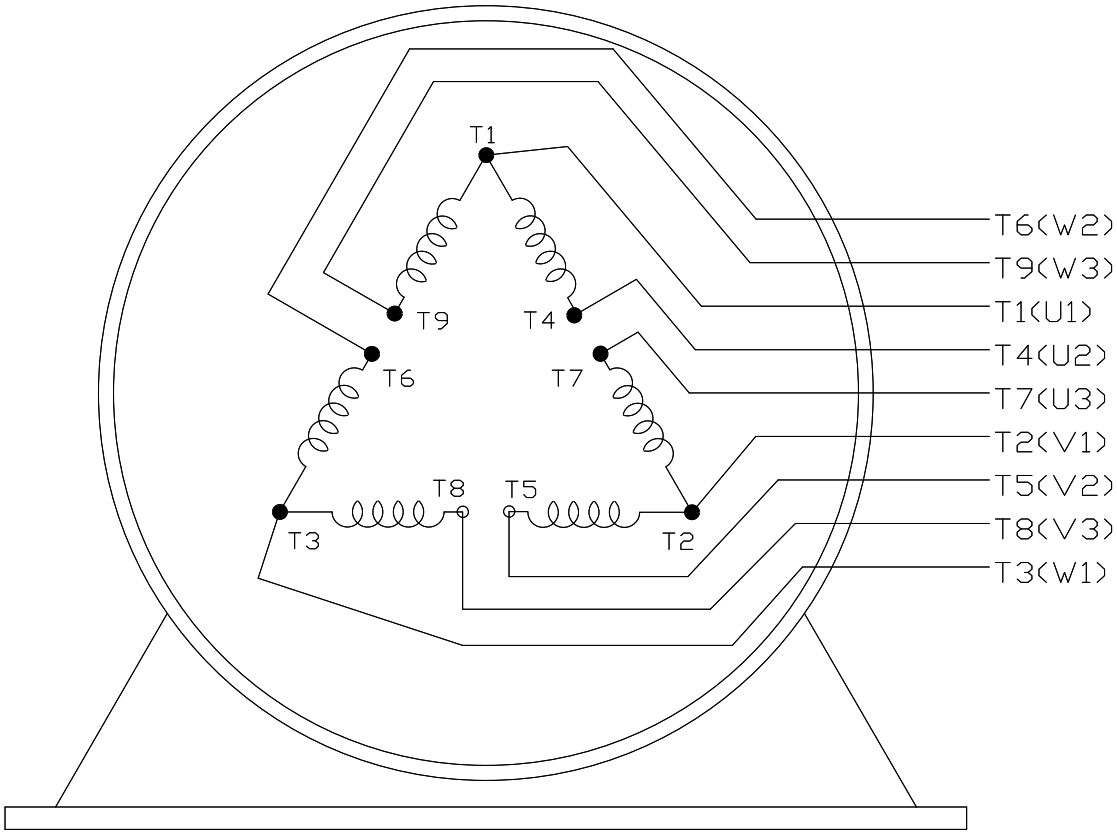
Uncontrolled Copy

LOW VOLTAGE



HIGH VOLTAGE





VIEW OF TERMINAL END

DRAWING REVISION: F	REVISION BY: SB	REV DATE/ © DATE: 08/01/2025	DRAWN BY: PGK	marathon™	
REQUEST NUMBER: CR-0023654	APPROVED BY: SBD	DATE: 08/01/2025	DATE: 06/04/1997		
REQUEST NUMBER DESCRIPTION: DRAWING TITLE BLOCK UPDATED			APPROVED BY: GK	DESCRIPTION: CONN DIAGRAM-EXTERNAL DELTA CON. - 3ø - 9 LEADS	
			DATE: 06/15/1997		
			REFERENCE	MATERIAL	PROCESS/FINISH
			THIRD ANGLE PROJECTION	SIZE: A	DRAWING NUMBER: EE7308K 4 of 4	SHEET: 1 OF 1

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