Cooling Tower Motors

Model No: 254TTFCD16568
Catalog No: U871B

Cooling Tower Motor, 15 & 10 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 RPM, 254T Frame, TEFC

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Product Information Packet: Model No: 254TTFCD16568, Catalog No: U871B Cooling Tower Motor, 15 & 10 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 RPM, 254T Frame, TEFC

Nameplate Specifications

Phase	**3**	Output HP	**15 & 10 Hp**
Output KW	**11.2 & 7.5 kW**	Voltage	**230/460 & 190/380 V**
Speed	**1770 & 1475 r/min**	Synchronous RPM	**1800 & 1500 r/min**
Service Factor	**1.15 & 1.15**	Frame	**254T**
Enclosure	**Totally Enclosed Fan Cooled**	Thermal Protection	**No Protection**
Efficiency	**92.4 & 91.8 %**	Ambient Temperature	**40 °C**
Frequency	**60 & 50 Hz**	Current	**36.5/18.4 & 31/15.5 A**
Power Factor	**83**	Duty	**Continuous**
Insulation Class	**H**	Design Code	**B**
KVA Code	**G**	Drive End Bearing Size	**6309**
Opp Drive End Bearing Size	**6209**	UL	**Recognized**
CSA	**Y**	CE	**Y**
IP Code	**55**	Number of Speeds	**1**

Technical Specifications

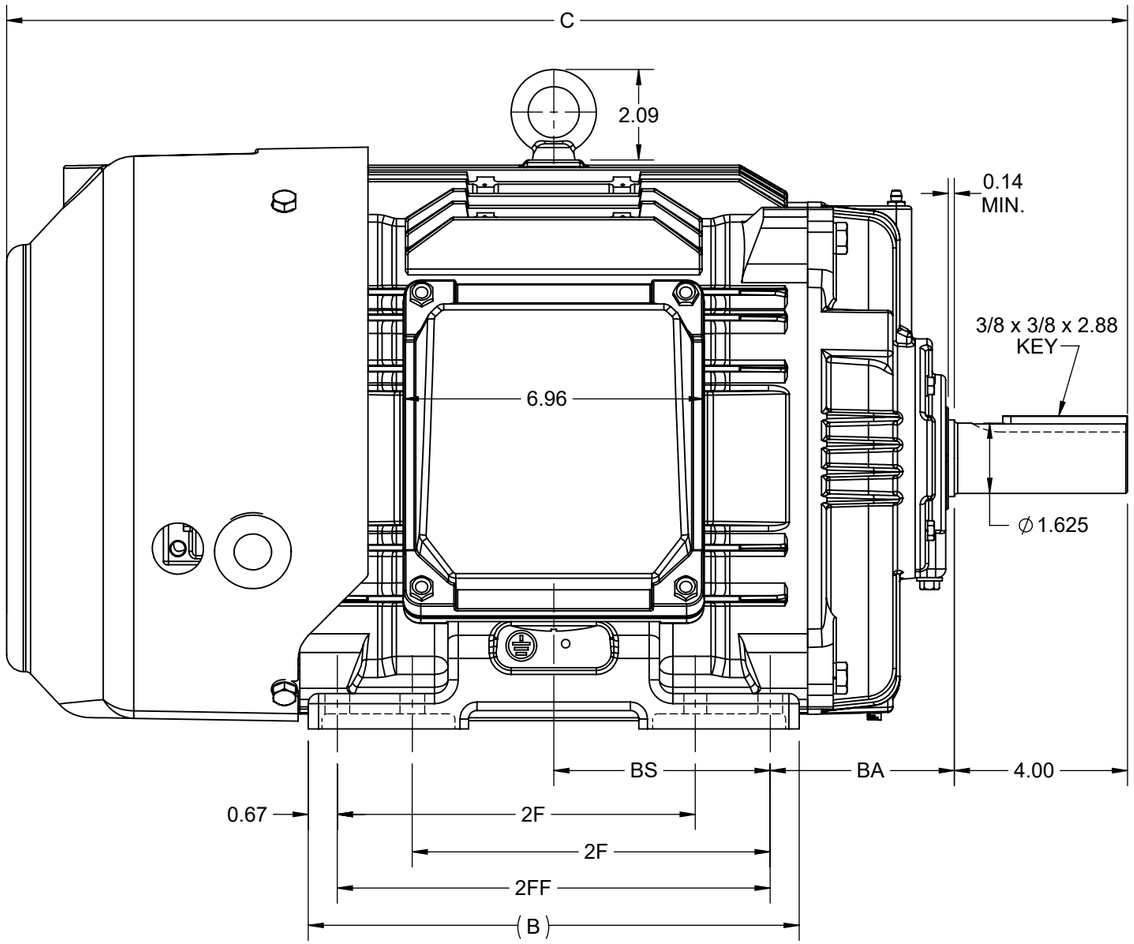
Electrical Type	**Squirrel Cage Inverter Rated**	Starting Method	**Line Or Inverter**
Poles	**4**	Rotation	**Reversible**
Resistance Main	**.713 O**	Mounting	**Rigid Base**
Motor Orientation	**Horizontal**	Drive End Bearing	**Ball**
Opp Drive End Bearing	**Ball**	Frame Material	**Cast Iron**
Shaft Type	**T**	Shaft Diameter	**1.626 in**
Assembly/Box Mounting	**F1/F2 Capable**	Inverter Load	**Constant 10:1/Variable 10:1**

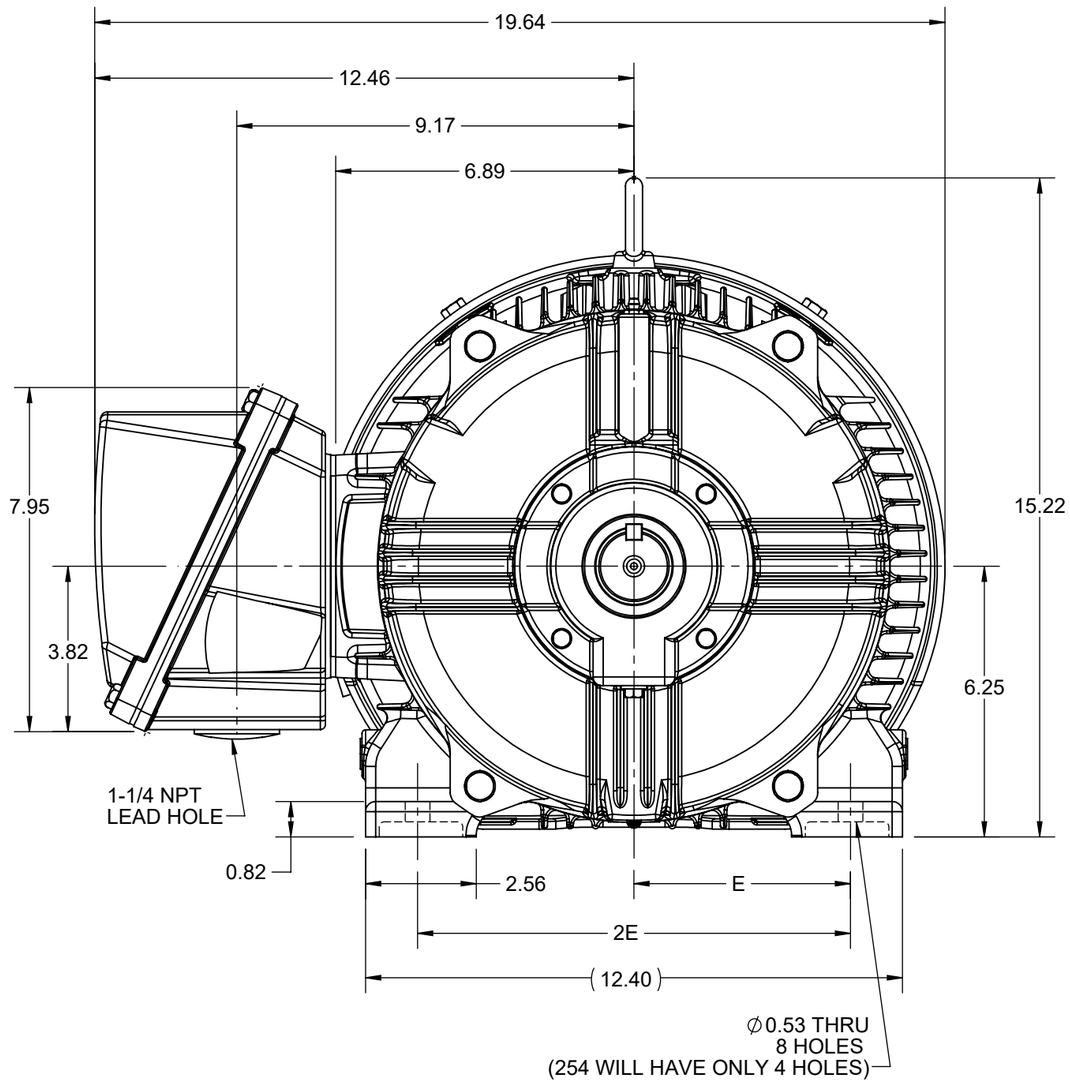
Drawings

Connection Drawing	**EE7308**	Outline Drawing	**SS208560-100**

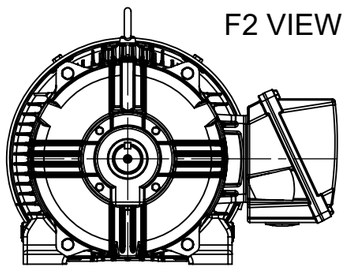
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DASH NO.	B	C	E	2E	2F	2FF	BA	BS	MOUNTING	FRAME
100	9.60	24.15	5.00	10.00	-	8.25	4.25	4.13	F1 OR F2	254T
200	11.34	25.89			8.25	10.00		5.00		254/256T





F2 VIEW



DRAWING REVISION: F	REVISION BY: SB	REV DATE/© DATE: 07/23/2025
REQUEST NUMBER: CR-0023556	APPROVED BY: SBD	DATE: 07/23/2025
REQUEST NUMBER DESCRIPTION: DRAWING TITLE BLOCK UPDATED		

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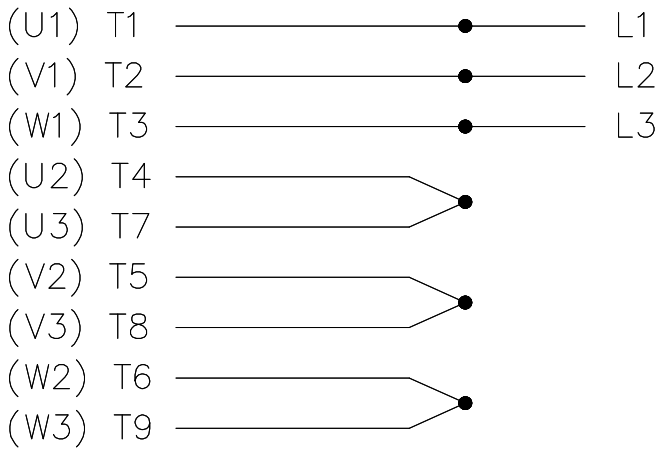
PRIMARY DIMENSIONS ARE INCH
mm DIMENSIONS IN [BRACKETS]
ARE FOR REFERENCE ONLY

DRAWN BY: BISWA	marathon™	
DATE: 26/09/2018	DESCRIPTION: OUTLINE 254T/256T FR-NEMA-SD & IEEE841	
APPROVED BY: SBD		
DATE: 26/09/2018		
REFERENCE	MATERIAL	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE: B / DRAWING NUMBER: SS208560	SHEET: 1 OF 1

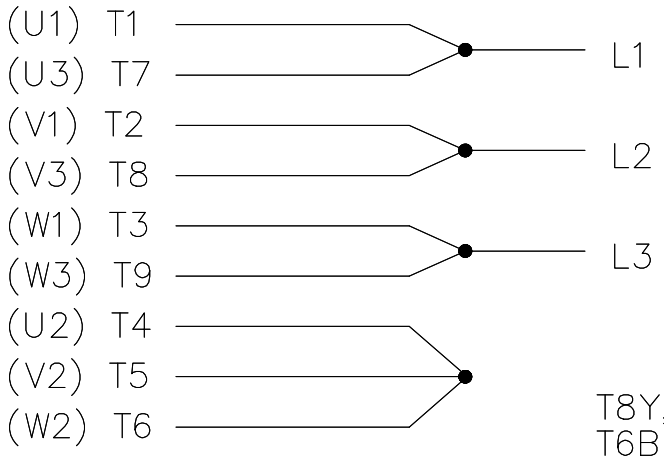
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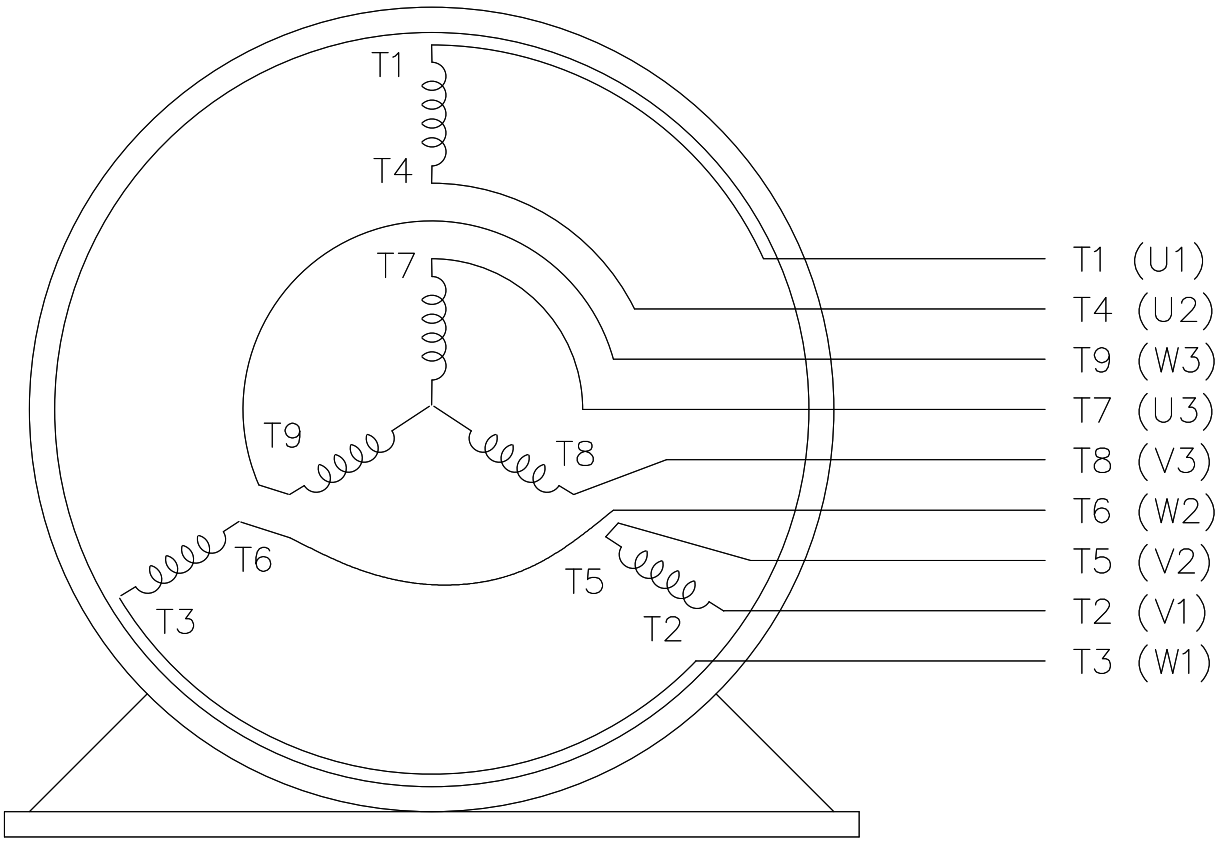
THREE PHASE
DUAL VOLTAGE MOTOR

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

REQUEST NUMBER DESCRIPTION
DRAWING TITLE BLOCK UPDATED

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

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DESCRIPTION
CONN DIAGRAM-EXTERNAL
3Ø - DUAL VOLTAGE MOTOR

MATERIAL	PROCESS/FINISH

SIZE	DRAWING NUMBER	SHEET
A	4 of 5 EE7308	1 OF 1

Data Sheet

Date: 8/1/2022
Customer:
Attention:
Submitted by:

marathon® electric

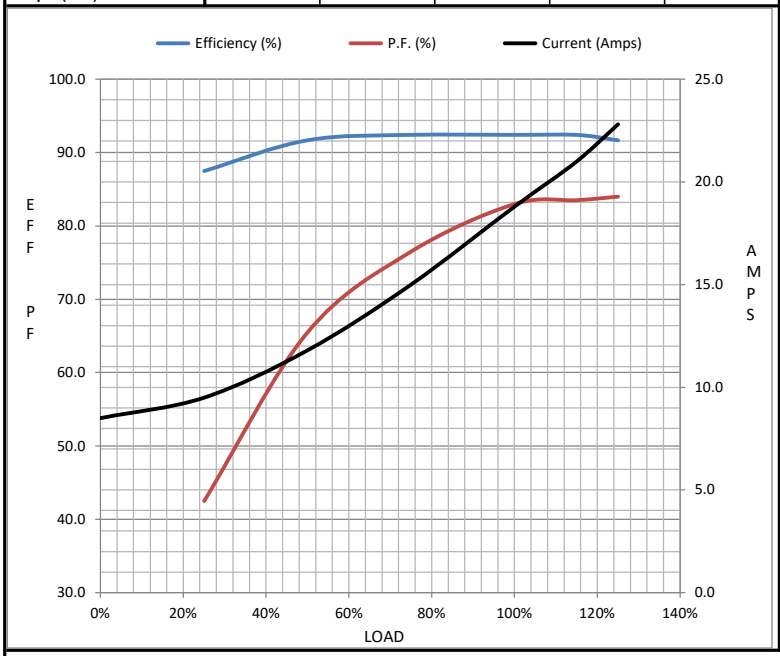
254TTFCD16568
225015.001 FAN
Submittal
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	8.5	9.5	11.8	15.0	18.8	21.0	22.8	116	
Torque (ft-lb)	0.00	11.0	22.0	33.5	44.5	51.5	56.0	110	
RPM	1800	1792	1785	1780	1772	1,768	1762	0	
Efficiency (%)		87.5	91.7	92.4	92.4	92.4	91.7		
P.F. (%)	5.0	42.5	65.5	76.5	83.0	83.5	84.0	41.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1622	1772	1800
Current (Amps)	116	100	66.0	18.8	8.5
Torque (ft-lb)	110	76.5	138	44.5	0.00



Information Block

HP	15.0
Sync. RPM	1800
Frame	254
Enclosure	TEFC
Construction	TFC
Voltage	230/460#190/380 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 wk²	2.40 Lb-Ft²
Ref Wdg	HA31604019 NONE
Sound Pressure @ 1M	65 dBA
VFD Rating	CONSTANT 10:1/VARIABLE 10:1
Outline Dwg	SS208560-100
Conn. Diag	EE7308
Additional Specifications:	
0	
0	

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.4400	0.2440	1.3040	1.4670	31.5630

Speed -Torque Curve

