Cooling Tower Motors

Model No: 254TTTCD16545
Catalog No: U1871A

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

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Product Information Packet: Model No: 254TTTCD16545, Catalog No: U1871A Cooling Tower Motor, 15 & 10 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 RPM, 254TV Frame, TEAO

Nameplate Specifications

Phase	**3**	Output HP	**15 & 10 Hp**
Output KW	**11.2 & 7.5 kW**	Voltage	**230/460 & 190/380 V**
Speed	**1772 & 1475 r/min**	Synchronous RPM	**1800 & 1500 r/min**
Service Factor	**1.15 & 1.15**	Frame	**254TV**
Enclosure	**Totally Enclosed Air Over**	Thermal Protection	**No Protection**
Efficiency	**92.4 & 92.5 %**	Ambient Temperature	**40 °C**
Frequency	**60 & 50 Hz**	Current	**37.5/18.8 & 31/15.4 A**
Power Factor	**82**	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	**56**	Number of Speeds	**1**

Technical Specifications

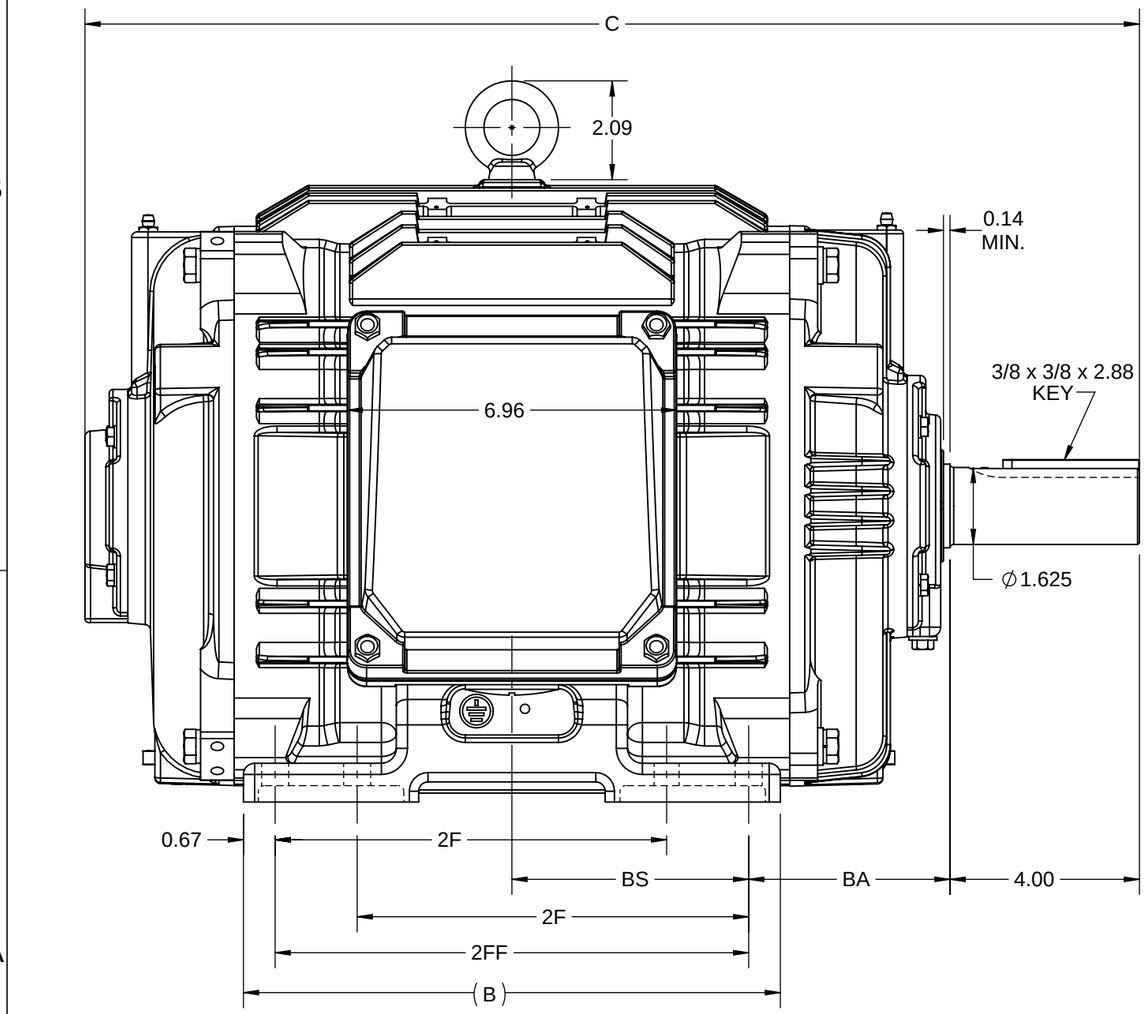
Electrical Type	**Squirrel Cage Inverter Rated**	Starting Method	**Line Or Inverter**
Poles	**4**	Rotation	**Reversible**
Resistance Main	**.6738 O**	Mounting	**Rigid Base**
Motor Orientation	**Horizontal Or Up Or Down**	Drive End Bearing	**Ball**
Opp Drive End Bearing	**Ball**	Frame Material	**Cast Iron**
Shaft Type	**T**	Shaft Diameter	**1.625 in**
Assembly/Box Mounting	**F1/F2 Capable**	Inverter Load	**Constant 10:1/Variable 10:1**

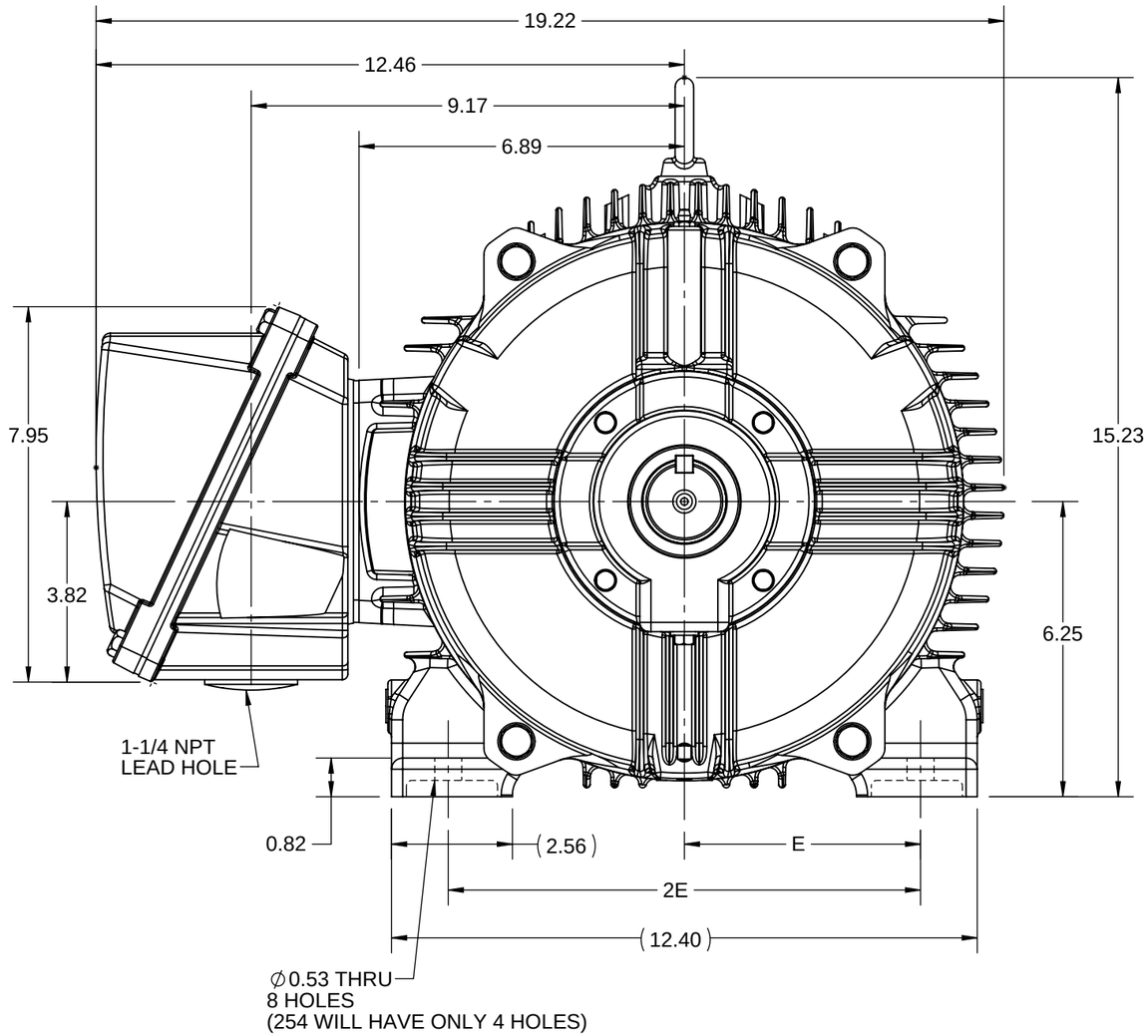
Drawings

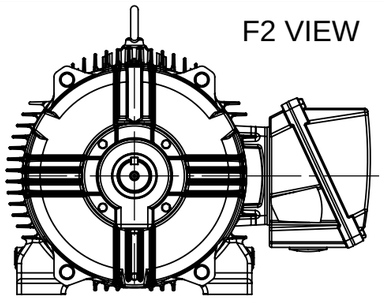
Connection Drawing	**EE7308**	Outline Drawing	**SS620955-100**

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DASH NO.	B	C	E	2E	2F	2FF	BA	BS	MOUNTING	FRAME
100	9.60	20.53	5.00	10.00	-	8.25	4.25	4.13	F1 OR F2	254T
200	11.34	22.27			8.25	10.00		5.00		254/256T







DRAWING REVISION	REVISION BY	REV DATE/© DATE
C	SB	05/20/2026
REQUEST NUMBER	APPROVED BY	DATE
CR-0026330	RMS	05/20/2026

REQUEST NUMBER DESCRIPTION
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TOLERANCES (EXCEPT AS NOTED):

DEC.	INCH	mm	ANGLE
.X	±0.1	[±3]	±0.5°
.XX	±0.02	[±0.5]	
.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: 125 INCH / 3.2 mm
mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY

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SAI	
DATE	
24/01/2020	
APPROVED BY	
SBD	
DATE	
24/01/2020	
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DESCRIPTION
OUTLINE
254T/256T FR-NEMA-TEAO/TENV

MATERIAL | PROCESS/FINISH

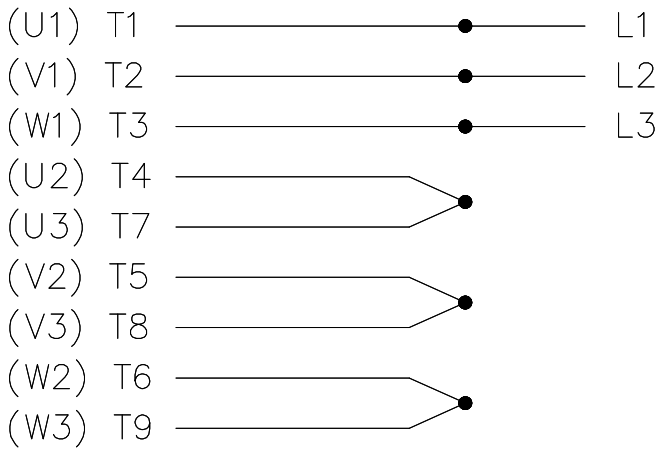
THIRD ANGLE PROJECTION

SIZE	DRAWING NUMBER	SHEET
B	SS620955	1 OF 1

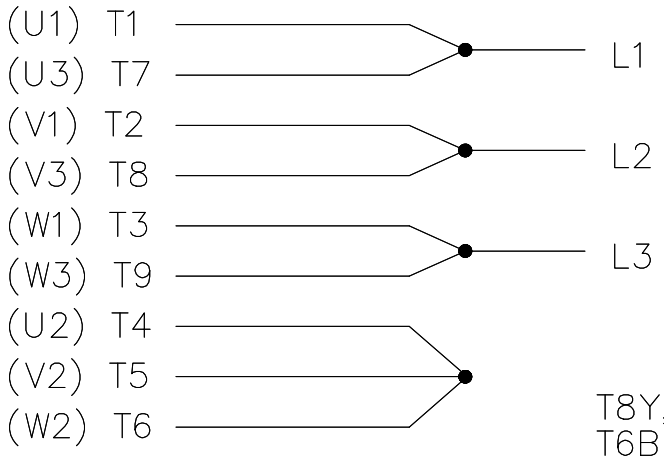
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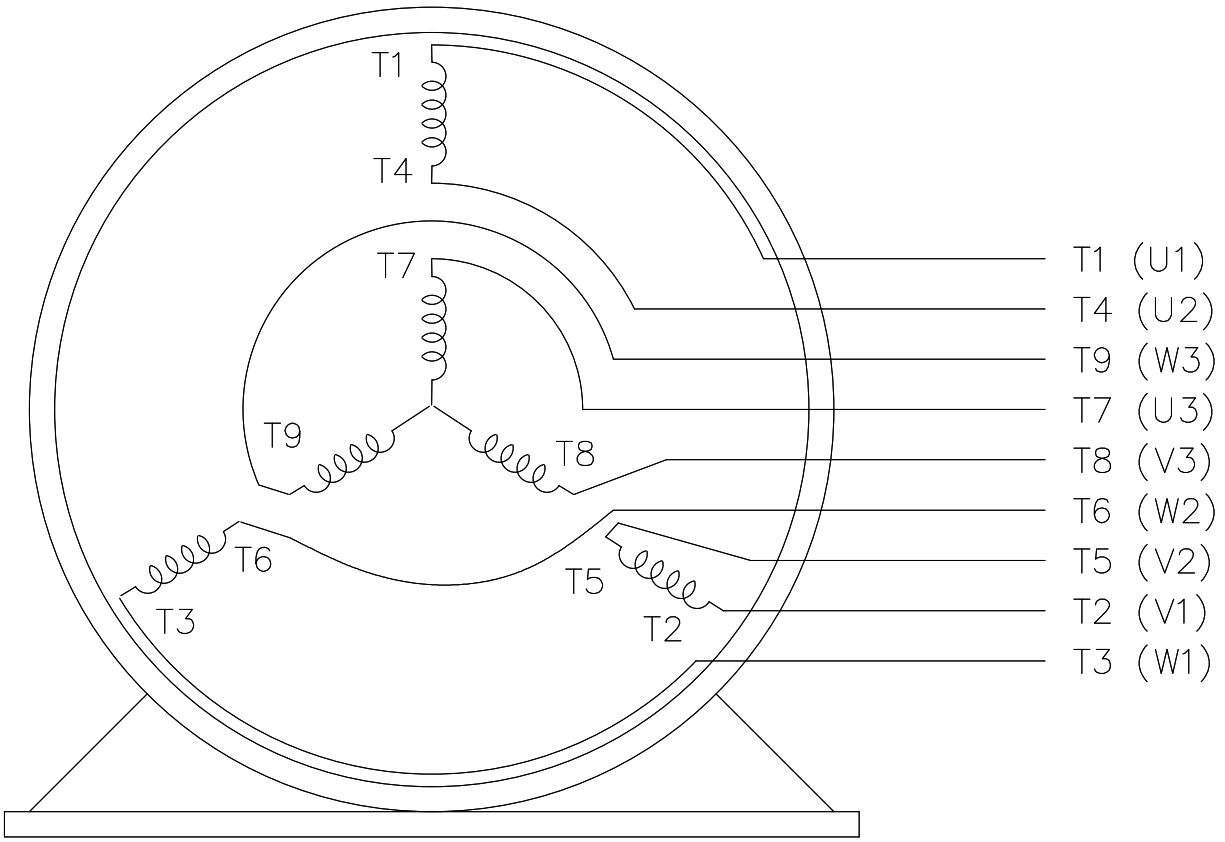
THREE PHASE
DUAL VOLTAGE MOTOR

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
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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: 9/7/2023
Customer:
Attention:
Submitted by: RAMYA

marathon® Motors

254TTTCD16545

Submittal

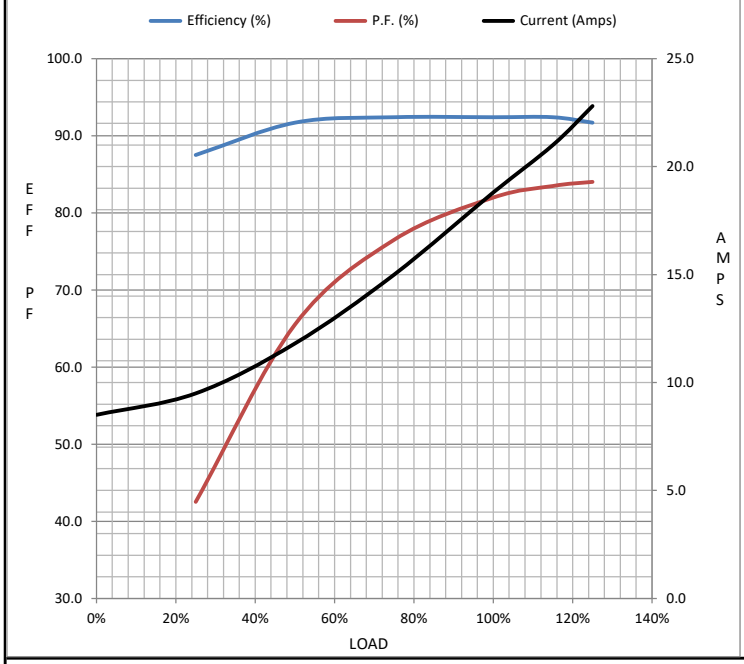
Data @ 460 V

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	113	
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	82.0	83.5	84.0	41.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1622	1772	1800
Current (Amps)	113	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	TEAO	
Construction	TTC	
Voltage	230/460#190/380	V
Frequency	60	Hz
Design	B	
LR Code letter	G	
Service Factor	1.15	
Temp Rise @ FL	0	° C
Duty	CONT	
Ambient	40	° C
Elevation	3,300	feet
Rotor/Shaft wk²	2.40	Lb-Ft²
Ref Wdg	HA31604019 R1	
Sound Pressure @ 1M	999	dBA
VFD Rating	CONSTANT 10:1/VARIABLE 10:1	
Outline Dwg		
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

