marathon®

Cooling Tower Motors

Model No: 445TTTCD16537
Catalog No: U1882A

Cooling Tower Motor, 200 & 150 HP, 3 Ph, 60 & 50 Hz, 460 & 380 V, 1800 RPM, 445TV Frame, TEAO

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Product Information Packet: Model No: 445TTTCD16537, Catalog No: U1882A Cooling Tower Motor, 200 & 150 HP, 3 Ph, 60 & 50 Hz, 460 & 380 V, 1800 RPM, 445TV Frame, TEAO

Nameplate Specifications

Phase	**3**	Output HP	**200 & 150 Hp**
Output KW	**149.0 & 112.0 kW**	Voltage	**460 & 380 V**
Speed	**1790 & 1490 r/min**	Synchronous RPM	**1800 & 1500 r/min**
Service Factor	**1.15 & 1.15**	Frame	**445TV**
Enclosure	**Totally Enclosed Air Over**	Thermal Protection	**No Protection**
Efficiency	**96.5 & 95.4 %**	Ambient Temperature	**40 °C**
Frequency	**60 & 50 Hz**	Current	**219 & 200 A**
Power Factor	**88.5**	Duty	**Continuous**
Insulation Class	**H**	Design Code	**B**
KVA Code	**G**	Drive End Bearing Size	**6319**
Opp Drive End Bearing Size	**6317**	UL	**Recognized**
CSA	**Y**	CE	**N**
IP Code	**56**	Number of Speeds	**1**

Technical Specifications

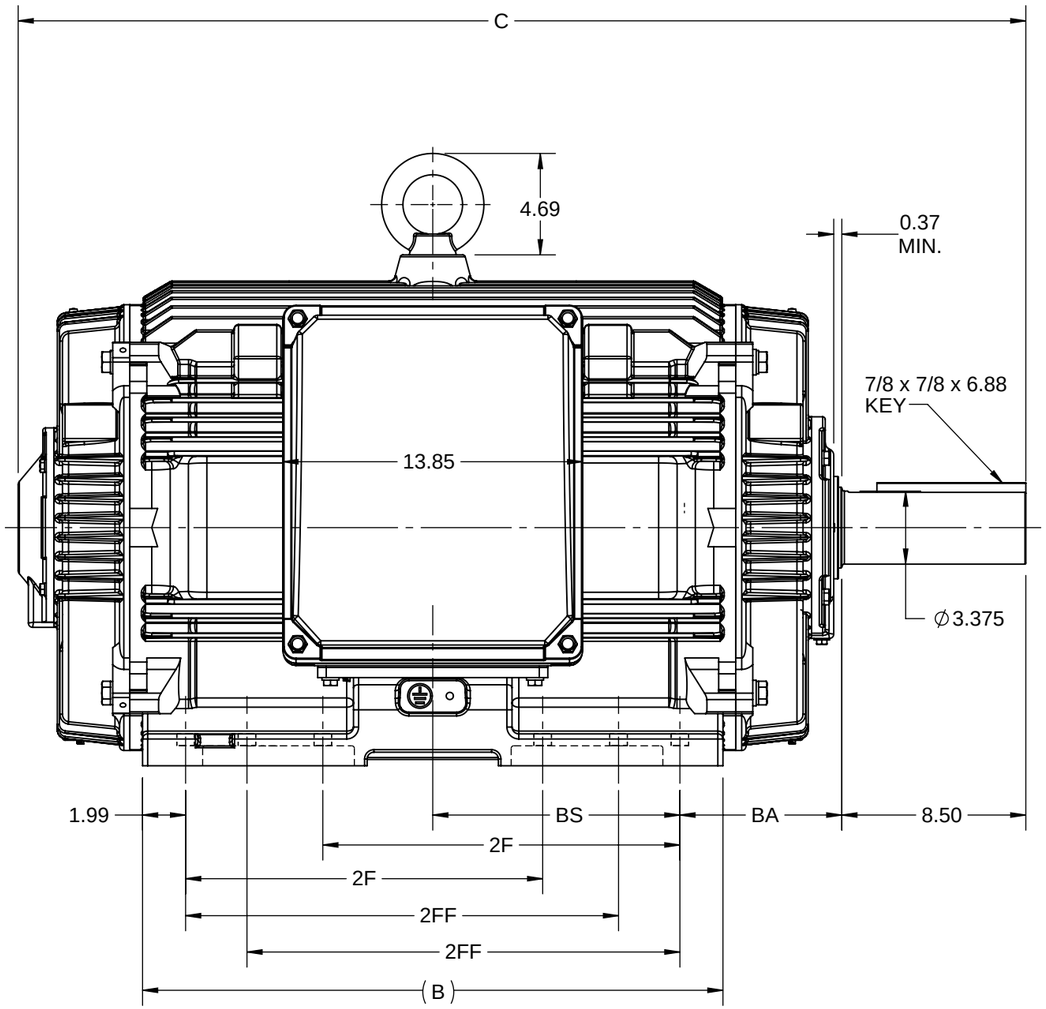
Electrical Type	**Squirrel Cage Inverter Rated**	Starting Method	**Part Wdg Start & Wye Start Delta Run Or Inverter**
Poles	**4**	Rotation	**Reversible**
Resistance Main	**.0184 O**	Mounting	**Rigid Base**
Motor Orientation	**Horizontal Or Up Or Down**	Drive End Bearing	**Ball**
Opp Drive End Bearing	**Ball**	Frame Material	**Cast Iron**
Shaft Type	**T**	Shaft Diameter	**3.375 in**
Assembly/Box Mounting	**F1/F2 Capable**	Inverter Load	**Constant 2:1/Variable 10:1**

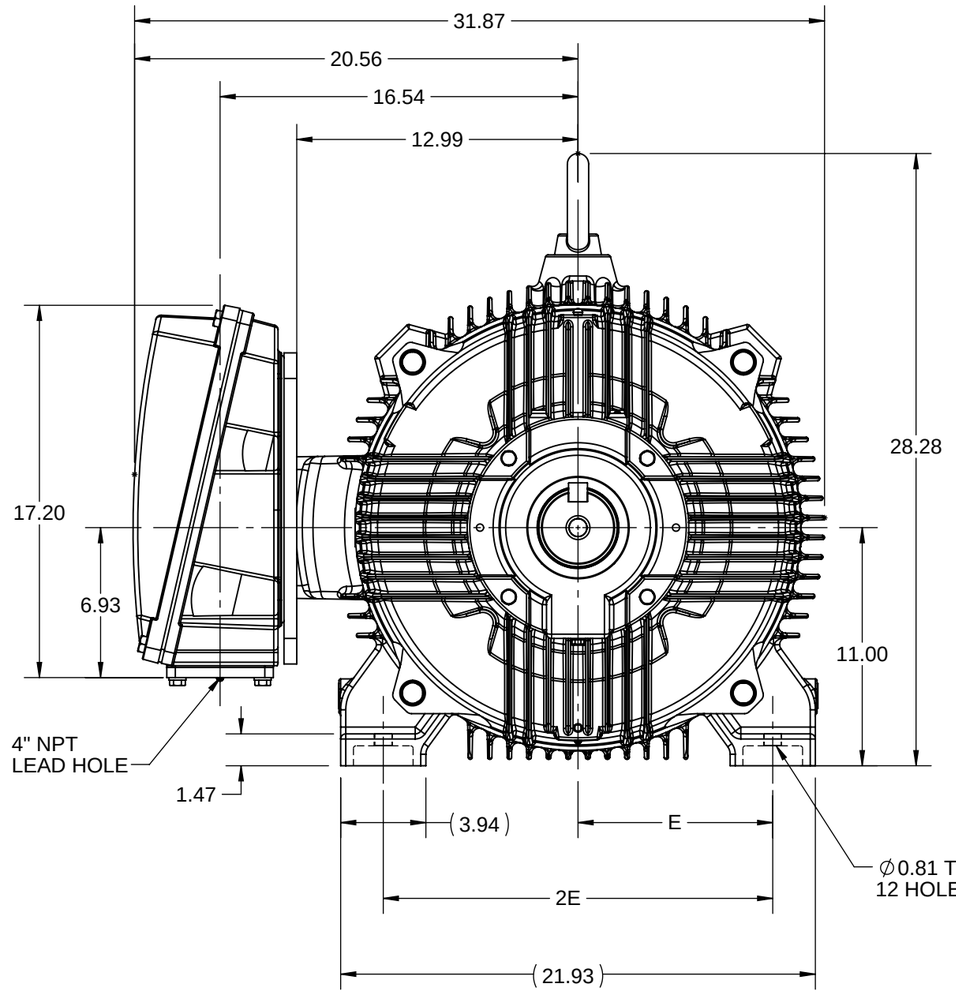
Drawings

Connection Drawing	**EE7300BH**	Outline Drawing	**SS620966**

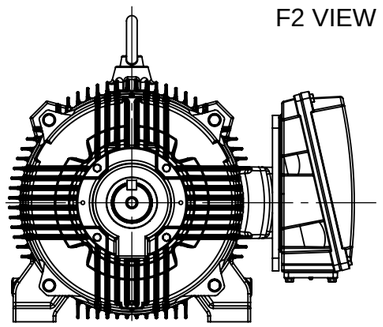
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B	C	E	2E	2F	2FF	BA	BS	MOUNTING
26.81	46.56	9.00	18.00	16.50	20.00	7.50	11.42	F1 OR F2





F2 VIEW



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
DRAWING TITLE BLOCK UPDATED

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DATE	30/01/2020
APPROVED BY	SBD
DATE	30/01/2020
REFERENCE	

THIRD ANGLE PROJECTION

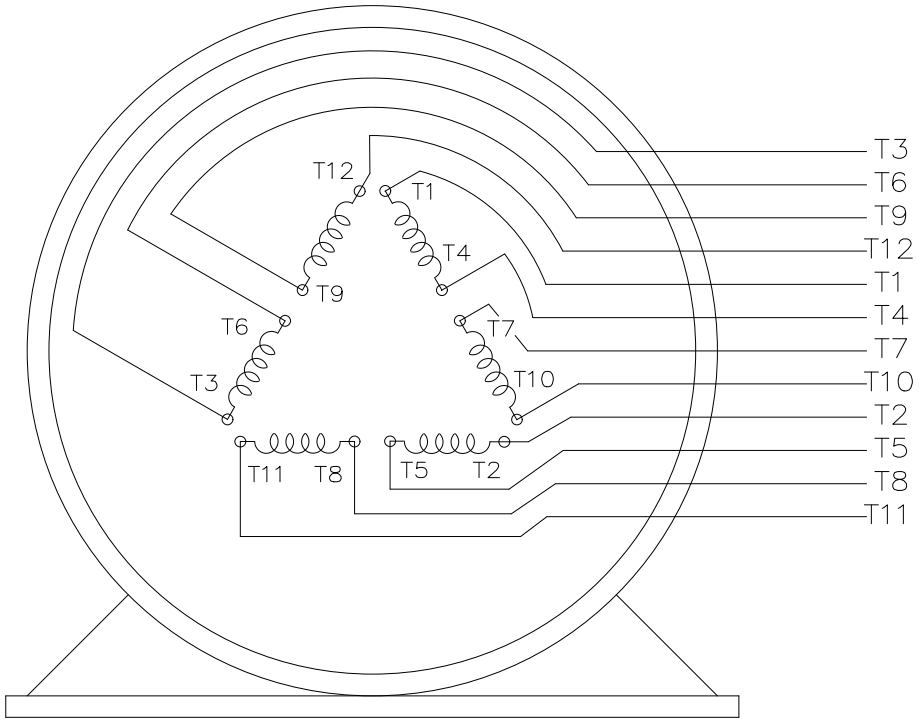
marathon™

DESCRIPTION
OUTLINE
445/447T FR-NEMA-TEAO/TENV

MATERIAL	PROCESS/FINISH

SIZE	DRAWING NUMBER	SHEET
B	SS620966	1 OF 1

Uncontrolled Copy



VIEW OF TERMINAL END

T12(W4)
T1(U1)
T6(W2)
T7(U3)
LINE 1

T2(V1)
T4(U2)
T8(V3)
T10(U4)
LINE 2

T3(W1)
T5(V2)
T9(W3)
T11(V4)
LINE 3

DRAWING REVISION: E	REVISION BY: SB	REV DATE/ © DATE: 08/04/2025
REQUEST NUMBER: CR-0023654	APPROVED BY: SBD	DATE: 08/04/2025
REQUEST NUMBER DESCRIPTION: DRAWING TITLE BLOCK UPDATED		

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DRAWN BY: RJW	marathon™	
DATE: 02/11/2005		
APPROVED BY: GK	DESCRIPTION: CONNECTION DIAGRAM 12 LEAD - SINGLE VOLTAGE	
DATE: 02/11/2005		
REFERENCE	MATERIAL	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE: A / DRAWING NUMBER: EE7300BH	SHEET: 1 OF 1

Data Sheet

Date: 11/17/2021
Customer:
Attention:
Submitted by:

marathon® Motors

445TTTCD16537

Submittal

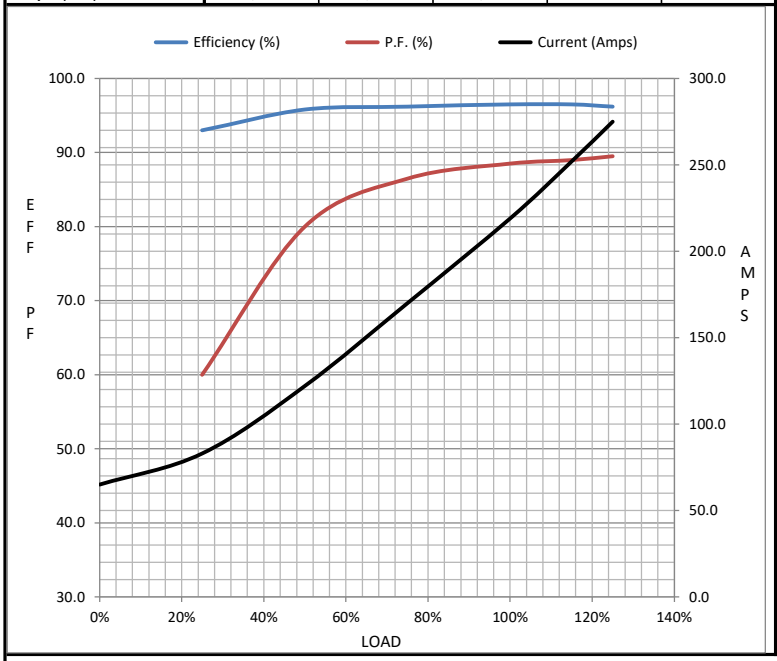
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	65.0	83.0	122	170	219	252	275	1,450	
Torque (ft-lb)	0.00	146	293	440	587	676	735	1,256	
RPM	1800	1798	1795	1792	1790	1,788	1788	0	
Efficiency (%)		93.0	95.8	96.2	96.5	96.5	96.2		
P.F. (%)	4.5	60.0	80.0	86.5	88.5	89.0	89.5	38.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1750	1790	1800
Current (Amps)	1,450	1,160	850	219	65.0
Torque (ft-lb)	1,256	1,050	1,775	587	0.00



Information Block

HP	200.0	
Sync. RPM	1800	
Frame	445	
Enclosure	TEAO	
Construction	TTC	
Voltage	460#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	81.17	Lb-Ft²
Ref Wdg	HA32804009 R1	
Sound Pressure @ 1M	80	dBA
VFD Rating	CONSTANT 2:1/VARIABLE 10:1	
Outline Dwg	SS620966	
Conn. Diag	EE7300BH	

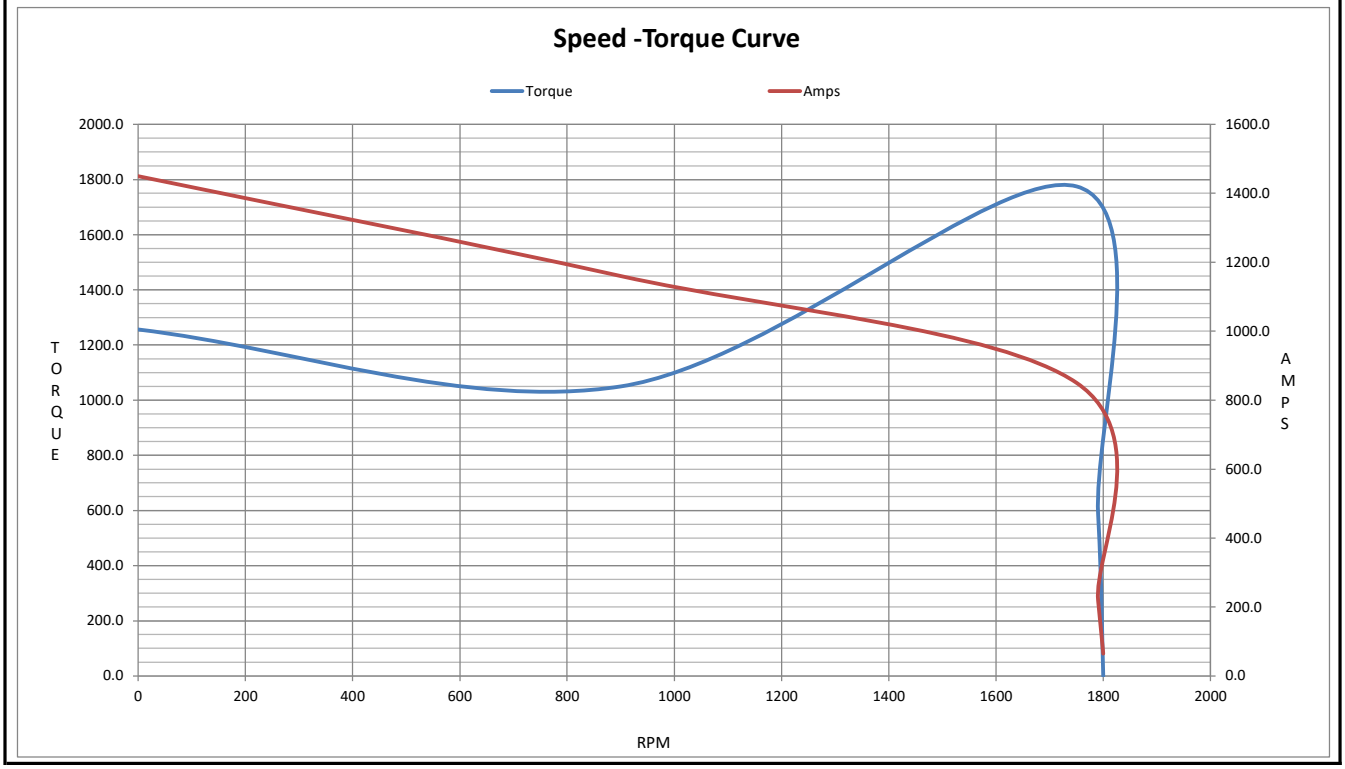
Additional Specifications:

0

0

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.0120	0.0070	0.0810	0.1850	3.8340



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

marathon® Motors

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER:
ORDER #:
CONN. DIAGRAM: EE7300BH
OUTLINE: SS620966
WINDING: HA32804009 R1 8
SPEED:

CUSTOMER P.O. #:
REFERENCE MODEL #: 445TTTCD16537
CAT #: U1882A
CUSTOMER PART #:
MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
200	149	1800	1790	445TV	TEAO	TTC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	460#380	219&200	PWS & YDRUN OR INV	CONT	H	1.15	40	3300

F.L. EFF	96.5	3/4 LD EFF	96.2	1/2 LD EFF	95.8	GTD EFF	ELECT. TYPE
F.L. PF	88.5	3/4 LD PF	86.5	1/2 LD PF	80.0	95.8	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)
587 LB-FT	1,450	1,256 LB-FT 214%	1,775 LB-FT 302%	0

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	APROX. MOTOR WGT
80 dBA	89 dBA	81.17 LB-FT²	1300 LB-FT²	40 SEC.	2	2675 LB.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	RIZONTAL OR UP OR DO	PREMIUM SEVERE DUTY	NONE	NO	NONE	BLUE - RAL 5003 (EPOXY)

BEARINGS DE	BEARINGS ODE	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
BALL	BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6319	6317						

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
0.012	0.007	0.081	0.185	3.834	0.080	ODE

*
NOTES
*

INVERTER TORQUE: CONSTANT 2:1/VARIABLE 10:1
INV. HP SPEED RANGE: NONE

ENCODER: NONE
NONE
NONE NONE PPR

BRAKE: NONE
NONE NONE
FT-LB: NA
VOLTAGE: NONE HZ:

PREPARED BY:
DATE: 11/17/2021

UL: V - LI,ME-INS,CONST UL REC

FORM: 3531 REV_4 2/27/06