marathon®

Vertical Pump Motors

Model No: 508UTDS16078
Catalog No: M763

Vertical Pump Motor, 250 HP, 3 Ph, 60 Hz, 460 V, 1200 RPM, 508 PV Frame, DP

©2026 Marathon, All Rights Reserved.

marathon®

Product Information Packet: Model No: 508UTDS16078, Catalog No: M763 Vertical Pump Motor, 250 HP, 3 Ph, 60 Hz, 460 V, 1200 RPM, 508 PV Frame, DP

Nameplate Specifications

Phase	**3**	Output HP	**250 Hp**
Output KW	**187.0 kW**	Voltage	**460 V**
Speed	**1188 r/min**	Synchronous RPM	**1200 r/min**
Service Factor	**1.15**	Frame	**508 PV**
Enclosure	**Drip Proof**	Thermal Protection	**No Protection**
Efficiency	**95.8 %**	Ambient Temperature	**40 °C**
Frequency	**60 Hz**	Current	**300.0 A**
Power Factor	**81**	Duty	**Continuous**
Insulation Class	**F**	Design Code	**B**
KVA Code	**G**	Drive End Bearing Size	**6316**
Opp Drive End Bearing Size	**7319**	UL	**Recognized**
CSA	**Y**	CE	**Y**
IP Code	**22**	Number of Speeds	**1**

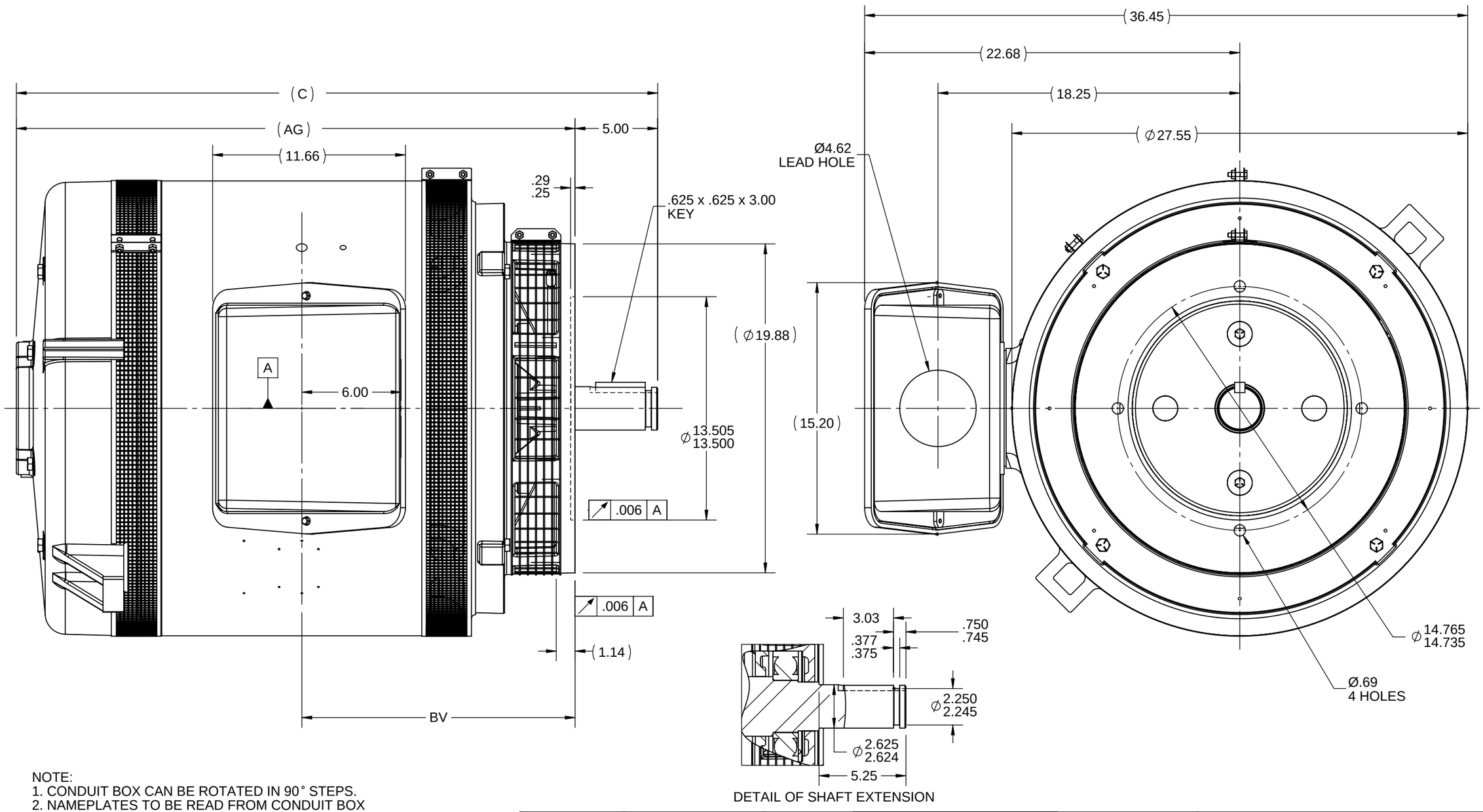
Technical Specifications

Electrical Type	**Squirrel Cage Induction Run**	Starting Method	**Across The Line**
Poles	**6**	Rotation	**Reversible**
Resistance Main	**.0175 O**	Mounting	**Round**
Motor Orientation	**Shaft Down**	Drive End Bearing	**Ball**
Opp Drive End Bearing	**Duplex Tandem Angular Contact**	Frame Material	**Cast Iron**
Shaft Type	**P**	Overall Length	**45.76 in**
Frame Length	**8.0 in**	Shaft Diameter	**2 5/8 in**
Shaft Extension	**5.00 in**	Assembly/Box Mounting	**F1/F2 Capable**

Drawings

Connection Drawing	**EE7300U**	Outline Drawing	**SS510025-2800**

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



DETAIL OF SHAFT EXTENSION

NOTE:
1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
2. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF THE MOTOR.

DASH	FRAME	C	AG	BV
2100	505P	38.77	33.77	16.52
2800	508P	45.77	40.77	20.02

DRAWING REVISION	REVISION BY	REV DATE/© DATE
L	SB	08/18/2026
REQUEST NUMBER	APPROVED BY	DATE
NMR-0240619	PD	08/18/2026

REQUEST NUMBER DESCRIPTION
MISSING DIA. ADDED FOR AK DIM

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 INCH / 5.1 mm
mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY

DRAWN BY	SMC
DATE	08-01-1991
APPROVED BY	GK
DATE	08-01-1991
REFERENCE	

marathon™

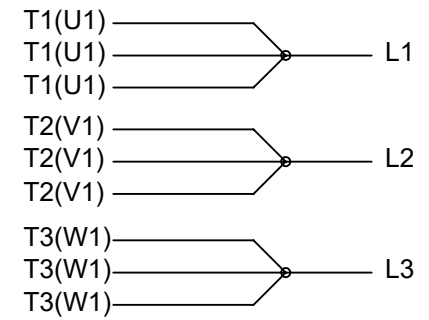
DESCRIPTION
OUTLINE
500P FR. - BB - TS - DR. PR. - P'BASE - SCREENS

MATERIAL | PROCESS/FINISH

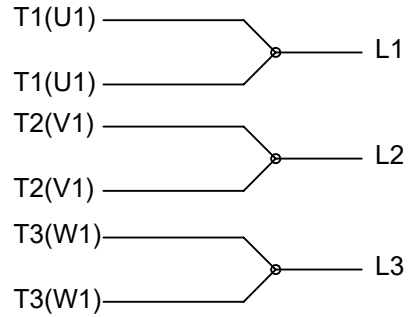
THIRD ANGLE PROJECTION

SIZE	DRAWING NUMBER	SHEET
B	SS510025	1 OF 1

IF MOTOR HAS 9 LEADS

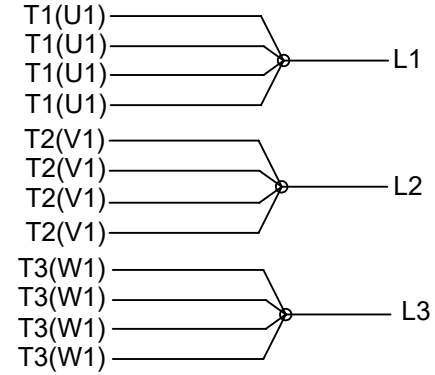


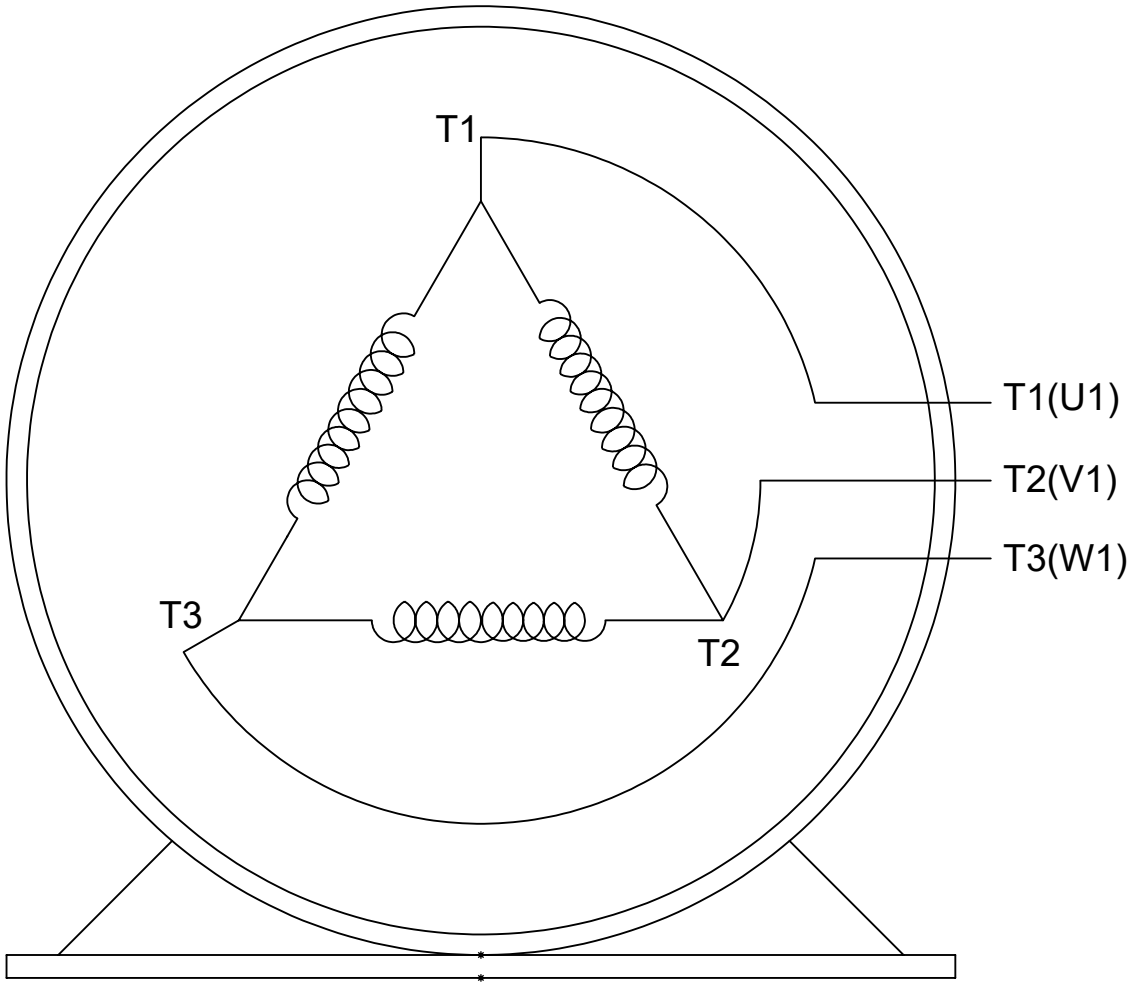
IF MOTOR HAS 6 LEADS



A-9806 DECAL IF CALLED FOR

IF MOTOR HAS 12 LEADS





VIEW OF TERMINAL END

DRAWING REVISION	REVISION BY	REV DATE/© DATE
M	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	DRS
DATE	09-27-1996
APPROVED BY	GK
DATE	09-30-1996
REFERENCE	
THIRD ANGLE PROJECTION	

marathon™

DESCRIPTION
CONN DIAGRAM-EXTERNAL
3Ø SINGLE VOLTAGE

MATERIAL	PROCESS/FINISH

SIZE	DRAWING NUMBER	SHEET
A	EE7300U	1 OF 1

Uncontrolled Copy

Data Sheet

Date: 11/30/2018
Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

marathon® electric

508UTDS16078

Submittal

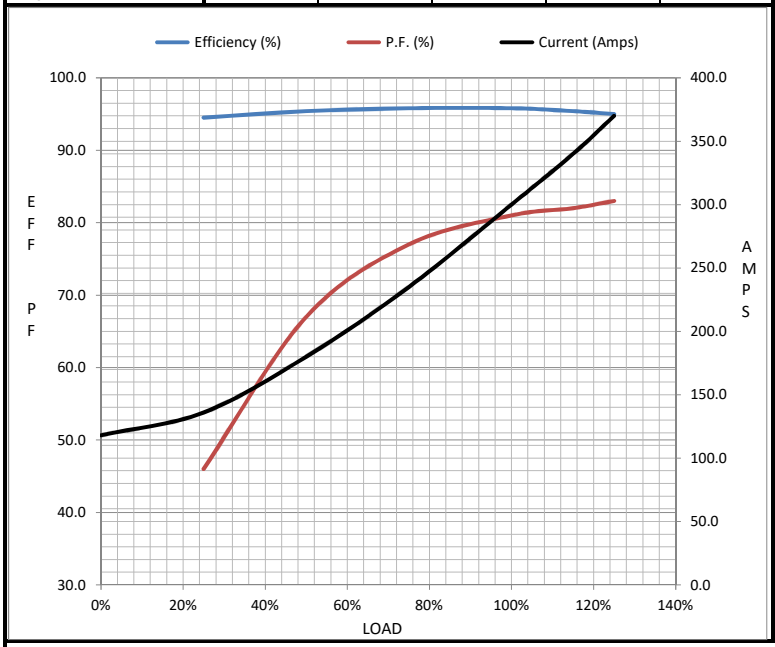
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	118	136	180	235	300	340	370	1,825	
Torque (ft-lb)	0.00	275	550	828	1,105	1,275	1,386	2,250	
RPM	1200	1196	1194	1190	1188	1,186	1184	0	
Efficiency (%)		94.5	95.4	95.8	95.8	95.4	95.0		
P.F. (%)	2.5	46.0	67.0	77.0	81.0	82.0	83.0	34.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1125	1188	1200
Current (Amps)	1,825	1,600	1,100	300	118
Torque (ft-lb)	2,250	2,000	2,700	1,105	0.00



Information Block

HP	250.0	
Sync. RPM	1200	
Frame	508	
Enclosure	DP	
Construction	TDS	
Voltage	460	V
Frequency	60	Hz
Design	B	
LR Code letter	G	
Service Factor	1.15	
Temp Rise @ FL	70	° C
Duty	CONT	
Ambient	40	° C
Elevation	1,000	feet
Rotor/Shaft wk²	172	Lb-Ft²
Ref Wdg	T508651 NONE	
Sound Pressure @ 1M	78	dBA
VFD Rating	NONE	
Outline Dwg	B-SS510025-2800	
Conn. Diag	A-EE7300U	
Additional Specifications:		
0		
0		

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.0110	0.0100	0.0850	0.1400	2.2150

Speed -Torque Curve

