marathon®

Vertical Pump Motors

Model No: 505UTDS16102
Catalog No: M752

Vertical Pump Motor, 125 HP, 3 Ph, 60 Hz, 460 V, 900 RPM, 505 PV Frame, DP

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Product Information Packet: Model No: 505UTDS16102, Catalog No: M752 Vertical Pump Motor, 125 HP, 3 Ph, 60 Hz, 460 V, 900 RPM, 505 PV Frame, DP

Nameplate Specifications

Phase	**3**	Output HP	**125 Hp**
Output KW	**93.0 kW**	Voltage	**460 V**
Speed	**890 r/min**	Synchronous RPM	**900 r/min**
Service Factor	**1.15**	Frame	**505 PV**
Enclosure	**Drip Proof**	Thermal Protection	**No Protection**
Efficiency	**94.5 %**	Ambient Temperature	**40 °C**
Frequency	**60 Hz**	Current	**170.0 A**
Power Factor	**73**	Duty	**Continuous**
Insulation Class	**F**	Design Code	**B**
KVA Code	**F**	Drive End Bearing Size	**6316**
Opp Drive End Bearing Size	**7319**	UL	**Recognized**
CSA	**Y**	CE	**Y**
IP Code	**22**	Number of Speeds	**1**

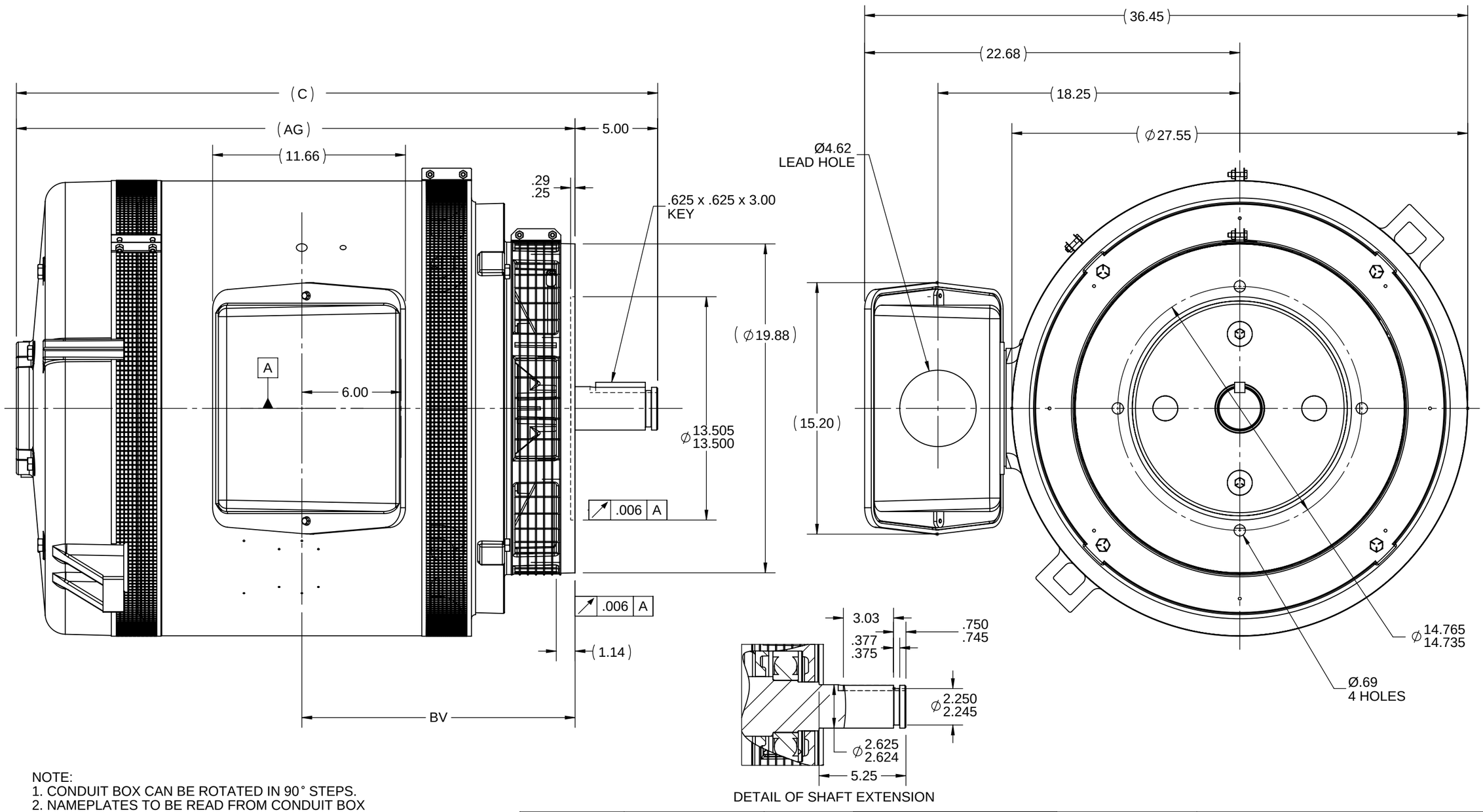
Technical Specifications

Electrical Type	**Squirrel Cage Induction Run**	Starting Method	**Across The Line**
Poles	**8**	Rotation	**Reversible**
Resistance Main	**.043 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	**38.76 in**
Frame Length	**21.0 in**	Shaft Diameter	**2 5/8 in**
Shaft Extension	**5.00 in**	Assembly/Box Mounting	**F1/F2 Capable**

Drawings

Connection Drawing	**EE7300U**	Outline Drawing	**SS510025-2100**

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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

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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	

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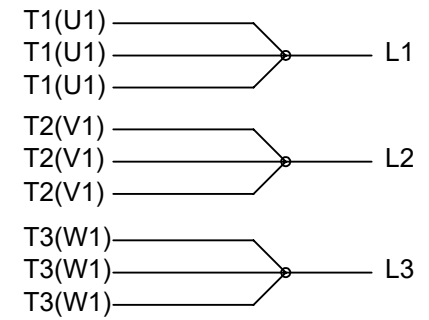
DESCRIPTION
OUTLINE
500P FR. - BB - TS - DR. PR. - P'BASE - SCREENS

MATERIAL | PROCESS/FINISH

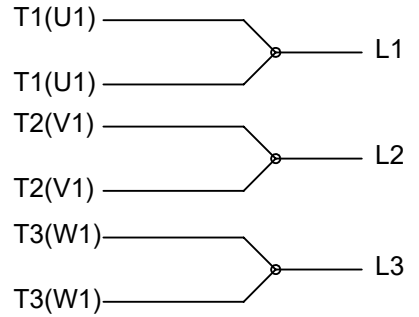
THIRD ANGLE PROJECTION

SIZE	DRAWING NUMBER	SHEET
B	SS510025	1 OF 1

IF MOTOR HAS 9 LEADS

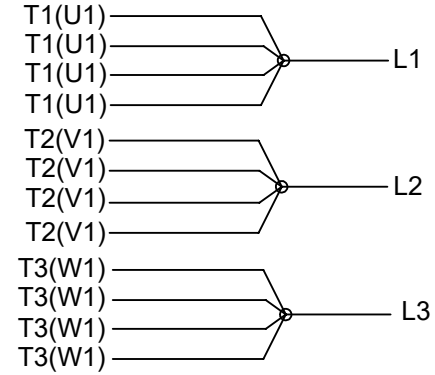


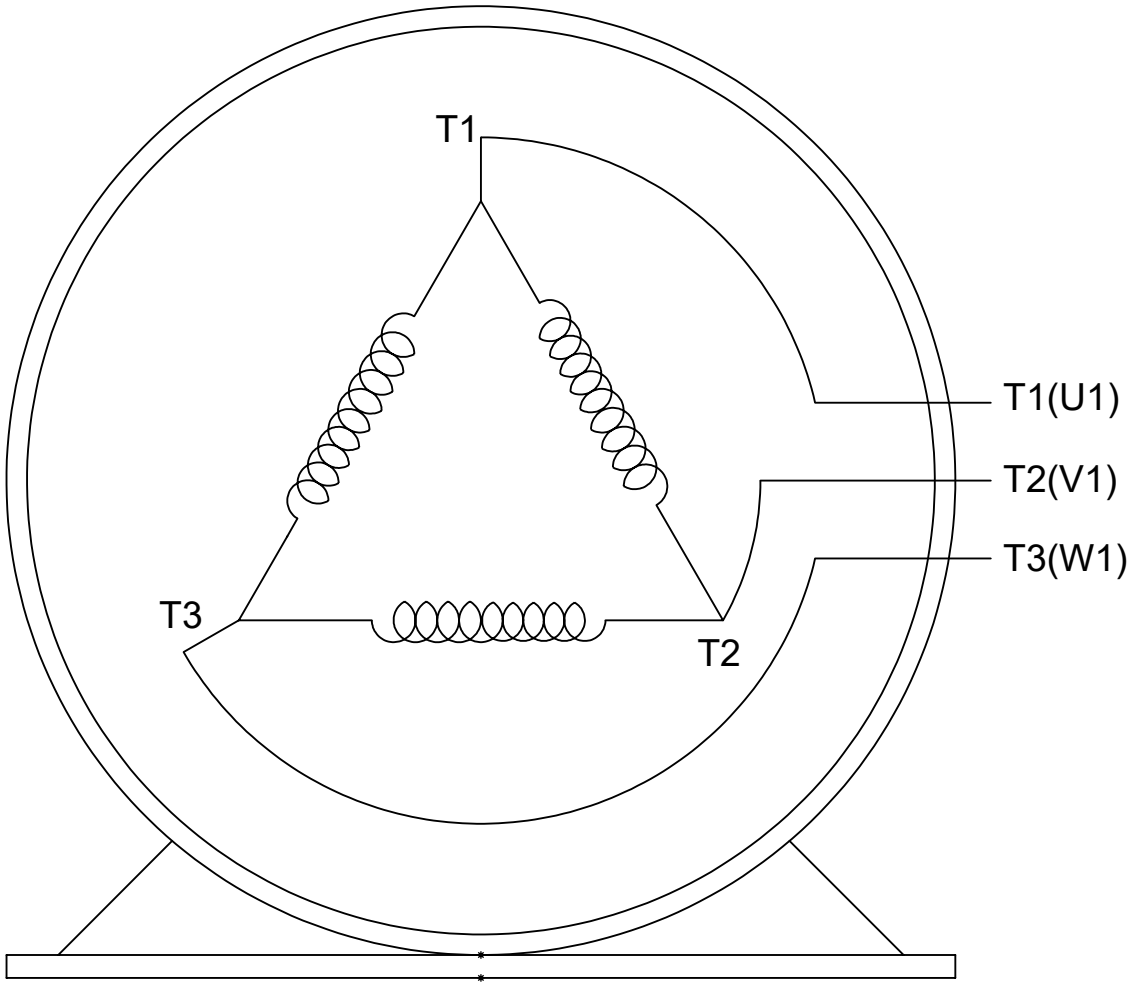
IF MOTOR HAS 6 LEADS



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

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PRIMARY DIMENSIONS ARE INCH
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DRAWN BY	DRS
DATE	09-27-1996
APPROVED BY	GK
DATE	09-30-1996
REFERENCE	
THIRD ANGLE PROJECTION	

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DESCRIPTION
CONN DIAGRAM-EXTERNAL
3Ø SINGLE VOLTAGE

MATERIAL	PROCESS/FINISH

SIZE	DRAWING NUMBER	SHEET
A	EE7300U	1 OF 1

Data Sheet

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

marathon® electric

505UTDS16102

Submittal

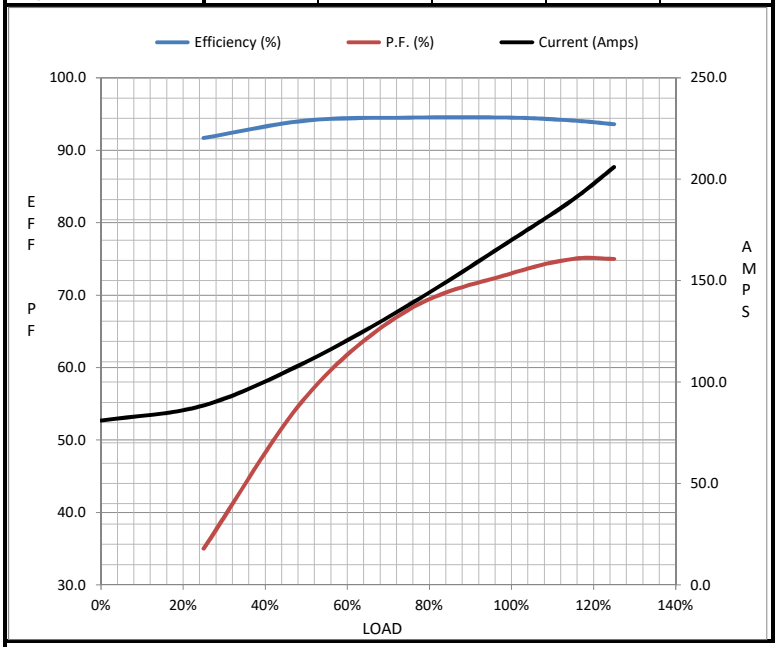
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	81.0	88.5	110	138	170	190	206	825	
Torque (ft-lb)	0.00	183	366	551	739	851	926	1,150	
RPM	900	898	895	892	890	888	885	0	
Efficiency (%)		91.7	94.1	94.5	94.5	94.1	93.6		
P.F. (%)	3.0	35.0	56.0	68.0	73.0	75.0	75.0	30.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	550	845	890	900
Current (Amps)	825	750	475	170	81.0
Torque (ft-lb)	1,150	950	1,550	739	0.00



Information Block

HP	125.0	
Sync. RPM	900	
Frame	505	
Enclosure	DP	
Construction	TDS	
Voltage	460	V
Frequency	60	Hz
Design	B	
LR Code letter	F	
Service Factor	1.15	
Temp Rise @ FL	50	° C
Duty	CONT	
Ambient	40	° C
Elevation	1,000	feet
Rotor/Shaft wk²	130	Lb-Ft²
Ref Wdg	T505837 NONE	
Sound Pressure @ 1M	75	dBA
VFD Rating	NONE	
Outline Dwg	B-SS510025-2100	
Conn. Diag	A-EE7300U	

Additional Specifications:

0

0

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.0270	0.0200	0.1860	0.3180	3.1370

