marathon®

Vertical Pump Motors

Model No: 405TTDS16102
Catalog No: M740

Vertical Pump Motor, 60 HP, 3 Ph, 60 Hz, 230/460 V, 900 RPM, 405HPV Frame, DP

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Product Information Packet: Model No: 405TTDS16102, Catalog No: M740 Vertical Pump Motor, 60 HP, 3 Ph, 60 Hz, 230/460 V, 900 RPM, 405HPV Frame, DP

Nameplate Specifications

Phase	**3**	Output HP	**60 Hp**
Output KW	**45.0 kW**	Voltage	**230/460 V**
Speed	**885 r/min**	Synchronous RPM	**900 r/min**
Service Factor	**1.15**	Frame	**405HPV**
Enclosure	**Drip Proof**	Thermal Protection	**No Protection**
Efficiency	**93 %**	Ambient Temperature	**40 °C**
Frequency	**60 Hz**	Current	**160.0/80.0 A**
Power Factor	**75.5**	Duty	**Continuous**
Insulation Class	**F**	Design Code	**B**
KVA Code	**G**	Drive End Bearing Size	**6314**
Opp Drive End Bearing Size	**7314**	UL	**Recognized**
CSA	**Y**	CE	**Y**
IP Code	**22**	Number of Speeds	**1**

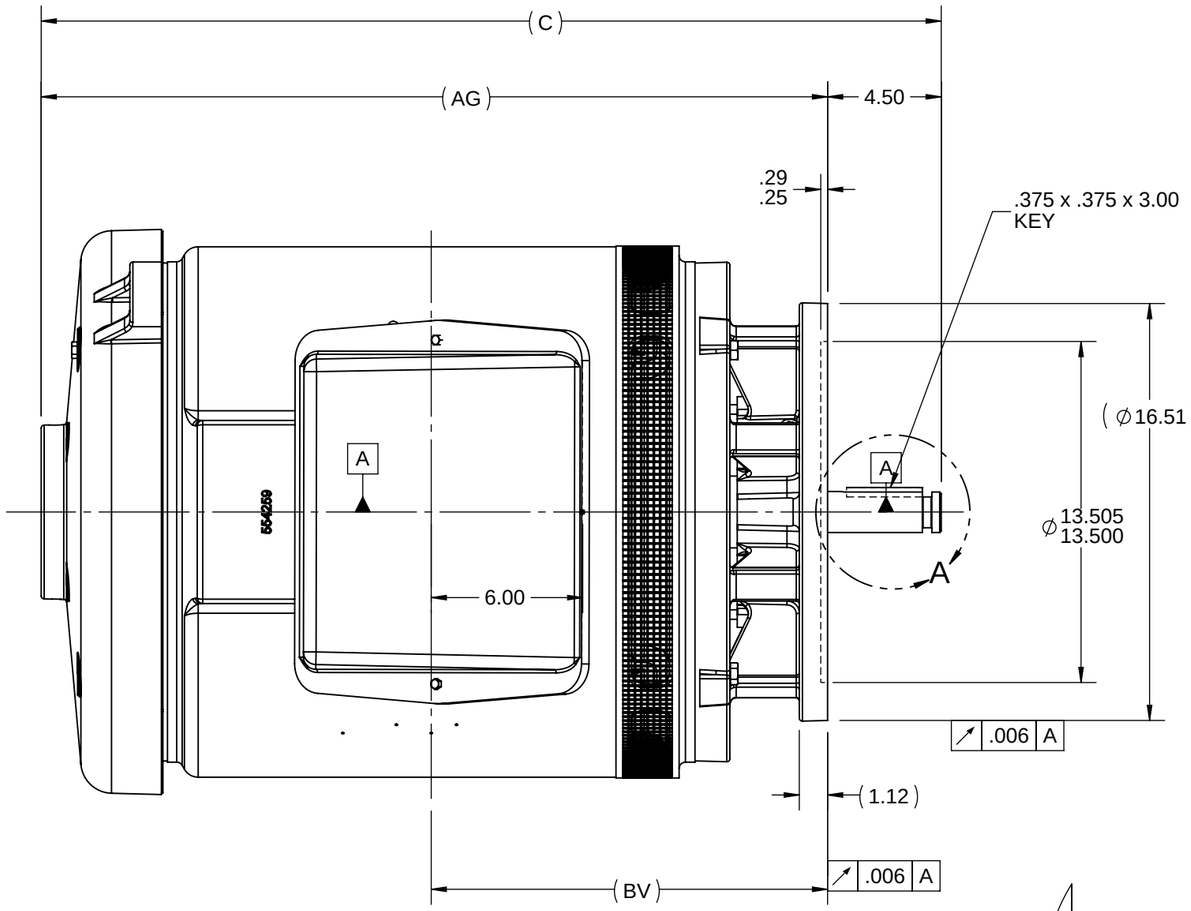
Technical Specifications

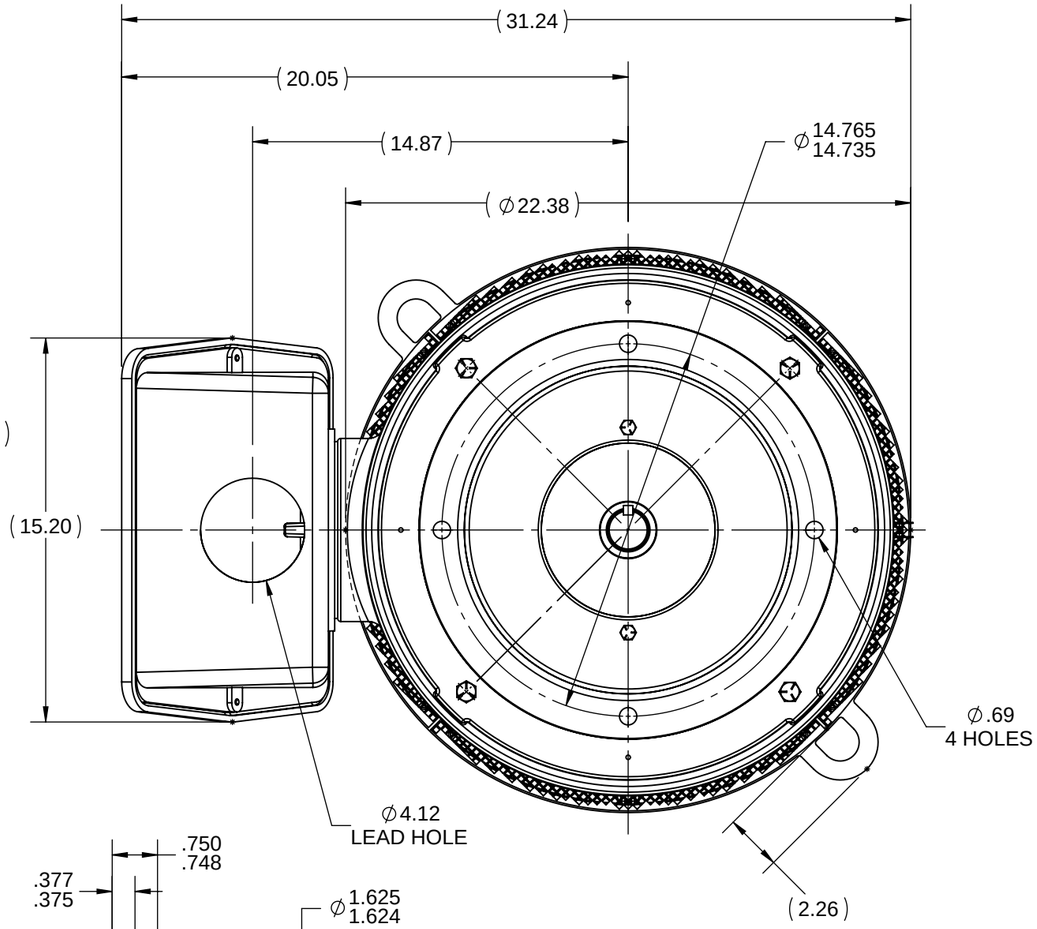
Electrical Type	**Squirrel Cage Induction Run**	Starting Method	**Across The Line**
Poles	**8**	Rotation	**Reversible**
Resistance Main	**.121 O**	Mounting	**Round**
Motor Orientation	**Shaft Down**	Drive End Bearing	**Ball**
Opp Drive End Bearing	**Duplex Tandem Angular Contact**	Frame Material	**Cast Iron**
Shaft Type	**HP**	Overall Length	**35.64 in**
Frame Length	**20.88 in**	Shaft Diameter	**1 5/8 in**
Shaft Extension	**4.50 in**	Assembly/Box Mounting	**F1/F2 Capable**

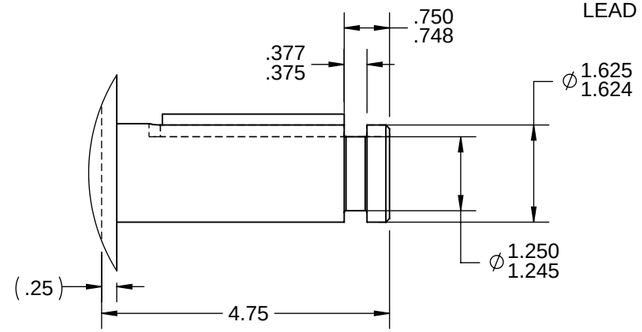
Drawings

Connection Drawing	**EE7308**	Outline Drawing	**B-SS555070-2088**

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DETAIL OF SHAFT EXT.

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
2088	400PV	35.64	31.14	15.70

DRAWING REVISION: E	REVISION BY: SB	REV DATE/© DATE: 05/28/2026
REQUEST NUMBER: CR-0026424	APPROVED BY: RMS	DATE: 05/28/2026
REQUEST NUMBER DESCRIPTION: DRAWING TITLE BLOCK UPDATED		

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TOLERANCES (EXCEPT AS NOTED):

DEC.	INCH	mm	ANGLE
.X	±0.1	[±3]	±0.5°
.XX	±0.01	[±0.3]	
.XXX	±0.005	[±0.13]	
.XXXX	±0.0005	[±0.013]	

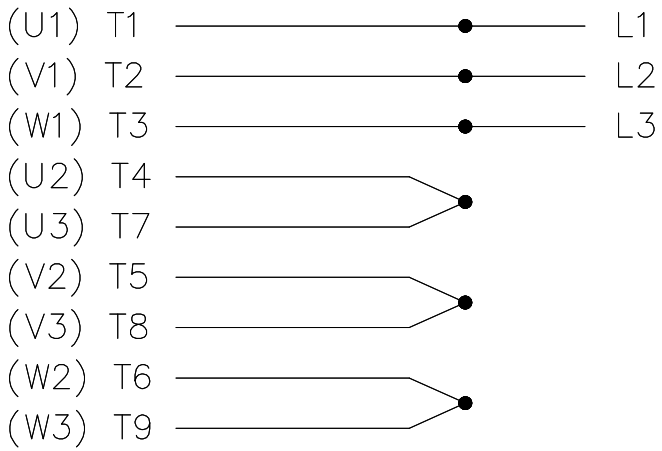
REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.08/.38] X 45°
CORNER FILLETS: R.02 [.5]
MACHINED SURFACES: 125 INCH / 3.2 mm
mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY

DRAWN BY: CJR	marathon™	
DATE: 03-01-2012		
APPROVED BY: DJK	DESCRIPTION: OUTLINE 400PV FR. - DR. PR. - VERTICAL	
DATE: 03-01-2012		
REFERENCE	MATERIAL	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE: B	DRAWING NUMBER: SS555070 — SHEET: 1 OF 1

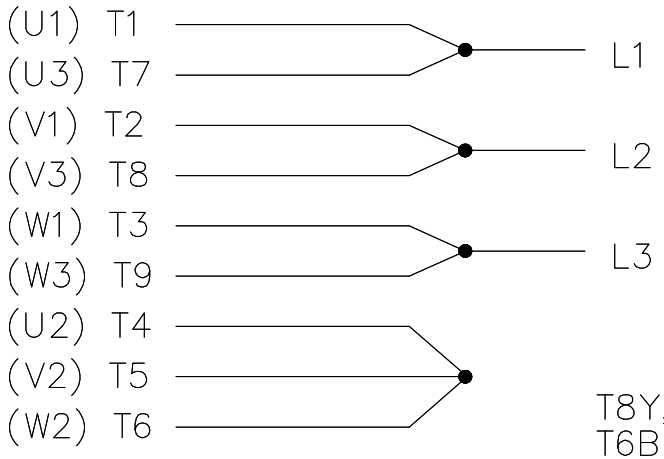
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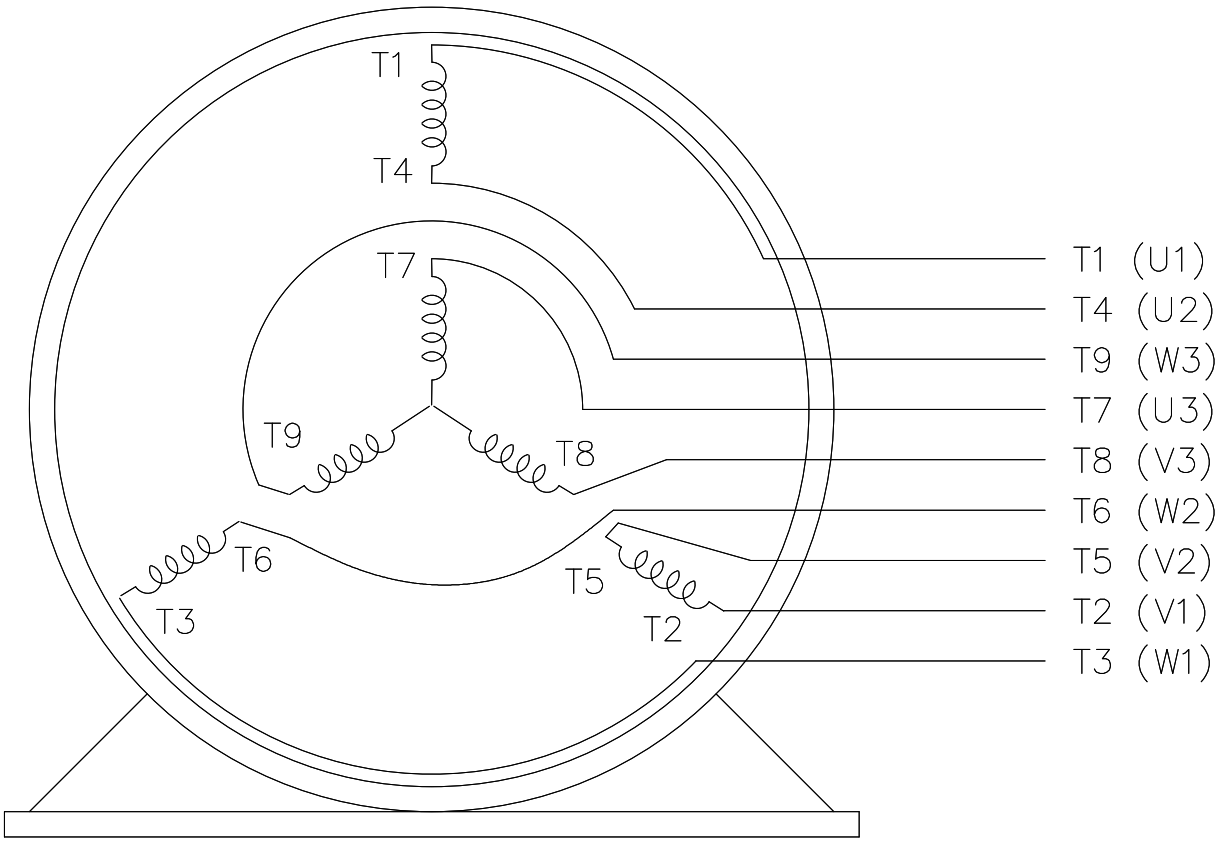
THREE PHASE
DUAL VOLTAGE MOTOR

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

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

marathon™

DESCRIPTION
CONN DIAGRAM-EXTERNAL
3Ø - DUAL VOLTAGE MOTOR

MATERIAL	PROCESS/FINISH

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

Uncontrolled Copy

Data Sheet

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

405TTDS16102

Submittal

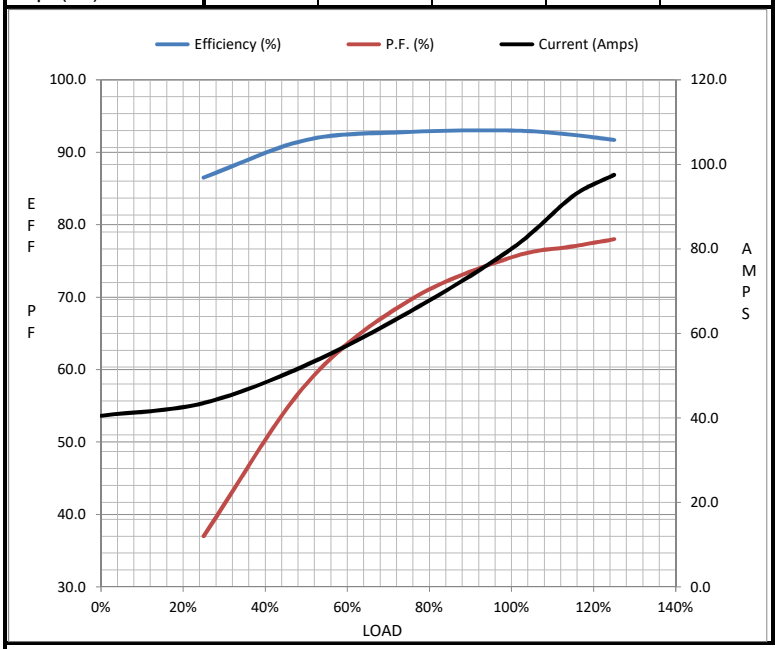
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	40.5	43.5	52.5	65.0	80.0	92.5	97.5	435	
Torque (ft-lb)	0.00	88.0	176	265	355	408	445	745	
RPM	900	896	894	890	885	884	882	0	
Efficiency (%)		86.5	91.7	92.8	93.0	92.4	91.7		
P.F. (%)	4.5	37.0	58.0	69.5	75.5	77.0	78.0	39.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	400	850	885	900
Current (Amps)	435	350	260	80.0	40.5
Torque (ft-lb)	745	675	900	355	0.00



Information Block

HP	60.0	
Sync. RPM	900	
Frame	405	
Enclosure	DP	
Construction	TDS	
Voltage	230/460	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	36.5	Lb-Ft²
Ref Wdg	T405818 NONE	
Sound Pressure @ 1M	70	dBA
VFD Rating	NONE	
Outline Dwg	B-SS555070-2088	
Conn. Diag	A-EE7308	

Additional Specifications:

0

0

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.0840	0.0490	0.3730	0.5630	6.9530

