marathon®

Vertical Pump Motors

Model No: 254TTFNA16088
Catalog No: M883B

Vertical Pump Motor, 7.50 HP, 3 Ph, 60 Hz, 230/460 V, 1200 RPM, 254HPV Frame, TEFC

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Product Information Packet: Model No: 254TTFNA16088, Catalog No: M883B Vertical Pump Motor, 7.50 HP, 3 Ph, 60 Hz, 230/460 V, 1200 RPM, 254HPV Frame, TEFC

Nameplate Specifications

Phase	**3**	Output HP	**7.50 Hp**
Output KW	**5.6 kW**	Voltage	**230/460 V**
Speed	**1175 r/min**	Synchronous RPM	**1200 r/min**
Service Factor	**1.15**	Frame	**254HPV**
Enclosure	**Totally Enclosed Fan Cooled**	Thermal Protection	**No Protection**
Efficiency	**91 %**	Ambient Temperature	**40 °C**
Frequency	**60 Hz**	Current	**19.8/9.9 A**
Power Factor	**78**	Duty	**Continuous**
Insulation Class	**F**	Design Code	**B**
KVA Code	**H**	Drive End Bearing Size	**6309**
Opp Drive End Bearing Size	**6210**	UL	**Recognized**
CSA	**Y**	CE	**Y**
IP Code	**43**	Number of Speeds	**1**

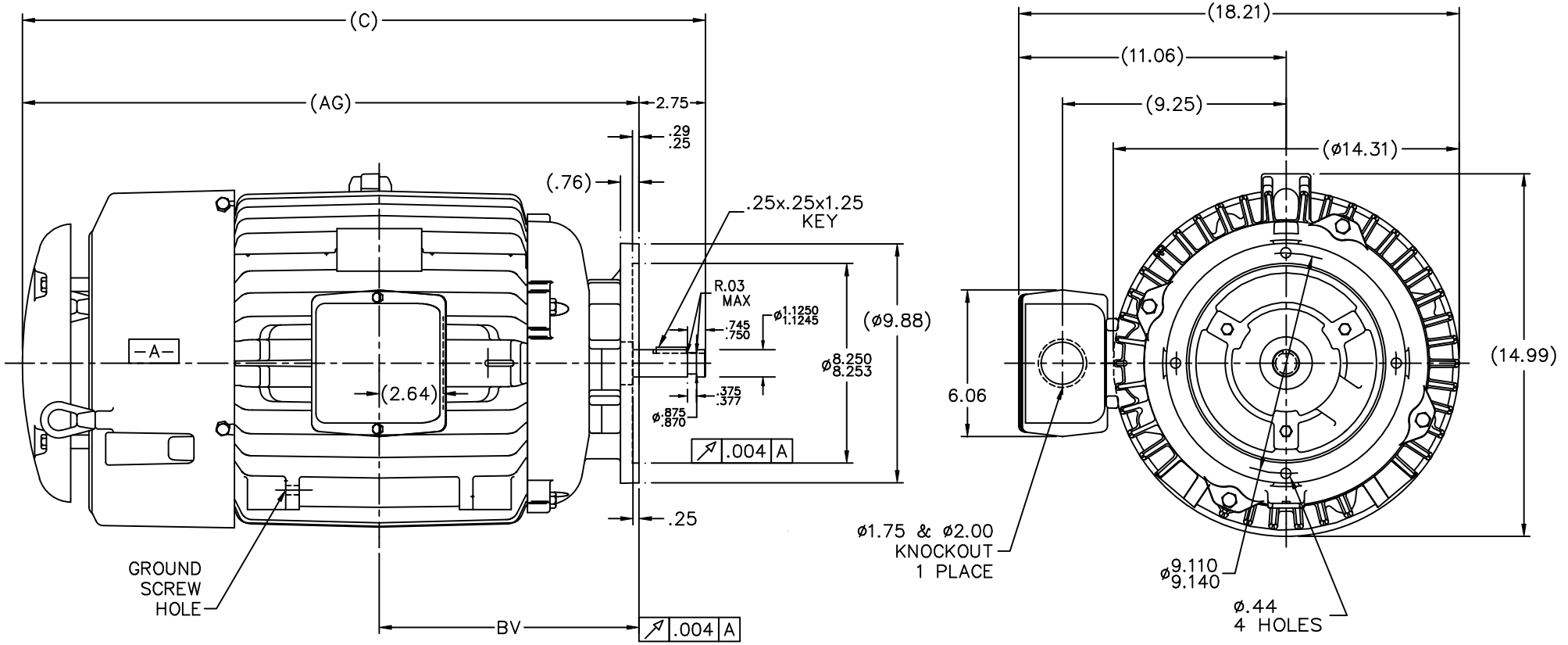
Technical Specifications

Electrical Type	**Squirrel Cage Induction Run**	Starting Method	**Across The Line**
Poles	**6**	Rotation	**Reversible**
Resistance Main	**1.319 O**	Mounting	**Round**
Motor Orientation	**Shaft Down**	Drive End Bearing	**Ball**
Opp Drive End Bearing	**Ball**	Frame Material	**Cast Iron**
Shaft Type	**HP**	Overall Length	**28.26 in**
Frame Length	**12.25 in**	Shaft Diameter	**1 1/8 in**
Shaft Extension	**2.75 in**	Assembly/Box Mounting	**F1/F2 Capable**

Drawings

Connection Drawing	**A-EE7308**	Outline Drawing	**B-SS203116-1225**

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NOTES:
1. BOX CAN ONLY BE ROTATED CLOCKWISE UP TO 270° FROM ITS ORIGINAL POSITION.
2. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	C	AG	BV	
1225	254-6HP	28.26	25.51	10.75	

NO.	REVISION	BY & DATE	CHK
8	REVISED DRAWING	RJW 04-04-2007	
7	ROTATED C'BOX 90° CN 32714	DRS 06-02-2004	ML
6	ADDED GROUND SCREW HOLE CN 31554	TJB 05-03-2001	
5	.29/.25 WAS .19/.25 CN 29300-133	DRS 09-05-2000	
4	UPDATED CONDUIT BOX CN 28427	TJB 01-25-2000	
3	REV. PART DESCRIPTION TEFC WAS		

TOLERANCES UNLESS SPECIFIED: DEC. INCHES; .X ±.1; .XX ±.03; .XXX ±.005; .XXXX ±.0005; ANG ±7'30"

MARATHON ELECTRIC

TITLE OUTLINE - TEFC
250HP FR. - BB - TS - P'BASE

MAT'L.
FINISH
RFP
DIST LB
CAD FILE ss203116

DRAWN	BLR 06-17-1996
CHK	ML 06-19-1996
APPD	BW 06-19-1996
SCALE	1=4
REF	280 HI MT. FR.
FMF	
PREV	

SIZE B | DRAWING NO. SS203116 | PAGE OF | REV. 8

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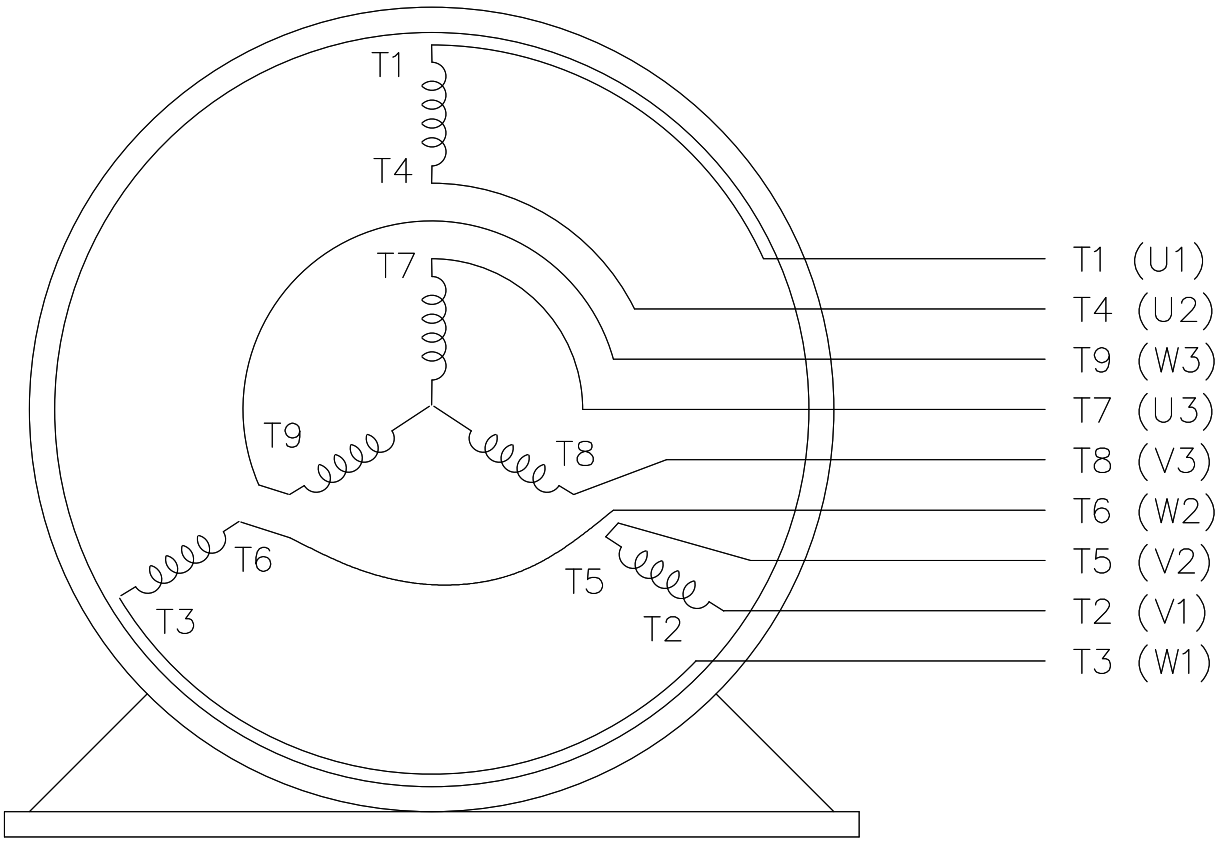
THREE PHASE
DUAL VOLTAGE MOTOR

HIGH VOLTAGE

(U1) T1 — L1
(V1) T2 — L2
(W1) T3 — L3
(U2) T4
(U3) T7
(V2) T5
(V3) T8
(W2) T6
(W3) T9

LOW VOLTAGE

(U1) T1
(U3) T7 — L1
(V1) T2
(V3) T8 — L2
(W1) T3
(W3) T9 — L3
(U2) T4
(V2) T5
(W2) T6



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	REVISION BY	REV DATE/ © DATE
J	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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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 6 EE7308	1 OF 1

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Data Sheet

Date: 19-06-2017
Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

marathon® electric

254TTFNA16088

Submittal

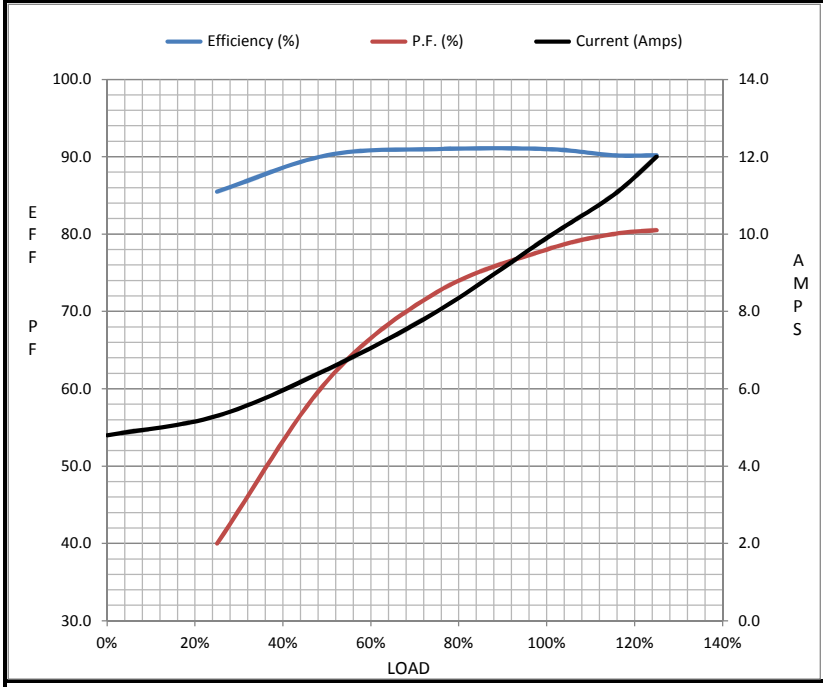
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	4.8	5.3	6.5	8.0	9.9	11.0	12.0	63.5	
Torque (ft-lb)	0.00	8.0	16.5	25.0	33.5	38.5	42.0	72.0	
RPM	1200	1195	1190	1180	1175	1,170	1165	0	
Efficiency (%)		85.5	90.2	91.0	91.0	90.2	90.2		
P.F. (%)	7.0	40.0	61.0	72.5	78.0	80.0	80.5	42.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1065	1175	1200
Current (Amps)	63.5	59.0	39.5	9.9	4.8
Torque (ft-lb)	72.0	69.0	103	33.5	0.00



Information Block

HP	7.5
Sync. RPM	1200
Frame	254
Enclosure	TEFC
Construction	TFN
Voltage	230/460 V
Frequency	60 Hz
Design	B
LR Code letter	H
Service Factor	1.15
Temp Rise @ FL	40 ° C
Duty	CONT
Ambient	40 ° C
Elevation	1,000 feet
Rotor/Shaft wk²	2.50 Lb-Ft²
Ref Wdg	254653 NONE
Sound Pressure @ 1M	56 dBA
VFD Rating	NONE
Outline Dwg	B-SS203116-1225
Conn. Diag	A-EE7308

Additional Specifications:

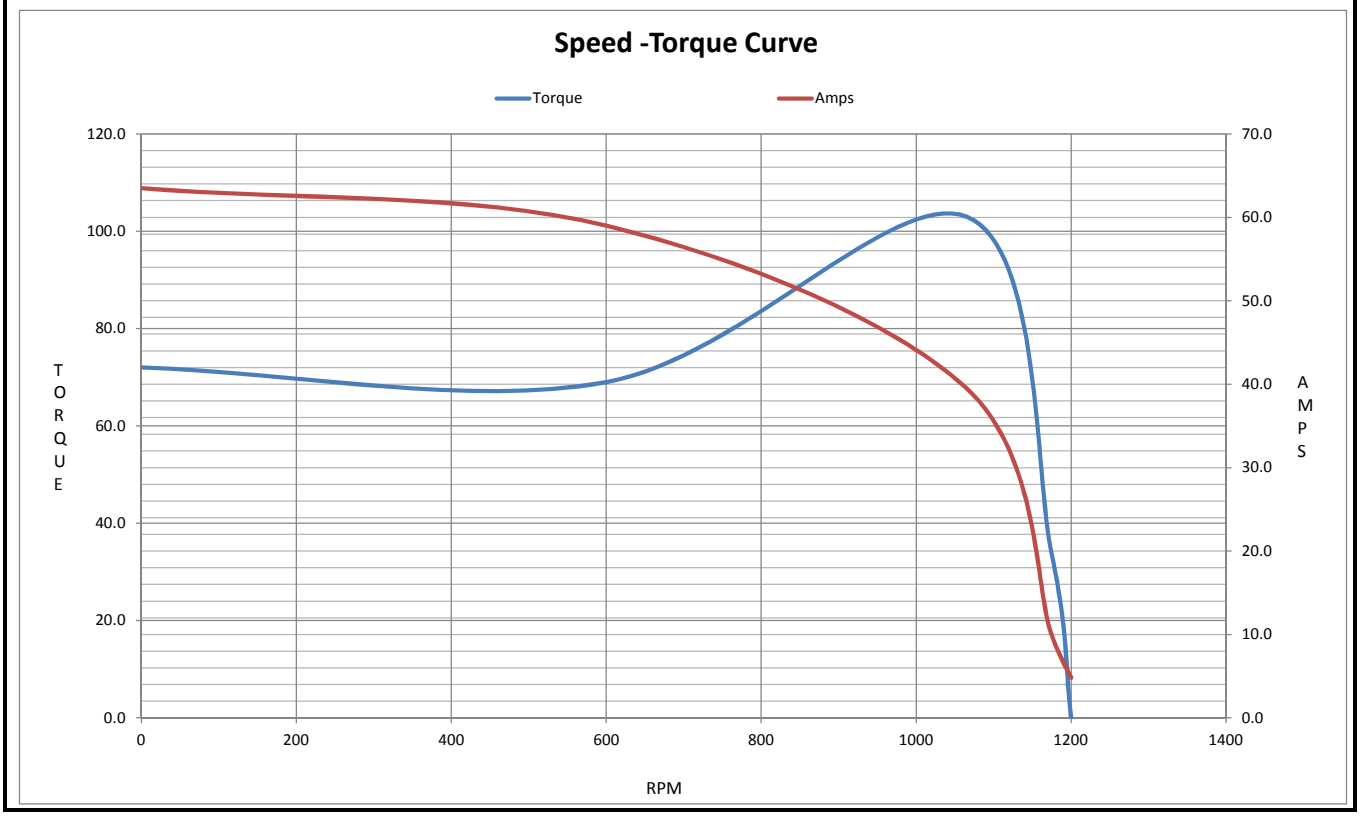
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365THFS8036

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.7370	0.6730	2.9030	3.1530	53.4870

Speed -Torque Curve



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CERTIFICATION DATA SHEET

Model#:	254TTFNA16088 AA	**WINDING#:**	254653 NONE 6
CONN. DIAGRAM:	A-EE7308	**ASSEMBLY:**	F1/F2 CAPABLE
OUTLINE:	B-SS203116-1225		

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
7 1/2	5.6	1200	1175	254HPV	TEFC	H	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	19.8/9.9	ACROSS THE LINE	CONTINUOUS	F3	1.15	40	3300

FULL LOAD EFF: 91	3/4 LOAD EFF: 91	1/2 LOAD EFF: 90.2	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 78	3/4 LOAD PF: 72.5	1/2 LOAD PF: 61	90.2	SQ CAGE IND RUN	9.6 / 4.8

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
33.5 LB-FT	127 / 63.5	72 LB-FT 215	103 LB-FT 307	40

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
56 dBA	66 dBA	2.5 LB-FT^2	170 LB-FT^2	20 SEC.	2	350 LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
P-BASE	STANDARD	ROUND	SHAFT DOWN	FALSE	NONE	TRUE	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL 6309	BALL 6210	POLYREX EM	HP	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE /n HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: NONE
INV. HP SPEED RANGE: NONE

ENCODER: NONE
NONE NONE
NONE NONE PPR

BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
NONE FT-LB NONE V NONE Hz

*
NOTES
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