

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 254TTDX16086

Catalog No: M808B

Vertical Pump Motor, 7.50 & 5 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1200 & 1000 RPM,  
254HPV Frame, DP



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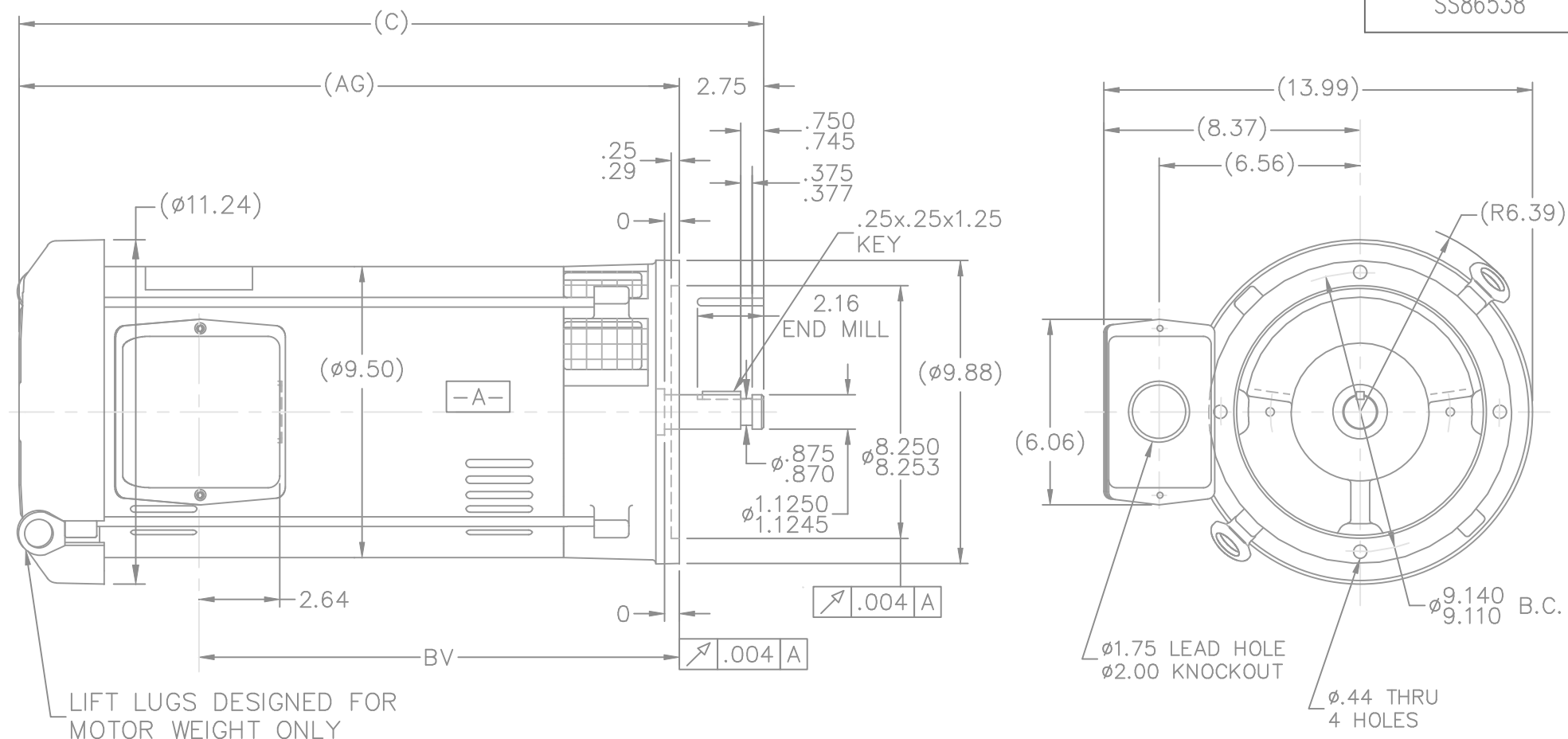
**RegalRexnord**

### Nameplate Specifications

Phase	3	Output HP	7.50 & 5 Hp
Output KW	5.6 & 3.7 kW	Voltage	230/460 & 190/380 V
Speed	1173 & 980 rpm	Service Factor	1.15 & 1.15
Frame	254HPV	Enclosure	Drip Proof
Thermal Protection	No Protection	Efficiency	91.2 & 91 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	21.4/10.7 & 17.6/8.8 A	Power Factor	71.3
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	H
Drive End Bearing Size	6309	Opp Drive End Bearing Size	6208
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	1.4 Ohms	Mounting	Round
Motor Orientation	Shaft Down	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Rolled Steel
Shaft Type	HP	Overall Length	24.30 in
Frame Length	15.15 in	Shaft Diameter	1.125 in
Shaft Extension	2.75 in	Assembly/Box Mounting	F1/F2 CAPABLE
Connection Drawing	EE7308	Outline Drawing	SS86538-1515

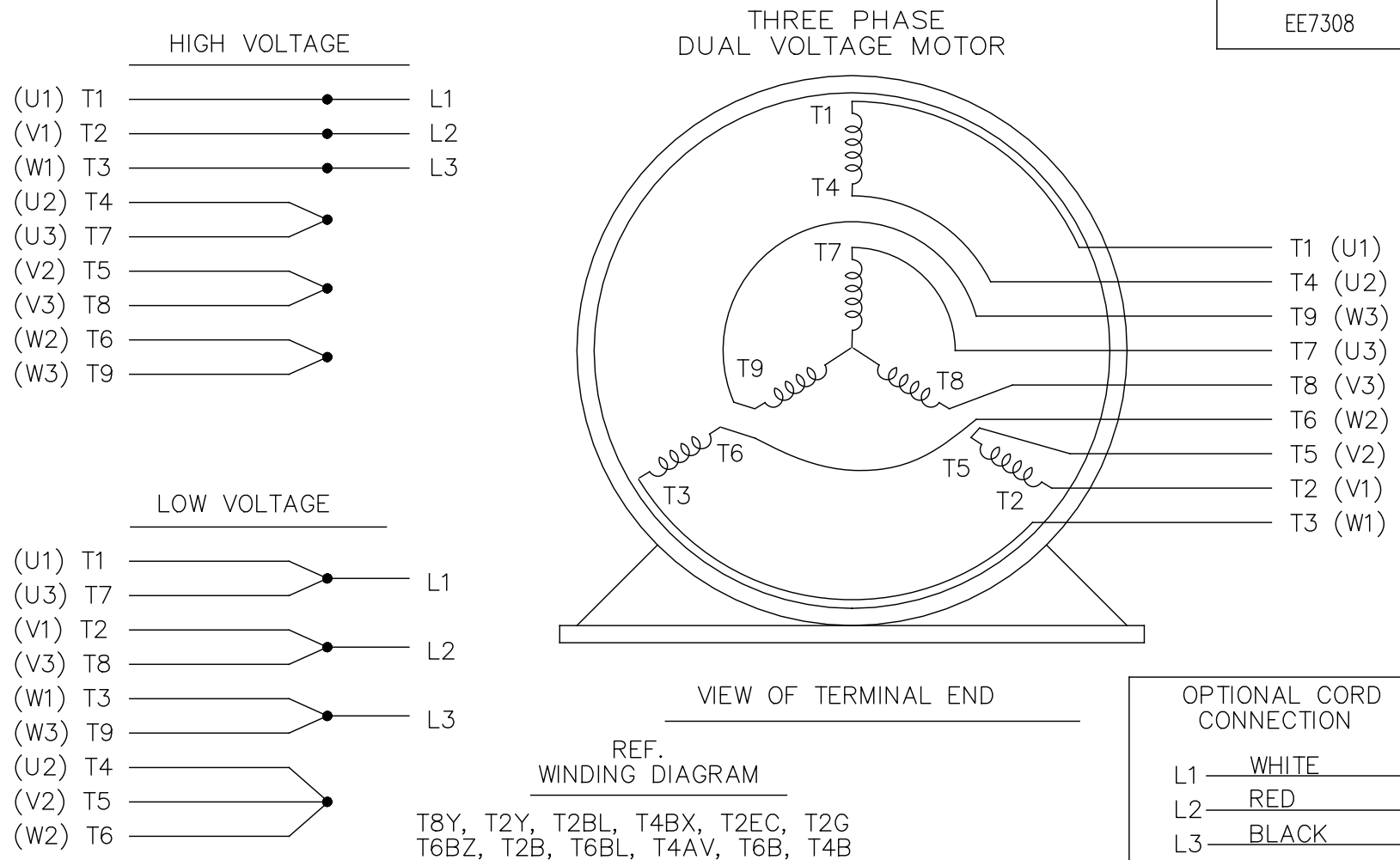



DASH	FR.	C	BV	AG
1340	254HP	22.55	13.93	19.80
1515	254/256HP	24.30	15.68	21.55

## NOTES:

- NAMEPLATE TO BE READ FROM SHAFT EXT. END OF MOTOR.
- BOX CAN BE MOUNTED IN 90° STEPS.

				TOLERANCES UNLESS SPECIFIED		MARATHON ELECTRIC	DRAWN KL 11-24-1993	
				DEC.	INCHES		CHK ML 11-29-1993	
8	UPDATED DRAWING		TJW 04/27/2007				APPD DRN 11-29-1993	
7	REDRAWN IN AUTOCAD		TAT 07-22-2004	ML	.X	±.1		
6	CLARIFIED REVISION HISTORY AND BOX ROT. CN28427	CAV 02-17-2000			.XX	±.03	SCALE 1=5	
5	UPDATED CONDUIT BOX CN 28427	TJB 01-31-2000			.XXX	±.005	REF	
4	-1515 WAS FOR 256HP FR. ONLY CN 18683	KL 10-11-1994			.XXXX	±.0005	FMF	
NO.	REVISION	BY & DATE	CHK	ANG	±'30"	FINISH	PREV	
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT			RFP	CAD FILE ss86538		SIZE A	DRAWING NO. SS86538	PAGE OF 8
			DIST LB					



				TOLERANCES UNLESS SPECIFIED		 <b>Regal</b> Beloit America, Inc.	DRAWN RM 11/20/1990	
5	CHG TO REGAL LOGO	SL 09/10/2015	AB	DEC.	INCHES		CHK ML 11/21/1990	
4	REVISED IEC NOTATIONS	MSG 11/15/2011	CMN	.X	±.1		APPD SAS 04/24/2003	
3	ADDED IEC NOTATIONS... (U1), (V1) ETC. MU95194	MSG 5/10/2010	MJS	.XX	±.02		SCALE 1=1	
2	ADDED THE OPTIONAL CORD CONNECTION MU46318	RDH 04/24/2003	DRS	.XXX	±.005	TITLE CONNECTION DIAGRAM 3ø — DUAL VOLTAGE MOTOR	REF	
1	REDRAWN	RM 11/20/1990		.XXXX	±.0005		FMF	
NO.	REVISION	BY & DATE	CHK	ANG	±7°30"	FINISH	PREV	
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			DIST WP					



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

DATA VOLTS: 460

### CERTIFICATION DATA SHEET

CUSTOMER: \_\_\_\_\_ CUSTOMER P.O. #: \_\_\_\_\_  
ORDER #: \_\_\_\_\_ REFERENCE MODEL #: 254TTDX16086  
CONN. DIAGRAM: EE7308 CAT #: M808B  
OUTLINE: TBD CUSTOMER PART #: \_\_\_\_\_  
WINDING: K2156179 NONE 1 MOUNTING: F1/F2 CAPABLE  
SPEED: \_\_\_\_\_

### TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
7.5	5.6	1200	1173	254HPV	DP	TDX	H	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	21.4/10.7&17.6/8.8	ACROSS THE LINE	CONT	F	1.15	40	3300

F.L. EFF	91.2	3/4 LD EFF	90.7	1/2 LD EFF	89.7	GTD EFF	90.2	ELECT. TYPE	SQ CAGE IND RUN
F.L. PF	71.3	3/4 LD PF	65.1	1/2 LD PF	52.8				

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)	
33.6 LB-FT	63.0	61.5 LB-FT 183%	92.5 LB-FT 275%	27	

@ 3 FT.	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
64 dBA	73 dBA	1.30 LB-FT²	120 LB-FT²	20 SEC.	2	150 LB.

### \*\*\* SUPPLEMENTAL INFORMATION \*\*\*

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
P-BASE	STANDARD	ROUND	SHAFT DOWN	NO	NONE	YES	RODENT	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	BALL	POLYREX EM	HP	NONE	NONE	1045 HOT ROLLED (C-204)	ROLLED STEEL
6309	6208						

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
0.801	0.816	3.58	3.969	49.027	0.150	ODE

* N O T E S *		INVERTER TORQUE: NONE INV. HP SPEED RANGE: NONE
	ENCODER: NONE NONE NONE	NONE PPR
PREPARED BY: FAREEDA DUDEKULA DATE: 9/11/2018	BRAKE: NONE NONE FT-LB: NA VOLTAGE: NONE	NONE H2:
FORM: 3531 REV_4 2/27/06	UL: V-INS, CONST UL REC	

## Data Sheet

Date: 11/30/2018

Customer: \_\_\_\_\_

Attention: \_\_\_\_\_

Submitted by: FAREEDA DUDEKULA

254TTDX16086



Submittal

Data @ 460 V

## Motor Load Data

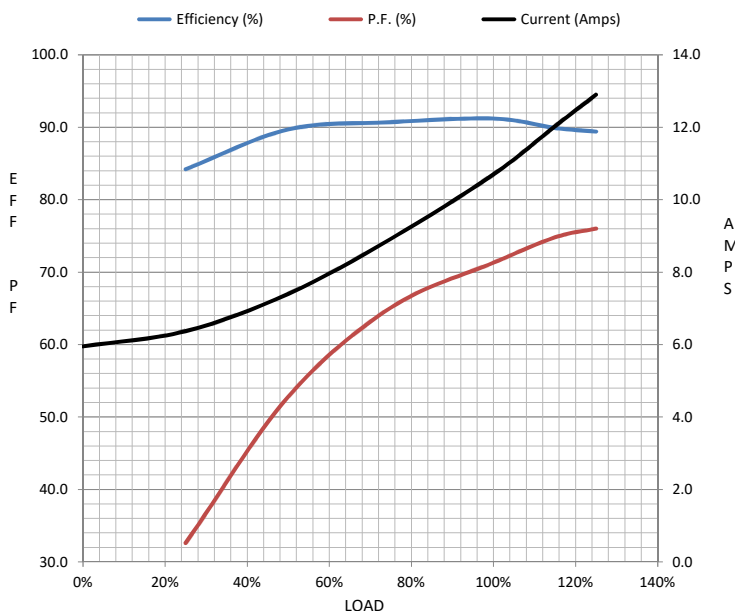
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	6.0	6.4	7.4	8.9	10.7	12.0	12.9	63.0	
Torque (ft-lb)	0.00	8.2	16.6	25.1	33.6	39.0	42.5	61.5	
RPM	1200	1193	1188	1177	1173	1,162	1158	0	
Efficiency (%)		84.2	89.7	90.7	91.2	89.9	89.4		
P.F. (%)	5.5	32.6	52.8	65.1	71.3	74.8	76.0	40.5	

## Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1000	1173	1200
Current (Amps)	63.0	55.0	40.0	10.7	6.0
Torque (ft-lb)	61.5	55.0	92.5	33.6	0.00

## Information Block

HP	7.5			
Sync. RPM	1200			
Frame	254			
Enclosure	DP			
Construction	TDR			
Voltage	230/460#190/380	V		
Frequency	60	Hz		
Design	B			
LR Code letter	H			
Service Factor	1.15			
Temp Rise @ FL	27	° C		
Duty	CONT			
Ambient	40	° C		
Elevation	1,000	feet		
Rotor/Shaft wk²	1.30	Lb-Ft²		
Ref Wdg	K2156179 NONE			
Sound Pressure @ 1M	64	dBA		
VFD Rating	NONE			
Outline Dwg	TBD			
Conn. Diag	EE7308			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.8010	0.8160	3.5800	3.9690	49.0270



## Speed -Torque Curve

