

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 256TTFNA16031

Catalog No: M893B

Vertical Pump Motor, 20 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 256HPV Frame, TEFC



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RegalRexnord

Nameplate Specifications

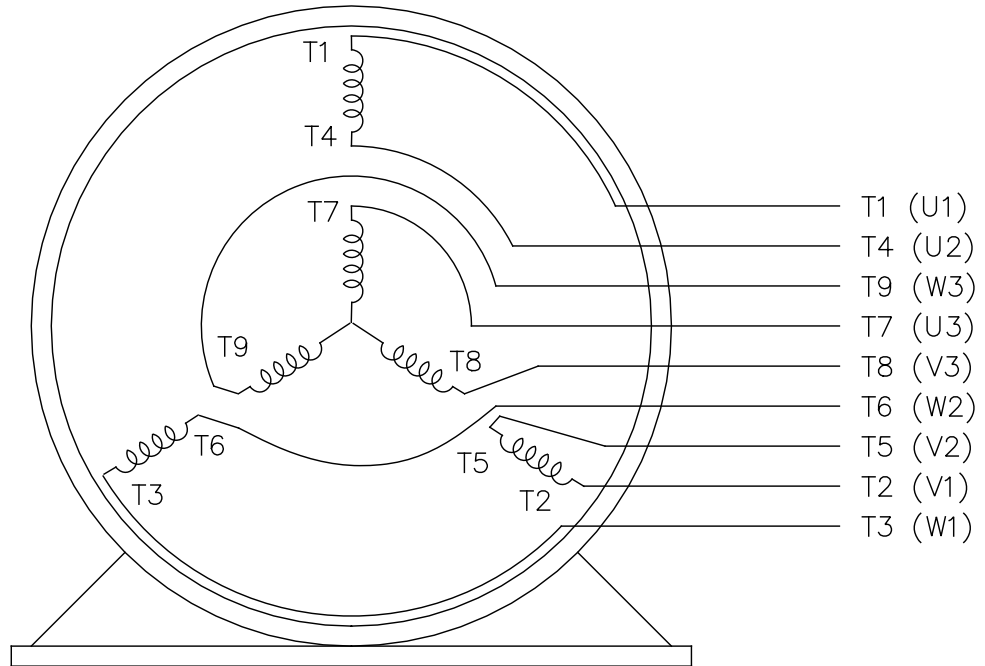
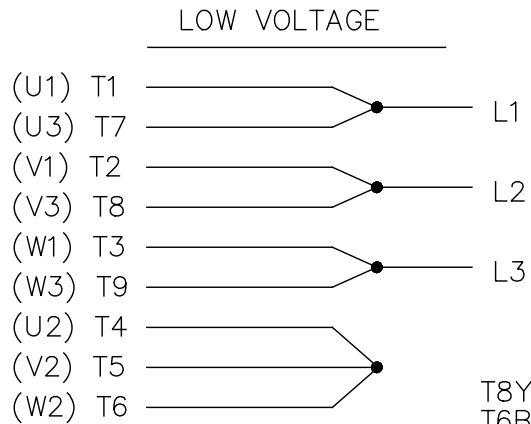
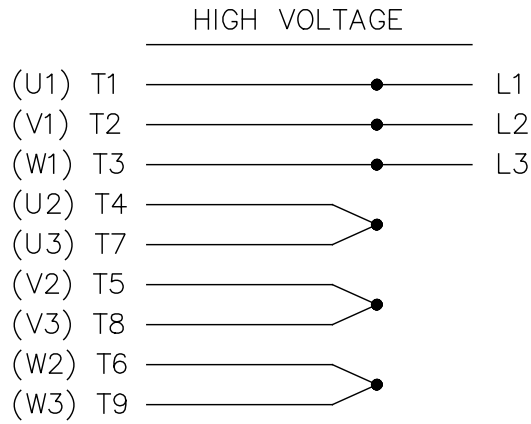
Output HP	20 Hp	Output KW	14.9 kW
Frequency	60 Hz	Voltage	230/460 V
Current	48.0/24.1 A	Speed	1775 rpm
Service Factor	1.15	Phase	3
Efficiency	93 %	Power Factor	84
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	256HPV	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
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	4	Rotation	Reversible
Resistance Main	.474 Ohms	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	1.125 in
Shaft Extension	2.75 in	Assembly/Box Mounting	F1/F2 CAPABLE
Connection Drawing	A-EE7308	Outline Drawing	B-SS203116-1225

EE7308

THREE PHASE
DUAL VOLTAGE MOTOR



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

NO.		REVISION		BY & DATE		CHK		ANG		FINISH		PREV	
5	CHG TO REGAL LOGO	SL	09/10/2015	AB									
4	REVISED IEC NOTATIONS	MSG	11/15/2011	CMN	.X	±.1							
3	ADDED IEC NOTATIONS... (U1), (V1) ETC. MU95194	MSG	5/10/2010	MJS	.XX	±.02							
2	ADDED THE OPTIONAL CORD CONNECTION MU46318	RDH	04/24/2003	DRS	.XXX	±.005							
1	REDRAWN	RM	11/20/1990		.XXXX	±.0005							
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		DIST	WP										
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REGAL™ Regal Beloit America, Inc.

TOLERANCES UNLESS SPECIFIED

DEC. INCHES

DRAWN RM 11/20/1990
CHK ML 11/21/1990
APPD SAS 04/24/2003

TITLE CONNECTION DIAGRAM
3Ø - DUAL VOLTAGE MOTOR

SCALE 1=1
REF
FMF
PREV



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 #: 256TTFNA16031
 CONN. DIAGRAM: A-EE7308 CAT #: M893B
 OUTLINE: B-SS203116-1225 CUSTOMER PART #: _____
 WINDING: K2564164 NONE 6 MOUNTING: F1/F2 CAPABLE
 SPEED: _____

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
20	14.9	1800	1775	256HPV	TEFC	TFN	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	230/460	48/24.1	ACROSS THE LINE	CONT	F	1.15	40	3300

F.L. EFF	93.0	3/4 LD EFF	93.6	1/2 LD EFF	93.0	GTD EFF	ELECT. TYPE
F.L. PF	84.0	3/4 LD PF	81.0	1/2 LD PF	72.0	92.4	SQ CAGE IND RUN

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
59.2 LB-FT	138	105 LB-FT 177%	146 LB-FT 247%	65

@ 3 FT.	POWER	ROTOR WK ²	MAX. LOAD WK ²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
65 dBA	74 dBA	3.2 LB-FT ²	125 LB-FT ²	25 SEC.	2	400 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	NONE	BLUE (ENAMEL)

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

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
0.267	0.207	0.99	1.491	28.4	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	BRAKE: NONE
DATE: 9/11/2018	NONE NONE
	FT-LB: NA
	VOLTAGE: NONE HZ:
FORM: 3531 REV_4 2/27/06	UL: V-INS, CONST UL REC

Data Sheet

Date: 12/3/2018
 Customer: _____
 Attention: _____
 Submitted by: FAREEDA DUDEKULA



256TTFNA16031

Submittal

Data @ 460 V

Motor Load Data

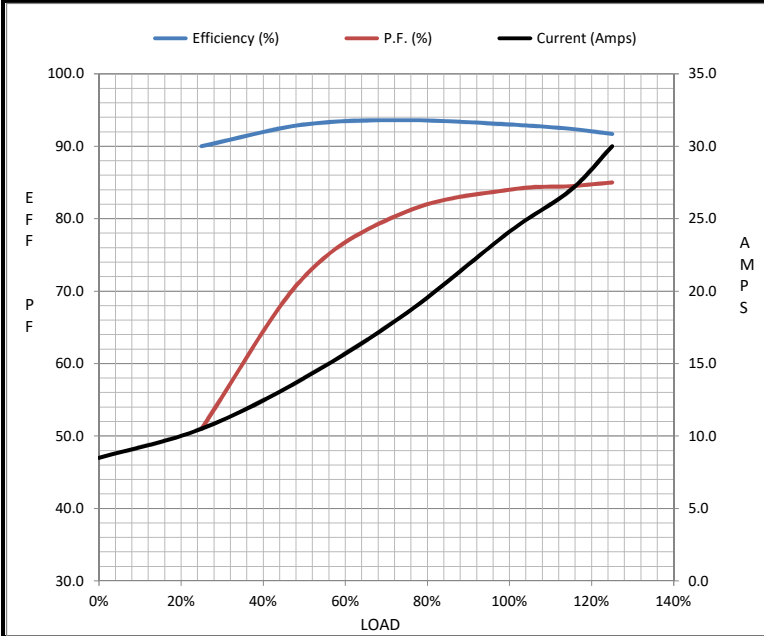
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	8.5	10.5	14.0	18.5	24.1	27.0	30.0	138
Torque (ft-lb)	0.00	14.5	29.5	44.5	59.2	68.0	74.5	105
RPM	1800	1795	1785	1780	1775	1,770	1760	0
Efficiency (%)		90.0	93.0	93.6	93.0	92.4	91.7	
P.F. (%)	8.5	51.0	72.0	81.0	84.0	84.5	85.0	40.0

Motor Speed Data

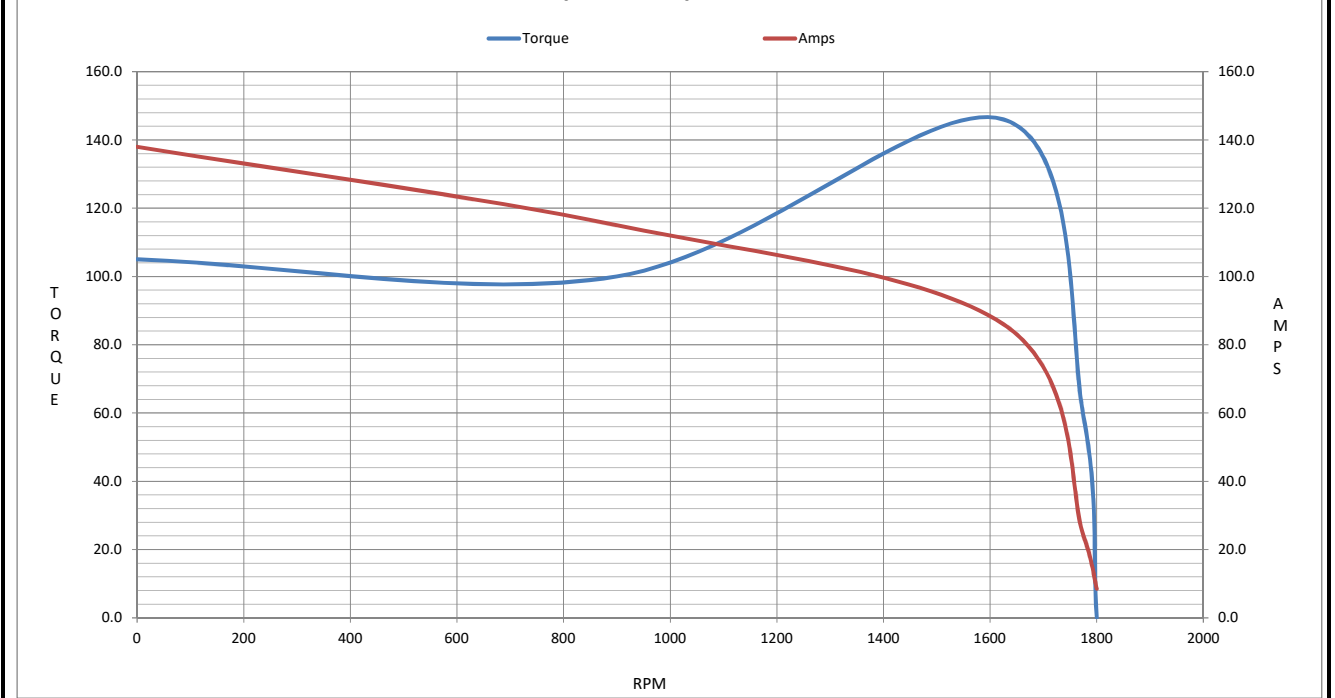
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1625	1775	1800
Current (Amps)	138	115	86.0	24.1	8.5
Torque (ft-lb)	105	100	146	59.2	0.00

Information Block

HP	20.0			
Sync. RPM	1800			
Frame	256			
Enclosure	TEFC			
Construction	TFS			
Voltage	230/460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	65 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	3.2 Lb-Ft ²			
Ref Wdg	K2564164 NONE			
Sound Pressure @ 1M	65 dBA			
VFD Rating	NONE			
Outline Dwg	B-SS203116-1225			
Conn. Diag	A-EE7308			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.2670	0.2070	0.9900	1.4910	28.4000



Speed - Torque Curve



EC Declaration of Conformity

The undersigned representing
the manufacturer:

Regal Beloit America
100 East Randolph St.
Wausau, WI 54401

and the authorized representative
established within the Community:

Marathon Electric UK
6F Thistleton Road Ind. Estate
Market Overton
Oakham, Rutland LE15 7PP UK

are committed to providing customers with products that comply with applicable regulations and international protocols to which they are subject, including the requirements of the European Parliament Directive on the Harmonization of the laws relating to electrical equipment designed for use within certain voltage limits (2014/35/EU).

Regal Beloit America declares that the following product(s), to which this declaration relates, are in conformity with the relevant sections of the EC standards listed below.

This statement supersedes any statements previously issued pertaining to the product(s) listed below and is subject to change without notice.

Model No : 256TTFNA16031

(Model No. may contain prefix and/or suffix characters)

Catalog No : M893B

Rework No : N/A

Directives :

Low Voltage Directive 2014/35/EU

Harmonized Standards Used :

EN 60034-1: 2010 (IEC 60034-1: 2010)

EN 60034-5: 2001/A1:2007 (IEC 60034-5: 2000/A1:2006)

Authorized Representative:



Michael A. Logsdon
Vice President, Technology

Authorized Representative in the Community:



Julian Clark
Marketing Engineer

Created on 09/01/2022

CE 22