PRODUCT INFORMATION PACKET

Model No: 256TTFNA16106
Catalog No: M892B
20 HP Vertical Solid Shaft P-Base Motor, 3 phase, 3600 RPM, 230/460 V, 256HPV Frame, TEFC
Vertical Pump Motors

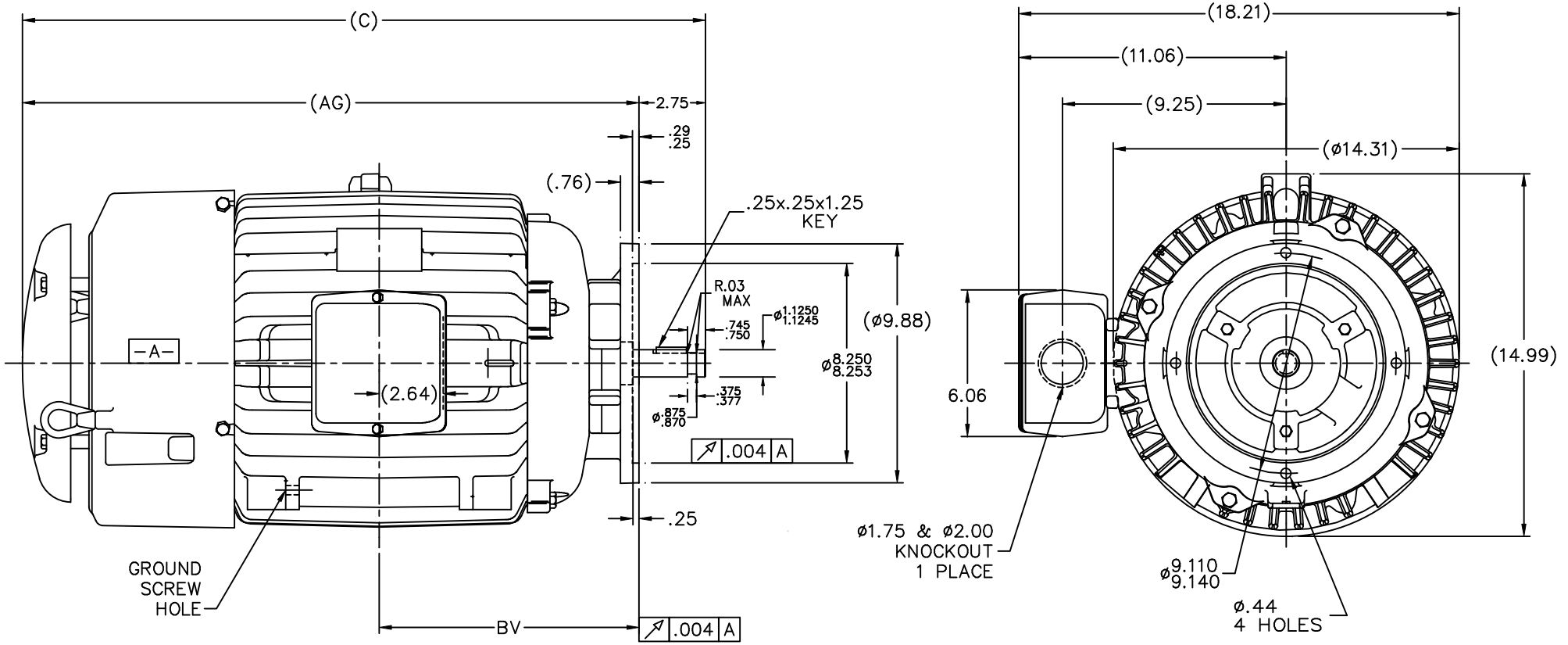
marathon® Motors

Nameplate Specifications

Output HP	20 Hp	Output KW	14.9 kW
Frequency	60 Hz	Voltage	230/460 V
Current	48.0/24.0 A	Speed	3540 rpm
Service Factor	1.15	Phase	3
Efficiency	91 %	Power Factor	87
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	256HPV	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No	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	2	Rotation	Reversible
Resistance Main	.485 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-EE7308K	Outline Drawing	B-SS203116-1225



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

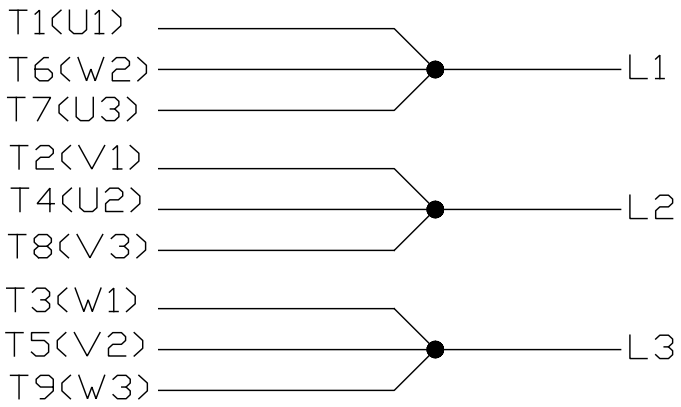
MAT'L.
FINISH
CAD FILE ss203116
RFP
DIST LB

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

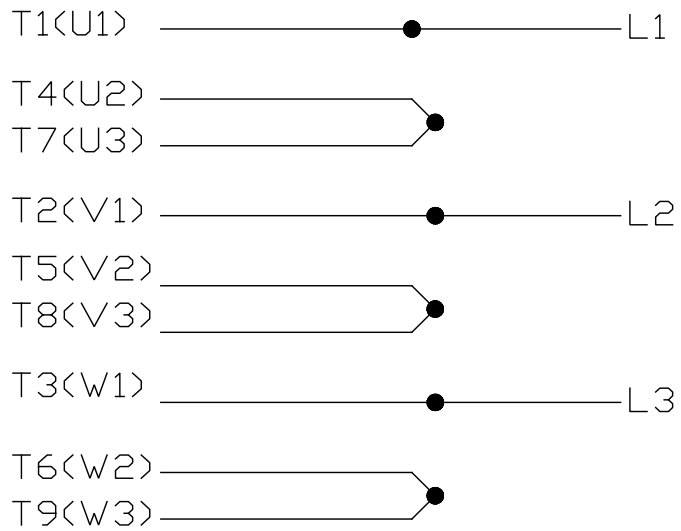
SIZE B | DRAWING NO. SS203116 | PAGE OF | REV. 8

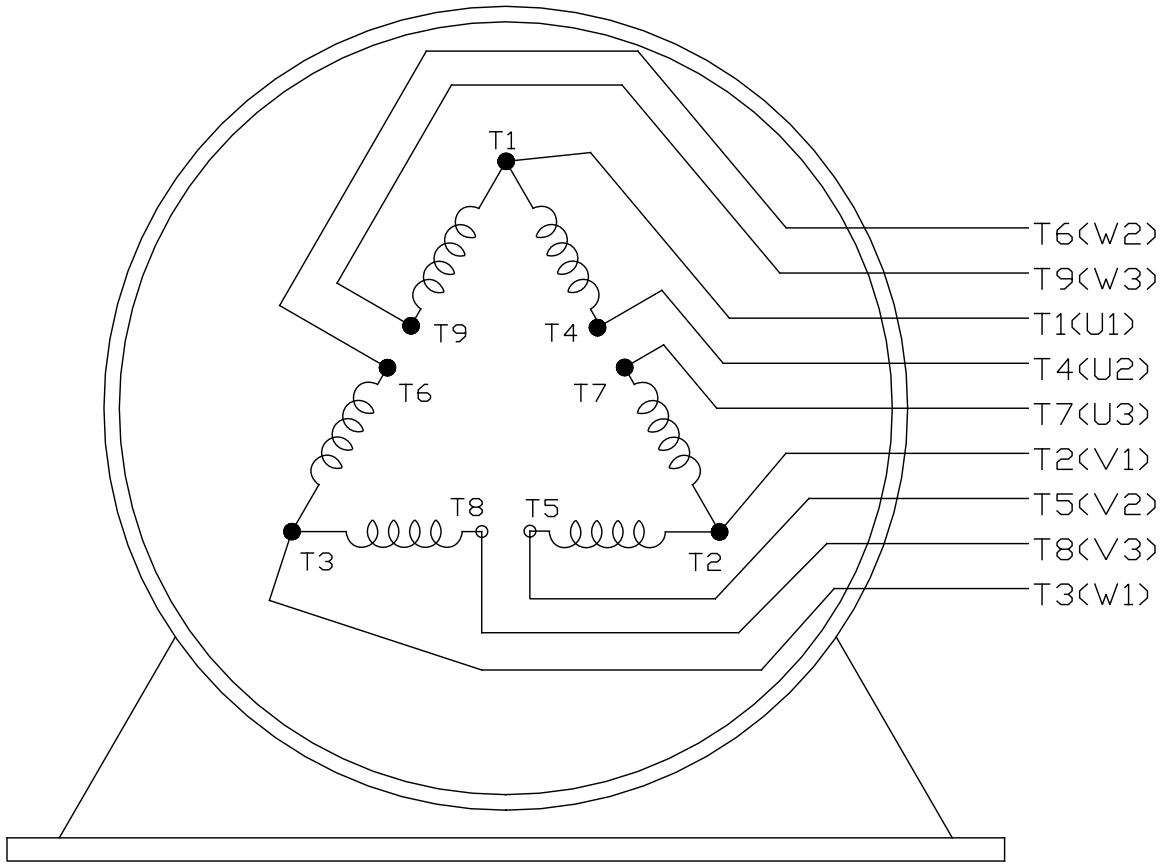
EE7308K

LOW VOLTAGE



HIGH VOLTAGE





VIEW OF TERMINAL END

NO.	REVISION	BY & DATE	CHK
E	CORRECTED IEC MARKINGS ECO-0111208	WGJ 01-23-2017	EMH
D	RE-DRAWN WITH REGAL LOGO ECO-0110493	WGJ 09-30-2016	EMH
8	ADDED IEC DESIGNATIONS MU95020	TJW 4/30/2010	MJS
7	REVISD HIGH VOLTAGE L2 WAS L3 CN52600-354	MRB 09-21-1998	
6	REDRAWN ON CADD	PGK 06-05-1997	

TOLERANCES UNLESS SPECIFIED: DEC. INCHES; .X ±.1; .XX ±.02; .XXX ±.005; .XXXX ±.0005; ANG ±7'30"

REGAL - BELOIT CORPORATION

DRAWN PGK 06-04-1997
CHK ML 06-05-1997
APPD GK 06-15-1997

TITLE: CONNECTION DIAGRAM
DELTA CON. - 3Ø - 9 LEADS

SCALE
REF
MAT'L.
FMF
FINISH
PREV
CAD FILE EE7308K
RFP
DIST

SIZE A | DRAWING NO. EE7308K | PAGE OF | REV. E

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

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER:
ORDER #:
CONN. DIAGRAM: A-EE7308K
OUTLINE: B-SS203116-1225
WINDING: K2562213 NONE 1
SPEED:

CUSTOMER P.O. #:
REFERENCE MODEL #: 256TTFNA16106
CAT #: M892B
CUSTOMER PART #:
MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
20	14.9	3600	3520	256HPV	TEFC	TFN	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	230/460	48/24	ACROSS THE LINE	CONT	F	1.15	40	3300

F.L. EFF	91.0	3/4 LD EFF	91.0	1/2 LD EFF	90.2	GTD EFF	ELECT. TYPE
F.L. PF	87.0	3/4 LD PF	84.0	1/2 LD PF	77.0	90.2	SQ CAGE IND RUN

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)	
29.8 LB-FT	145	50.0 LB-FT 168%	78.0 LB-FT 262%	75	

@ 3 FT.	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
72 dBA	81 dBA	1.15 LB-FT²	26 LB-FT²	20 SEC.	2	340 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 DE	BEARINGS ODE	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
BALL 6309	BALL 6210	POLYREX EM	HP	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON

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
0.327	0.22	1.15	1.079	34.62	0.150	ODE

NOTES
*
*

INVERTER TORQUE: NONE
INV. HP SPEED RANGE: NONE

ENCODER: NONE
NONE
NONE NONE PPR

BRAKE: NONE
NONE NONE
FT-LB: NA
VOLTAGE: NONE HZ:

PREPARED BY: FAREEDA DUDEKULA
DATE: 9/11/2018

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

marathon® electric

256TTFNA16106

Submittal

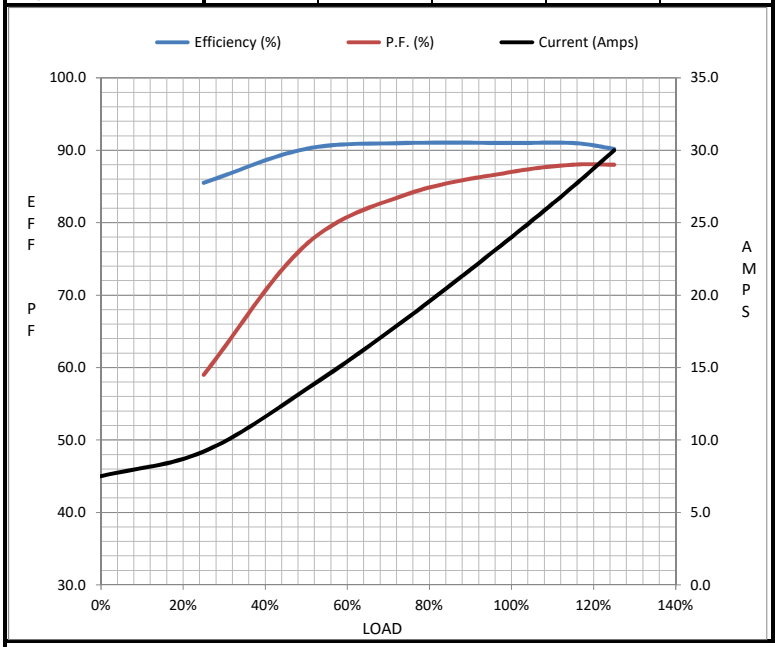
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	7.5	9.2	13.5	18.5	24.0	27.5	30.0	145	
Torque (ft-lb)	0.00	7.5	14.8	22.2	29.8	34.5	37.5	50.0	
RPM	3600	3580	3560	3540	3520	3,510	3490	0	
Efficiency (%)		85.5	90.2	91.0	91.0	91.0	90.2		
P.F. (%)	8.5	59.0	77.0	84.0	87.0	88.0	88.0	35.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3200	3520	3600
Current (Amps)	145	130	100	24.0	7.5
Torque (ft-lb)	50.0	50.0	78.0	29.8	0.00



Information Block

HP	20.0	
Sync. RPM	3600	
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	75	° C
Duty	CONT	
Ambient	40	° C
Elevation	1,000	feet
Rotor/Shaft wk²	1.15	Lb-Ft²
Ref Wdg	K2562213 NONE	
Sound Pressure @ 1M	72	dBA
VFD Rating	NONE	
Outline Dwg	B-SS203116-1225	
Conn. Diag	A-EE7308K	
Additional Specifications:		
0		
0		

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.3270	0.2200	1.1500	1.0790	34.6200

Speed -Torque Curve