PRODUCT INFORMATION PACKET

Model No: 444TTDN16078
Catalog No: M747
100 HP Vertical Solid Shaft P-Base Motor, 3 phase, 1200 RPM, 230/460 V, 444HPV Frame, ODP
Vertical Pump Motors

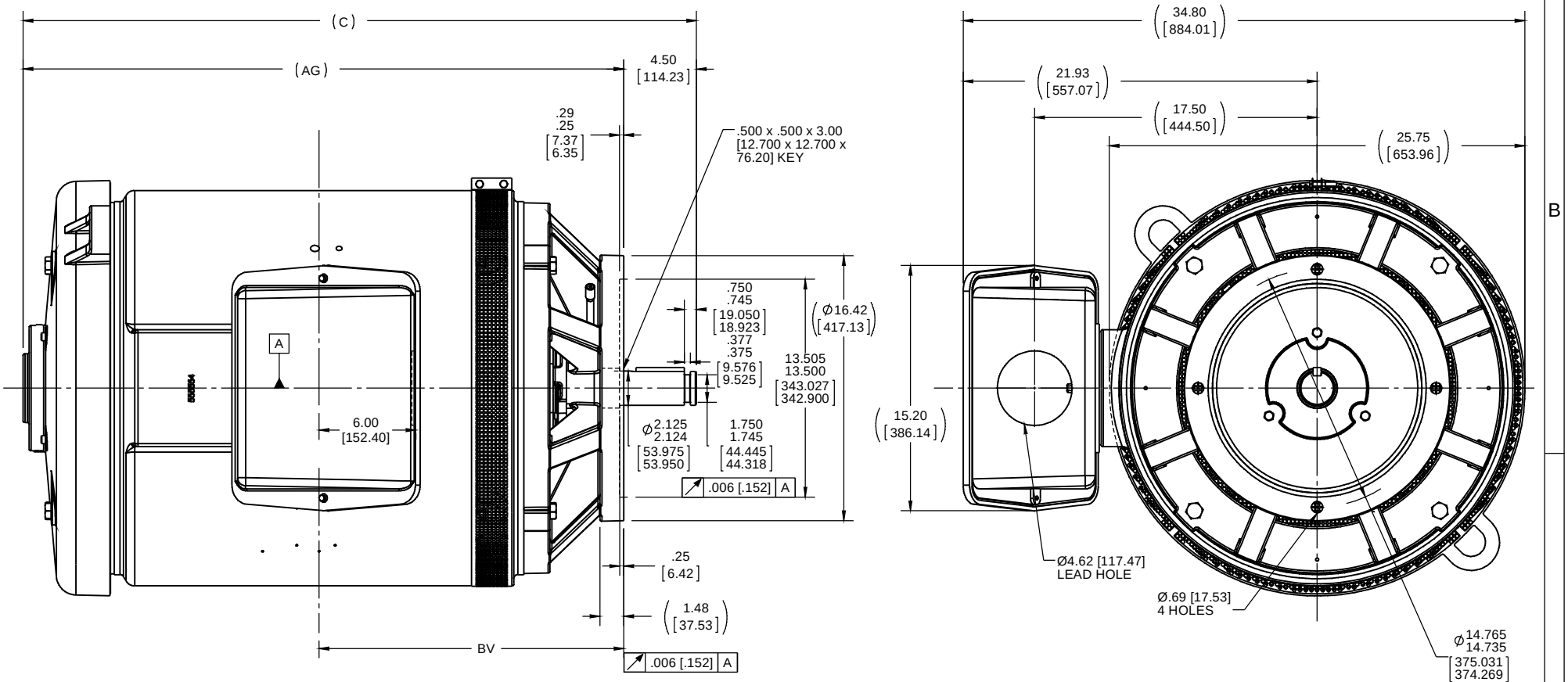
marathon® Motors

Nameplate Specifications

Output HP	100 Hp	Output KW	75.0 kW
Frequency	60 Hz	Voltage	230/460 V
Current	246.0/123.0 A	Speed	1190 rpm
Service Factor	1.15	Phase	3
Efficiency	94 %	Power Factor	80
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	444HPV	Enclosure	Drip Proof
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6318	Opp Drive End Bearing Size	6316
UL	Recognized	CSA	Y
CE	Y	IP Code	12
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	6	Rotation	Reversible
Resistance Main	.046 Ohms	Mounting	Round
Motor Orientation	Shaft Down	Drive End Bearing	Ball
Opp Drive End Bearing	Double Angular Contact	Frame Material	Cast Iron
Shaft Type	HP	Overall Length	41.72 in
Frame Length	25.38 in	Shaft Diameter	2.125 in
Shaft Extension	4.5 in	Assembly/Box Mounting	F1/F2 Capable
Outline Drawing	B-SS555833-2538	Connection Drawing	A-EE7308K



NOTES:
1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS
2. NAMEPLATES TO BE READ FROM SHAFT EXTENSION END OF MOTOR

DASH	FRAME	C	AG	BV
2538	444/5PV	41.72 [1059.62]	37.22 [945.39]	18.88 [479.55]

DRAWING REVISION	REVISION BY	DATE
C	AJW	07-01-2014
ECO	APPROVED BY	DATE
ECO-0054258	DJK	07-01-2014

ECO DESCRIPTION
UPDATED TO CURRENT STANDARDS

TOLERANCES UNLESS OTHERWISE SPECIFIED:

DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±0.5°
.XX	±0.01	[±0.25]	
XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	

REMOVE BURRS & BREAK SHARP
EDGES: .003/.015 [.076/.381]
CORNER FILLETS: .02 [.51]
MACHINED SURFACES: 125 INCH / 3.2 mm
mm SHOWN IN [BRACKETS]

DRAWN BY	TJW
DATE	07-16-2013
APPROVED BY	DJK
DATE	07-19-2013
REFERENCE	
THIRD ANGLE PROJECTION	

Regal Beloit America, Inc.

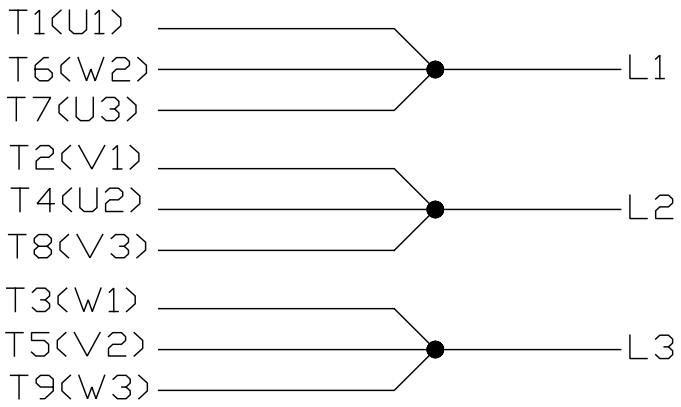
DESCRIPTION
OUTLINE
444/5PV FR. -DR.PR. -P'BASE

MATERIAL	PROCESS/FINISH

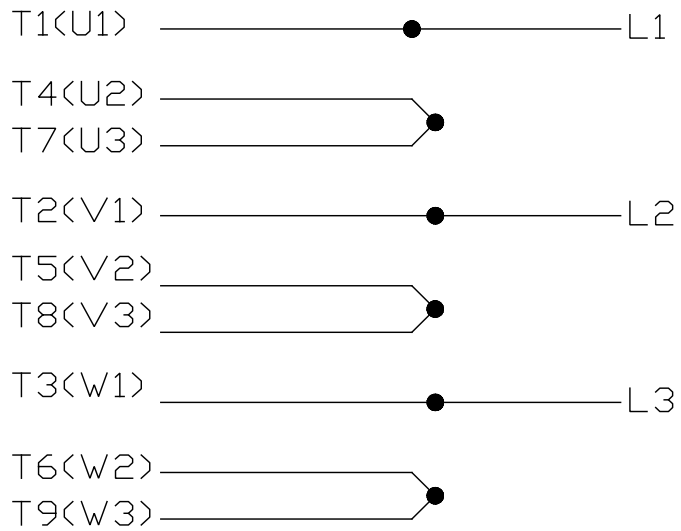
SIZE	DRAWING NUMBER	SHEET
B	SS555833	1 OF 1

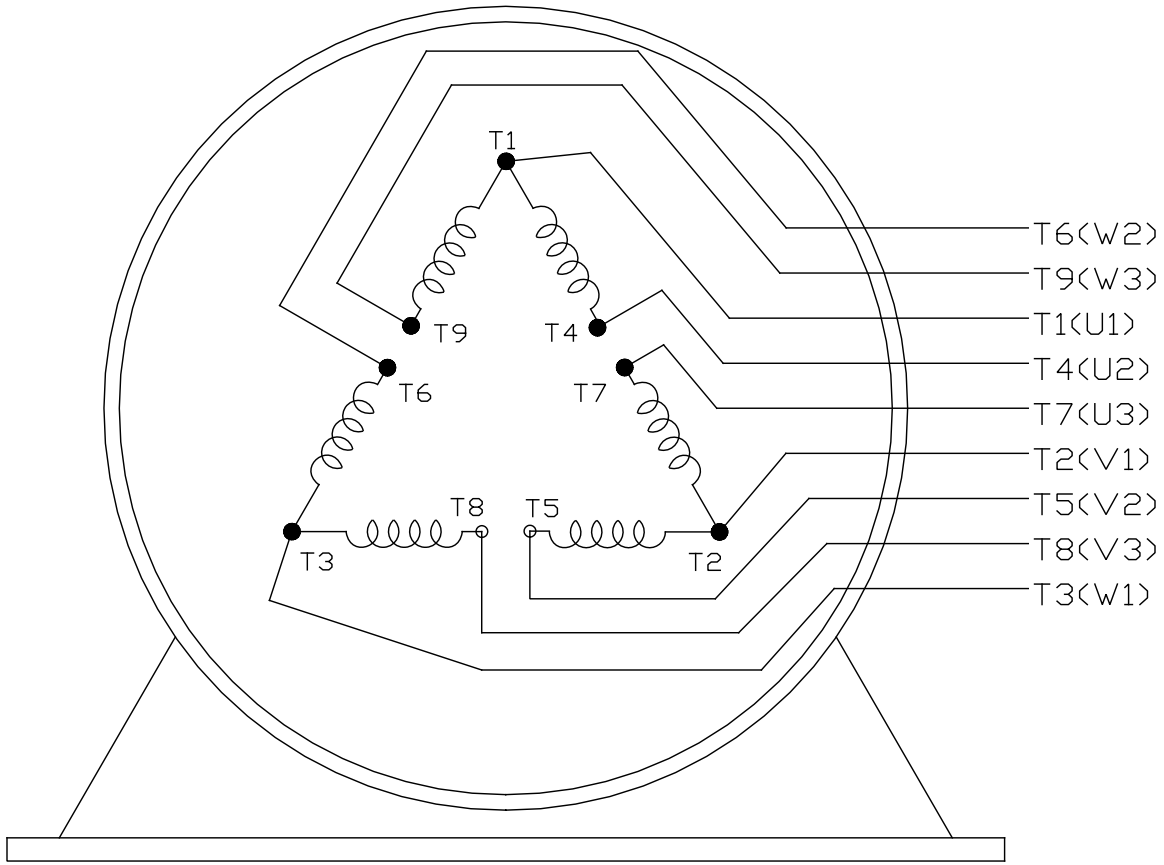
EE7308K

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

CERTIFICATION DATA SHEET

Model#:	444TTDN16078 AA	**WINDING#:**	T4446118 NONE 1
CONN. DIAGRAM:	A-EE7308K	**ASSEMBLY:**	F1/F2 CAPABLE
OUTLINE:	B-SS555833-2538		

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
100	75	1200	1190	444HPV	DP	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	246/123	ACROSS THE LINE	CONTINUOUS	F1	1.15	40	3300

FULL LOAD EFF: 94	3/4 LOAD EFF: 95	1/2 LOAD EFF: 94.1	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 80	3/4 LOAD PF: 75	1/2 LOAD PF: 64	94.5	SQ CAGE IND RUN	106 / 53

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
442 LB-FT	1450 / 725	750 LB-FT 168	1100 LB-FT 248	50

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
76 dBA	86 dBA	55 LB-FT^2	1700 LB-FT^2	20 SEC.	2	1600 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	DOUBLE ANGULAR CONTACT	POLYREX EM	HP	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6318	6316						

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

*
N
O
T
E
S
*

DATE: 06/21/2017 04:19:03 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 1/28/2019
Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

marathon® electric

444TTDN16078

Submittal

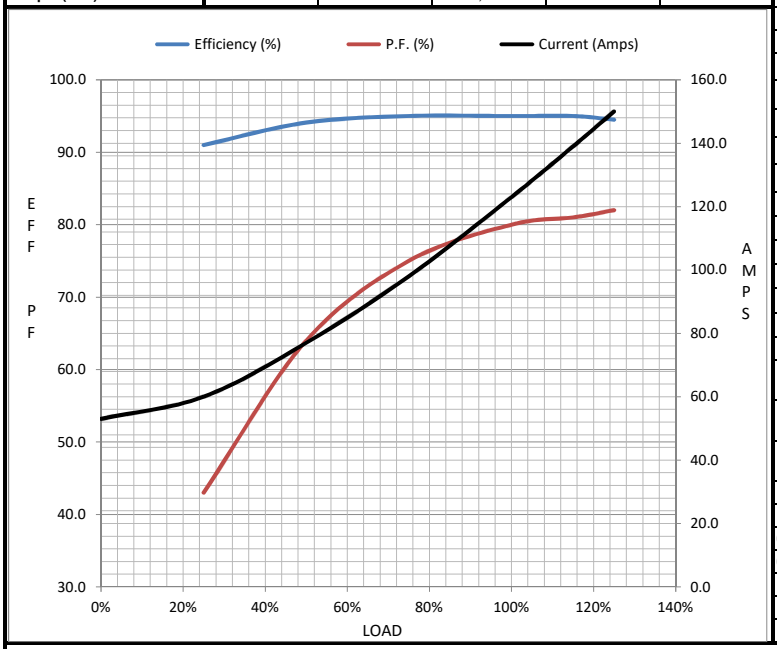
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	53.0	60.0	77.0	98.0	123	139	150	725	
Torque (ft-lb)	0.00	110	220	331	442	508	554	750	
RPM	1200	1197	1195	1192	1190	1,188	1186	0	
Efficiency (%)		91.0	94.1	95.0	95.0	95.0	94.5		
P.F. (%)	4.0	43.0	64.0	75.0	80.0	81.0	82.0	29.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1125	1190	1200
Current (Amps)	725	600	425	123	53.0
Torque (ft-lb)	750	525	1,100	442	0.00



Information Block

HP	100.0	
Sync. RPM	1200	
Frame	444	
Enclosure	DP	
Construction	TDN	
Voltage	230/460	V
Frequency	60	Hz
Design	B	
LR Code letter	G	
Service Factor	1.15	
Temp Rise @ FL	50	° C
Duty	CONT	
Ambient	40	° C
Elevation	3,300	feet
Rotor/Shaft wk²	55.0	Lb-Ft²
Ref Wdg	T4446118 NONE	
Sound Pressure @ 1M	76	dBA
VFD Rating	NONE	
Outline Dwg	B-SS555833-2538	
Conn. Diag	A-EE7308K	

Additional Specifications:

0

0

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.0330	0.0200	0.2360	0.2780	4.8760