PRODUCT INFORMATION PACKET

Model No: 284TTDN16007
Catalog No: M825B
30 HP Vertical Solid Shaft P-Base Motor, 3 phase, 3600 RPM, 230/460 V, 284HPV Frame, ODP
Vertical Pump Motors

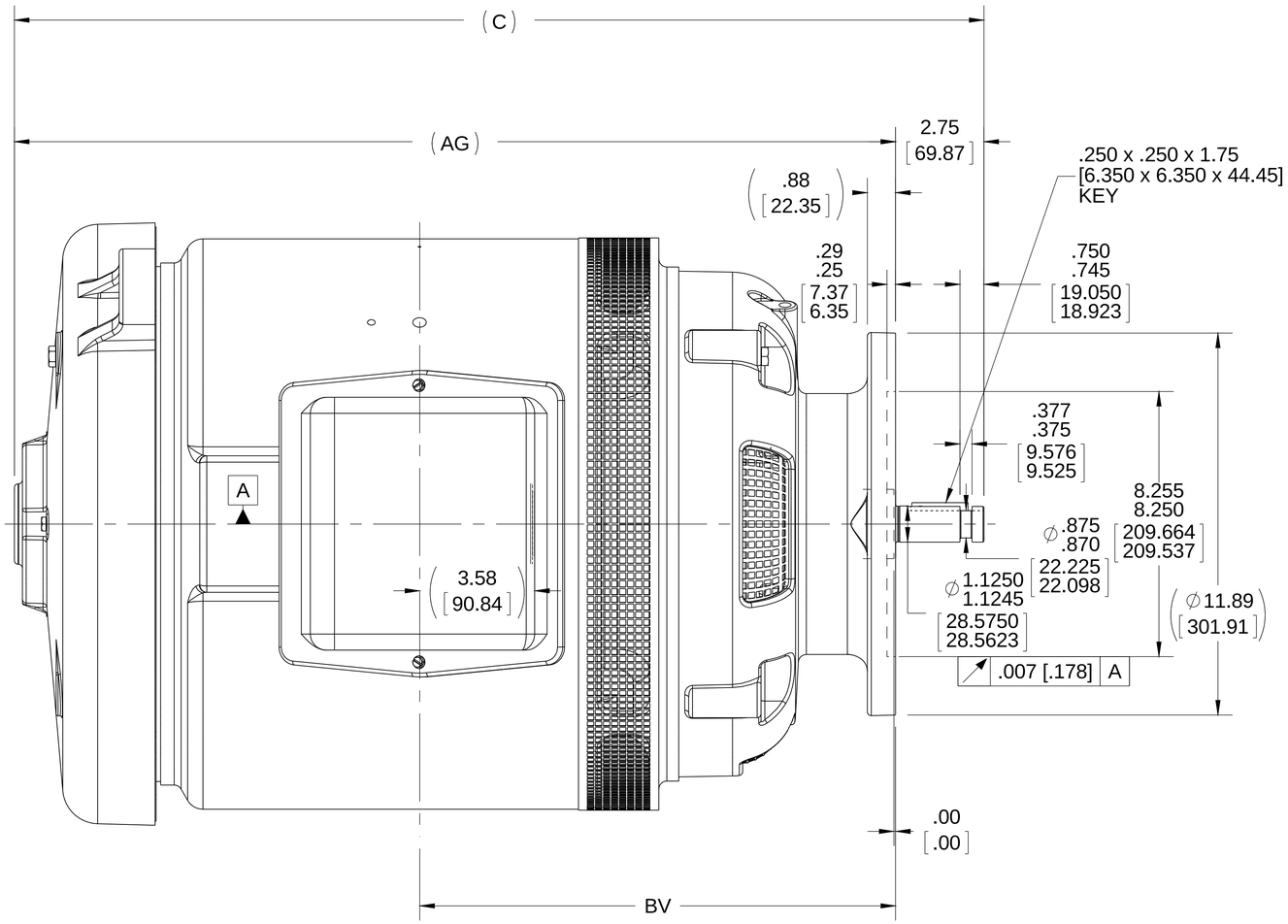
marathon® Motors

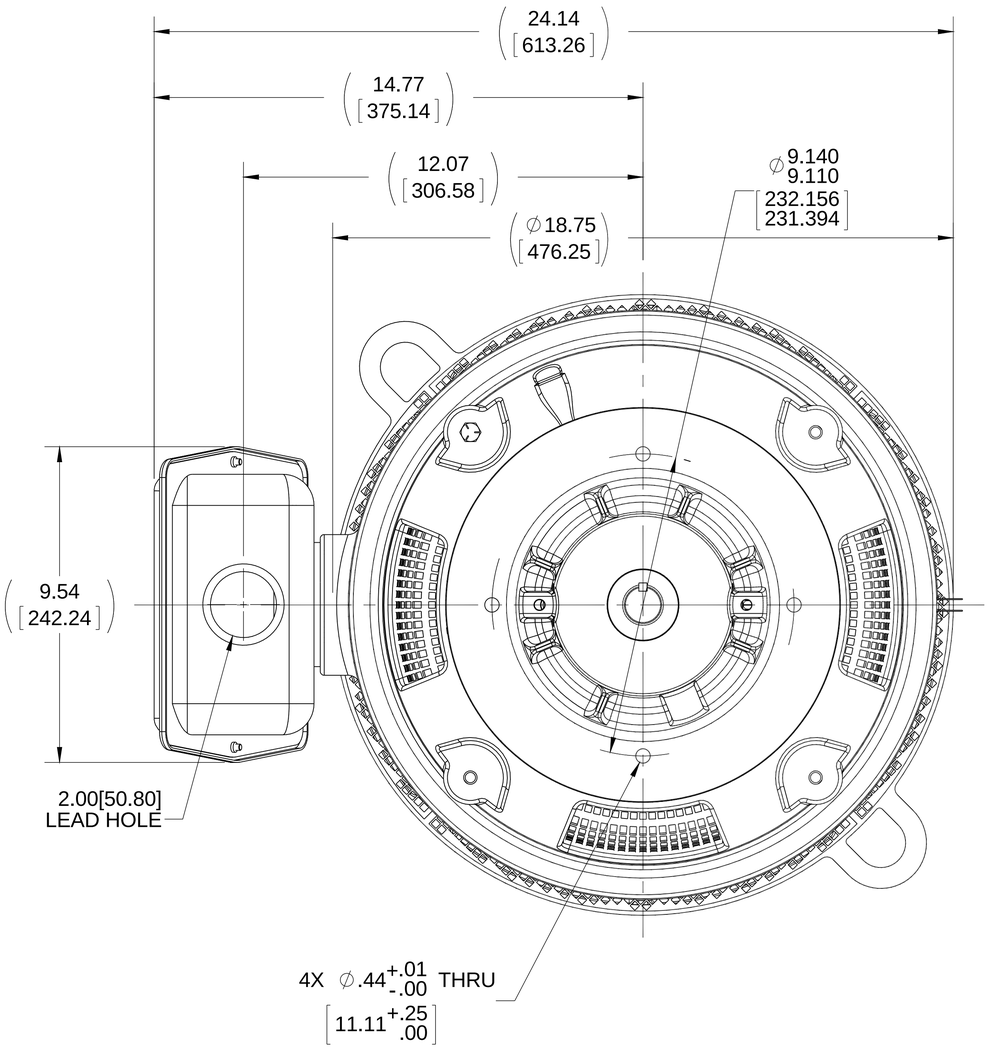
Nameplate Specifications

Output HP	30 Hp	Output KW	22.4 kW
Frequency	60 Hz	Voltage	230/460 V
Current	68.0/34.0 A	Speed	3552 rpm
Service Factor	1.15	Phase	3
Efficiency	93.6 %	Power Factor	88
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	284HPV	Enclosure	Drip Proof
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6311	Opp Drive End Bearing Size	6311
UL	Recognized	CSA	Y
CE	Y	IP Code	23
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	2	Rotation	Reversible
Resistance Main	.285 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	30.18 in
Frame Length	16.12 in	Shaft Diameter	1.125 in
Shaft Extension	2.75 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	B-SS312773-1612	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	BV	AG
1612	284/6HP	30.18 [766.57]	14.81 [376.17]	27.43 [696.72]

DRAWING REVISION A	REVISION BY	DATE
ECO ECO-0100318	APPROVED BY	DATE
ECO DESCRIPTION MU122807 / NMR-0105977		

TOLERANCES UNLESS OTHERWISE SPECIFIED:

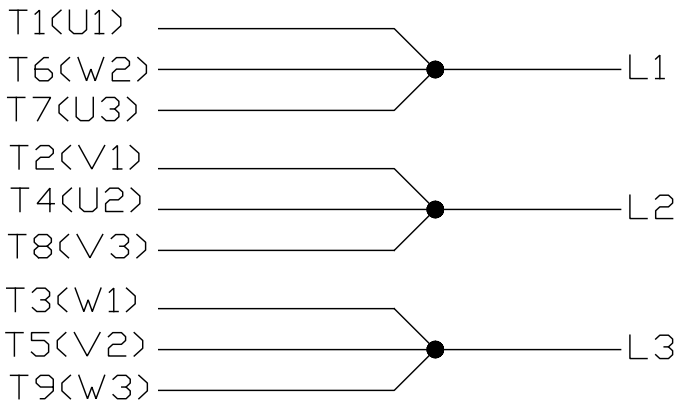
DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±7' 30"
.XX	±0.03	[±0.76]	
XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	

REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45°
CORNER FILLETS: R.02 [.51]
MACHINED SURFACES: 200 INCH / 5.1 mm
mm SHOWN IN [BRACKETS]

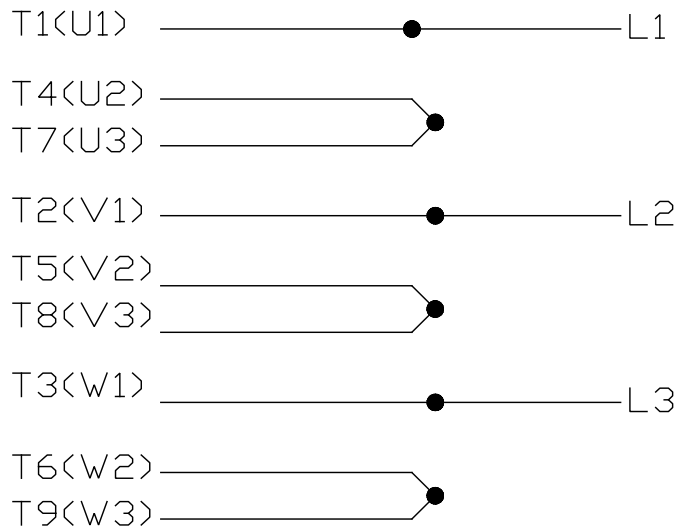
DRAWN BY LPC			Regal Beloit America, Inc.
DATE 04-21-2016			
APPROVED BY TB	DESCRIPTION OUTLINE 280 HP FR. - P'BASE - VERT. DR.PR.		
DATE 04-21-2016			
REFERENCE	MATERIAL	PROCESS/FINISH	
THIRD ANGLE PROJECTION	SIZE B	DRAWING NUMBER SS312773	SHEET 1 OF 1

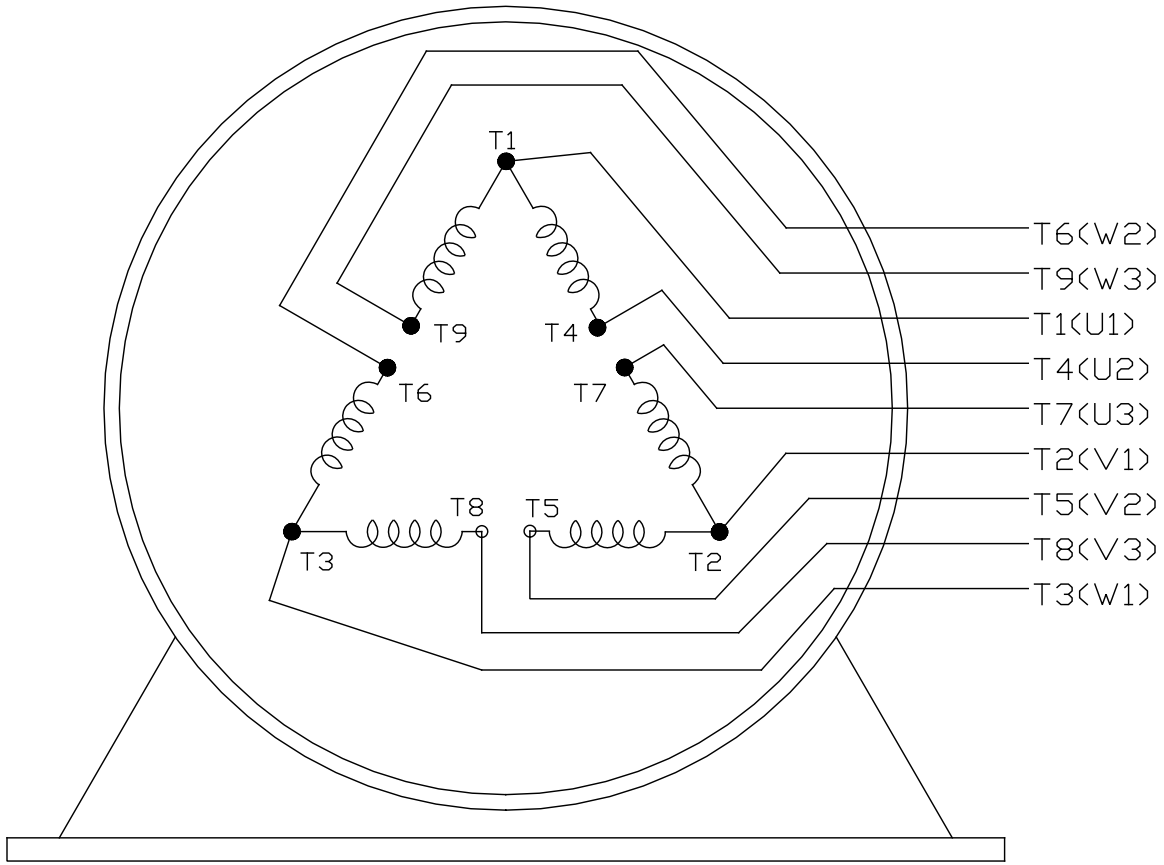
EE7308K

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

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-SS312773-1612
WINDING: K284284 NONE 1
SPEED:

CUSTOMER P.O. #:
REFERENCE MODEL #: 284TTDN16007
CAT #: M725
CUSTOMER PART #:
MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
30	22.4	3600	3552	284HPV	DP	TDN	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	230/460	68/34	ACROSS THE LINE	CONT	F	1.15	40	3300

F.L. EFF	93.6	3/4 LD EFF	93.6	1/2 LD EFF	93.0	GTD EFF	ELECT. TYPE
F.L. PF	88.0	3/4 LD PF	86.0	1/2 LD PF	80.0	93.0	SQ CAGE IND RUN

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)	
44.5 LB-FT	217	62.0 LB-FT 139%	120 LB-FT 270%	50	

@ 3 FT.	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
80 dBA	89 dBA	2.60 LB-FT²	35 LB-FT²	15 SEC.	2	375 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 DE	BEARINGS ODE	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
BALL 6311	BALL 6311	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
0.189	0.104	0.814	0.597	26.819	0.150	DE

*
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

284TTDN16007

Submittal

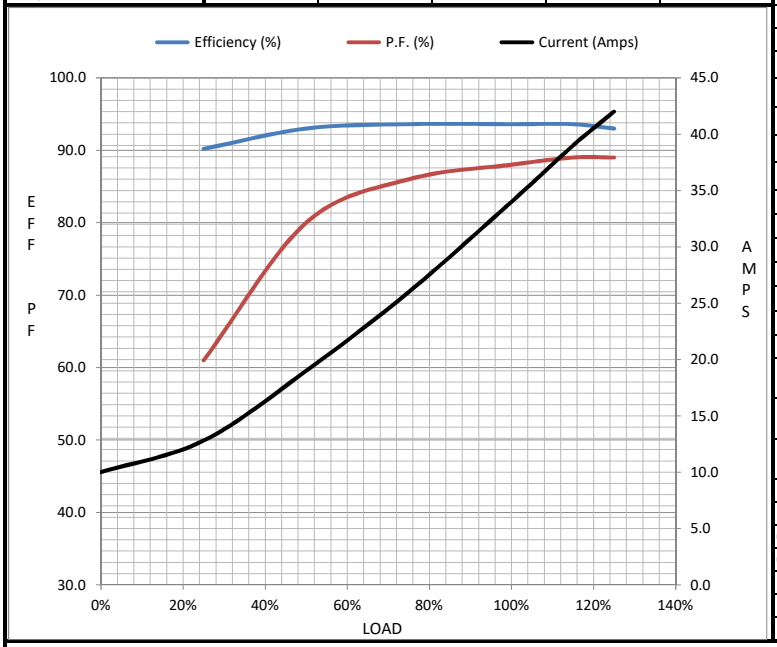
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	10.0	12.8	19.0	26.0	34.0	39.0	42.0	217	
Torque (ft-lb)	0.00	11.0	22.0	33.2	44.5	51.0	55.5	62.0	
RPM	3600	3590	3578	3565	3552	3,545	3540	0	
Efficiency (%)		90.2	93.0	93.6	93.6	93.6	93.0		
P.F. (%)	7.0	61.0	80.0	86.0	88.0	89.0	89.0	31.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3400	3552	3600
Current (Amps)	217	200	135	34.0	10.0
Torque (ft-lb)	62.0	52.0	120	44.5	0.00



Information Block

HP	30.0	
Sync. RPM	3600	
Frame	284	
Enclosure	DP	
Construction	TDS	
Voltage	230/460	V
Frequency	60	Hz
Design	A	
LR Code letter	G	
Service Factor	1.15	
Temp Rise @ FL	50	° C
Duty	CONT	
Ambient	40	° C
Elevation	1,000	feet
Rotor/Shaft wk²	2.60	Lb-Ft²
Ref Wdg	K284284 NONE	
Sound Pressure @ 1M	80	dBA
VFD Rating	NONE	
Outline Dwg	B-SS312773-1612	
Conn. Diag	A-EE7308K	
Additional Specifications:		
0		
0		

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.1890	0.1040	0.8140	0.5970	26.8190