

# PRODUCT INFORMATION PACKET

**marathon**<sup>®</sup>  
Motors

Model No: 284TSTDBD4002  
Catalog No: U597  
30,3600,DP,284TS,3/60/230/460  
Fire Pump



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**REGAL**<sup>®</sup>



### Nameplate Specifications

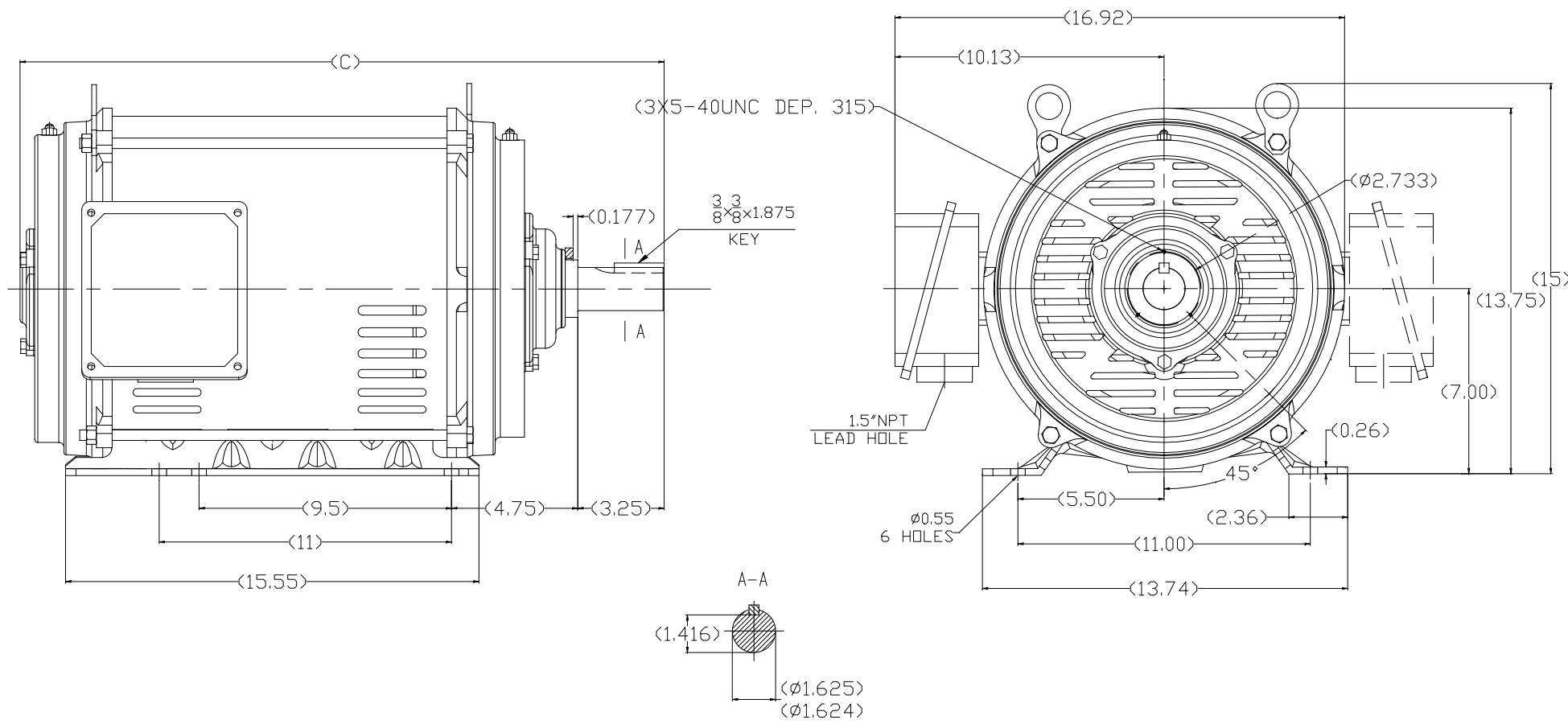
Output HP	<b>30 Hp</b>	Output KW	<b>22.4 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>230/460 V</b>
Current	<b>72.0/36.0 A</b>	Speed	<b>3560 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>91 %</b>	Duty	<b>Continuous</b>
Insulation Class	<b>F</b>	Design Code	<b>B</b>
KVA Code	<b>F</b>	Frame	<b>284TS</b>
Enclosure	<b>Drip Proof</b>	Overload Protector	<b>No</b>
Ambient Temperature	<b>50 °C</b>	Drive End Bearing Size	<b>6211</b>
Opp Drive End Bearing Size	<b>6211</b>	UL	<b>No</b>
CSA	<b>Y</b>	CE	<b>Y</b>
IP Code	<b>23</b>		

### Technical Specifications

Electrical Type	<b>Squirrel Cage Induction Run</b>	Starting Method	<b>Part Wdg Start &amp; Wye Start Delta Run</b>
Poles	<b>2</b>	Rotation	<b>Reversible</b>
Mounting	<b>Rigid base</b>	Motor Orientation	<b>HORIZONTAL</b>
Drive End Bearing	<b>BALL</b>	Opp Drive End Bearing	<b>BALL</b>
Frame Material	<b>Rolled Steel</b>	Shaft Type	<b>TS</b>
Overall Length	<b>24.34 in</b>	Frame Length	<b>12.59 in</b>
Shaft Diameter	<b>1.625 in</b>	Shaft Extension	<b>3.25 in</b>
Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>		
Outline Drawing	<b>SS620709-284TS</b>	Connection Diagram	<b>EE7308AA</b>

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SS620709



284TS	24.34	YES
286TS	25.72	YES
FRAME	C	F1/F2

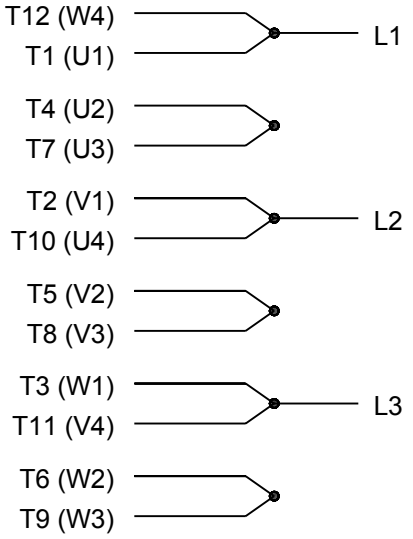
		TOLERANCES UNLESS SPECIFIED				DRAWN WY 25-2-2016	
		DEC.	INCHES			CHK ZXW 25-2-2016	
		.X	±.1			APPD ZYH 25-2-2016	
		.XX	±.03			SCALE 1:1	
		.XXX	±.005	TITLE		REF	
A	RELEASED FOR PRODUCTION ECD-0116665	WGJ	1/19/17	EMH	.XXX	±.0005	MAT'L.
NO.	REVISION	BY & DATE	CHK	ANG	±1/2'	FINISH	PREV
THIS DRAWING 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	SS620709	SIZE
				DIST			DRAWING NO. PAGE OF REV.
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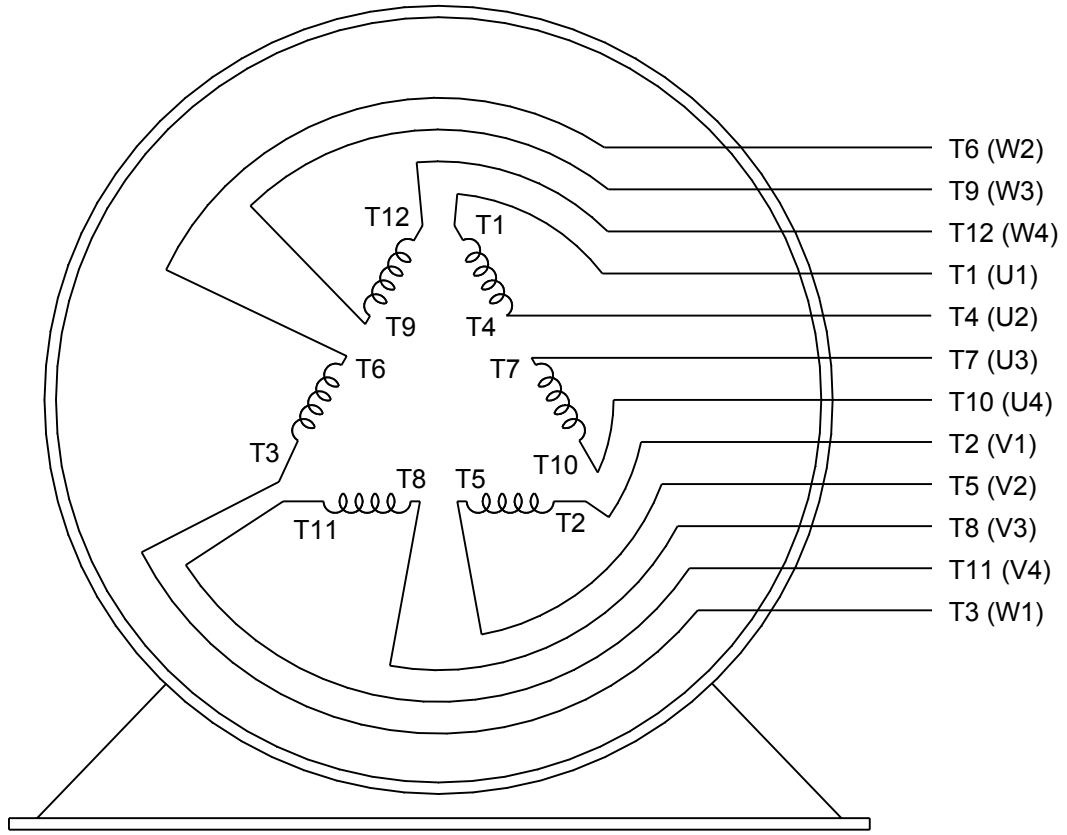
284/286TS FR.-ODP-ROLLED STEEL



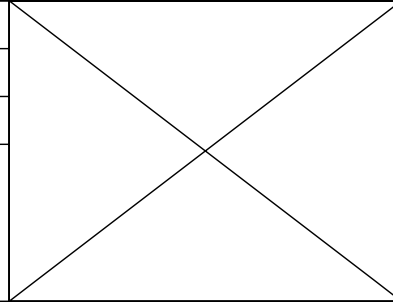
### LOW VOLTAGE



### HIGH VOLTAGE



DRAWING REVISION <b>K</b>	REVISION BY <b>AJW</b>	DATE <b>07-17-2015</b>
ECO <b>ECO-0081632</b>	APPROVED BY <b>T. VUE</b>	DATE <b>07-17-2015</b>
ECO DESCRIPTION <b>REV'D IEC MARKINGS PER IEC 60034-8</b>		
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DRAWN BY <b>LZ</b>
DATE <b>01-12-1994</b>
APPROVED BY <b>GK</b>
DATE <b>01-14-1994</b>
REFERENCE
THIRD ANGLE PROJECTION

<b>Regal Beloit America, Inc.</b>	
<b>CONN DIAGRAM-EXTERNAL</b> <b>3Ø-2/1 DELTA-12 LEADS</b>	
MATERIAL	PROCESS/FINISH
SIZE <b>A</b>	DRAWING NUMBER <b>EE7308AA</b>
SHEET <b>1 OF 1</b>	



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

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER P.O. #:   
 ORDER #: EE7308AA REFERENCE MODEL #: 284TSTDDBD4002  
 CONN. DIAGRAM: SS620709 CAT #: U597  
 OUTLINE: IE3L1802110 NONE 2 CUSTOMER PART #:   
 WINDING: MOUNTING: F1/F2 CAPABLE  
 SPEED:   
 TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
30	22.4	3600	3580	284TS	DP	TDC	F	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#190/380	72/36&72/36	WS(LV ONLV) & YDRU	CONT	F	1.15	50	3300
	F.L. EFF	91.0	3/4 LD EFF	91.0	1/2 LD EFF	89.5	GTD EFF	ELECT. TYPE	
	F.L. PF	86.0	3/4 LD PF	82.0	1/2 LD PF	74.0	90.2	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	205	62.0 LB-FT	110 LB-FT	247%
@ 3 FT.	POWER	ROTOR WK <sup>2</sup>	MAX. LOAD WK <sup>2</sup>	SAFE STALL TIME
999 DBA	1008 DBA	0.00 LB-FT <sup>2</sup>	0 LB-FT <sup>2</sup>	20 SEC.
				START/SHOUR
				MOTOR WGT
				0 LB.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	NO	NONE	NO	NONE	RED (ENAMEL)
BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT	MATERIAL	FRAME MATERIAL
DE BALL 6211	ODE BALL 6211	POLYREX EM	TS	NONE	NONE	1045 HOT ROLLED (C-204)		ROLLED STEEL

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
0.227	0.095	0.672	0.757	20.869	0.150	ODE

* N		INVERTER TORQUE: NONE	
O		INV. HP SPEED RANGE: NONE	
T		ENCODER: NONE	
E		NONE	
S		BRAKE: NONE	
		NONE	
		FT-LB: NA	
		VOLTAGE: NONE	
		UL: NONE	
		HZ:	

PREPARED BY: FAREEDA DUDEKULA  
 DATE: 8/30/2018  
 FORM: 3531 REV 4 2/27/06

Data Sheet

2841STDBD4002



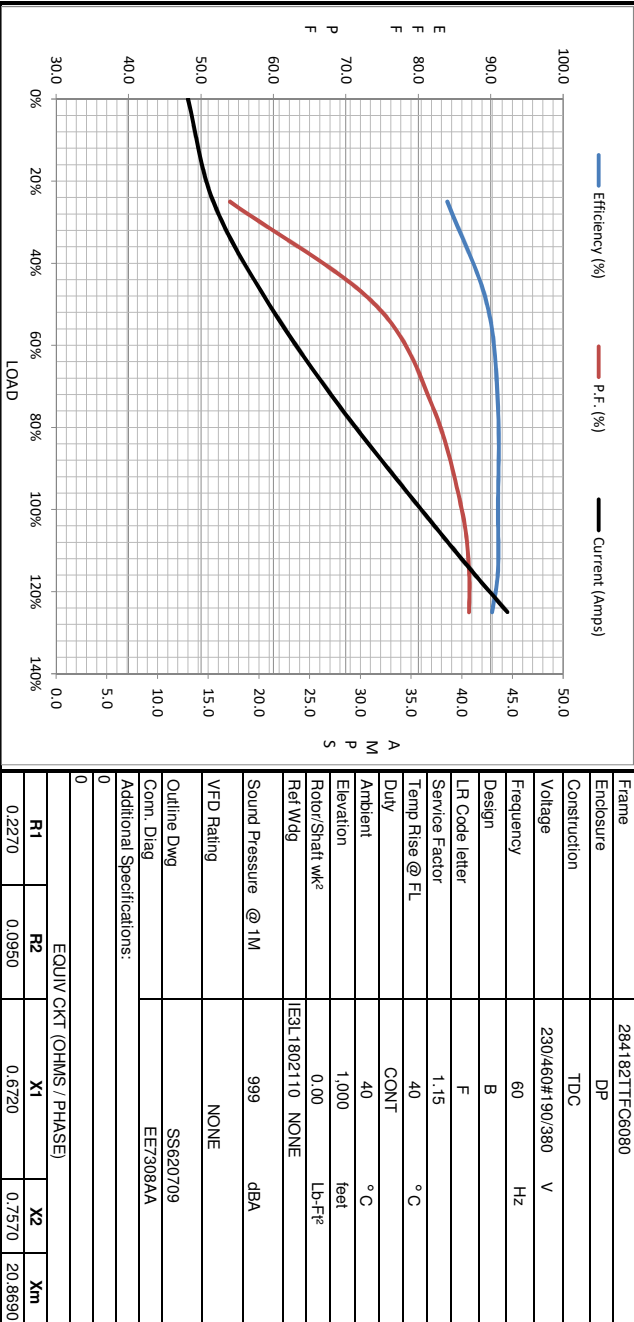
Submital

Data @ 460 V

Date: 8/30/2018  
 Customer:   
 Attention:   
 Submitted by: FAREEDA DUDEKULA

Motor Load Data									
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	13.0	15.5	21.0	28.0	36.0	41.0	44.5	205	
Torque (ft-lb)	0.00	11.0	22.0	33.0	44.5	51.0	55.5	62.0	
RPM	3600	3590	3580	3570	3560	3550	3545	0	
Efficiency (%)		84.0	89.5	91.0	91.0	91.0	90.2		
P.F. (%)	8.0	54.0	74.0	82.0	86.0	87.0	87.0	36.0	

Motor Speed Data					Information Block				
LR	Pull-Up	BD	Rated	Idle	HP	Frame	Enclosure	Construction	Voltage
0	1800	3350	3660	3600	30.0	2841B2TFC080	DP	TDC	230/460#190/380 V
205	180	125	36.0	13.0	3600				60 Hz
62.0	52.0	110	44.5	0.00					



Design	B			
LR Code letter	F			
Service Factor	1.15			
Temp Rise @ FL	40 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Motor/Shaft wk <sup>2</sup>	0.00 Lb-Ft <sup>2</sup>			
Ret Wdg	IE3L1802110 NONE			
Sound Pressure @ 1M	999 DBA			
VFD Rating	NONE			
Outline Dwg	SS620709			
Conn. Diag	EE7308AA			
Additional Specifications:				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.2270	0.0950	0.6720	0.7570	20.8690

