

# PRODUCT INFORMATION PACKET

**marathon**<sup>®</sup>  
Motors

Model No: 284TSTDBD4008  
Catalog No: U1103  
30,3600,DP,284TS,3/60/575  
Fire Pump



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**REGAL**<sup>®</sup>



### Nameplate Specifications

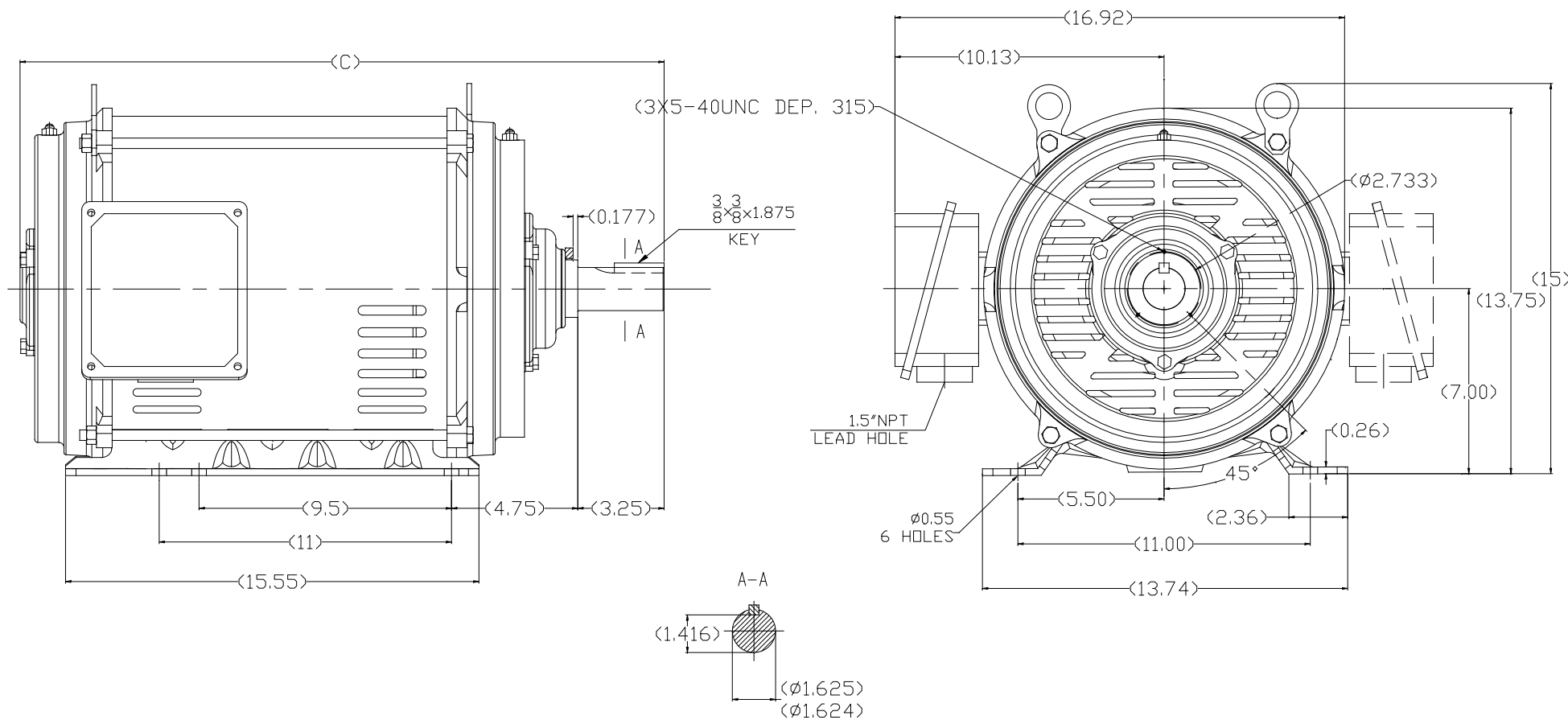
Output HP	<b>30 Hp</b>	Output KW	<b>22.4 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>575 V</b>
Current	<b>28.8 A</b>	Speed	<b>3560 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>91 %</b>	Duty	<b>Continuous</b>
Insulation Class	<b>F</b>	Design Code	<b>B</b>
KVA Code	<b>F</b>	Frame	<b>284TS</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>EE7300BH</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	.XXXX ±.0005	MAT'L.	FMF
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	DRAWING NO. PAGE OF REV.
				DIST		B	SS620709 A



VIEW OF TERMINAL END

				TOLERANCES UNLESS SPECIFIED		REGAL REGAL - BELOIT CORPORATION	DRAWN RJW 02-11-2005				
				DEC.	INCHES		CHK	ML	02-11-2005		
				.X	±.1		APPD	GK	02-11-2005		
				.XX	±.02	TITLE CONNECTION DIAGRAM		SCALE			
D	CHANGED TO REGAL TITLE BLOCK	ECO-0108299	WGJ 08/22/2016	EMH	.XXX ±.005	12 LEAD- SINGLE VOLTAGE		REF			
1	ADDED IEC TERMINAL MARKINGS	CN 41429	JJB 05/24/2007	ML	.XXXX ±.0005	MAT'L.		FMF			
NO.	REVISION	BY & DATE	CHK	ANG	±7'30"	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 02-11-2005	CAD FILE ee7300bh	SIZE A	DRAWING NO. EE7300BH	PAGE OF	REV. C
						DIST LB					



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

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER P.O. #:   
 ORDER #: EE7300BH   
 REFERENCE MODEL #: 284TSTDDBD4008   
 CONN. DIAGRAM: SS620709   
 CAT #: U1103   
 WINDING: IE3L1802110 NONE 4   
 CUSTOMER PART #:   
 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	3560	284TS	DP	TDC	F	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	575	28.8	PWS & VDRUN	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	164	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
				2
				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	POLYREX EM	T8	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
0.355	0.148	1.049	1.183	32.607	0.150	ODE

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

PREPARED BY: FAREEDA DUDEKULA  
 DATE: 8/20/2018  
 FORM: 3531 REV 4 2/27/06  
 UL: NONE

Data Sheet

2841STDBD4008



Submital Data @ 575 V

Date: 8/20/2018  
 Customer:   
 Attention:   
 Submitted by: FAREEDA DUDEKULA

Motor Load Data

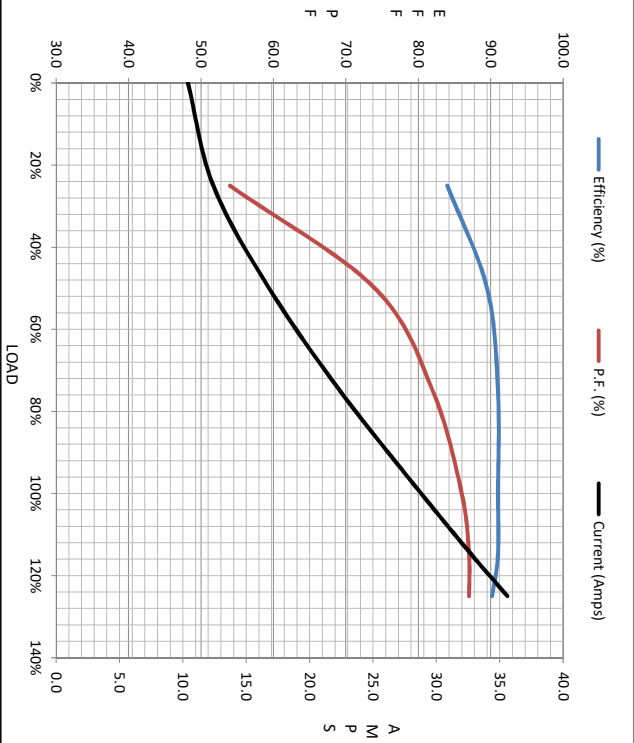
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	10.4	12.4	16.8	22.4	28.8	32.8	35.6	164
Torque (ft-lb)	0.00	11.0	22.0	33.0	44.5	51.0	55.5	62.0
RPM	3600	3590	3580	3570	3560	3,550	3545	0
Efficiency (%)		84.0	89.5	91.0	91.0	91.0	90.2	
P.F. (%)	8.0	54.0	74.0	82.0	86.0	87.0	87.0	36.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3350	3660	3600
Current (Amps)	164	144	100	28.8	10.4
Torque (ft-lb)	62.0	52.0	110	44.5	0.00

Information Block

HP	30.0
Sync. RPM	3600
Frame	2841B2TFC6080
Enclosure	DP
Construction	TDC
Voltage	575 V
Frequency	60 HZ
Design	B
LR Code letter	F
Service Factor	1.15
Temp Rise @ FL	40 °C
Duty	CONT
Ambient	40 °C
P 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	EE7300BH
Additional Specifications:	
0	
0	
	EQUIV CKT (OHMS / PHASE)
	R1 R2 X1 X2 Xn
	0.3550 0.1480 1.0490 1.1830 32.6070



Speed - Torque Curve

