

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 445TSTDS14051

Catalog No: U540

Fire Pump Motor, 250 & 200 HP, 3 Ph, 60 & 50 Hz, 460 & 380 V, 1800 & 1500 RPM, 445TS Frame, DP



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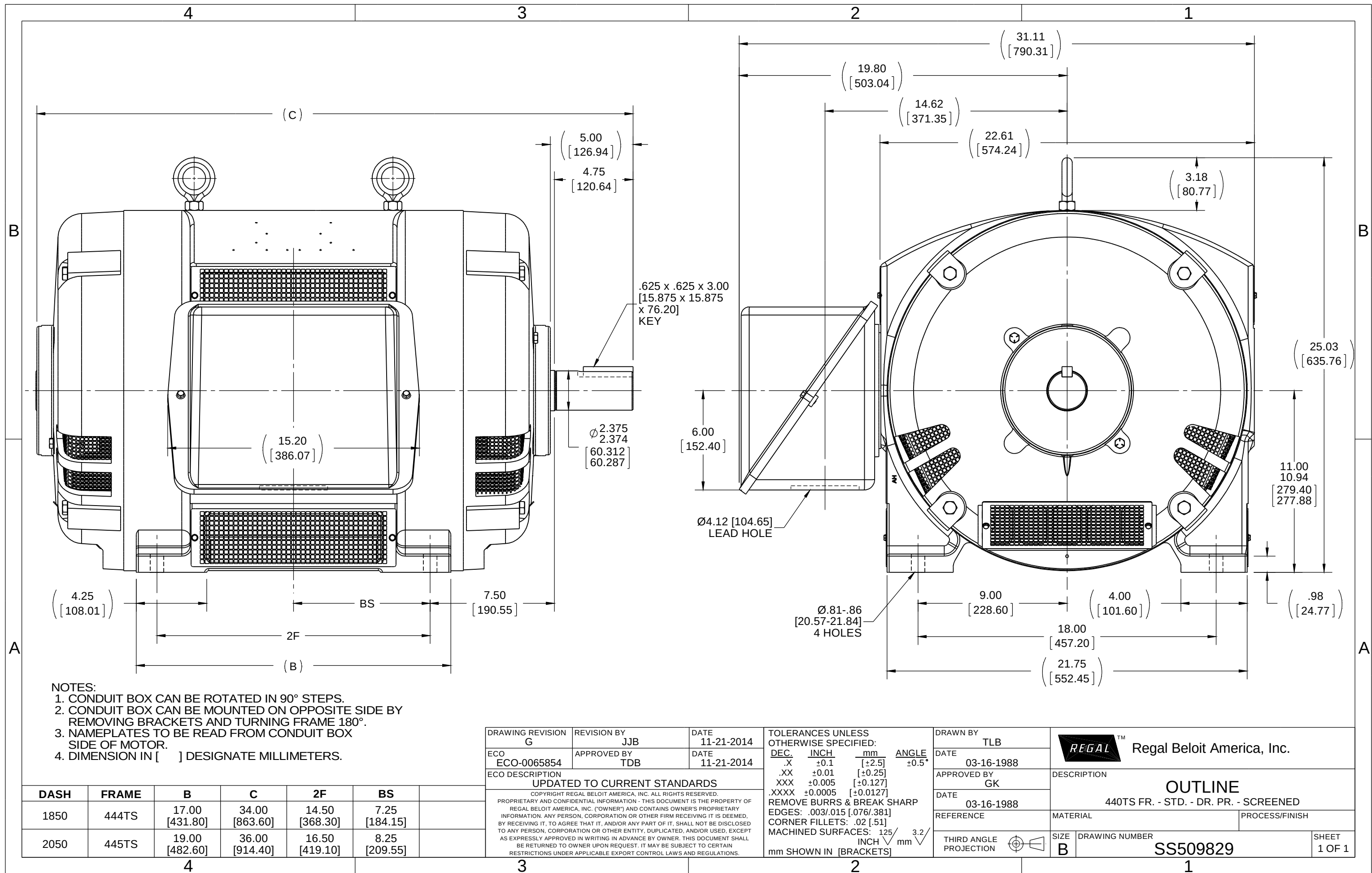
RegalRexnord

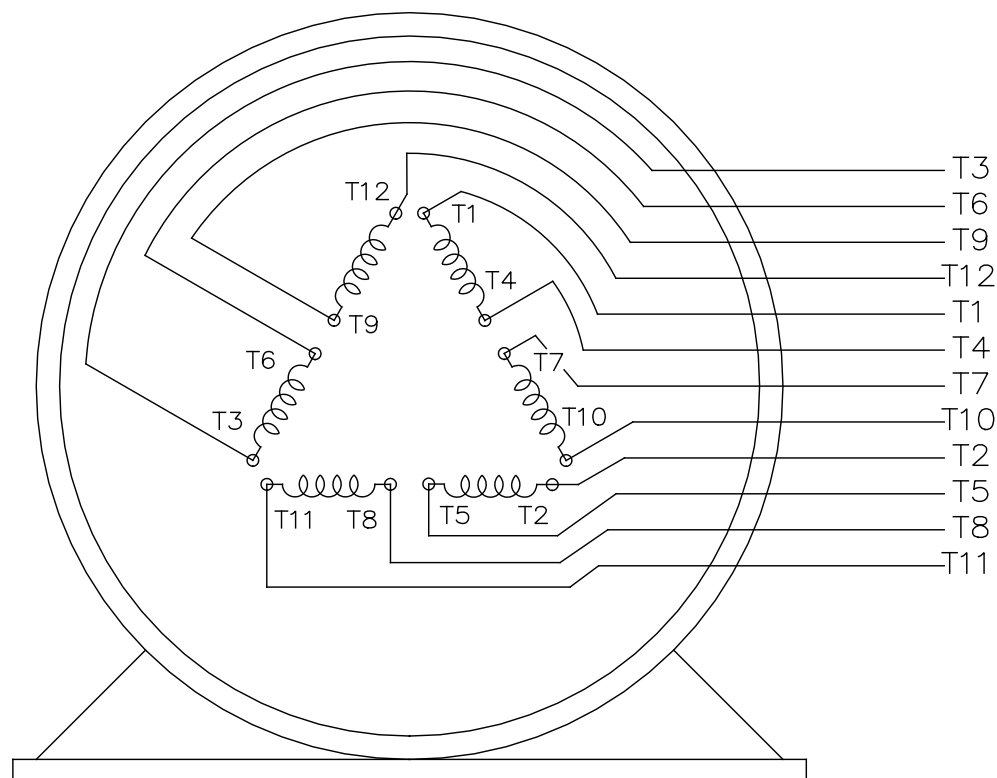
Nameplate Specifications

Phase	3	Output HP	250 & 200 Hp
Output KW	187.0 & 149.0 kW	Voltage	460 & 380 V
Speed	1780 & 1480 rpm	Service Factor	1.15 & 1.15
Frame	445TS	Enclosure	Drip Proof
Thermal Protection	No Protection	Efficiency	95.4 & 95 %
Ambient Temperature	50 °C	Frequency	60 & 50 Hz
Current	287 & 279 A	Power Factor	86
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	F
Drive End Bearing Size	6313	Opp Drive End Bearing Size	6313
UL	No	CSA	Y
CE	Y	IP Code	12
Number of Speeds	1		

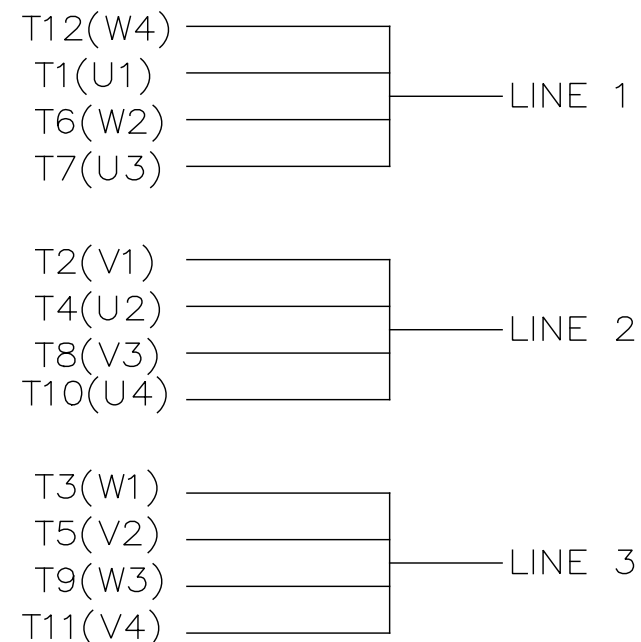
Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Part Wdg Start & Wye Start Delta Run
Poles	4	Rotation	Reversible
Resistance Main	.018 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	TS	Overall Length	36.00 in
Frame Length	20.50 in	Shaft Diameter	2.375 in
Shaft Extension	5 in	Assembly/Box Mounting	F1/F2 Capable
Connection Drawing	A-EE7300BH	Outline Drawing	B-SS509829-2050





VIEW OF TERMINAL END



				TOLERANCES UNLESS SPECIFIED		 REGAL - BELOIT CORPORATION	DRAWN RJW 02-11-2005						
				DEC.	INCHES		CHK	ML	02-11-2005				
				.X	±.1		APPD	GK	02-11-2005				
				.XX	±.02		SCALE						
D	CHANGED TO REGAL TITLE BLOCK	ECO-0108299	WGJ 08/22/2016	EMH	.XXX	±.005	TITLE CONNECTION DIAGRAM 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	DRAWING NO.	PAGE	OF	REV.
				DIST		LB	A	EE7300BH		C			

CERTIFICATION DATA SHEET

Model#: 445TSTD514051 AN
 CONN. DIAGRAM: A-EE7300BH
 OUTLINE: B-SS509829-2050

WINDING#: T445485 NONE 3
 ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
250&200	187&149	1800	1780&1480	445TS	DP	F	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	460#380	287&279	PWS & YDRUN	CONTINUOU S	F1	1.15/1.15	50	3300

FULL LOAD EFF: 95.4&95	3/4 LOAD EFF: 95.4	1/2 LOAD EFF: 95	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 86&85.5	3/4 LOAD PF: 83.5	1/2 LOAD PF: 77.5	94.5	SQ CAGE IND RUN	83

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
738 LB-FT	1650	1375 LB-FT 186	1600 LB-FT 217	70

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
80 dBA	90 dBA	47.5 LB-FT^2	850 LB-FT^2	20 SEC.	2	1500 LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	D RIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	RED (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL						
6313	6313	POLYREX EM	TS	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON

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

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DATE: 06/21/2017 05:18:22 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 6/19/2017

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



445TSTD514051

Submittal

Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	83.0	107	158	219	287	333	363	1,650	
Torque (ft-lb)	0.00	183	367	551	738	852	925	1,375	
RPM	1800	1795	1790	1785	1780	1,775	1770	0	
Efficiency (%)		93.0	95.0	95.4	95.4	94.5	94.5		
P.F. (%)	5.5	59.0	77.5	83.5	86.0	86.0	85.0	33.5	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle	Information Block																																
Speed (RPM)	0	900	1705	1780	1800	HP	250.0																															
Current (Amps)	1,650	1,485	900	287	83.0	Sync. RPM	1800																															
Torque (ft-lb)	1,375	1,230	1,600	738	0.00	Frame	445																															
— Efficiency (%) — P.F. (%) — Current (Amps) <table><caption>Graph Data</caption><thead><tr><th>Load (%)</th><th>Efficiency (%)</th><th>P.F. (%)</th><th>Current (Amps)</th></tr></thead><tbody><tr><td>25</td><td>93.0</td><td>59.0</td><td>100</td></tr><tr><td>40</td><td>94.0</td><td>75.0</td><td>120</td></tr><tr><td>60</td><td>95.0</td><td>82.0</td><td>160</td></tr><tr><td>80</td><td>95.5</td><td>85.0</td><td>200</td></tr><tr><td>100</td><td>95.0</td><td>87.0</td><td>250</td></tr><tr><td>120</td><td>94.0</td><td>85.0</td><td>320</td></tr></tbody></table>						Load (%)	Efficiency (%)	P.F. (%)	Current (Amps)	25	93.0	59.0	100	40	94.0	75.0	120	60	95.0	82.0	160	80	95.5	85.0	200	100	95.0	87.0	250	120	94.0	85.0	320	Enclosure	DP			
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						100	95.0	87.0	250																													
						120	94.0	85.0	320																													
						Construction	TDS																															
						Voltage	460#380 V																															
						Frequency	60 Hz																															
						Design	B																															
						LR Code letter	F																															
						Service Factor	1.15																															
						Temp Rise @ FL	70 ° C																															
						Duty	CONT																															
						Ambient	40 ° C																															
Elevation	1,000 feet																																					
Rotor/Shaft wk ²	47.5 Lb-Ft ²																																					
Ref Wdg	T445485 NONE																																					
Sound Pressure @ 1M	80 dBA																																					
VFD Rating	NONE																																					
Outline Dwg	B-SS509829-2050																																					
Conn. Diag	A-EE7300BH																																					
Additional Specifications:																																						
0																																						
0																																						
EQUIV CKT (OHMS / PHASE)																																						
R1		R2		X1		X2		Xm																														
0.0110		0.0110		0.1060		0.1480		3.2130																														

Speed -Torque Curve

