

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 449THFS9027

Catalog No: W632

300 HP, Severe Duty Motor, 3 phase, 1800 RPM, 460 V, 449T Frame, TEFC
Severe Duty Motors



Regal and Marathon are trademarks of Regal Rexnord Corporation or one of its affiliated companies.
©2021 Regal Rexnord Corporation, All Rights Reserved. MC017097E

RegalRexnord

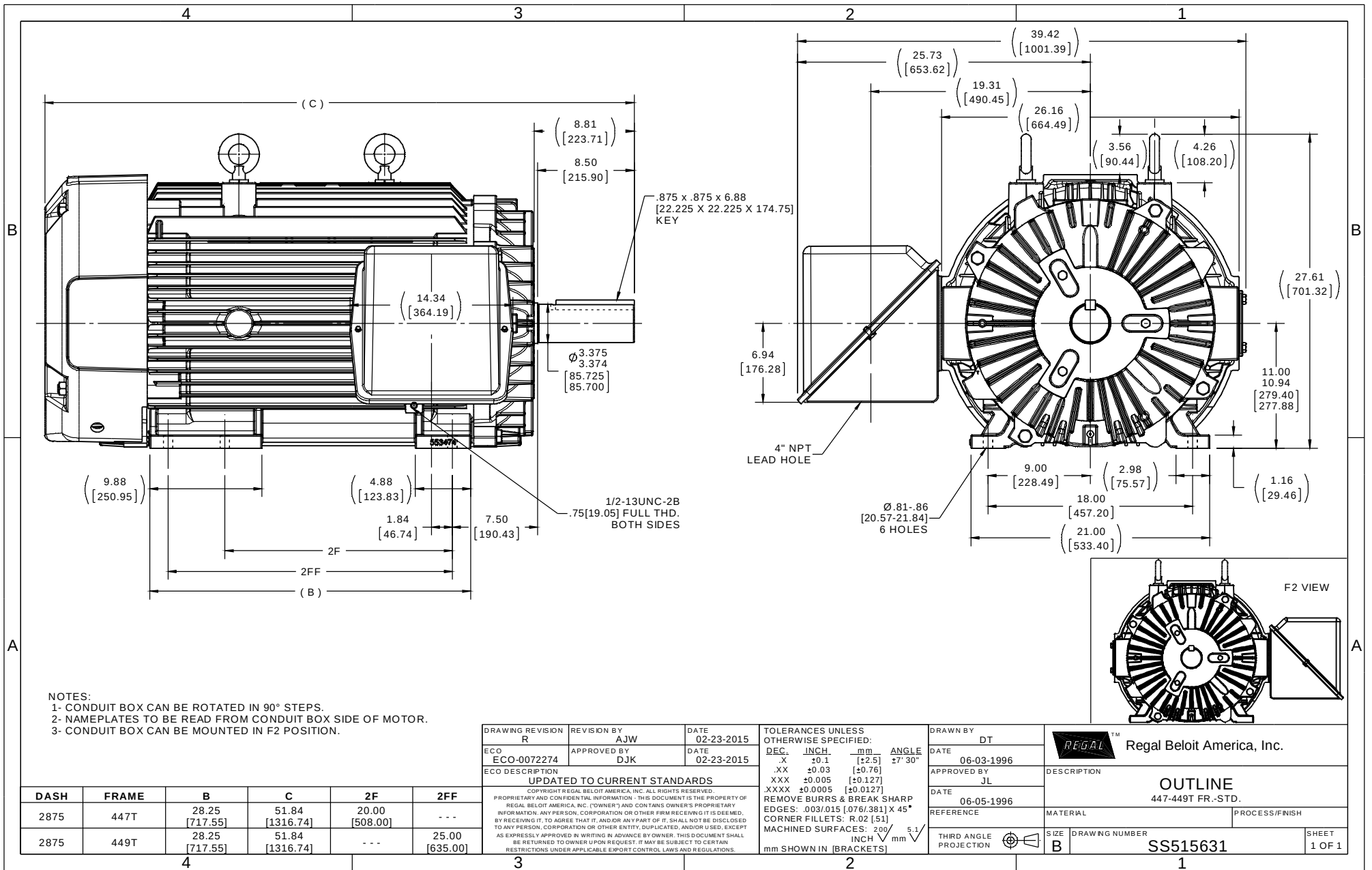
Nameplate Specifications

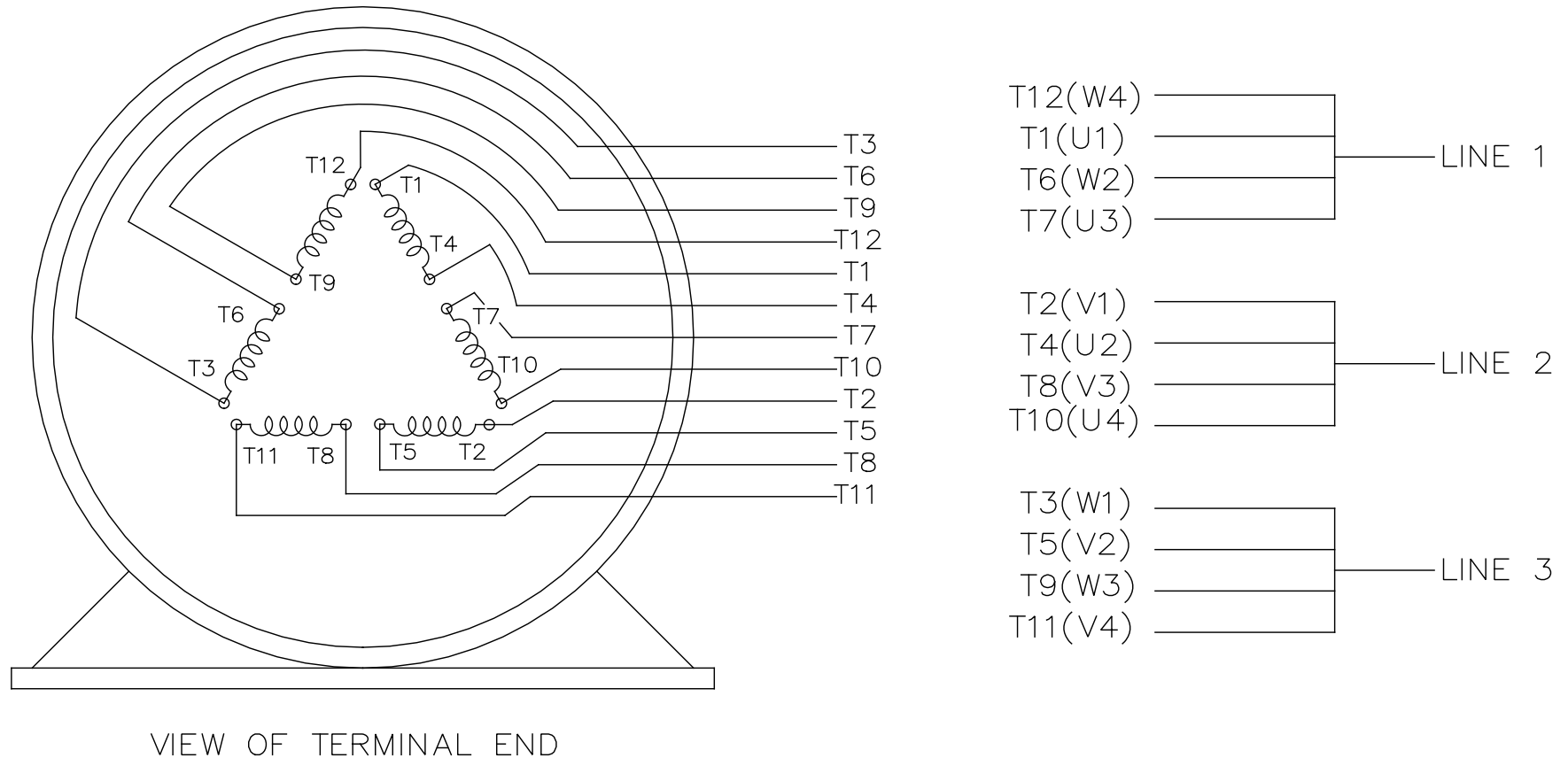
Output HP	300 Hp	Output KW	224.0 kW
Frequency	60 Hz	Voltage	460 V
Current	339.0 A	Speed	1785 rpm
Service Factor	1.15	Phase	3
Efficiency	96.5 %	Power Factor	86
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	449T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6319	Opp Drive End Bearing Size	6318
UL	Recognized	CSA	Y
CE	Y	IP Code	56
Hazardous Location	DIVISION 2 T2B	Number of Speeds	1

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Part Wdg Start & Wye Start Delta Run Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.0085 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	51.84 in
Frame Length	28.75 in	Shaft Diameter	3.375 in
Shaft Extension	8.81 in	Assembly/Box Mounting	F1/F2 CAPABLE
Connection Drawing	A-EE7300BH	Outline Drawing	B-SS515631-2875

This is an uncontrolled document once printed or downloaded and is subject to change without notice. Date Created:10/12/2021





				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		TITLE CONNECTION DIAGRAM 12 LEAD- SINGLE VOLTAGE							
D	CHANGED TO REGAL TITLE BLOCK	ECO-0108299	WGJ 08/22/2016	EMH	.XXX ±.005	SCALE								
1	ADDED IEC TERMINAL MARKINGS	CN 41429	JJB 05/24/2007	ML	.XXXX ±.0005	MAT'L.				REF				
NO.	REVISION		BY & DATE	CHK	ANG	±7'30"	FINISH				FMF			
											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#: 449THFS9027 AF **WINDING#:** T449445 NONE 1
CONN. DIAGRAM: A-EE7300BH **ASSEMBLY:** F1/F2 CAPABLE
OUTLINE: B-SS515631-2875

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
300	224	1800	1785	447/449T	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	339	PWS & YDRUN OR INV	CONTINUOU S	F1	1.15	40	3300

FULL LOAD EFF: 96.5	3/4 LOAD EFF: 96.5	1/2 LOAD EFF: 95.4	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 86	3/4 LOAD PF: 84.5	1/2 LOAD PF: 78	96.2	SQ CAGE INV RATED	98

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
883 LB-FT	2200	1775 LB-FT 201	2100 LB-FT 238	75

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
80 dBA	90 dBA	93 LB-FT^2	2500 LB-FT^2	25 SEC.	1	3000 LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	DIVISION 2 T2B	FALSE	NONE	BLUE (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6319	6318						

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: CONSTANT 2:1
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 06:41:13 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 6/29/2017

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



449THFS9027

Submittal

Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	98.0	125	187	260	339	390	425	2,200	
Torque (ft-lb)	0.00	219	439	660	883	1,015	1,105	1,775	
RPM	1800	1796	1792	1788	1785	1,782	1778	0	
Efficiency (%)		93.0	95.4	96.5	96.5	96.2	95.8		
P.F. (%)	4.5	60.0	78.0	84.5	86.0	86.0	86.0	31.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle																																									
Speed (RPM)	0	900	1725	1785	1800	Information Block																																								
Current (Amps)	2,200	2,050	1,150	339	98.0	HP	300.0																																							
Torque (ft-lb)	1,775	1,650	2,100	883	0.00	Sync. RPM	1800																																							
— Efficiency (%) — P.F. (%) — Current (Amps) <table><thead><tr><th>LOAD</th><th>Efficiency (%)</th><th>P.F. (%)</th><th>Current (Amps)</th></tr></thead><tbody><tr><td>0%</td><td>93.0</td><td>60.0</td><td>100.0</td></tr><tr><td>20%</td><td>94.0</td><td>70.0</td><td>110.0</td></tr><tr><td>40%</td><td>95.0</td><td>80.0</td><td>120.0</td></tr><tr><td>60%</td><td>95.5</td><td>85.0</td><td>130.0</td></tr><tr><td>80%</td><td>96.0</td><td>88.0</td><td>140.0</td></tr><tr><td>100%</td><td>96.0</td><td>36.0</td><td>150.0</td></tr><tr><td>120%</td><td>95.5</td><td>35.0</td><td>160.0</td></tr><tr><td>125%</td><td>95.0</td><td>35.0</td><td>420.0</td></tr></tbody></table>						LOAD	Efficiency (%)	P.F. (%)	Current (Amps)	0%	93.0	60.0	100.0	20%	94.0	70.0	110.0	40%	95.0	80.0	120.0	60%	95.5	85.0	130.0	80%	96.0	88.0	140.0	100%	96.0	36.0	150.0	120%	95.5	35.0	160.0	125%	95.0	35.0	420.0	Frame	449			
						LOAD	Efficiency (%)	P.F. (%)	Current (Amps)																																					
						0%	93.0	60.0	100.0																																					
						20%	94.0	70.0	110.0																																					
						40%	95.0	80.0	120.0																																					
						60%	95.5	85.0	130.0																																					
						80%	96.0	88.0	140.0																																					
						100%	96.0	36.0	150.0																																					
						120%	95.5	35.0	160.0																																					
						125%	95.0	35.0	420.0																																					
						Enclosure	TEFC																																							
						Construction	TFN																																							
						Voltage	460	V																																						
						Frequency	60	Hz																																						
						Design	A																																							
						LR Code letter	G																																							
						Service Factor	1.15																																							
Temp Rise @ FL	75	° C																																												
Duty	CONT																																													
Ambient	40	° C																																												
Elevation	1,000	feet																																												
Rotor/Shaft wk²	93.0	Lb-Ft²																																												
Ref Wdg	T449445	NONE																																												
Sound Pressure @ 1M	80	dBA																																												
VFD Rating	CONSTANT 2:1																																													
Outline Dwg	B-SS515631-2875																																													
Conn. Diag	A-EE7300BH																																													
Additional Specifications:																																														
0																																														
0																																														
EQUIV CKT (OHMS / PHASE)																																														
R1	R2	X1	X2	Xm																																										
0.0050	0.0060	0.0760	0.1140	2.6200																																										

Speed -Torque Curve

