

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 449TTFCD16375

Catalog No: GT1084

Globetrotter® General Purpose Motor, 400 & 350 HP, 3 Ph, 60 & 50 Hz, 460 & 380 V, 1800 & 1500 RPM,  
449T Frame, TEFC



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**RegalRexnord**

### Nameplate Specifications

Phase	<b>3</b>	Output HP	<b>400 &amp; 350 Hp</b>
Output KW	<b>300.0 &amp; 260.0 kW</b>	Voltage	<b>460 &amp; 380 V</b>
Speed	<b>1788 &amp; 1488 rpm</b>	Service Factor	<b>1.15 &amp; 1.15</b>
Frame	<b>449T</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<b>No Protection</b>	Efficiency	<b>96.5 &amp; 95.8 %</b>
Ambient Temperature	<b>40 °C</b>	Frequency	<b>60 &amp; 50 Hz</b>
Current	<b>440 &amp; 465 A</b>	Power Factor	<b>88</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>G</b>
Drive End Bearing Size	<b>6319</b>	Opp Drive End Bearing Size	<b>6317</b>
UL	<b>Listed</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>55</b>
Number of Speeds	<b>1</b>	Hazardous Location	<b>DIVISION 2 T2B</b>

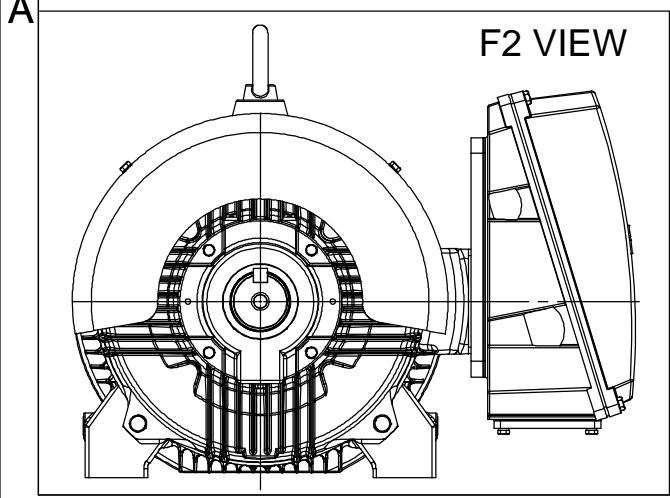
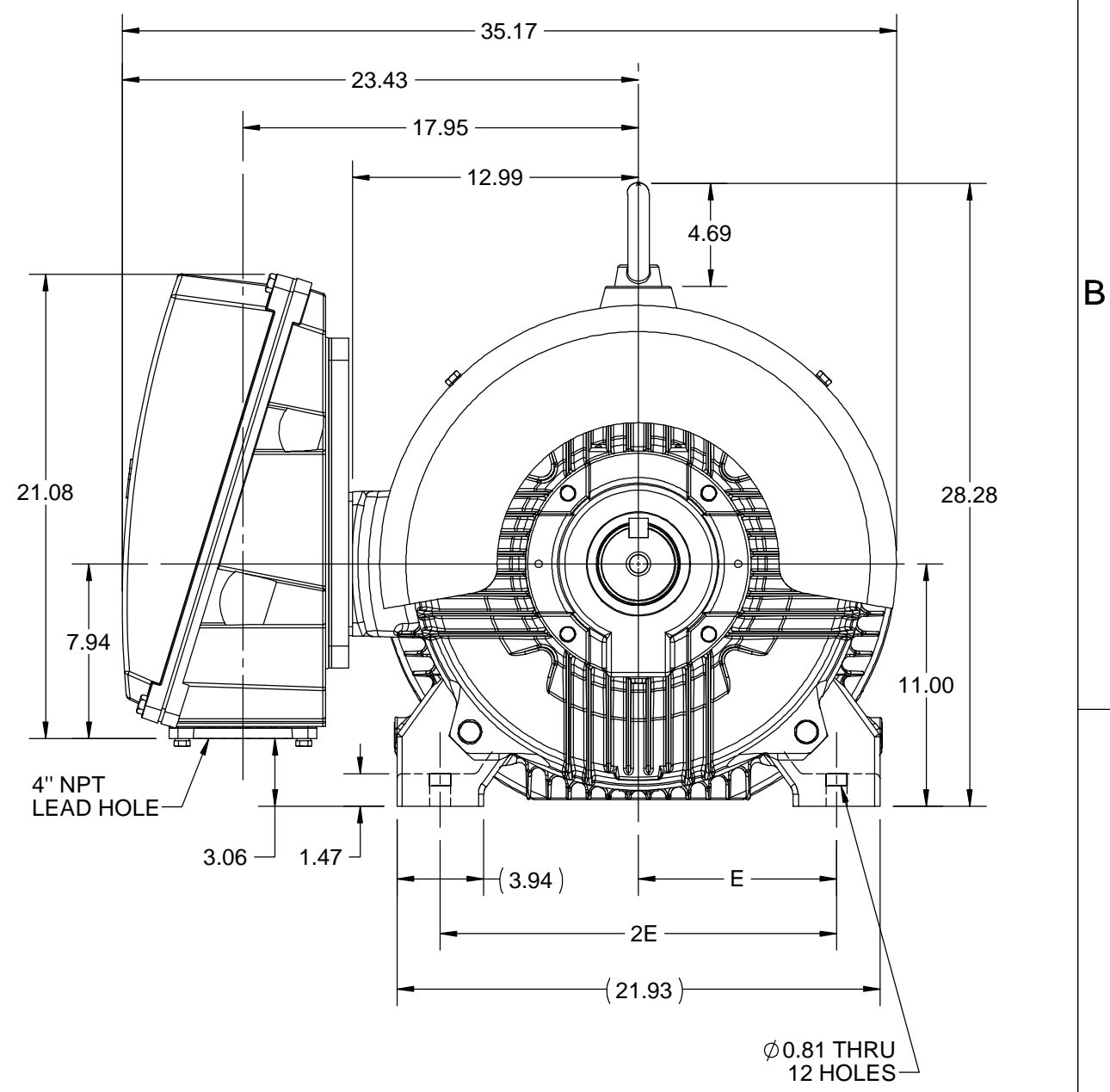
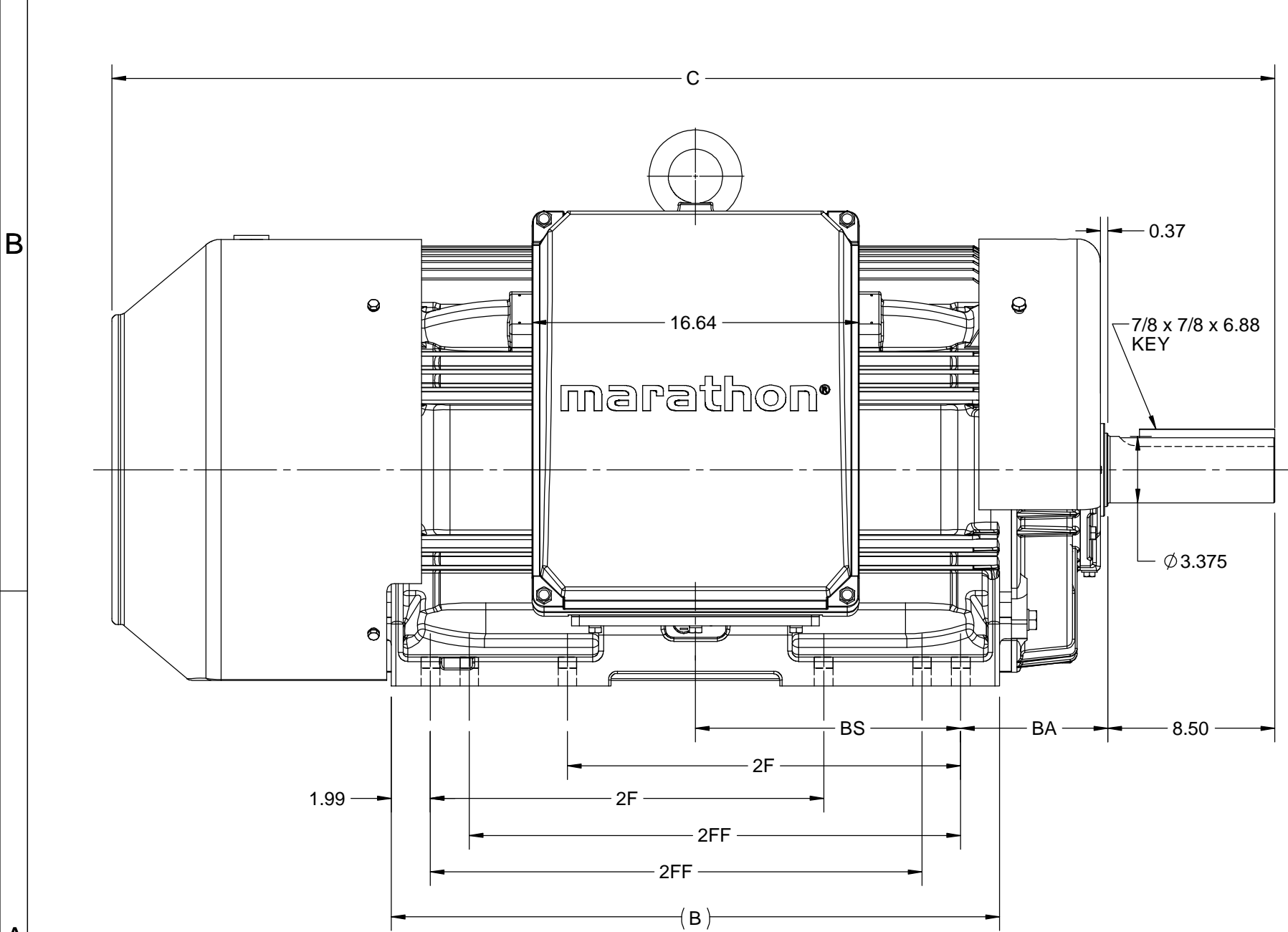
### Technical Specifications

Electrical Type	<b>Squirrel Cage Induction Run</b>	Starting Method	<b>Part Wdg Start</b>
Poles	<b>4</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>.009 Ohms</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>Cast Iron</b>
Shaft Type	<b>T</b>	Shaft Diameter	<b>3.375 in</b>
Assembly/Box Mounting	<b>F1 ONLY</b>	Inverter Load	<b>VARIABLE 10:1</b>
Outline Drawing	<b>SS621028</b>	Connection Drawing	<b>EE7341C</b>

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4 3 2 1

B	C	E	2E	2F	2FF	BA	BS	MOUNTING
30.94	59.15	9.00	18.00	20.00	25.00	7.50	13.48	F1 OR F2



DRAWING REVISION B	REVISION BY BISWA	REV DATE/© DATE 09/10/2020
ECO ECO-0195135	APPROVED BY GNK	DATE 09/10/2020
ECO DESCRIPTION		
DRAWING UPDATED		
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PRIMARY DIMENSIONS ARE INCH  
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ARE FOR REFERENCE ONLY

DRAWN BY BISWA	Regal Beloit America, Inc.
DATE 13/05/2020	
APPROVED BY SBD	DESCRIPTION <b>OUTLINE</b> 447/449T FR H/O B3 MTG.
DATE 13/05/2020	MATERIAL
REFERENCE	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE B
DRAWING NUMBER SS621028	SHEET 1 OF 1

4 3 2 1

EE7341C

THREE PHASE – PART WINDING START  
DELTA – 6 LEADS

START

CONNECT T1 TO LINE 1  
CONNECT T2 TO LINE 2  
CONNECT T3 TO LINE 3  
T7-T8-T9 OPEN

RUN

CONNECT T1&T7 TO LINE 1  
CONNECT T2&T8 TO LINE 2  
CONNECT T3&T9 TO LINE 3



VIEW OF TERMINAL END

IF MOTOR HAS 2 T'S

START

CONNECT T1,T1 TO LINE 1  
CONNECT T2,T2 TO LINE 2  
CONNECT T3,T3 TO LINE 3  
T7,T7-T8,T8-T9,T9 OPEN

RUN

CONNECT T1,T1&T7,T7 TO LINE 1  
CONNECT T2,T2&T8,T8 TO LINE 2  
CONNECT T3,T3&T9,T9 TO LINE 3

		TOLERANCES UNLESS SPECIFIED		REGAL REGAL-BELOIT CORPORATION		DRAWN	BLR	03-09-1998
		DEC.	INCHES			CHK	ML	03-23-1998
		.X	± -			APPD	GK	03-23-1998
		.XX	± -	TITLE		SCALE 1=1		
E	NOTE ADDED FOR 2 T'S	NAR 17-12-2020	RC	.XXX	± -	CONNECTION DIAGRAM		REF
D	RE-DRAWN WITH REGAL LOGO ECO-0110493	WGJ 09-30-2016	EMH	.XXXX	± -	3ø - 6 LEADS		FMF
NO.	REVISION	BY & DATE	CHK	ANG	± -	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 EE7341C		SIZE	DRAWING NO. PAGE OF REV.	
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P.O. BOX 8003  
 WAUSAU, WI 54401-8003  
 PH. 715-675-3311

DATA VOLTS: 460

**CERTIFICATION DATA SHEET**

CUSTOMER:  
 ORDER #:  
 CONN. DIAGRAM: EE7341C  
 OUTLINE: SS621028  
 WINDING: HA32804032 NONE 1  
 SPEED: \_\_\_\_\_

CUSTOMER P.O. #:  
 REFERENCE MODEL #: 449TTFC16375  
 CAT #: GT1084  
 CUSTOMER PART #:  
 MOUNTING: F1/F2 CAPABLE

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
400	298	1800	1788	447/449T	TEFC	TFC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	460#380	442&475	PWS OR INVERTER	CONT	F	1.15	40	3300

F.L. EFF	96.2	3/4 LD EFF	96.5	1/2 LD EFF	96.4	GTD EFF	ELECT. TYPE
F.L. PF	88.0	3/4 LD PF	86.9	1/2 LD PF	81.9	95.8	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
1,175 LB-FT	2,960	3,000 LB-FT	255% 2,500 LB-FT	213% 85

SOUND PRESSURE @ 3 FT.	SOUND	POWER	ROTOR WK <sup>2</sup>	MAX. LOAD WK <sup>2</sup>	SAFE STALL TIME	STARTS/HOUR	APROX.	MOTOR WGT
85 dBA	94 dBA		132 LB-FT <sup>2</sup>	3000 LB-FT <sup>2</sup>	20 SEC.	2	3258	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	DIVISION 2 T2B	YES	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
BALL	BALL						
6319	6317						

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
0.006	0.004	0.042	0.113	2.375	0.150	NONE

NOTES	INVERTER TORQUE: CONSTANT 2:1/VARIABLE 10:1					
	INV. HP SPEED RANGE: NONE					
	ENCODER: NONE					
	NONE PPR					

PREPARED BY:					
DATE:	6/9/2021				
BRAKE: NONE		NONE		NONE	
FT-LB: NA		VOLTAGE: NONE		HZ:	
UL: NO LETTER - ME, WUXI TEFC BLUEWHALE CLASS 1 DIV. 2 UL LISTED					

FORM: 3531 REV. 4 2/27/06

Data Sheet

Date: 6/9/2021  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: \_\_\_\_\_



449TTFCD16375

Submittal

Data @ 460 V

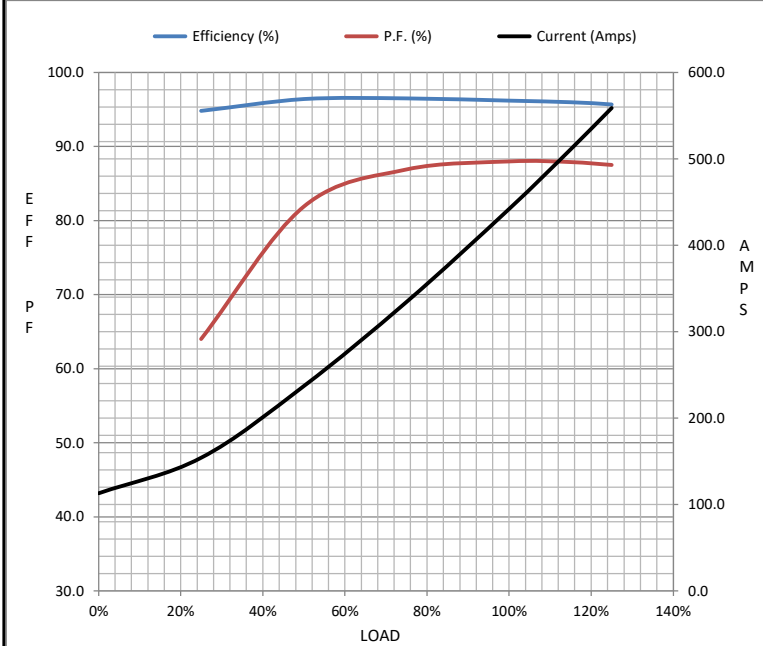
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	113	154	237	335	442	511	559	2,960
Torque (ft-lb)	0.00	292	585	880	1,175	1,353	1,472	3,000
RPM	1800	1797	1794	1791	1788	1,786	1784	0
Efficiency (%)		94.8	96.4	96.5	96.2	96.0	95.7	
P.F. (%)	4.0	64.0	81.9	86.9	88.0	87.9	87.5	42.0

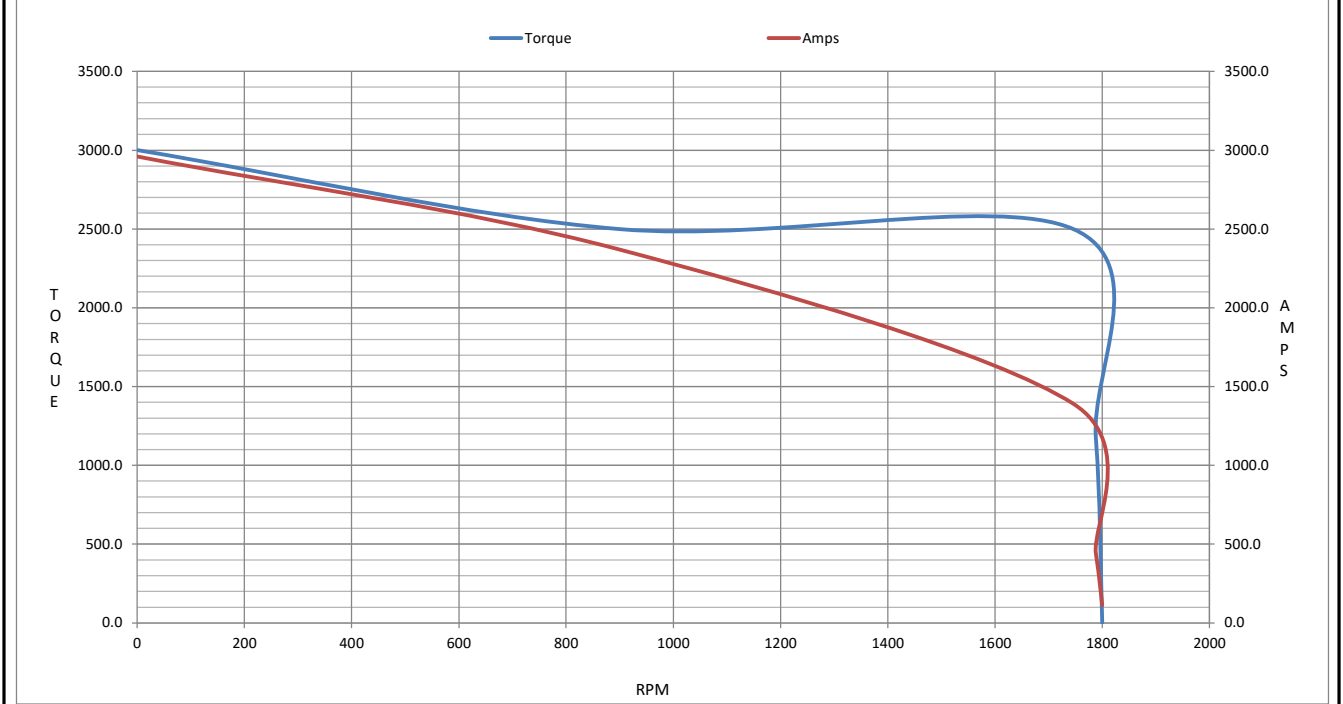
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1746	1788	1800
Current (Amps)	2,960	2,370	1,390	442	113
Torque (ft-lb)	3,000	2,500	2,500	1,175	0.00

Information Block				
HP	400.0			
Sync. RPM	1800			
Frame	449			
Enclosure	TEFC			
Construction	TFC			
Voltage	460#380 V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	85 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	3,300 feet			
Rotor/Shaft wk <sup>2</sup>	132 Lb-F <sup>2</sup>			
Ref Wdg	HA32804032 NONE			
Sound Pressure @ 1M	85 dBA			
VFD Rating	CONSTANT 2:1/VARIABLE 10:1			
Outline Dwg	SS621028			
Conn. Diag	EE7341C			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0060	0.0040	0.0420	0.1130	2.3750



Speed - Torque Curve



## EC Declaration of Conformity

The undersigned representing  
the manufacturer:

Regal Beloit America  
100 East Randolph St.  
Wausau, WI 54401

and the authorized representative  
established within the Community:

Marathon Electric UK  
6F Thistleton Road Ind. Estate  
Market Overton  
Oakham, Rutland LE15 7PP UK

are committed to providing customers with products that comply with applicable regulations and international protocols to which they are subject, including the requirements of the European Parliament Directive on the Harmonization of the laws relating to electrical equipment designed for use within certain voltage limits (2014/35/EU).

Regal Beloit America declares that the following product(s), to which this declaration relates, are in conformity with the relevant sections of the EC standards listed below.

This statement supersedes any statements previously issued pertaining to the product(s) listed below and is subject to change without notice.

Model No : 449TTFC16375

(Model No. may contain prefix and/or suffix characters)

Catalog No : GT1084

Rework No : N/A

Directives :

Low Voltage Directive 2014/35/EU

Harmonized Standards Used :

EN 60034-1: 2010 (IEC 60034-1: 2010)

EN 60034-5: 2001/A1:2007 (IEC 60034-5: 2000/A1:2006)

Authorized Representative:



Michael A. Logsdon  
Vice President, Technology

Authorized Representative in the Community:



Julian Clark  
Marketing Engineer

Created on 09/01/2022

**CE 22**