

# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 315STFC6588

Catalog No: R508

Globetrotter® IEC Cast Iron Motor, 100 & 75 HP, 3 Ph, 60 & 50 Hz, 230/460 & 200/400 V,  
1200 & 1000 RPM, 315S Frame, TEFC



Regal and Marathon are trademarks of Regal Rexnord Corporation or one of its affiliated companies.

©2023 Regal Rexnord Corporation, All Rights Reserved. MC017097E

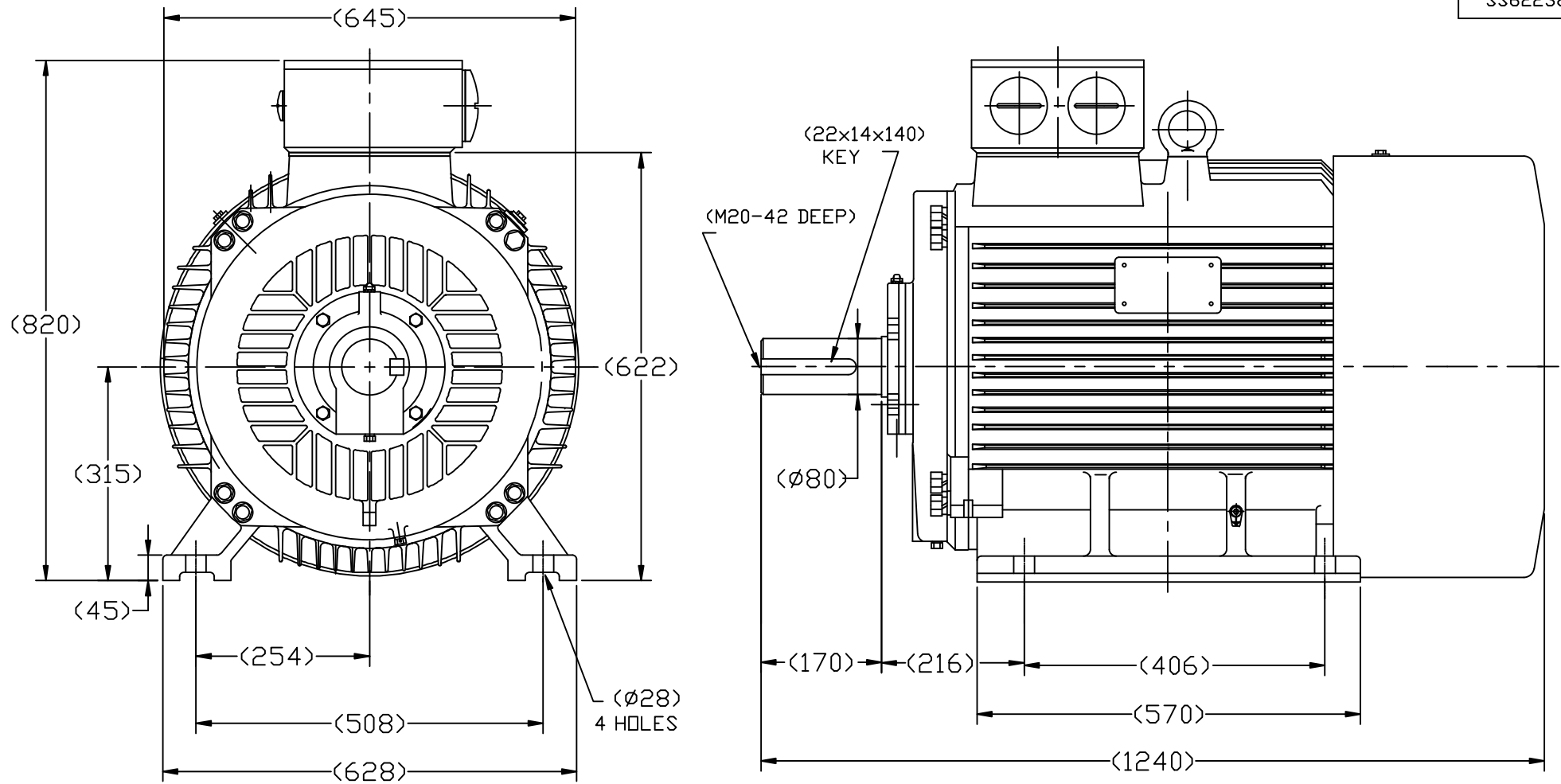
**RegalRexnord**

### Nameplate Specifications

Phase	3	Output HP	100 & 75 Hp
Output KW	75.0 & 56.0 kW	Voltage	230/460 & 200/400 V
Speed	1190 & 992 rpm	Service Factor	1.15 & 1.15
Frame	315S	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	95 & 95 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	226/113 & 200/100 A	Power Factor	87
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	H
Drive End Bearing Size	6319	Opp Drive End Bearing Size	6319
UL	Recognized	CSA	Y
CE	Y	IP Code	55
Number of Speeds	1		

### Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Part Wdg Start & Wye Start Delta Run Or Inverter
Poles	6	Rotation	Reversible
Resistance Main	0 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	IEC	Overall Length	48.81 in
Shaft Diameter	3.142 in	Shaft Extension	6.69 in
Assembly/Box Mounting	F3	Inverter Load	CONSTANT 2:1
Connection Drawing	00417203ME	Outline Drawing	SS622383



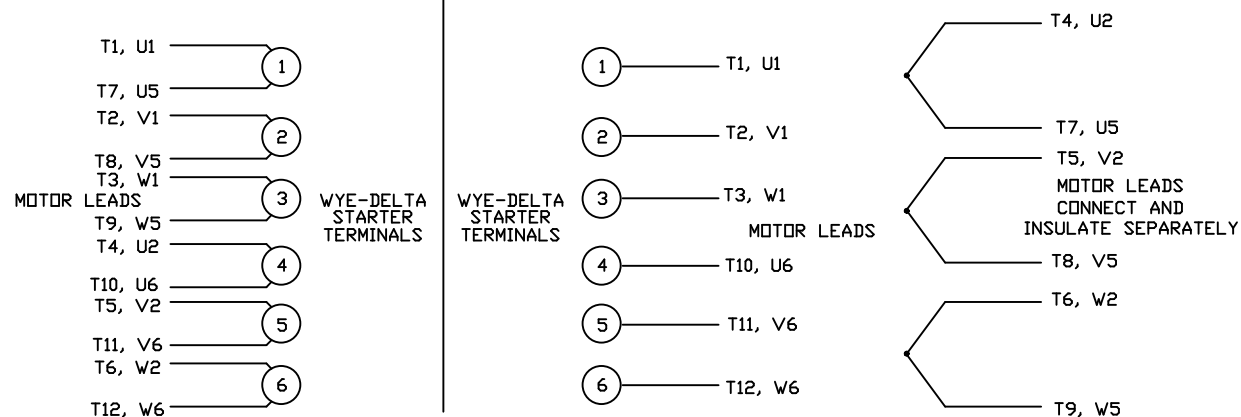
DRAWING MAY NOT BE TO SCALE

			TOLERANCES UNLESS SPECIFIED		REGAL REGAL-BELOIT CORPORATION	DRAWN MDL 09-11-2012	
			DEC.	INCHES		CHK	
			.X	±.1	TITLE OUTLINE C20-31SS-6	APPD	
			.XX	±.03		SCALE	
			.XXX	±.005		REF	S220306570
			.XXXX	±.0005		FMF	HEBEI
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	SS622383	SIZE
			DIST				B
							DRAWING NO.
							SS622383
							REV.

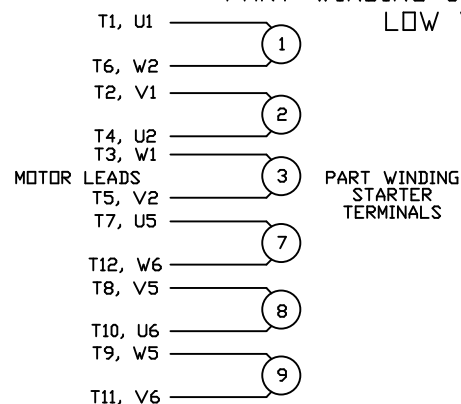
## WYE - DELTA STARTING USEABLE ON 2,4 AND 6 POLE MOTORS.

## LOW VOLTAGE CONNECTION

## HIGH VOLTAGE CONNECTION



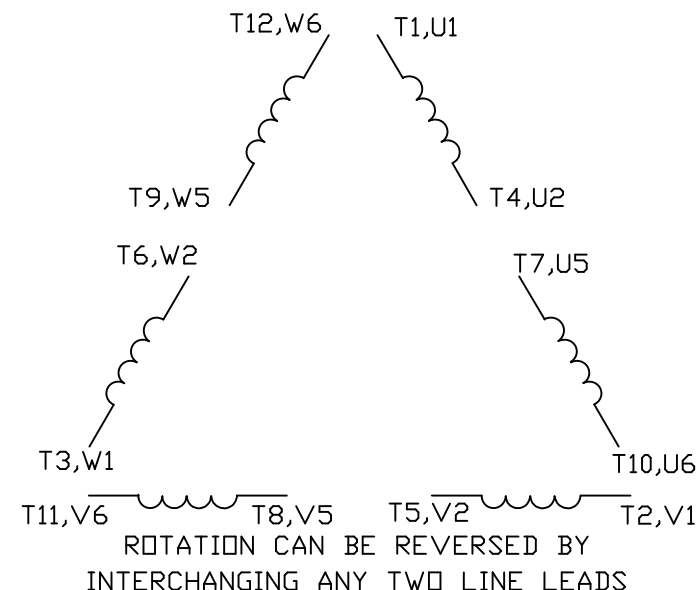
REFER TO THE WYE-DELTA STARTER CONNECTION INSTRUCTIONS FOR PROPER CONNECTION OF POWER LINES TO STARTER.

PART WINDING START USABLE ON 4 & 6 POLE MOTORS  
LOW VOLTAGE CONNECTION ONLY

REFER TO THE PART WINDING STARTER INSTRUCTIONS FOR PROPER CONNECTION OF POWER LINES TO STARTER.

REFER TO THE CUTLER - HAMMER OR EQUIV. FOR PROPER SELECTION OF OVERLOAD HEATER COILS.

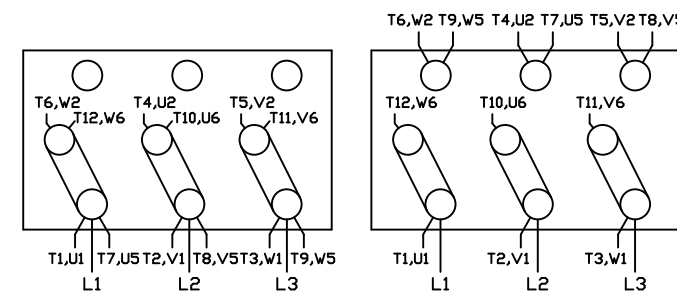
## LINE LEADS



12 LEAD DELTA CONNECTION ACROSS THE LINE START  
(FOR Y START DELTA RUN, REMOVE THE JUMPERS)

LOW VOLTAGE  
(MUST BE REWIRED  
AS SHOWN)

HIGH VOLTAGE  
(FACTORY WIRED FOR HIGH  
VOLTAGE AS SHOWN)



TOLERANCES  
UNLESS SPECIFIED

DEC. INCHES

.X ±.1

.XX ±.01

.XXX ±.005

.XXXX ±.0005

ANG ±1/2°



TITLE DELTA - WYE CONNECTION DIAGRAM  
IEC CAST IRON MOTORS

MAT'L.

FINISH

DRAWN CJW 08/28/02

CHK

APPD

SCALE 1=1

REF

FMF

PREV

NO. REVISION BY & DATE

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

DIST

CAD FILE 00417203ME

SIZE

A

DRAWING NO.

004172-03ME

REV.



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

DATA VOLTS: 460

### CERTIFICATION DATA SHEET

CUSTOMER:

ORDER #:

CONN. DIAGRAM: 00417203ME

OUTLINE: SS622383

WINDING: T22806018 NONE 1

SPEED:

CUSTOMER P.O. #:

REFERENCE MODEL #: 315STFC6588

CAT #: R508

CUSTOMER PART #:

MOUNTING: F3

### TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
100	75	1200	1190	315S	TEFC	TFC	H	N

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#200/400	226/113&200/100	PWS & YDRUN OR INV	CONT	F	1.15	40	3300

F.L. EFF	95.0	3/4 LD EFF	95.0	1/2 LD EFF	94.5	GTD EFF		ELECT. TYPE	
F.L. PF	87.0	3/4 LD PF	85.0	1/2 LD PF	79.0	94.5		SQ CAGE INV RATED	

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (° C)	
441 LB-FT	850	1,025 LB-FT 232%	1,325 LB-FT 300%	40	

@ 3 FT.	POWER	ROTOR WK <sup>2</sup>	MAX. LOAD WK <sup>2</sup>	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
65 dBA	74 dBA	0.00 LB-FT <sup>2</sup>	0 LB-FT <sup>2</sup>	25 SEC.	2	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	UM SEVERE	NONE	NO	NONE	BLUE (ENAMEL)

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

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	0	0	0	0	0.080	ODE

* N O T E S *		INVERTER TORQUE: CONSTANT 2:1 INV. HP SPEED RANGE: 1.5 X BASE SPEED
	ENCODER: NONE	
	NONE	
	NONE	NONE PPR

PREPARED BY: EARL BABBITTS	BRAKE: NONE
DATE: 13-07-17	NONE NONE
	FT-LB: NA
	VOLTAGE: NONE HZ:
FORM: 3531 REV_4 2/27/06	UL: V-INS, CONST UL REC

## Data Sheet

Date: 29-06-2017

Customer:

Attention:

Submitted by: FAREEDA DUDEKULA

315STFC6588



Submittal

Data @ 460 V

## Motor Load Data

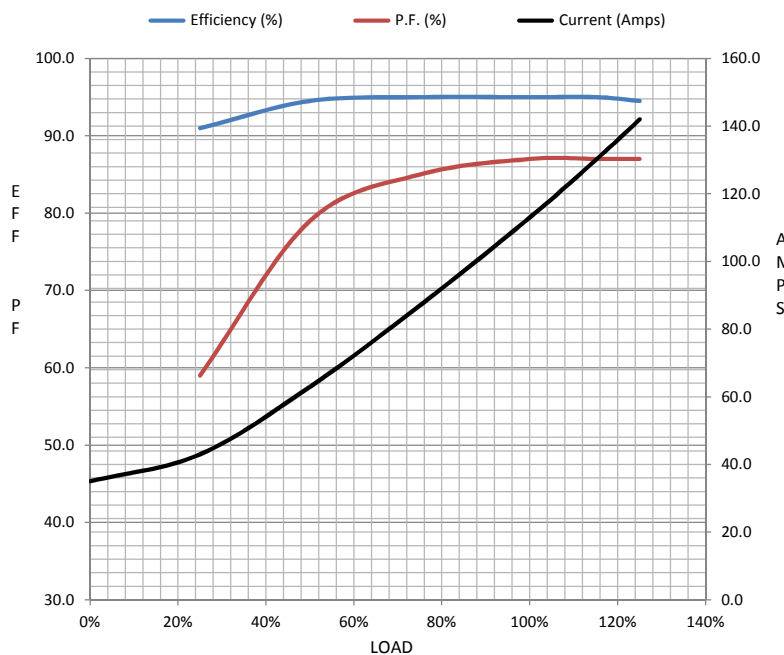
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	35.0	43.0	63.0	87.0	113	130	142	850	
Torque (ft-lb)	0.00	110	220	330	441	508	553	1,025	
RPM	1200	1198	1196	1192	1190	1,189	1188	0	
Efficiency (%)		91.0	94.5	95.0	95.0	95.0	94.5		
P.F. (%)	6.0	59.0	79.0	85.0	87.0	87.0	87.0	35.0	

## Motor Speed Data

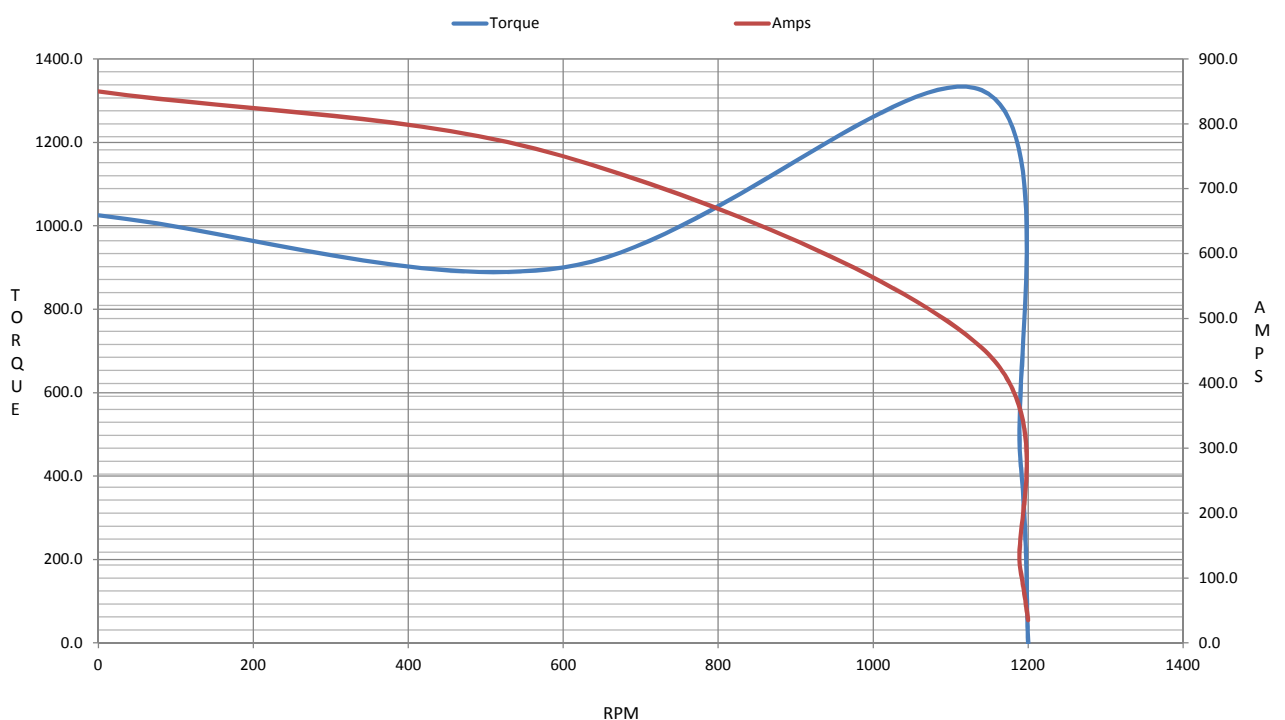
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1140	1190	1200
Current (Amps)	850	750	455	113	35.0
Torque (ft-lb)	1,025	900	1,325	441	0.00

## Information Block

HP	100.0			
Sync. RPM	1200			
Frame	315			
Enclosure	TEFC			
Construction	TFC			
Voltage	230/460#200/40(V			
Frequency	60 Hz			
Design	A			
LR Code letter	H			
Service Factor	1.15			
Temp Rise @ FL	40 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk²	0.00 Lb-Ft²			
Ref Wdg	T22806018 NONE			
Sound Pressure @ 1M	65 dBA			
VFD Rating	CONSTANT 2:1			
Outline Dwg	SS622383			
Conn. Diag	00417203ME			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0000	0.0000	0.0000	0.0000	0.0000



## 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 : 315STFC6588

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

Catalog No : R508

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**