

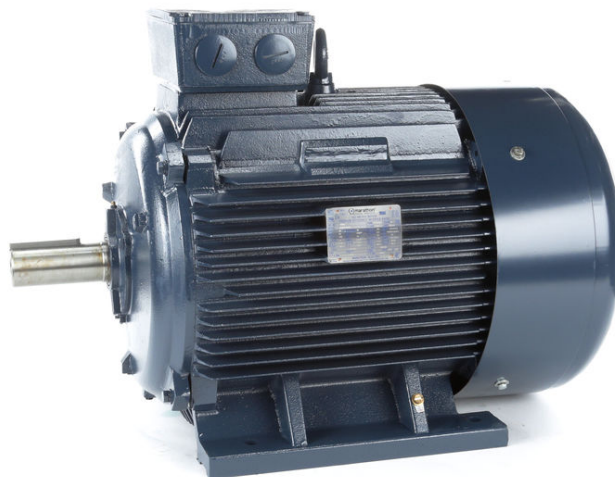
# PRODUCT INFORMATION PACKET

**marathon®**  
Motors

Model No: 280STFC6501

Catalog No: R506

Globetrotter® IEC Cast Iron Motor, 100 & 75 HP, 3 Ph, 60 & 50 Hz, 230/460 & 200/400 V,  
3600 & 3000 RPM, 280S 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

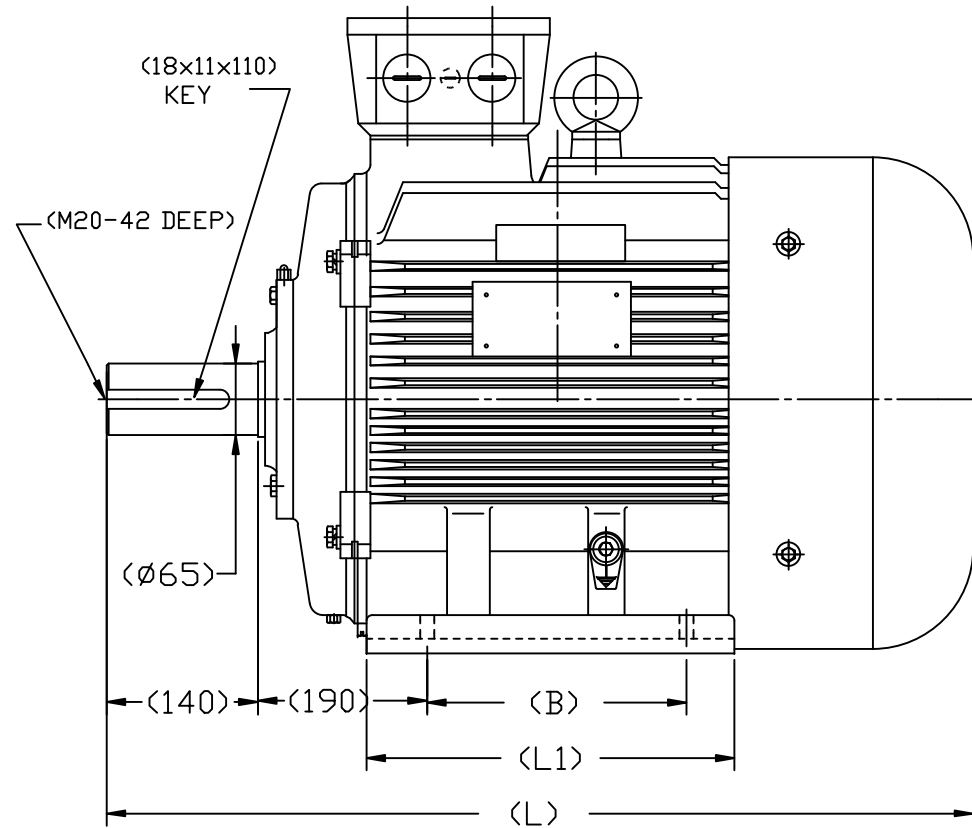
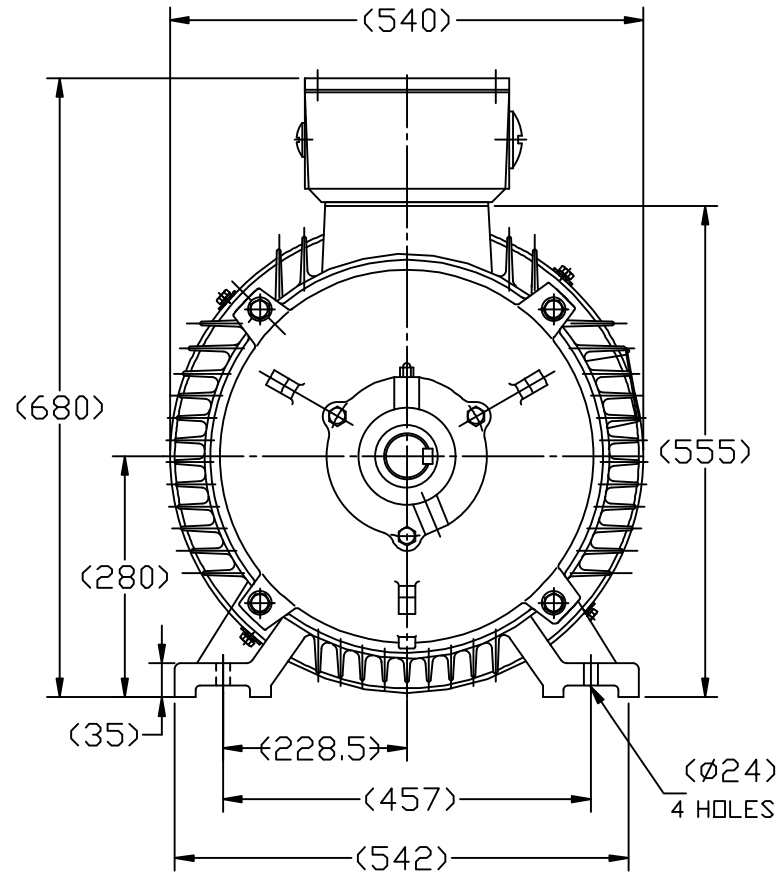
**RegalRexnord**

### Nameplate Specifications

Phase	3	Output HP	100 & 75 Hp
Output KW	75.0 & 56.0 kW	Voltage	230/460 & 200/400 V
Speed	3575 & 2985 rpm	Service Factor	1.15 & 1.15
Frame	280S	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	94.1 & 94.5 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	222/111 & 192/96 A	Power Factor	89.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	H
Drive End Bearing Size	6314	Opp Drive End Bearing Size	6314
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	2	Rotation	Reversible
Resistance Main	.0273 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	38.38 in
Shaft Diameter	2.555 in	Shaft Extension	5.51 in
Assembly/Box Mounting	F3	Inverter Load	CONSTANT 10:1
Connection Drawing	00417201ME	Outline Drawing	SS622380



DRAWING MAY NOT BE TO SCALE

CAT #	FRAME	B	L1	L
R506	DF280S-2R	368	485	975
	DF280M-2R	419	536	1026

		TOLERANCES UNLESS SPECIFIED		REGAL REGAL-BELOIT CORPORATION	DRAWN MDL 09-11-2012	
		DEC.	INCHES		CHK	
		.X	±.1	TITLE OUTLINE DF280S,M-2R-PREMIUM	APPD	
		.XX	±.03		SCALE	
		.XXX	±.005		REF	R506
		.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	SS622380	SIZE
			DIST			B
						DRAWING NO.
						SS622380
						REV.

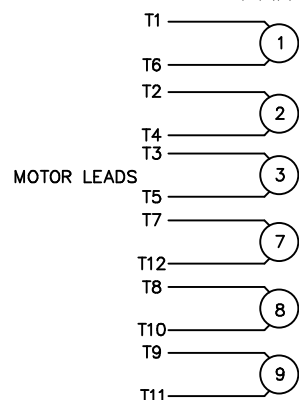
## WYE - DELTA STARTING USEABLE ON 2,4 AND 6 POLE MOTORS.

## LOW VOLTAGE CONNECTION

## HIGH VOLTAGE CONNECTION



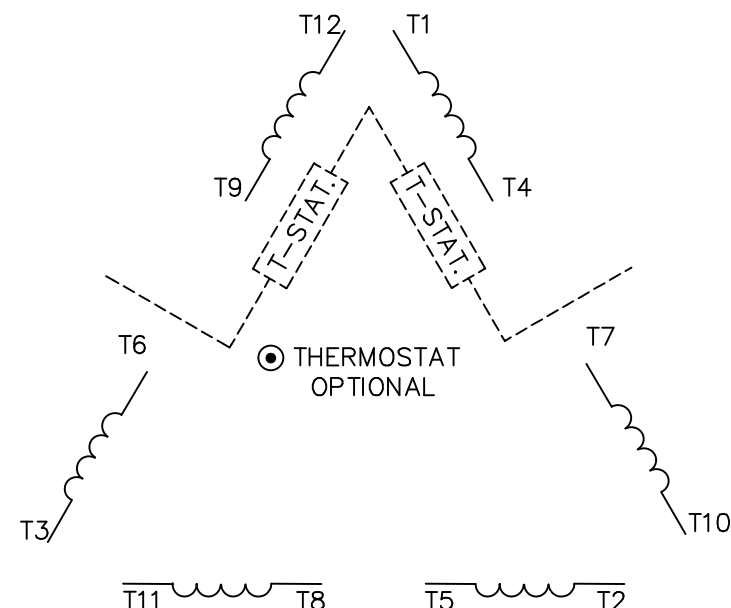
REFER TO THE WYE-DELTA STARTER CONNECTION INSTRUCTIONS FOR PROPER CONNECTION OF POWER LINES TO STARTER.

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



● RED LEADS OR P1, P2, FOR N/C THERMOSTAT

## ACROSS THE LINE START &amp; RUN

	LINE 1	LINE 2	LINE 3	JOIN & INSULATE SEPARATELY
HIGH VOLT	T1,T12	T2,T10	T3,T11	(T4,T7) (T5,T8) (T6,T9)
LOW VOLT	T1,T6 T7,T12	T2,T4 T8,T10	T3,T5 T9,T11	

TOLERANCES  
UNLESS SPECIFIED

DEC. INCHES

.X ±.1

.XX ±.01

.XXX ±.005

.XXXX ±.0005

ANG ±1/2"

MARATHON  
ELECTRIC

DRAWN WLW 09/08/77

CHK RPB 09/12/77

APPD JCW 09/12/77

SCALE 1=1

REF

FMF

PREV

03 REV'D LOW VOLTAGE CONN. LEADS PER ELEC.

BJB 06/07/00

02 ADDED T-STAT. NOTES PER ELECTRICAL

KMM 06/02/98

01 REDRAWN TO CAD

DBT 06/02/97

NO. REVISION

BY &amp; DATE

CHK

ANG

RFP

DIST

TITLE DELTA - WYE CONNECTION DIAGRAM

MAT'L.

FINISH

CAD FILE 00417201ME

SIZE

A

DRAWING NO.

004172-01ME

REV.

03

## CERTIFICATION DATA SHEET

Model#: 280STFC6501 AA

WINDING#: T22802007 NONE 1

CONN. DIAGRAM: 00417201ME

ASSEMBLY: F3

OUTLINE: SS622380

## TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
100&75	75&56	3600	3575&2985	280S	TEFC	H	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#200/ 400	222/111&192/ 96	PWS & YDRUN OR INV	CONTINUOU S	F5	1.15/1.15	40	3300

FULL LOAD EFF: 94.1&94.5	3/4 LOAD EFF: 93.6	1/2 LOAD EFF: 92.4	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 89.5&89	3/4 LOAD PF: 89	1/2 LOAD PF: 87	93.6	SQ CAGE INV RATED	42 / 21

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
147 LB-FT	1230 / 615	200 LB-FT 136	420 LB-FT 286	65

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
81 dBA	91 dBA	- LB-FT^2	- LB-FT^2	15 SEC.	2	1175 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	NONE	FALSE	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL	POLYREX EM	STANDARD IEC	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6314	6314						

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

* N O T E S *	INVERTER TORQUE: CONSTANT 10:1
	INV. HP SPEED RANGE: 1.5 X BASE SPEED
	ENCODER: NONE NONE NONE NONE NONE PPR
	BRAKE: NONE NONE NONE P/N NONE NONE NONE NONE FT-LB NONE V NONE Hz

DATE: 06/23/2017 07:28:54 AM  
FORM 3531 REV.3 02/07/99

\*\* Subject to change without notice.

## Data Sheet

Date: 19-06-2017

Customer:

Attention:

Submitted by: FAREEDA DUDEKULA



280STFC6501

Submittal

Data @ 460 V

## Motor Load Data

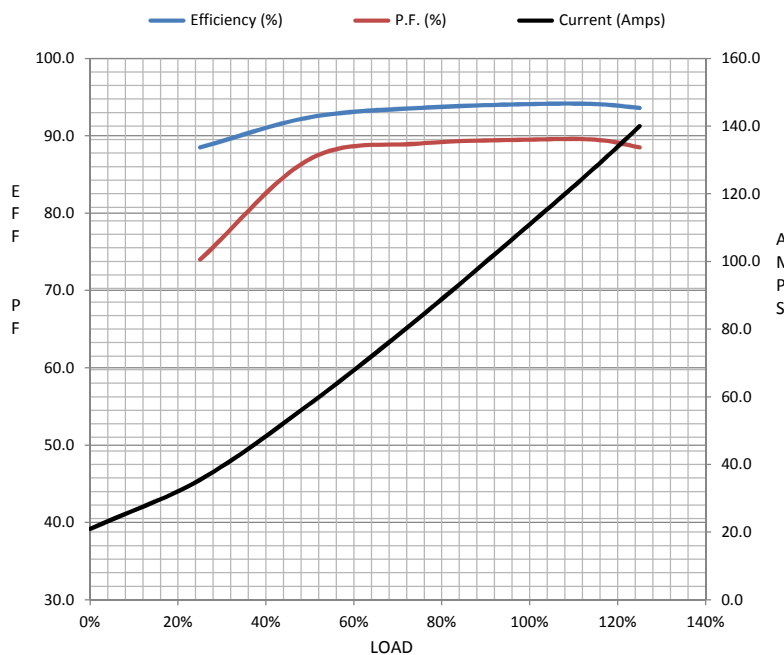
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	21.0	35.5	58.0	83.5	111	128	140	615
Torque (ft-lb)	0.00	36.6	73.0	110	147	169	184	200
RPM	3600	3595	3588	3582	3575	3,572	3568	0
Efficiency (%)		88.5	92.4	93.6	94.1	94.1	93.6	
P.F. (%)	13.0	74.0	87.0	89.0	89.5	89.5	88.5	27.0

## Motor Speed Data

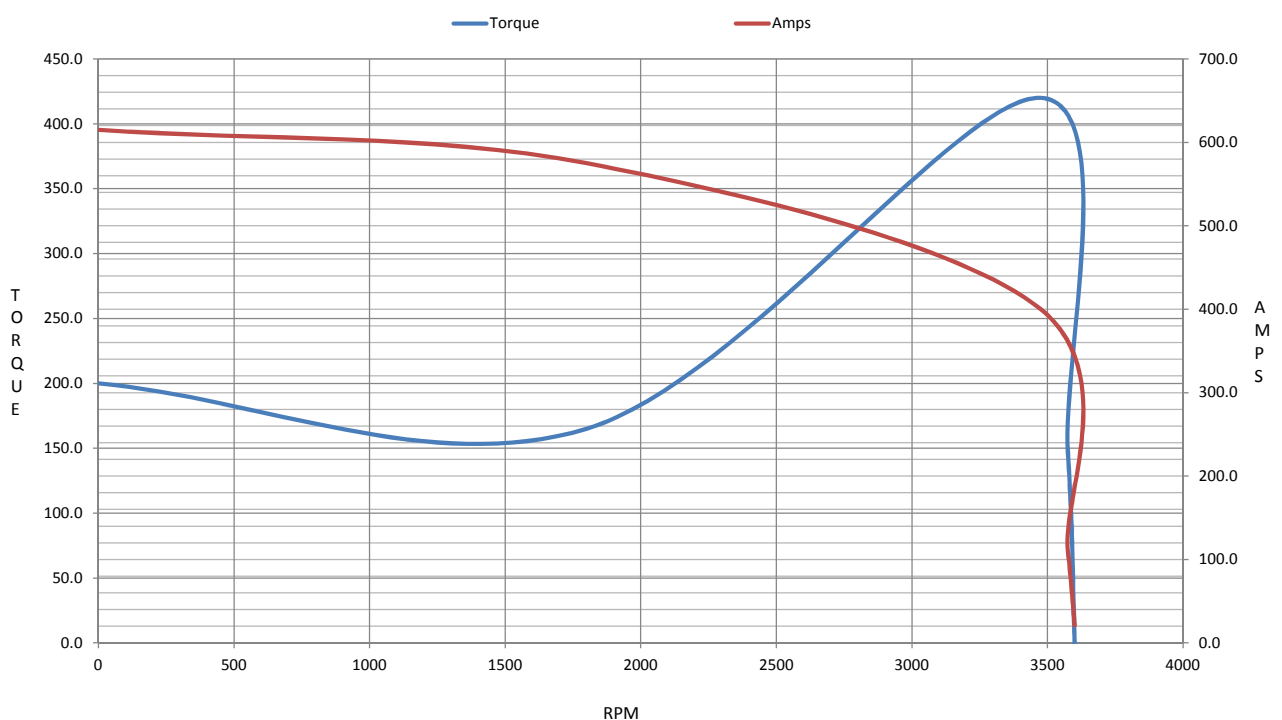
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3475	3575	3600
Current (Amps)	615	575	400	111	21.0
Torque (ft-lb)	200	165	420	147	0.00

## Information Block

HP	100.0			
Sync. RPM	3600			
Frame	444			
Enclosure	TEFC			
Construction	TFC			
Voltage	230/460#200/40(V			
Frequency	60 Hz			
Design	B			
LR Code letter	F			
Service Factor	1.15			
Temp Rise @ FL	65 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk²	0.00 Lb-Ft²			
Ref Wdg	T22802007 NONE			
Sound Pressure @ 1M	81 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	SS622380			
Conn. Diag	00417201ME			
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 : 280STFC6501

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

Catalog No : R506

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**