

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 250MTFC6501

Catalog No: R503

Globetrotter® IEC Cast Iron Motor, 75 & 60 HP, 3 Ph, 60 & 50 Hz, 230/460 & 200/400 V,
3600 & 3000 RPM, 250M 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

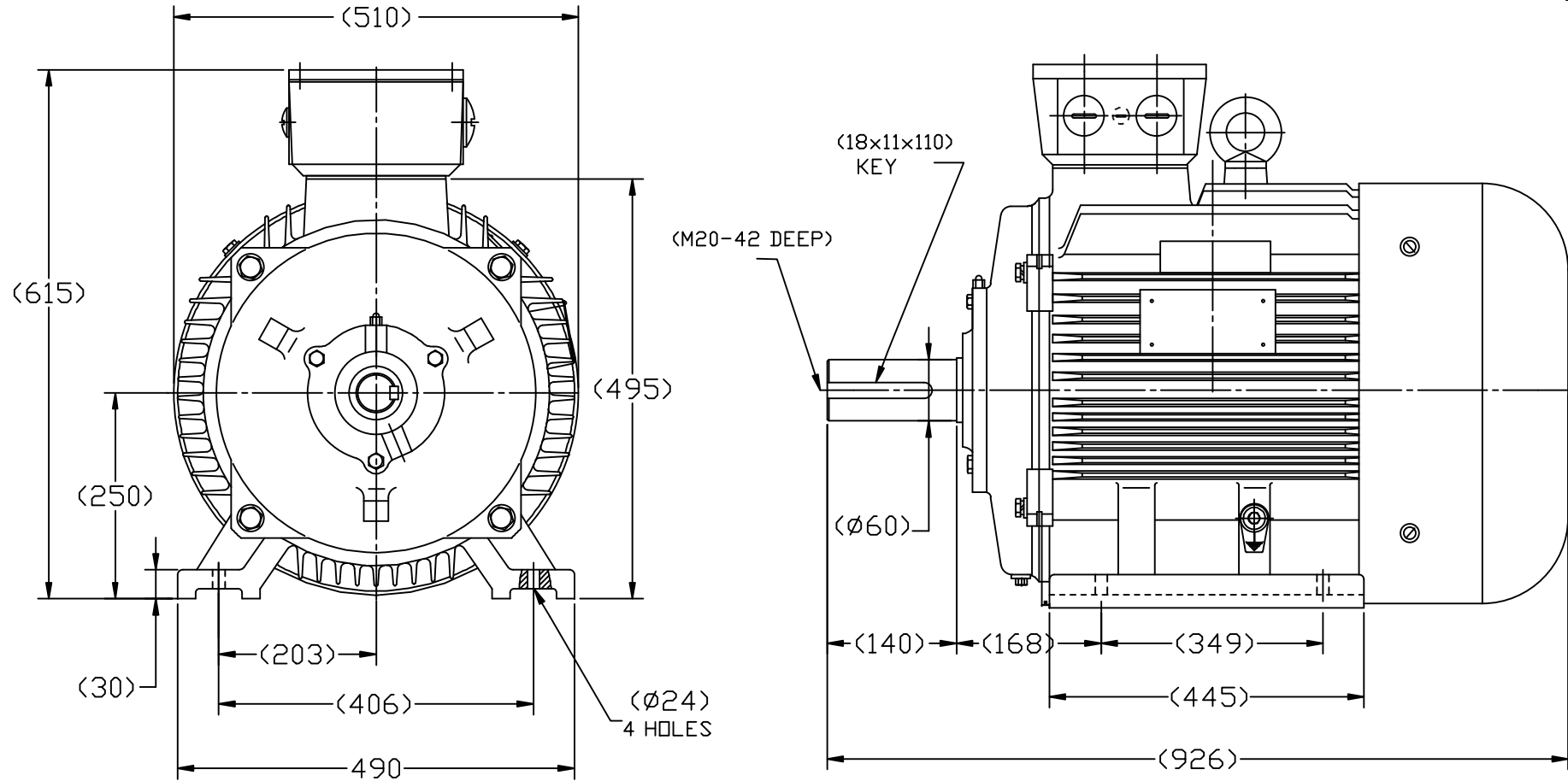
RegalRexnord

Nameplate Specifications


Phase	3	Output HP	75 & 60 Hp
Output KW	56.0 & 45.0 kW	Voltage	230/460 & 200/400 V
Speed	3570 & 2975 rpm	Service Factor	1.15 & 1.15
Frame	250M	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	93.6 & 93.6 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	166/83 & 151/75.5 A	Power Factor	90
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Drive End Bearing Size	6313	Opp Drive End Bearing Size	6313
UL	Recognized	CSA	N
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
Mounting	Rigid Base	Motor Orientation	Horizontal
Drive End Bearing	Ball	Opp Drive End Bearing	Ball
Frame Material	Cast Iron	Shaft Type	IEC
Overall Length	36.45 in	Shaft Diameter	2.555 in
Shaft Extension	5.51 in	Assembly/Box Mounting	F3
Inverter Load	CONSTANT 10:1		
Outline Drawing	SS622378	Connection Drawing	00417203ME



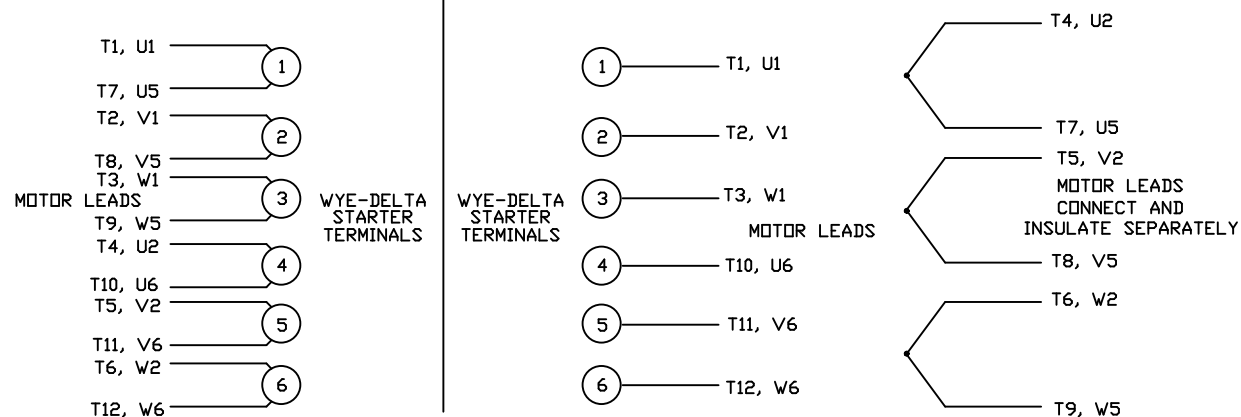
DRAWING MAY NOT BE TO SCALE

			TOLERANCES UNLESS SPECIFIED		 REGAL-BELOIT CORPORATION	DRAWN MDL 09-10-2012	
			DEC.	INCHES		CHK	
			.X	±.1		APPD	
			.XX	±.03		SCALE	
			.XXX	±.005		REF	R503
			.XXXX	±.0005		FMF	HEBEI
NO.	REVISION	BY & DATE	CHK	ANG	±1/2	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	SS622378
			DIST				
						SIZE	DRAWING NO.
						B	SS622378
							REV.

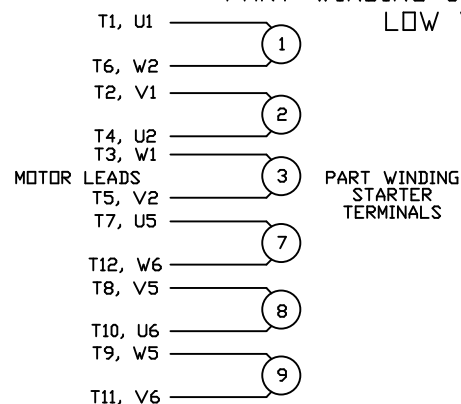
WYE - DELTA STARTING USEABLE ON 2,4 AND 6 POLE MOTORS.

LOW VOLTAGE CONNECTION

HIGH VOLTAGE CONNECTION



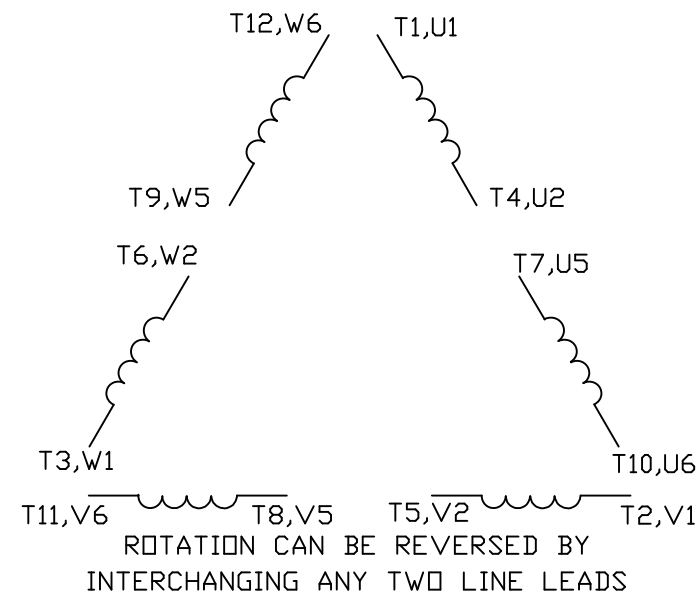
REFER TO THE WYE-DELTA STARTER CONNECTION INSTRUCTIONS FOR PROPER CONNECTION OF POWER LINES TO STARTER.

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.

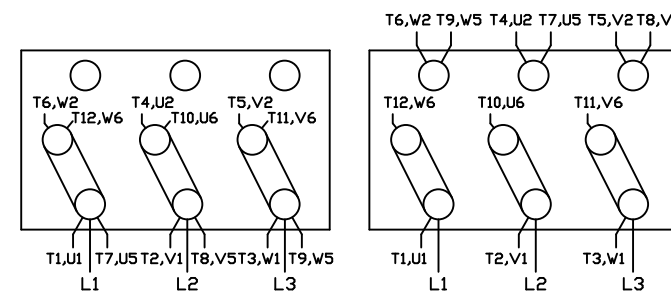
LINE LEADS



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

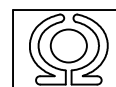
.X ±.1

.XX ±.01

.XXX ±.005

.XXXX ±.0005

ANG ±1/2°



MARATHON
ELECTRIC

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

CHK

RFP

DIST

CAD FILE 00417203ME

SIZE

A

DRAWING NO.

004172-03ME

REV.

CERTIFICATION DATA SHEET

Model#: 250MTFC6501 AA
 CONN. DIAGRAM: 00417203ME
 OUTLINE: SS622378

WINDING#: T19602015 NONE 3
 ASSEMBLY: F3

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
75&60	56&45	3600	3570&2975	250M	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#200/ 400	166/83&151/7 5.5	PWS & YDRUN OR INV	CONTINUOU S	F5	1.15/1.15	40	3300

FULL LOAD EFF: 93.6&93.6	3/4 LOAD EFF: 93	1/2 LOAD EFF: 91.7	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 90&89	3/4 LOAD PF: 90	1/2 LOAD PF: 87	93	SQ CAGE INV RATED	34 / 17

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
110 LB-FT	1084 / 542	210 LB-FT 191	275 LB-FT 250	60

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
77 dBA	87 dBA	11.2 LB-FT^2	- LB-FT^2	20 SEC.	2	- 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
6313	6313						

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 01:08:29 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



250MTFC6501

Submittal

Data @ 460 V

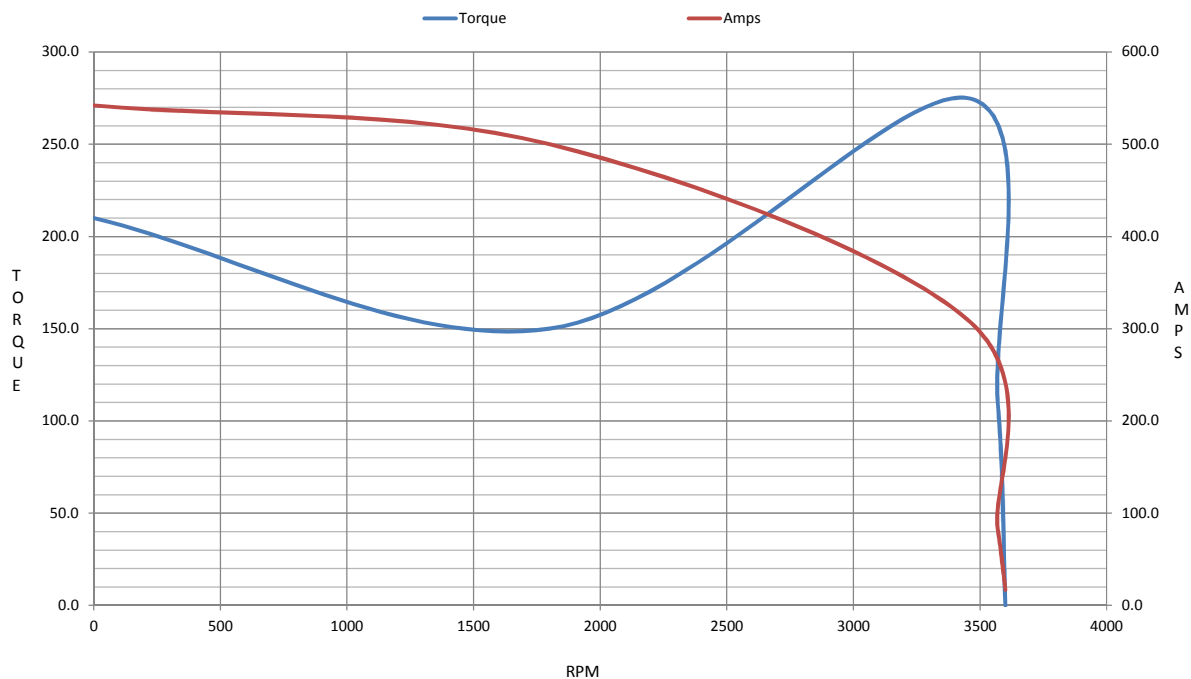
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	17.0	26.5	43.5	62.5	83.0	95.0	105	542	
Torque (ft-lb)	0.00	27.4	55.0	82.5	110	127	138	210	
RPM	3600	3592	3585	3578	3570	3,565	3560	0	
Efficiency (%)		87.5	91.7	93.0	93.6	93.6	93.0		
P.F. (%)	11.0	75.0	87.0	90.0	90.0	90.0	89.5	31.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle					
Speed (RPM)	0	1800	3450	3570	3600					
Current (Amps)	542	500	310	83.0	17.0					
Torque (ft-lb)	210	150	275	110	0.00					
<div><div>— Efficiency (%)</div><div>— P.F. (%)</div><div>— Current (Amps)</div><div>EFFICIENCY, P.F., AND CURRENT</div></div>						Information Block				
						HP		75.0		
						Sync. RPM		3600		
						Frame		405		
						Enclosure		TEFC		
						Construction		TFC		
						Voltage		30/460#200/40V		
						Frequency		60 Hz		
						Design		A		
						LR Code letter		G		
						Service Factor		1.15		
						Temp Rise @ FL		60 °C		
						Duty		CONT		
						Ambient		40 °C		
						Elevation		1,000 feet		
						Rotor/Shaft wk ²		11.2 Lb-Ft ²		
						Ref Wdg		T19602015 NONE		
Sound Pressure @ 1M		77 dBA								
VFD Rating		CONSTANT 10:1								
Outline Dwg		SS622378								
Conn. Diag		00417203ME								
Additional Specifications:										
0										
0										
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 : 250MTFC6501

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

Catalog No : R503

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