

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 225MTFC6501

Catalog No: R500

Globetrotter® IEC Cast Iron Motor, 60 & 50 HP, 3 Ph, 60 & 50 Hz, 230/460 & 200/400 V,
3600 & 3000 RPM, 225M Frame, TEFC



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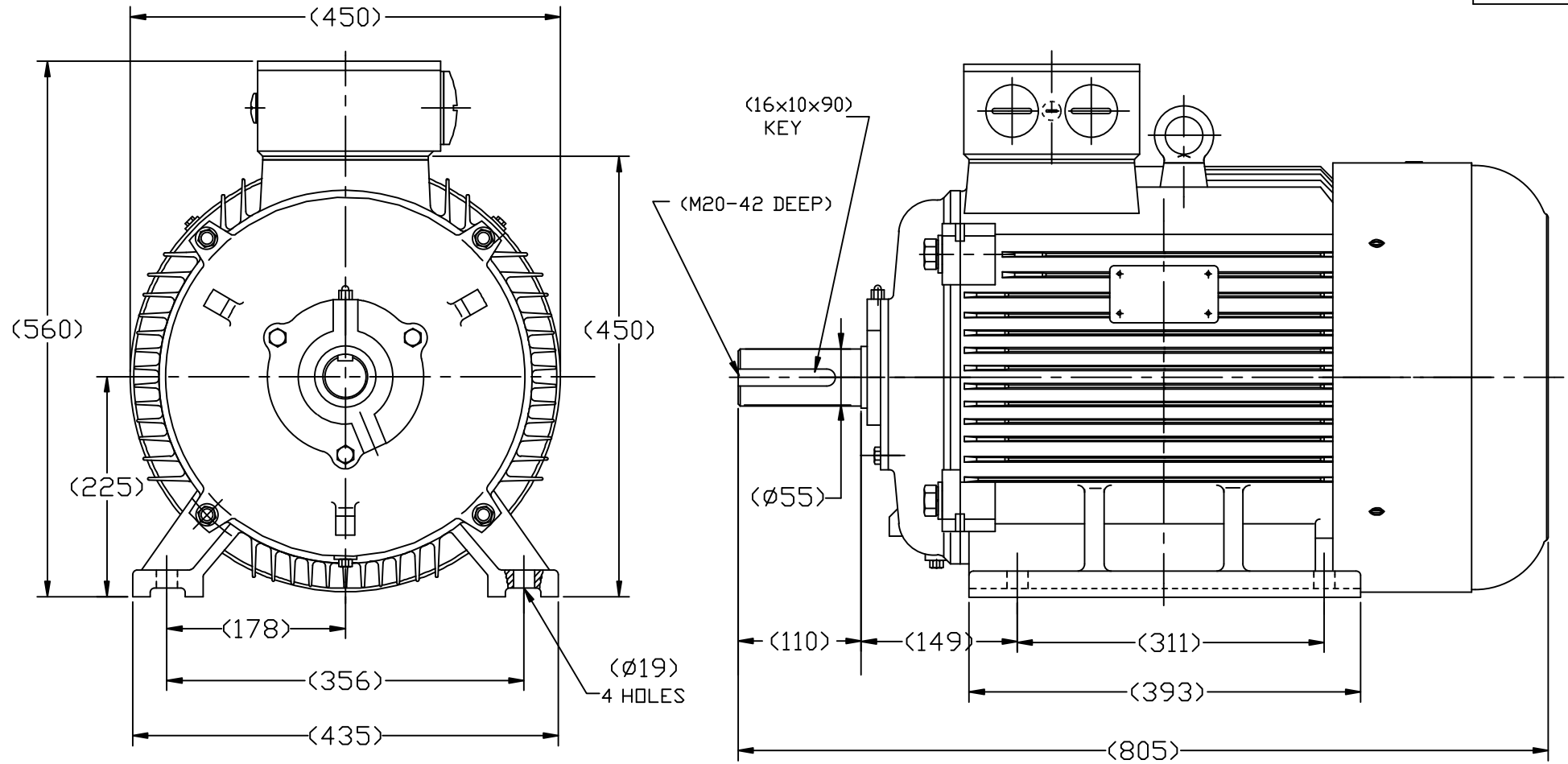
RegalRexnord

Nameplate Specifications


Phase	3	Output HP	60 & 50 Hp
Output KW	45.0 & 37.0 kW	Voltage	230/460 & 200/400 V
Speed	3572 & 2970 rpm	Service Factor	1.15 & 1.15
Frame	225M	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	94.1 & 93.6 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	134/67 & 134/67 A	Power Factor	88.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	F
Drive End Bearing Size	6213	Opp Drive End Bearing Size	6213
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	.0732 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	31.69 in
Shaft Diameter	2.333 in	Shaft Extension	4.33 in
Assembly/Box Mounting	F3		
Connection Drawing	004172.03ME	Outline Drawing	SS622377



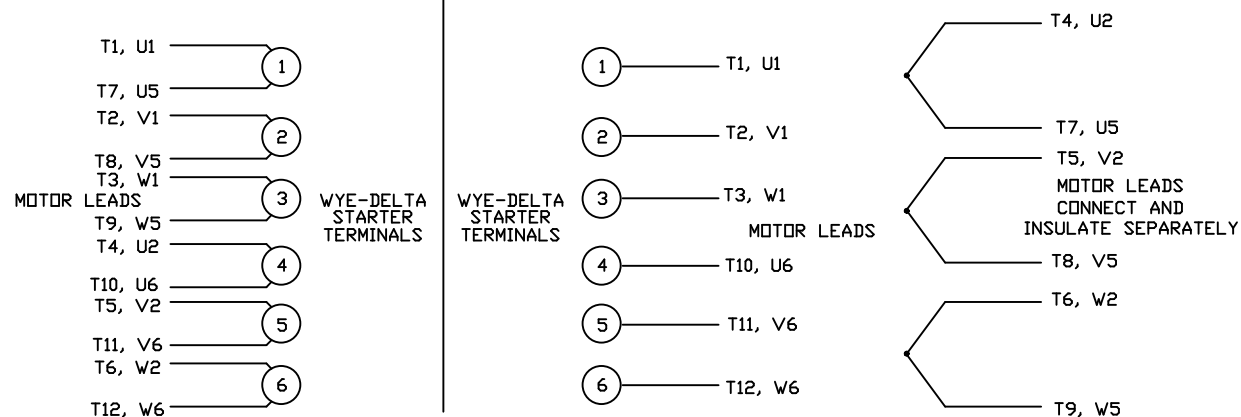
DRAWING MAY NOT BE TO SCALE

		TOLERANCES UNLESS SPECIFIED		 REGAL-BELOIT CORPORATION	DRAWN MDL 08-14-2012	
		DEC.	INCHES		CHK	
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		.XXX	±.005		REF	R300,R501
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NO.	REVISION	BY & DATE	CHK	ANG	FINISH	PREV
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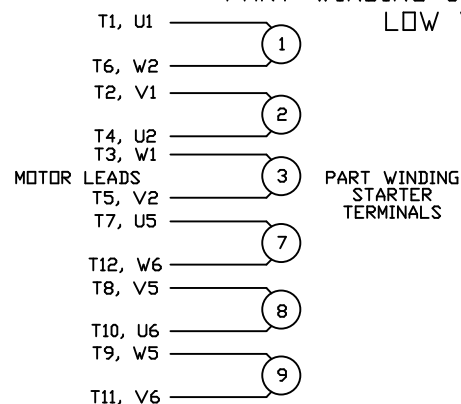
WYE - DELTA STARTING USEABLE ON 2,4 AND 6 POLE MOTORS.

LOW VOLTAGE CONNECTION

HIGH VOLTAGE CONNECTION



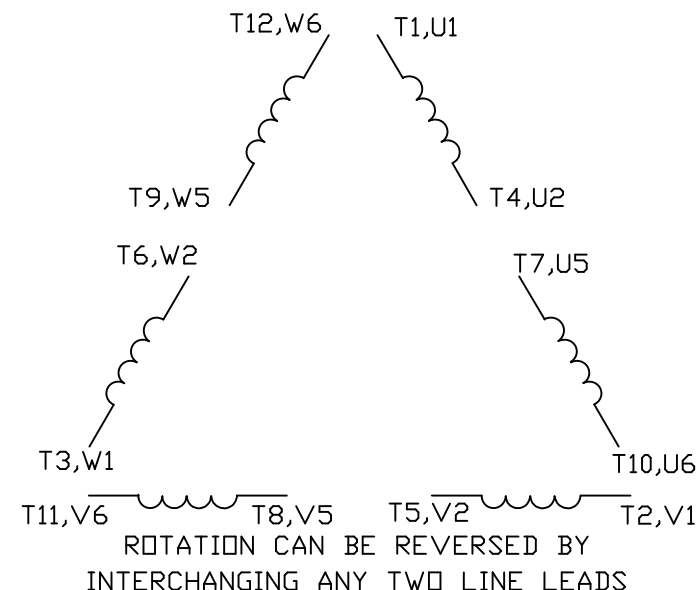
REFER TO THE WYE-DELTA STARTER CONNECTION INSTRUCTIONS FOR PROPER CONNECTION OF POWER LINES TO STARTER.

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.

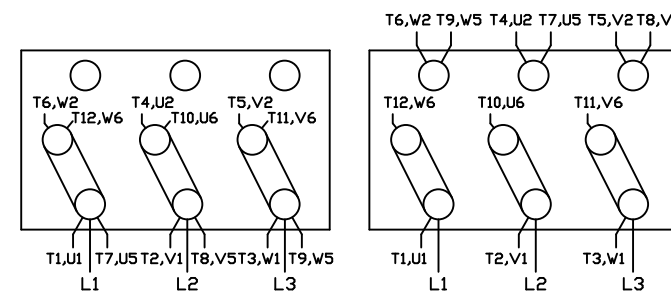
LINE LEADS



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

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RFP

DIST

CAD FILE 00417203ME

SIZE

A

DRAWING NO.

004172-03ME

REV.

CERTIFICATION DATA SHEET

Model#: 225MTFC6501 AA

WINDING#: T18302028 NONE 1

CONN. DIAGRAM: 004172.03ME

ASSEMBLY: F3

OUTLINE: SS622377

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
60&50	45&37	3600	3572&2970	225M	TEFC	F	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#200/ 400	134/67&134/6 7	PWS & YDRUN OR INV	CONTINUOU S	F5	1.15/1.15	40	3300

FULL LOAD EFF: 94.1&93.6	3/4 LOAD EFF: 94.1	1/2 LOAD EFF: 93.6	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 88.5&88	3/4 LOAD PF: 88	1/2 LOAD PF: 85	93	SQ CAGE INV RATED	28 / 14

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
88 LB-FT	830 / 415	155 LB-FT 175	210 LB-FT 238	65

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
- dBA	- dBA	0 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	FALSE	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
6213	6213						

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 01:06:27 AM
FORM 3531 REV.3 02/07/99

** Subject to change without notice.

Data Sheet

Date: 1/7/2019
 Customer: _____
 Attention: _____
 Submitted by: FAREEDA DUDEKULA



225MTFC6501

Submittal

Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	14.0	21.5	35.0	50.5	67.0	77.5	84.5	415	
Torque (ft-lb)	0.00	22.0	44.0	66.0	88.0	102	111	155	
RPM	3600	3595	3588	3580	3572	3565	3562	0	
Efficiency (%)		91.0	93.6	94.1	94.1	94.1	93.6		
P.F. (%)	8.5	71.0	85.0	88.0	88.5	88.5	88.0	33.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle																																									
Speed (RPM)	0	1800	3475	3572	3600																																									
Current (Amps)	415	375	215	67.0	14.0																																									
Torque (ft-lb)	155	125	210	88.0	0.00																																									
<div><div><div>Efficiency (%)</div><div>P.F. (%)</div><div>Current (Amps)</div></div><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></td><td></td><td>41</td></tr><tr><td>20%</td><td></td><td></td><td>45</td></tr><tr><td>25%</td><td>91</td><td>71</td><td>48</td></tr><tr><td>40%</td><td>93</td><td>82</td><td>55</td></tr><tr><td>60%</td><td>94</td><td>87</td><td>72</td></tr><tr><td>80%</td><td>94</td><td>88</td><td>88</td></tr><tr><td>100%</td><td>94</td><td>88</td><td>104</td></tr><tr><td>125%</td><td>94</td><td>88</td><td>140</td></tr></tbody></table></div>						LOAD	Efficiency (%)	P.F. (%)	Current (Amps)	0%			41	20%			45	25%	91	71	48	40%	93	82	55	60%	94	87	72	80%	94	88	88	100%	94	88	104	125%	94	88	140					
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						100%	94	88	104																																					
						125%	94	88	140																																					
						Information Block																																								
						HP	60.0																																							
						Sync. RPM	3600																																							
						Frame	364																																							
						Enclosure	TEFC																																							
						Construction	TFS																																							
						Voltage	230/460#200/400		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	3,300		feet																																											
Rotor/Shaft wk²	0.00		Lb-Ft²																																											
Ref Wdg	T18302028 NONE																																													
Sound Pressure @ 1M	999		dBA																																											
VFD Rating	CONSTANT 10:1																																													
Outline Dwg	SS622377																																													
Conn. Diag	004172.03ME																																													
Additional Specifications:																																														
0																																														
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EQUIV CKT (OHMS / PHASE)																																														
R1	R2	X1	X2	Xm																																										
0.0000	0.0000	0.0000	0.0000	0.0000																																										

Speed -Torque Curve

