

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 160MTFC6536

Catalog No: R334A

Globetrotter® IEC Cast Iron Motor, 15 & 10 HP, 3 Ph, 60 & 50 Hz, 230/460 & 200/400 V,
1800 & 1500 RPM, 160M Frame, TEFC



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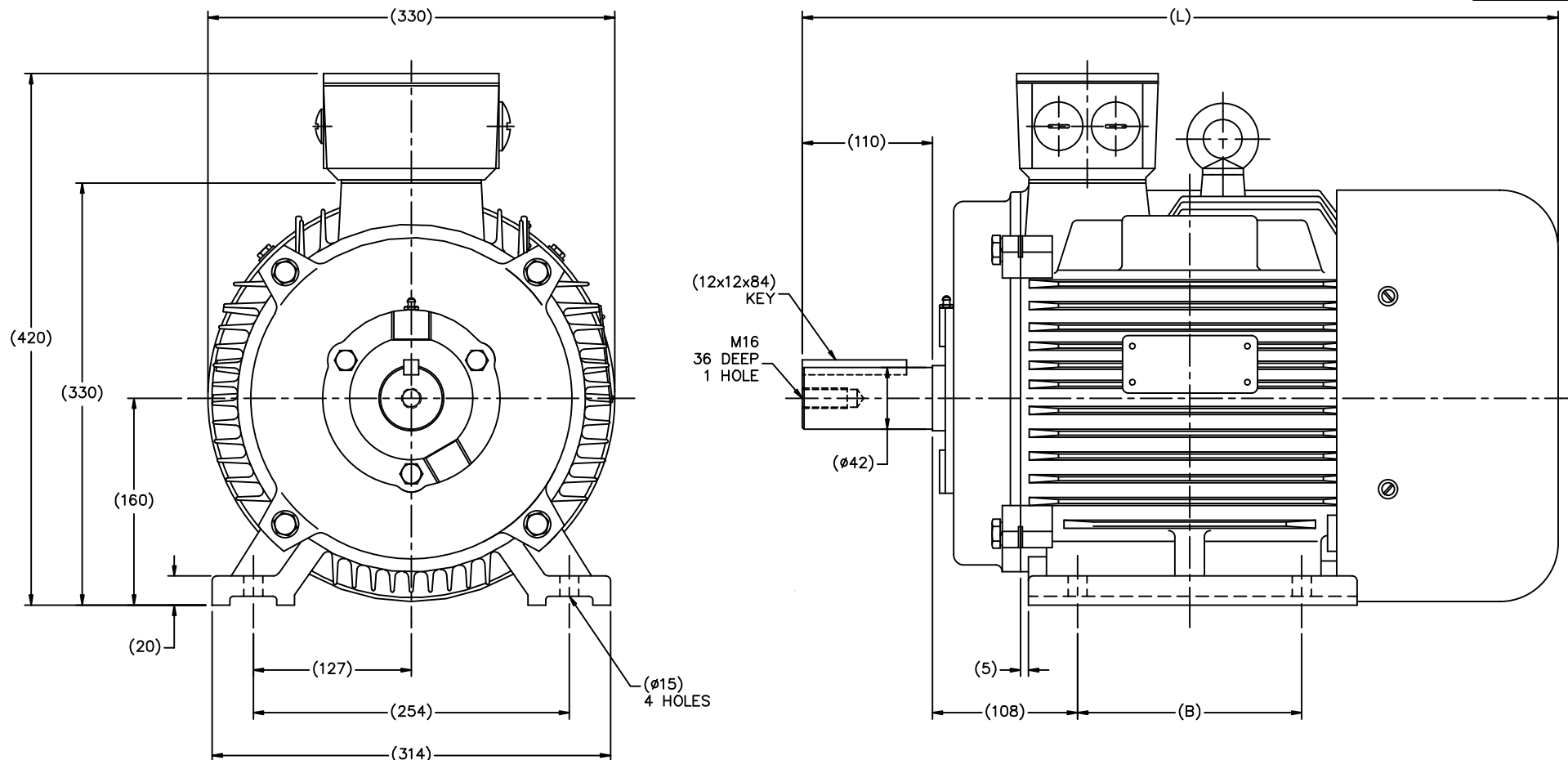
RegalRexnord

Nameplate Specifications

Phase	3	Output HP	15 & 10 Hp
Output KW	11.2 & 7.5 kW	Voltage	230/460 & 200/400 V
Speed	1775 & 1482 rpm	Service Factor	1.15 & 1.15
Frame	160M	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	92.4 & 91.7 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	37/18.5 & 31/15.5 A	Power Factor	82.5
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	H
Drive End Bearing Size	6309	Opp Drive End Bearing Size	6209
UL	No	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	4	Rotation	Reversible
Resistance Main	.129 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	23.62 in
Shaft Diameter	1.666 in	Shaft Extension	4.33 in
Assembly/Box Mounting	F3	Inverter Load	CONSTANT 10:1
Connection Drawing	004172.01ME	Outline Drawing	B-SS622239



(MAY NOT BE DRAWN TO SCALE)

(DIMENSIONS ARE IN MILLIMETERS)

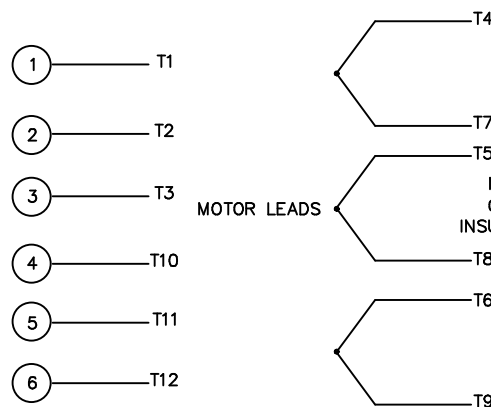
DF160M1-2R	193315.60	600	210
DF160M2-2R	193318.60	600	210
DF160M-4R	193316.60	600	210
DF160L-2R	193321.60	645	254
DF160L-4R	193319.60	645	254
DF160M-6R	193314.60	600	210
FRAME	PART #	L	B

				TOLERANCES UNLESS SPECIFIED			REGAL-BELOIT CORPORATION	DRAWN MSG 11-17-2010		
				DEC.	METRIC			CHK	MJS	11-18-2010
				.X	±2.5			APPD	SB	11-18-2010
				.XX	±.76				SCALE	5=16
				.XXX	±.127				REF	
				.XXX	±.0127				FMF	HEBEI
				ANG	±7°30"				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	11-18-2010	CAD FILE ss622239			SIZE	DRAWING NO. PAGE OF REV.
				DIST					B	SS622239

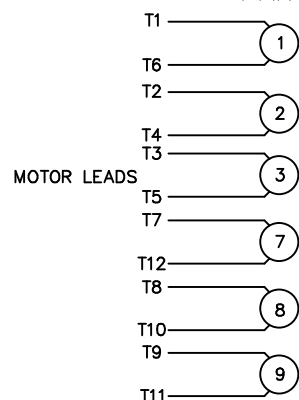
WYE - DELTA STARTING USEABLE ON 2,4 AND 6 POLE MOTORS.

LOW VOLTAGE CONNECTION

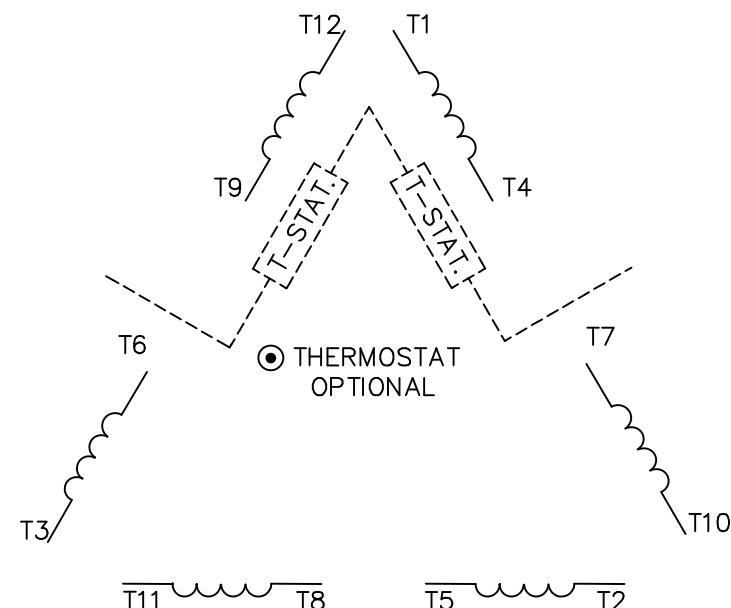
HIGH VOLTAGE CONNECTION

WYE-DELTA
STARTER
TERMINALSWYE-DELTA
STARTER
TERMINALS

MOTOR LEADS

MOTOR LEADS
CONNECT AND
INSULATE SEPARATELYREFER 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 ONLYPART WINDING
STARTER
TERMINALSREFER 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

ROTATION CAN BE REVERSED BY
INTERCHANGING ANY TWO LINE LEADS
● RED LEADS OR P1, P2, FOR N/C THERMOSTAT

ACROSS THE LINE START & 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 & DATE

CHK

ANG

MAT'L.

FINISH

RFP

DIST

CAD FILE 00417201ME

SIZE

A

DRAWING NO.

004172-01ME

REV.

03



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

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER:
ORDER #:
CONN. DIAGRAM: 004172.01ME
OUTLINE: B-SS622239
WINDING: T12904005 NONE 3
SPEED:

CUSTOMER P.O. #:
REFERENCE MODEL #: 160MTFC6536
CAT #: R334A
CUSTOMER PART #:
MOUNTING: F3

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
15	11.2	1800	1765	160M	TEFC	TFC	H	A

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60/50	230/460#200/400	36/18&31/15.5	PWS & YDRUN OR INV	CONT	F	1.15	40	3300

F.L. EFF	92.4	3/4 LD EFF	92.4	1/2 LD EFF	91.7	GTD EFF		ELECT. TYPE	
F.L. PF	84.0	3/4 LD PF	78.0	1/2 LD PF	67.5		0.0	SQ CAGE INV RATED	

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)	
44.6 LB-FT	140	126 LB-FT 283%	154 LB-FT 345%	45	

@ 3 FT.	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
999 dBA	1008 dBA	2.09 LB-FT²	2.1 LB-FT²	15 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
6309 6209						

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 10:1 INV. HP SPEED RANGE: 1.5 X BASE SPEED
		ENCODER: NONE NONE NONE NONE PPR
PREPARED BY: EARL BABBITTS DATE: 5/5/2017		BRAKE: NONE NONE NONE FT-LB: NA VOLTAGE: NONE UL: NONE
		HZ:

FORM: 3531 REV_4 2/27/06

Data Sheet

Date: 5/5/2017

Customer: _____

Attention: _____

Submitted by: EARL BABBITTS



160MTFC6536

Submittal

Data @ 460 V

Motor Load Data

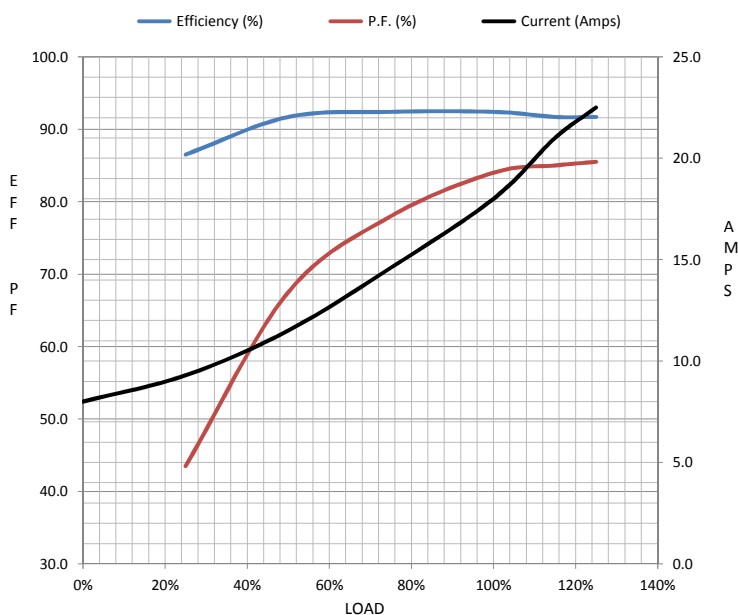
Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	8.0	9.3	11.5	14.6	18.0	21.0	22.5	140	
Torque (ft-lb)	0.00	11.0	22.0	33.2	44.6	51.3	55.7	126	
RPM	1800	1794	1788	1780	1765	1,770	1765	0	
Efficiency (%)		86.5	91.7	92.4	92.4	91.7	91.7		
P.F. (%)	6.0	43.5	67.5	78.0	84.0	85.0	85.5	0.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	467	1620	1765	1800
Current (Amps)	140	130	79.5	18.0	8.0
Torque (ft-lb)	126	98.5	154	44.6	0.00

Information Block

HP	15.0			
Sync. RPM	1800			
Frame	254			
Enclosure	TEFC			
Construction	TFC			
Voltage	30/460#200/40 V			
Frequency	60 Hz			
Design	A			
LR Code letter	H			
Service Factor	1.15			
Temp Rise @ FL	45 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk²	2.09 Lb-Ft²			
Ref Wdg	T12904005 NONE			
Sound Pressure @ 1M	999 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	B-SS622239			
Conn. Diag	004172.01ME			
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

