

# PRODUCT INFORMATION PACKET

**marathon**<sup>®</sup>  
Motors

Model No: 254TTFCA6082  
Catalog No: GT3117  
7 1/2, 1200, TEFC, 254JM, 3/60/230/460  
JM



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**REGAL**<sup>®</sup>

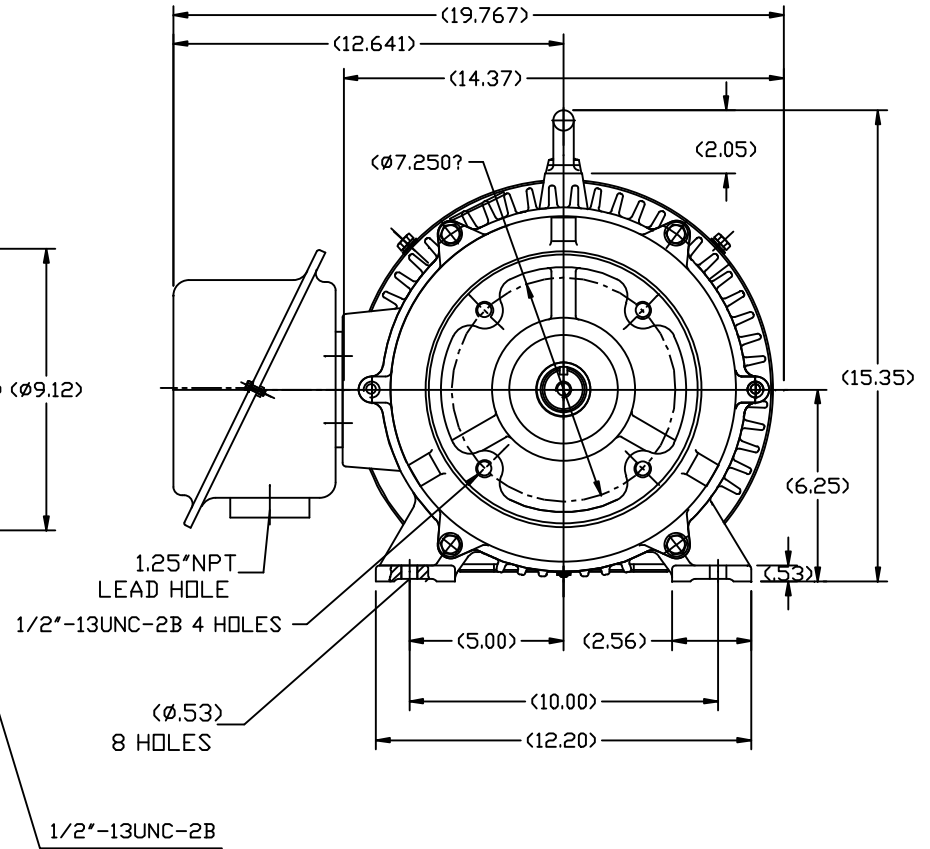
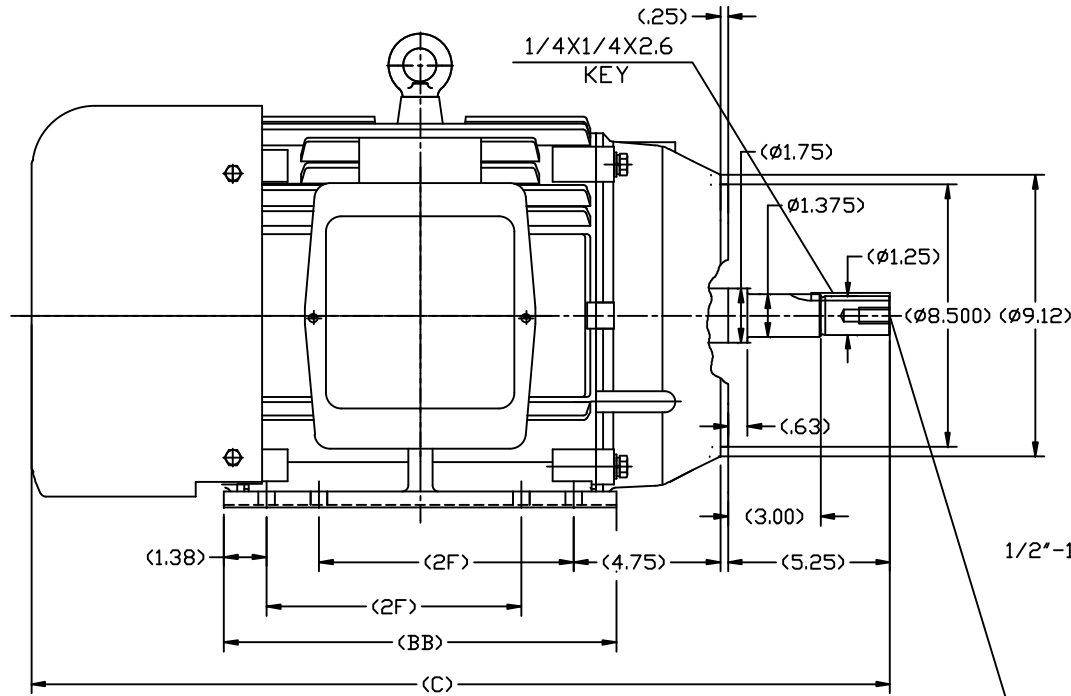
### Nameplate Specifications

Output HP	7.50 Hp	Output KW	5.6 kW
Frequency	60 Hz	Voltage	230/460 V
Current	21.0/10.5 A	Speed	1182 rpm
Service Factor	1.15	Phase	3
Efficiency	91 %	Duty	Continuous
Insulation Class	F	Design Code	B
KVA Code	G	Frame	254JMV
Enclosure	Totally Enclosed Fan Cooled	Overload Protector	No
Ambient Temperature	40 °C	Drive End Bearing Size	6309
Opp Drive End Bearing Size	6209	UL	Recognized
CSA	Y	CE	Y
IP Code	43		

### Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	6	Rotation	Reversible
Mounting	Rigid base	Motor Orientation	Horizontal Or Shaft Down
Drive End Bearing	Ball	Opp Drive End Bearing	Ball
Frame Material	Cast Iron	Shaft Type	JM
Overall Length	26.6 in	Shaft Diameter	1.250 in
Shaft Extension	5.25 in	Assembly/Box Mounting	F1/F2 Capable
Outline Drawing	SS620564	Connection Diagram	EE-7308K

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254	26.60	12.80	8.25
256	27.80	13.98	10.00
FRAME	C	BB	2F

		TOLERANCES UNLESS SPECIFIED		REGAL-BELOIT CORPORATION		DRAWN LSJ 05-16-2012
		DEC.	INCHES			CHK
		.X	±.1	TITLE		APPD
		.XX	±.03	OUTLINE		SCALE 1=4
		.XXX	±.005	254/256TC FR-TEFC-CAST IRON		REF
		.XXXX	±.0005	MAT'L.		FMF HWADA
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	SS620564
				DIST	SIZE	DRAWING NO.
					B	SS620564
						REV.

**CERTIFICATION DATA SHEET**

**Model#:** 254TTFCA6082 AA      **WINDING#:** CHT25460001 NONE 1  
**CONN. DIAGRAM:** EE-7308K      **ASSEMBLY:** F1/F2 CAPABLE  
**OUTLINE:** SS620564

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
7 1/2&5	5.6&3.7	1200	1182&985	254JMV	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	21/10.5&17.6/ 8.8	LINE OR INVERTER	CONTINUOU S	F7	1.15/1.15	40	3300

FULL LOAD EFF: 91&90.2	3/4 LOAD EFF: 91	1/2 LOAD EFF: 89.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 74&71	3/4 LOAD PF: 67	1/2 LOAD PF: 55	90.2	SQ CAGE INV RATED	11.2 / 5.6

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
33.4 LB-FT	110 / 55	51 LB-FT 153	100 LB-FT 305	40

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
56 dBA	66 dBA	2.5 LB-FT^2	150 LB-FT^2	20 SEC.	2	325 LBS.

**\*\*\* SUPPLEMENTAL INFORMATION \*\*\***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	RIGID	HORIZONTAL OR SHAFT DOWN	FALSE	NONE	FALSE	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL 6309	BALL 6209	POLYREX EM	JM	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON

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

INVERTER TORQUE: VARIABLE 10:1
INV. HP SPEED RANGE: NONE
ENCODER: NONE
NONE NONE
NONE NONE PPR
BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
NONE FT-LB NONE V NONE Hz

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DATE: 06/23/2017 04:00:29 AM  
 FORM 3531 REV.3 02/07/99

\*\* Subject to change without notice.

Data Sheet

Date: 16-06-2017  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



254TTFCA6082

Submittal

Data @ 460 V

Motor Load Data

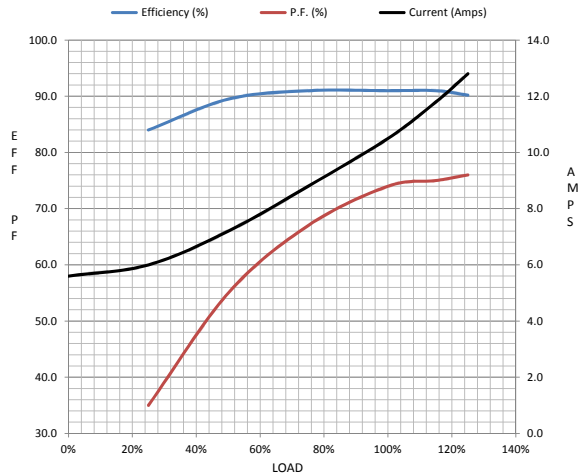
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	5.6	6.0	7.2	8.8	10.5	11.8	12.8	55.0
Torque (ft-lb)	0.00	8.3	16.5	25.0	33.4	38.5	42.0	51.0
RPM	1200	1195	1192	1185	1182	1,180	1178	0
Efficiency (%)		84.0	89.5	91.0	91.0	91.0	90.2	
P.F. (%)	5.5	35.0	55.0	67.0	74.0	75.0	76.0	34.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1100	1182	1200
Current (Amps)	55.0	49.0	34.0	10.5	5.6
Torque (ft-lb)	51.0	46.0	100	33.4	0.00

Information Block

HP	7.5			
Sync. RPM	1200			
Frame	254			
Enclosure	TEFC			
Construction	TFC			
Voltage	30/460#190/38V			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	40 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	2.50 Lb-Ft <sup>2</sup>			
Ref Wdg	CHT25460001 NONE			
Sound Pressure @ 1M	56 dBA			
VFD Rating	VARIABLE 10:1			
Outline Dwg	SS620564			
Conn. Diag	EE-7308K			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.7940	0.4540	2.1550	3.5150	46.3050



Speed -Torque Curve

