

# PRODUCT INFORMATION PACKET

**marathon**<sup>®</sup>  
Motors

Model No: 254TTFC6031  
Catalog No: U648A  
15,1800,TEFC,254T,3/60/575  
Totally Enclosed Fan Cooled (TEFC)



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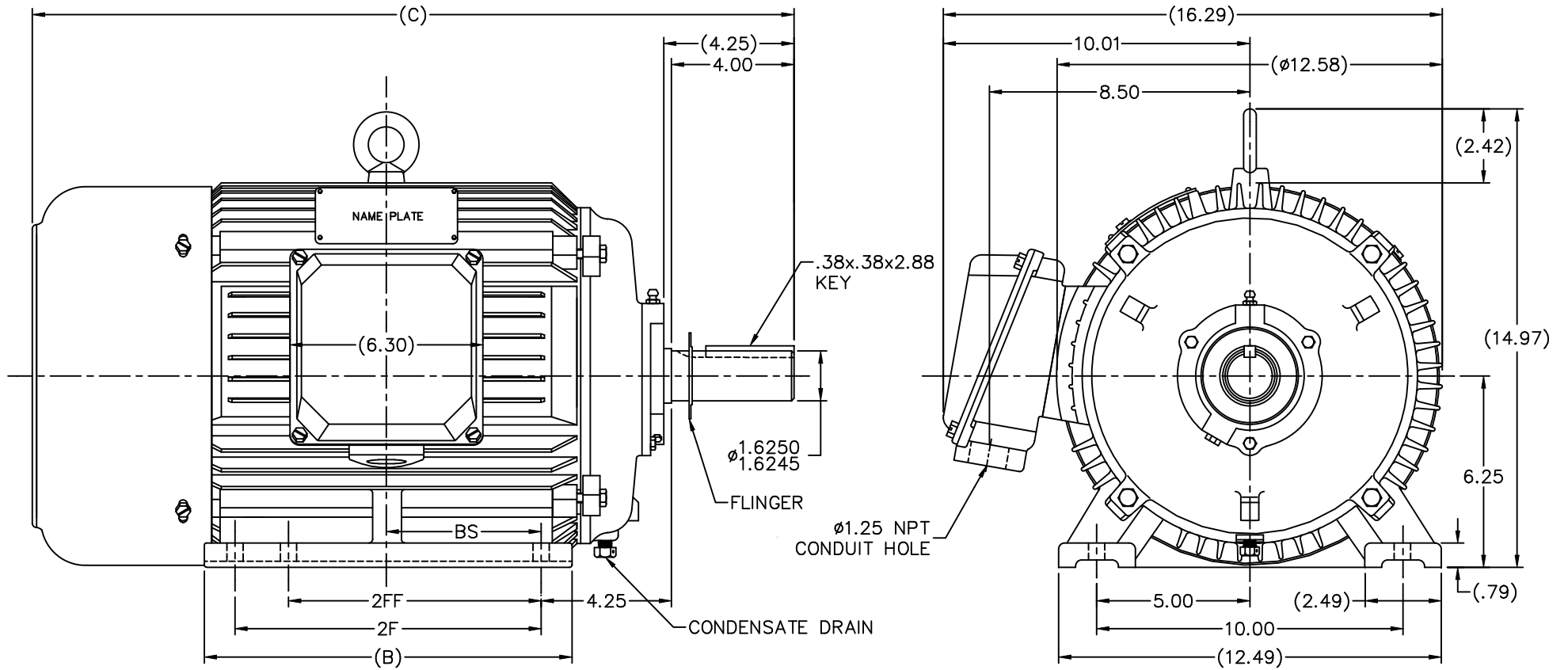
### Nameplate Specifications

Output HP	<b>15 Hp</b>	Output KW	<b>11.2 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>575 V</b>
Current	<b>14.5 A</b>	Speed	<b>1775 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>92.4 %</b>	Duty	<b>Continuous</b>
Insulation Class	<b>F</b>	Design Code	<b>B</b>
KVA Code	<b>H</b>	Frame	<b>254T</b>
Enclosure	<b>Totally Enclosed Fan Cooled</b>	Overload Protector	<b>No</b>
Ambient Temperature	<b>40 °C</b>	Drive End Bearing Size	<b>6309</b>
Opp Drive End Bearing Size	<b>6308</b>	UL	<b>Recognized</b>
CSA	<b>Y</b>	CE	<b>Y</b>
IP Code	<b>43</b>		

### Technical Specifications

Electrical Type	<b>Squirrel Cage Induction Run</b>	Starting Method	<b>Across The Line</b>
Poles	<b>4</b>	Rotation	<b>Reversible</b>
Mounting	<b>Rigid base</b>	Motor Orientation	<b>Horizontal</b>
Drive End Bearing	<b>Ball</b>	Opp Drive End Bearing	<b>Ball</b>
Frame Material	<b>Cast Iron</b>	Shaft Type	<b>T</b>
Overall Length	<b>23.19 in</b>	Shaft Diameter	<b>1.625 in</b>
Shaft Extension	<b>4.25 in</b>	Assembly/Box Mounting	<b>F1/F2 Capable</b>
Outline Drawing	<b>169538.60ME</b>	Connection Diagram	<b>00519001ME</b>

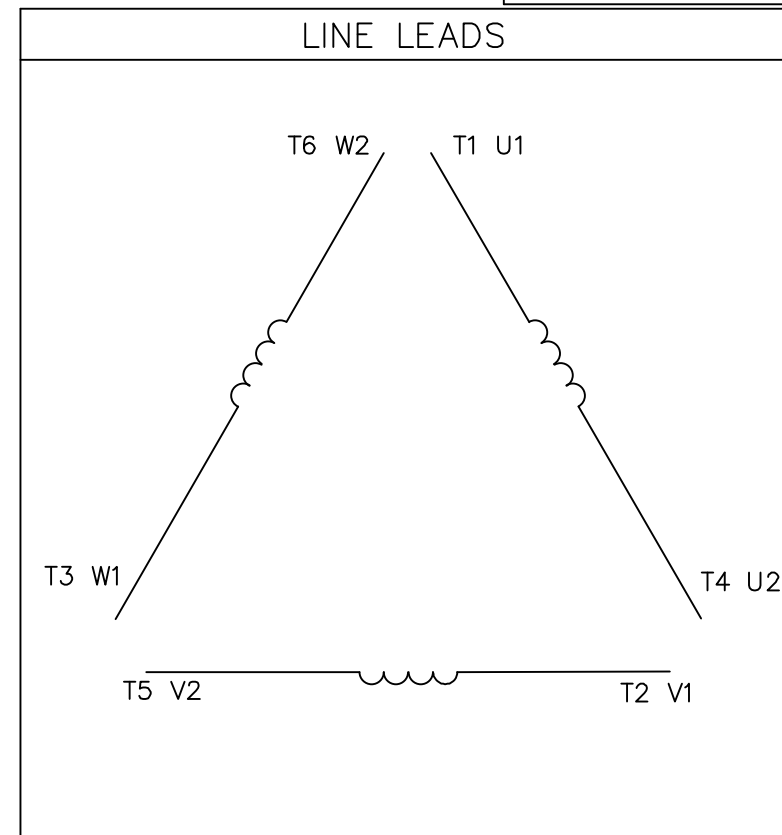
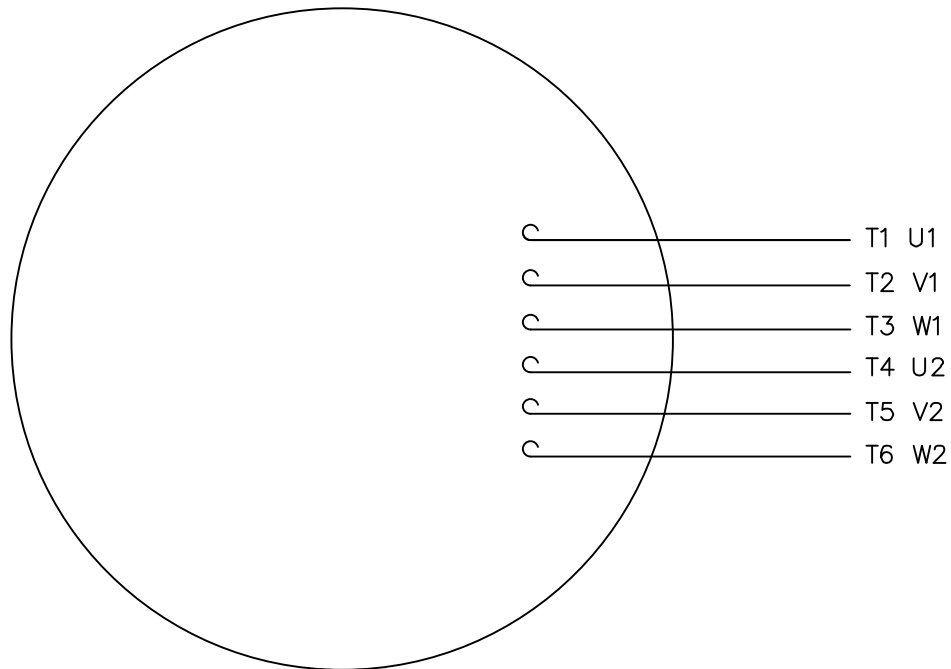
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NOTE: 256T HAS 6 MTG. HOLES, USING BOTH 254T AND 256T "2F" LOCATIONS.

DASH	FRAME	C	BS	B	2F	2FF
1248	254T	23.19	6.24	3.94	--	8.25
1398	256T	24.92	5.49	4.81	10.00	8.25

		TOLERANCES UNLESS SPECIFIED		MARATHON ELECTRIC		DRAWN TJB 05-29-2003	
		DEC.	INCHES			CHK	ML 05-29-2003
		.X	±.1			APPD	GK 05-29-2003
		.XX	±.03	TITLE OUTLINE - RIGID		SCALE 5=16	
		.XXX	±.005	250 FR. - TEFC		REF	
1	NEW DRAWING	TJB	05-29-2003	ML	.XXXX	±.0005	MAT'L
NO.		REVISION		BY & DATE		FINISH	
		CHK	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	CAD FILE 16953860ME		SIZE
				DIST	WA	DRAWING NO.	PAGE OF REV.
						B	169538-60ME 1



	L1	L2	L3	JOIN
START (WYE)	T1 U1	T2 V1	T3 U2	(T4,T5,T6) (U2,V2,W2)
RUN (DELTA)	(T1,T6) (U1,W2)	(T2,T4) (V1,U2)	(T3,T5) (W1,V2)	

		TOLERANCES UNLESS SPECIFIED				DRAWN PG 05/07/82			
		DEC.	INCHES			CHK			
		.X	±.1	TITLE EXTERNAL WIRING DIAGRAM STAR START - DELTA RUN MAT'L. Y-CONNECTED START - DELTA CONNECTED RUN FINISH SINGLE VOLTAGE		APPD TEM 05/07/82			
03	ADDED IEC DESIGNATIONS	MOL	04/27/12			.XX	±.01	SCALE 1=1	
02	REMOVED OBSOLETE STATUS	KJH	06/28/99			.XXX	±.005	REF	
01	REDRAWN ON CAD	DBT	05/30/97	.XXXX	±.0005	FMF			
NO.	REVISION	BY & DATE	CHK	ANG	±1/2'	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 00519001ME		SIZE A	DRAWING NO. 005190-01ME	REV. 03	
			DIST						

**CERTIFICATION DATA SHEET**

**Model#:** 254TFFC6031 AA                      **WINDING#:** T12904005 NONE 4  
**CONN. DIAGRAM:** 00519001ME              **ASSEMBLY:** F1/F2 CAPABLE  
**OUTLINE:** 169538.60ME

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
15	11.2	1800	1775	254T	TEFC	H	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	575	14.5	ACROSS THE LINE	CONTINUOUS	F2	1.15	40	3300

FULL LOAD EFF: 92.4	3/4 LOAD EFF: 93	1/2 LOAD EFF: 92.4	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 82.5	3/4 LOAD PF: 77.5	1/2 LOAD PF: 67	-	SQ CAGE IND RUN	6.3

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
44.5 LB-FT	102	110.4 LB-FT 247	134.1 LB-FT 300	45

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
- dBA	- dBA	2.09 LB-FT^2	2.1 LB-FT^2	15 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	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6309	6308						

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  
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S  
\*

INVERTER TORQUE: NONE
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

DATE: 06/23/2017 03:43:55 AM  
FORM 3531 REV.3 02/07/99

\*\* Subject to change without notice.

Data Sheet

Date: 15-06-2017  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



254TTC6031

Submittal

Data @ 575 V

Motor Load Data

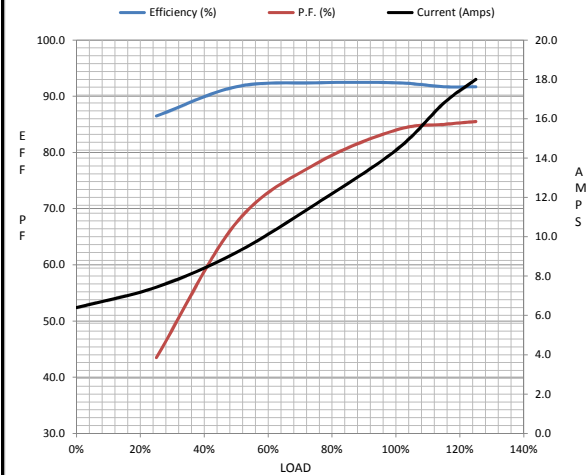
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	6.4	7.4	9.2	11.7	14.4	16.8	18.0	112
Torque (ft-lb)	0.00	11.0	22.0	33.2	44.6	51.3	55.7	126
RPM	1800	1794	1788	1780	1765	1,770	1765	0
Efficiency (%)		86.5	91.7	92.4	92.4	91.7	91.7	
P.F. (%)	6.0	43.5	67.5	78.0	84.0	85.0	85.5	0.0

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	467	1620	1765	1800
Current (Amps)	112	104	63.6	14.4	6.4
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	575 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 wk <sup>2</sup>	2.09 Lb-FT <sup>2</sup>			
Ref Wdg	T12904005 NONE			
Sound Pressure @ 1M	999 dBA			
VFD Rating	NONE			
Outline Dwg	169538.60ME			
Conn. Diag	5190.01ME			
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

