PRODUCT INFORMATION PACKET

Model No: 254TTFC6081
Catalog No: E005
7.50 HP General Purpose Motor, 3 phase, 1200 RPM, 575 V, 254T Frame, TEFC
General Purpose Motors

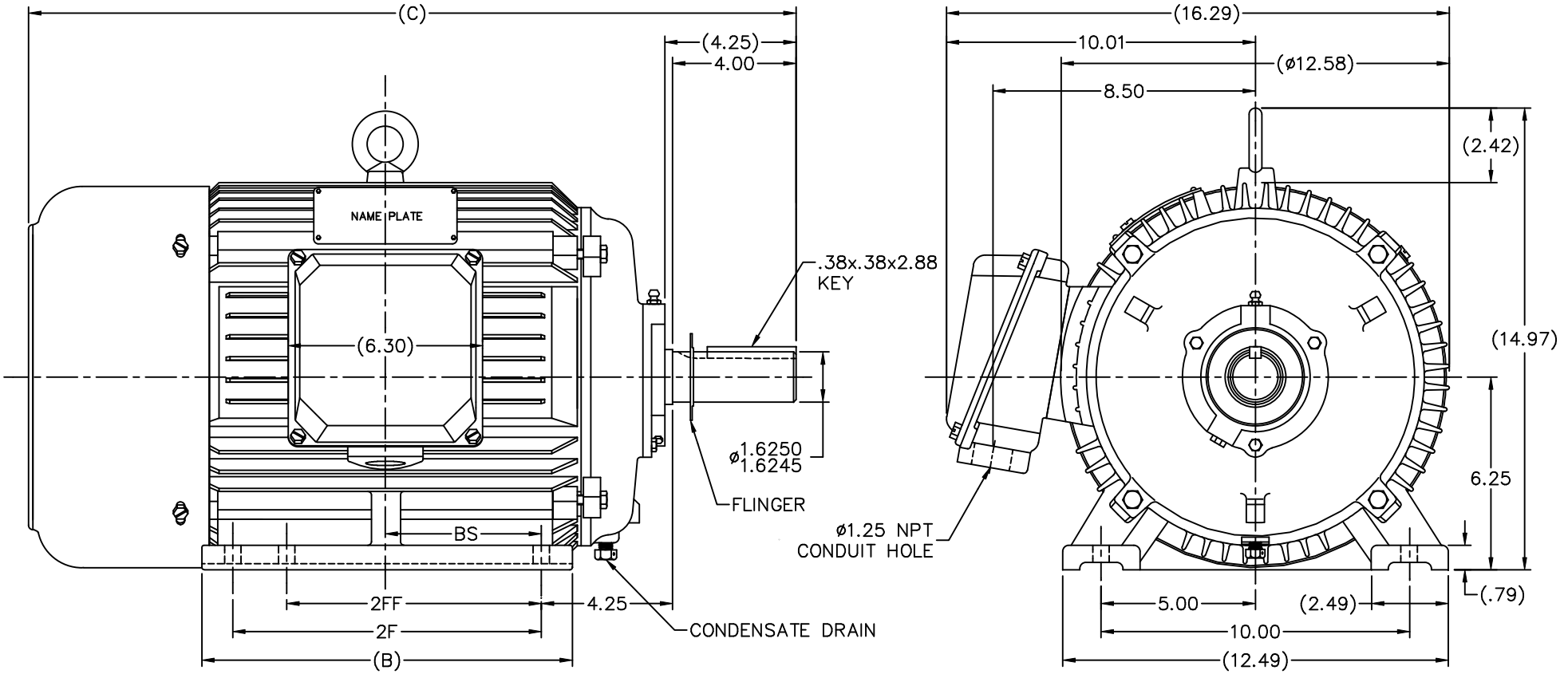
marathon® Motors

Nameplate Specifications

Output HP	7.50 Hp	Output KW	5.6 kW
Frequency	60 Hz	Voltage	575 V
Current	8.9 A	Speed	1185 rpm
Service Factor	1.15	Phase	3
Efficiency	91.7 %	Power Factor	70
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	H
Frame	254T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6309	Opp Drive End Bearing Size	6308
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	6	Rotation	Reversible
Mounting	Rigid Base	Motor Orientation	Horizontal
Drive End Bearing	Ball	Opp Drive End Bearing	Ball
Frame Material	Cast Iron	Shaft Type	T
Overall Length	23.19 in	Shaft Diameter	1.625 in
Shaft Extension	4.25 in	Assembly/Box Mounting	F1/F2 Capable
Outline Drawing	16953860ME-254T	Connection Drawing	005190.01ME



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

NO.	REVISION	BY & DATE	CHK
1	NEW DRAWING	TJB 05-29-2003	ML

TOLERANCES UNLESS SPECIFIED

DEC.	INCHES
.X	±.1
.XX	±.03
.XXX	±.005
.XXXX	±.0005
ANG	±7'30"

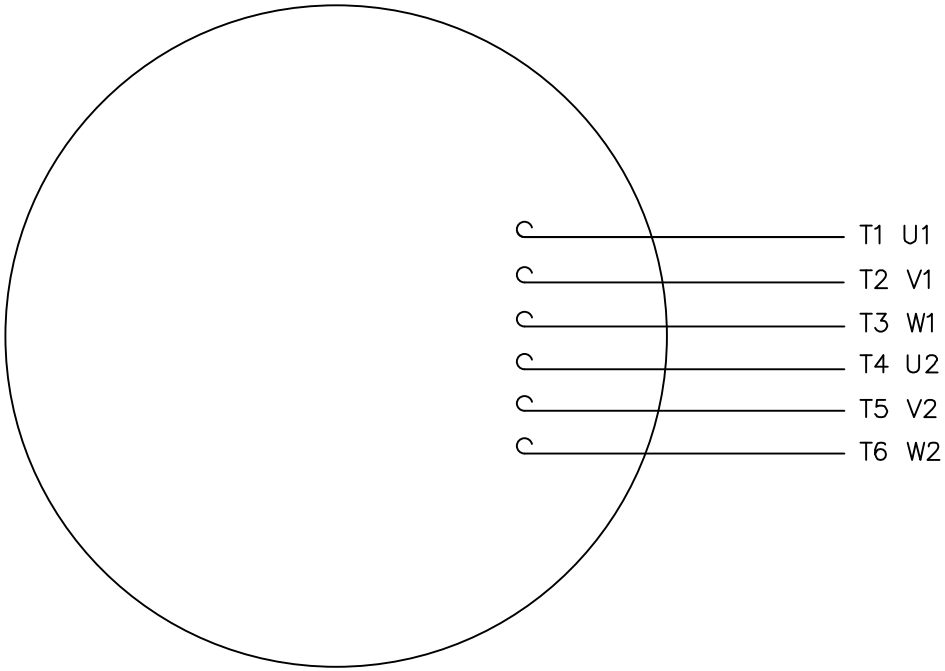
MARATHON ELECTRIC

TITLE OUTLINE – RIGID
250 FR. – TEFC

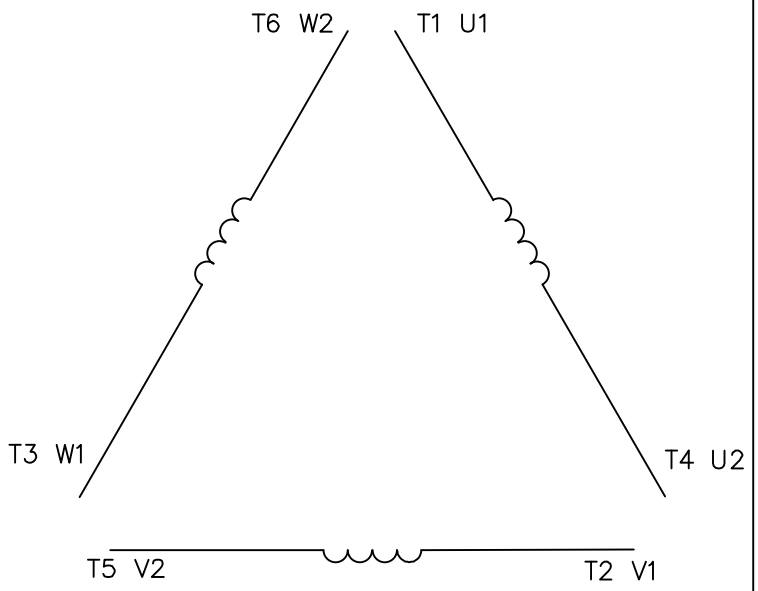
DRAWN TJB 05-29-2003
CHK ML 05-29-2003
APPD GK 05-29-2003
SCALE 5=16
REF
FMF
PREV
MAT'L.
FINISH

RFP
DIST WA
CAD FILE 16953860ME

SIZE	DRAWING NO.	PAGE OF	REV.
B	169538–60ME		1



LINE LEADS



	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)	

NO.	REVISION	BY & DATE	CHK
03	ADDED IEC DESIGNATIONS	MOL 04/27/12	
02	REMOVED OBSOLETE STATUS	KJH 06/28/99	
01	REDRAWN ON CAD	DBT 05/30/97	

TOLERANCES UNLESS SPECIFIED

DEC.	INCHES
.X	±.1
.XX	±.01
.XXX	±.005
.XXXX	±.0005
ANG	±1/2°

MARATHON ELECTRIC

DRAWN	PG 05/07/82
CHK	
APPD	TEM 05/07/82
SCALE	1=1
REF	
FMF	
PREV	

TITLE: EXTERNAL WIRING DIAGRAM
STAR START – DELTA RUN

MAT'L. Y–CONNECTED START – DELTA CONNECTED RUN

FINISH: SINGLE VOLTAGE

CAD FILE: 00519001ME

RFP

DIST

SIZE	DRAWING NO.	REV.
A	005190–01ME	03

CERTIFICATION DATA SHEET

Model#:	254TTFC6081 AA	**WINDING#:**	T12906018 NONE 4
CONN. DIAGRAM:	5190.01ME	**ASSEMBLY:**	F1/F2 CAPABLE
OUTLINE:	169538.60ME		

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
7 1/2	5.60	1200	1185	254T	TEFC	H	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	575	8.9	LINE OR INVERTER	CONTINUOUS	F2	1.15	40	3300

FULL LOAD EFF: 91.7	3/4 LOAD EFF: 91.7	1/2 LOAD EFF: 89.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 70	3/4 LOAD PF: 65	1/2 LOAD PF: 53.5	90.2	SQ CAGE INV RATED	4.2

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
33.2 LB-FT	53.6	65 LB-FT 195	112.5 LB-FT 338	26

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
52 dBA	62 dBA	2.472 LB-FT^2	2.5 LB-FT^2	- SEC.	-	- 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 6309	BALL 6308	POLYREX EM	T	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

*
NOTES
*

DATE: 06/23/2017 03:45:11 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 6/19/2017
Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

marathon electric

254TTFC6081

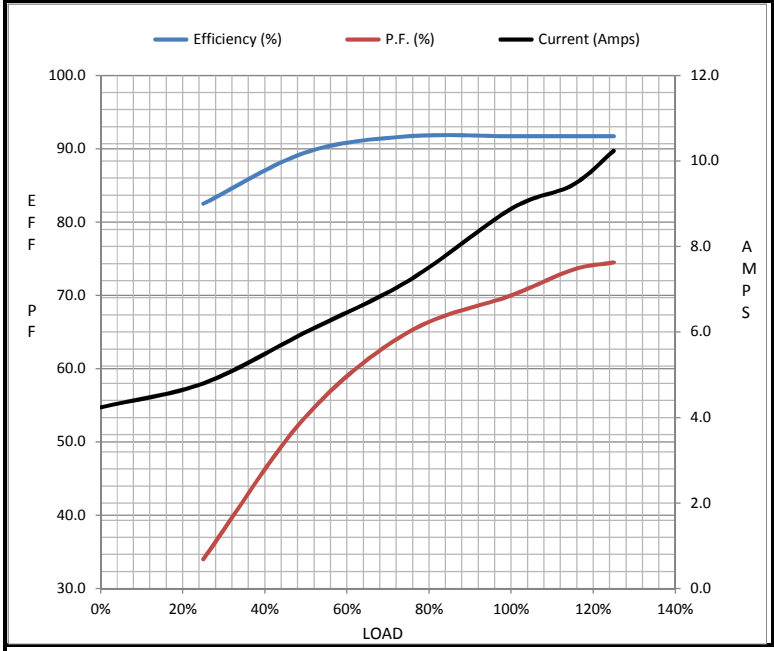
Submittal
Data @ 575 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	4.2	4.8	6.0	7.2	8.9	9.4	10.2	53.6	
Torque (ft-lb)	0.00	8.2	16.5	24.8	33.2	38.2	41.6	65.0	
RPM	1200	1197	1194	1190	1185	1,184	1180	0	
Efficiency (%)		82.5	89.5	91.7	91.7	91.7	91.7		
P.F. (%)	6.0	34.0	53.5	65.0	70.0	73.5	74.5	0.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	400	1135	1185	1200
Current (Amps)	53.6	51.2	33.6	8.9	4.2
Torque (ft-lb)	65.0	55.0	113	33.2	0.00



Information Block

HP	7.5	
Sync. RPM	1200	
Frame	254	
Enclosure	TEFC	
Construction	TFC	
Voltage	575	V
Frequency	60	Hz
Design	B	
LR Code letter	H	
Service Factor	1.15	
Temp Rise @ FL	31	° C
Duty	CONT	
Ambient	40	° C
Elevation	1,000	feet
Rotor/Shaft wk²	2.47	Lb-Ft²
Ref Wdg	T12906018	NONE
Sound Pressure @ 1M	52	dBA
VFD Rating	VARIABLE 10:1	
Outline Dwg	169538.60ME	
Conn. Diag	5190.01ME	
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