

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 254TTFC6077

Catalog No: U633A

XRI® General Purpose General Purpose Motor, 7.50 & 5 HP, 3 Ph, 60 & 50 Hz, 208-230/460 & 190/380 V,
1200 & 1000 RPM, 254T Frame, TEFC



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RegalRexnord

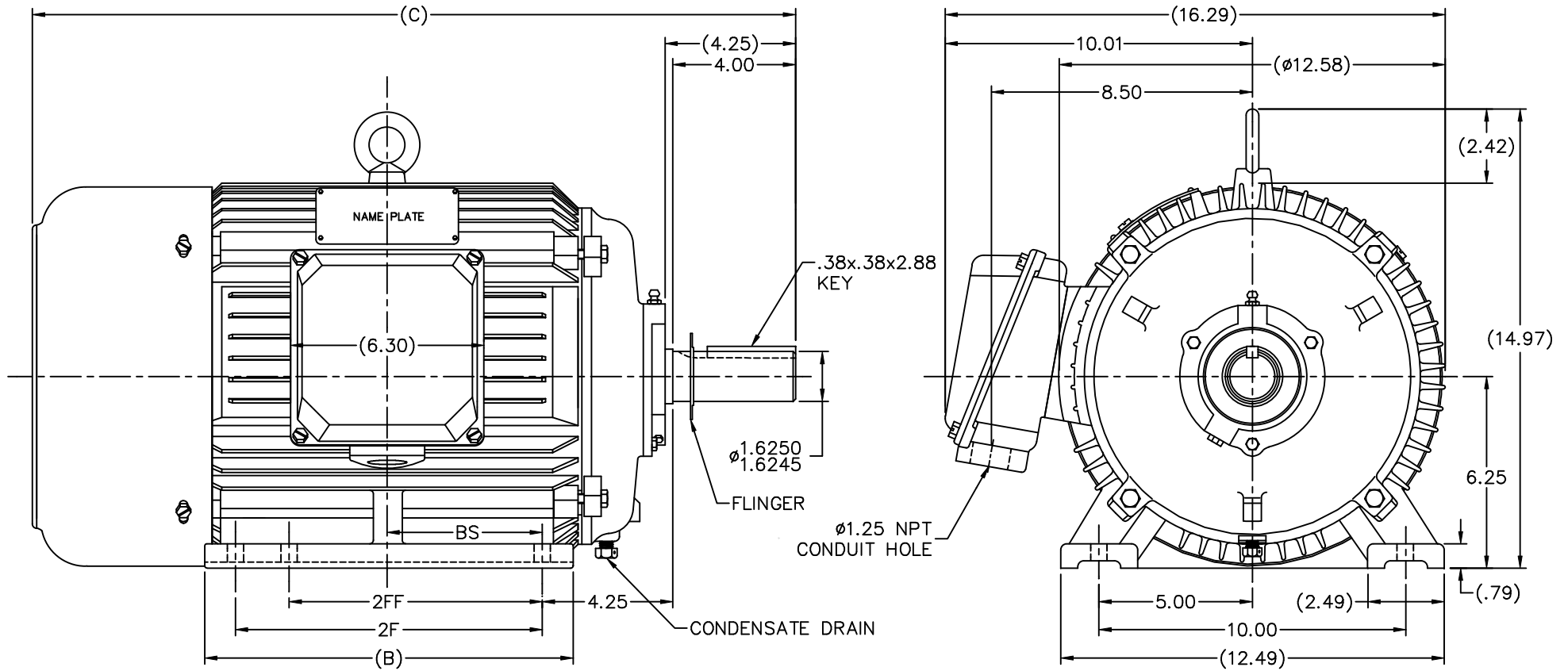
Nameplate Specifications

Phase	3	Output HP	7.50 & 5 Hp
Output KW	5.6 & 3.7 kW	Voltage	208-230/460 & 190/380 V
Speed	1185 & 990 rpm	Service Factor	1.15 & 1.15
Frame	254T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	91.7 & 91.7 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	23-22.2/11.1 & 19/9.5 A	Power Factor	70
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	H
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 Induction Run	Starting Method	Wye Start Delta Run
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
Connection Drawing	00417203ME	Outline Drawing	16953860ME-254T

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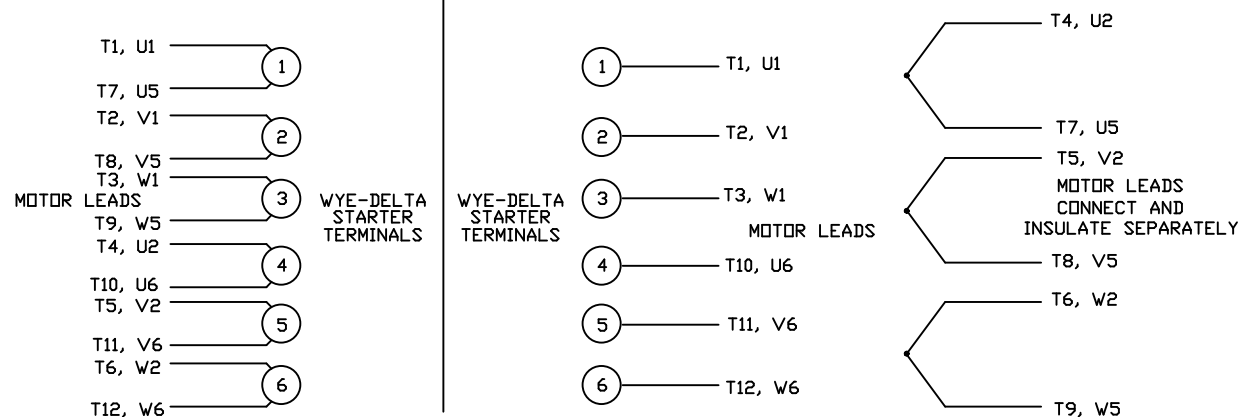
NOTE: 256T HAS 6 MTG. HOLES, USING BOTH 254T AND 256T "2F" LOCATIONS.

							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		SCALE 5=16			
							.XXX	±.005		REF			
							.XXX	±.0005		FMF			
							NO.	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	ANG	±7'30"				
							DIST	WA					
										SIZE	DRAWING NO.	PAGE	REV.
										B	169538-60ME	1	1

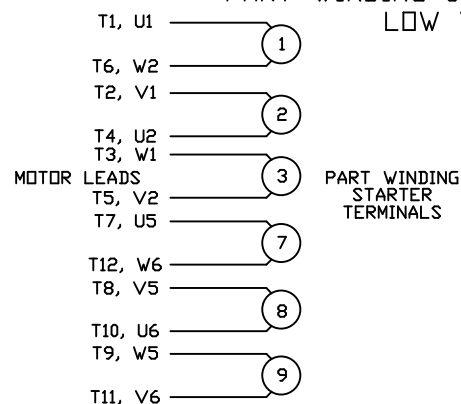
WYE - DELTA STARTING USEABLE ON 2,4 AND 6 POLE MOTORS.

LOW VOLTAGE CONNECTION

HIGH VOLTAGE CONNECTION



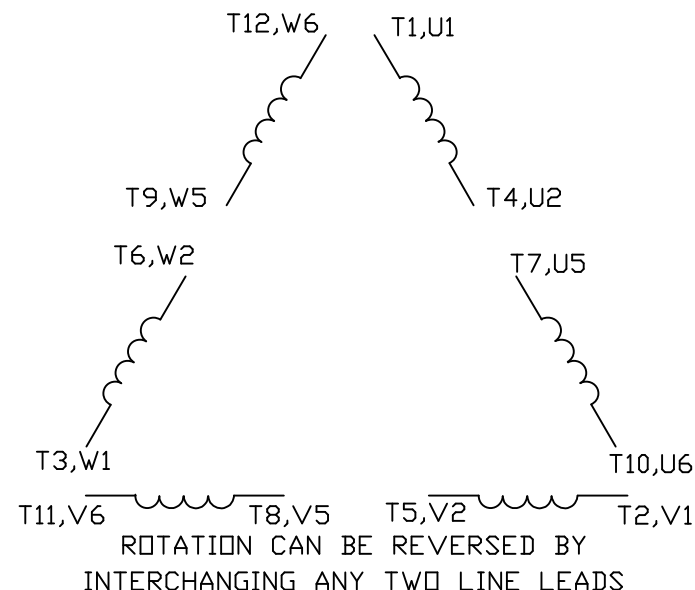
REFER TO THE WYE-DELTA STARTER CONNECTION INSTRUCTIONS FOR PROPER CONNECTION OF POWER LINES TO STARTER.

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.

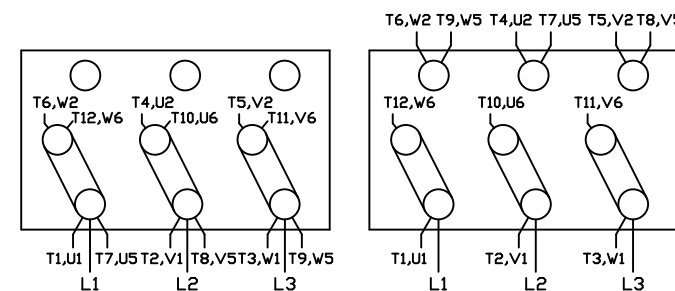
LINE LEADS



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

CHK

DIST

CAD FILE 00417203ME

SIZE

A

DRAWING NO.

004172-03ME

REV.

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CERTIFICATION DATA SHEET

Model#: 254TTFC6077 AA
 CONN. DIAGRAM: 00417203ME
 OUTLINE: 169538.60ME

WINDING#: T12906018 NONE 3
 ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
7 1/2&5	5.60&3.70	1200	1185&990	254T	TEFC	H	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	208- 230/460#190/ 380	23- 22.2/11.1&19/ 9.5	WYE START DELTA RUN	CONTINUOUS	F2	1.15/1.15	40	3300

FULL LOAD EFF: 91.7&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&65	3/4 LOAD PF: 65	1/2 LOAD PF: 53.5	90.2	SQ CAGE IND RUN	10.6 / 5.3

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
33.2 LB-FT	134 / 67	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	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 T E S *	INVERTER TORQUE: NONE
	INV. HP SPEED RANGE: NONE
	ENCODER: NONE
	NONE NONE PPR
	BRAKE: NONE NONE
	NONE P/N NONE
	NONE NONE
	NONE FT-LB NONE V NONE Hz

DATE: 06/23/2017 03:44:33 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

Date: 6/29/2017

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



254TTFC6077

Submittal

Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	5.3	6.0	7.5	9.0	11.1	11.8	12.8	67.0	
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)	67.0	64.0	42.0	11.1	5.3																																													
Torque (ft-lb)	65.0	55.0	113	33.2	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>5.5</td></tr><tr><td>20%</td><td></td><td></td><td>5.8</td></tr><tr><td>25%</td><td>82</td><td>1.0</td><td>6.0</td></tr><tr><td>40%</td><td>88</td><td>3.5</td><td>7.0</td></tr><tr><td>60%</td><td>91</td><td>6.0</td><td>8.5</td></tr><tr><td>80%</td><td>92</td><td>7.0</td><td>10.0</td></tr><tr><td>100%</td><td>92</td><td>7.5</td><td>11.5</td></tr><tr><td>120%</td><td>92</td><td>7.8</td><td>12.5</td></tr><tr><td>125%</td><td>92</td><td>8.0</td><td>13.0</td></tr></tbody></table></div>						LOAD	Efficiency (%)	P.F. (%)	Current (Amps)	0%			5.5	20%			5.8	25%	82	1.0	6.0	40%	88	3.5	7.0	60%	91	6.0	8.5	80%	92	7.0	10.0	100%	92	7.5	11.5	120%	92	7.8	12.5	125%	92	8.0	13.0					
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						Enclosure					TEFC																																							
						Construction					TFC																																							
						Voltage					3-230/460#190/3 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					NONE																																													
Outline Dwg					169538.60ME																																													
Conn. Diag					00417203ME																																													
Additional Specifications:																																																		
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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

