

PRODUCT INFORMATION PACKET

marathon[®]
Motors

Model No: 256TTFC6002
Catalog No: U649A
20,3600,TEFC,256T,3/60/230/460
Totally Enclosed Fan Cooled (TEFC)



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REGAL[®]



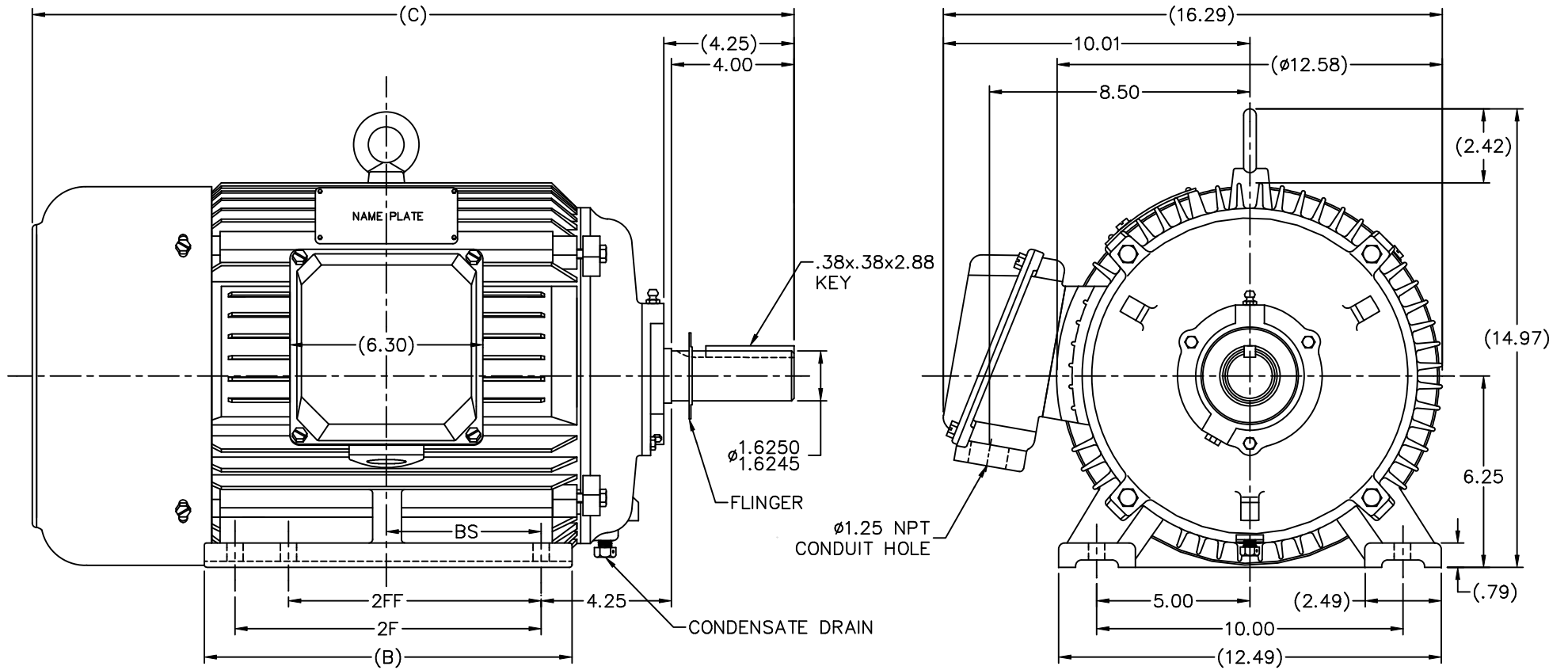
Nameplate Specifications

Output HP	20 Hp	Output KW	14.9 kW
Frequency	60 Hz	Voltage	230/460 V
Current	46.0/23.0 A	Speed	3550 rpm
Service Factor	1.15	Phase	3
Efficiency	92.4 %	Duty	Continuous
Insulation Class	F	Design Code	B
KVA Code	G	Frame	256T
Enclosure	Totally Enclosed Fan Cooled	Overload Protector	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		

Technical Specifications

Electrical Type	Squirrel Cage Induction Run	Starting Method	Across The Line
Poles	2	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	24.92 in	Shaft Diameter	1.625 in
Shaft Extension	4.25 in	Assembly/Box Mounting	F1/F2 Capable
Outline Drawing	169538.60ME	Connection Diagram	004172.03ME

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

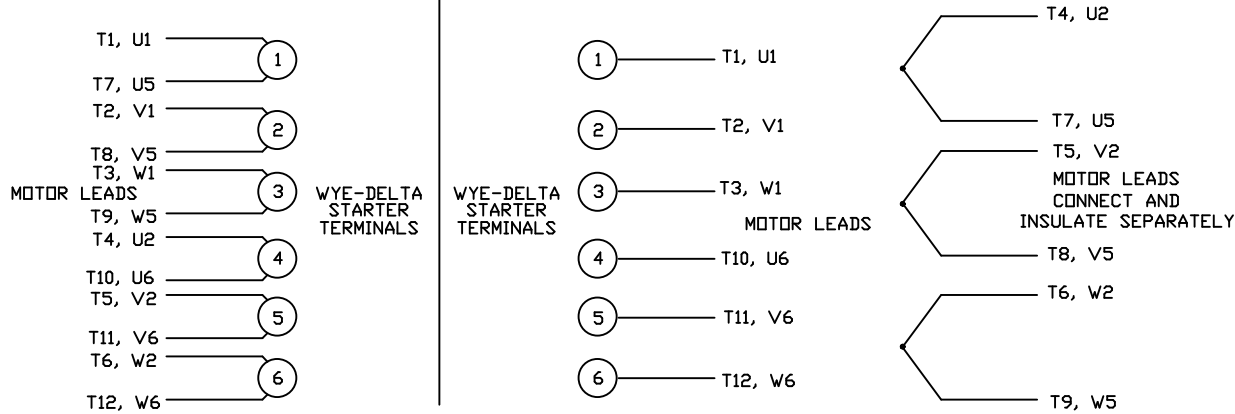
DASH	FRAME	C	BS	B	2F	2FF
1248	254T	23.19	6.24	3.94	--	8.25
1398	256T	24.92	5.49	4.81	10.00	8.25

		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		CHK	ANG	±7'30"	FINISH
		BY & DATE		RFP	CAD FILE 16953860ME		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				SIZE		DRAWING NO.	PAGE OF
				DIST WA		B	169538-60ME 1

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

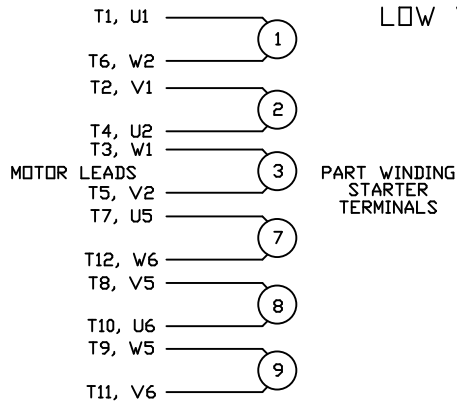
LOW VOLTAGE CONNECTION

HIGH VOLTAGE CONNECTION



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

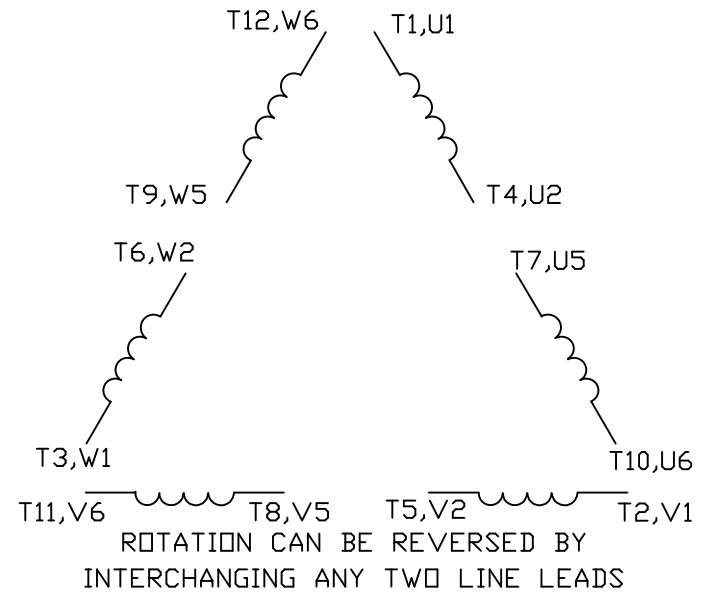
PART WINDING START USABLE ON 4 & 6 POLE MOTORS
LOW VOLTAGE CONNECTION ONLY



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.

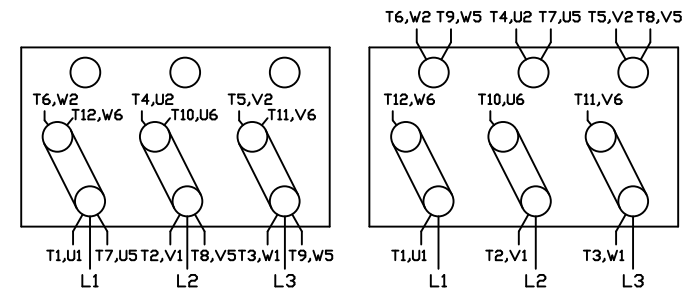
LINE LEADS



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

RFP

DIST

CAD FILE 00417203ME

SIZE DRAWING NO.

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REV.

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CERTIFICATION DATA SHEET

Model#: 256TTFC6002 AA **WINDING#:** T12902023 NONE 3
CONN. DIAGRAM: 004172.03ME **ASSEMBLY:** F1/F2 CAPABLE
OUTLINE: 169538.60ME

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
20&15	14.9&11.2	3600	3550&2957	256T	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	46/23&40/20	ACROSS THE LINE	CONTINUOU S	F5	1.15/1.15	40	3300

FULL LOAD EFF: 92.4&92.4	3/4 LOAD EFF: 92.4	1/2 LOAD EFF: 91.7	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 88.5&91	3/4 LOAD PF: 87.5	1/2 LOAD PF: 82	91	SQ CAGE IND RUN	10.8 / 5.4

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
30 LB-FT	290 / 145	75 LB-FT 250	81.5 LB-FT 272	60

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
69 dBA	79 dBA	2 LB-FT^2	- LB-FT^2	20 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

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

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DATE: 06/23/2017 06:42:55 AM
 FORM 3531 REV.3 02/07/99

** Subject to change without notice.

Data Sheet

Date: 6/20/2017

2561TEC6002

Customer:



Submital

Attention:

FAREEDA DUDEKULA

Data @ 460 V

Submitted by:

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	5.4	8.1	12.7	17.7	23.0	26.5	29.0	145
Torque (ft-lb)	0.00	7.5	15.0	22.5	30.0	34.5	37.5	75.0
RPM	3600	3590	3578	3565	3550	3545	3540	0
Efficiency (%)		87.5	91.7	92.4	92.4	91.7	91.7	0.0
P.F. (%)	10.0	67.5	82.0	87.5	88.5	88.0	88.0	0.0

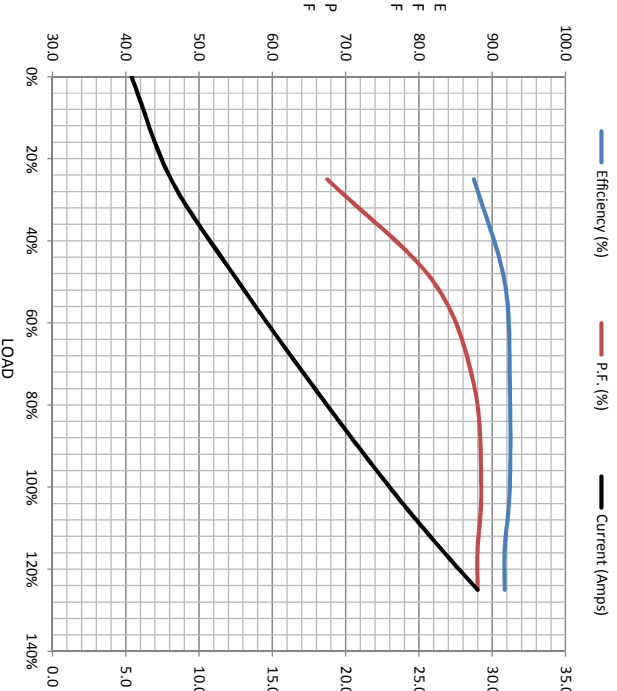
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (rpm)	0	1800	3450	3550	3600
Current (Amps)	145	130	95.0	23.0	5.4
Torque (ft-lb)	75.0	67.5	81.5	30.0	0.00

Information Block

HP	20.0
Sync. RPM	3600
Frame	256
Enclosure	TEFC
Construction	TFC
Voltage	30/460#190/38 V
Frequency	60 Hz
Design	A
LR Code letter	G
Service Factor	1.15
Temp Rise @ FL	60 °C
Duty	CONT
Ambient	40 °C
Elevation	1,000 feet
Rotor/Shaft wkt	2.00 Lb-Fe
Rel Wdg	TT12902023 NONE
Sound Pressure @ 1M	69 dBA
VFD Rating	NONE
Outline Dwg	169538.60ME
Conn. Diag	004172.03ME
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

