PRODUCT INFORMATION PACKET

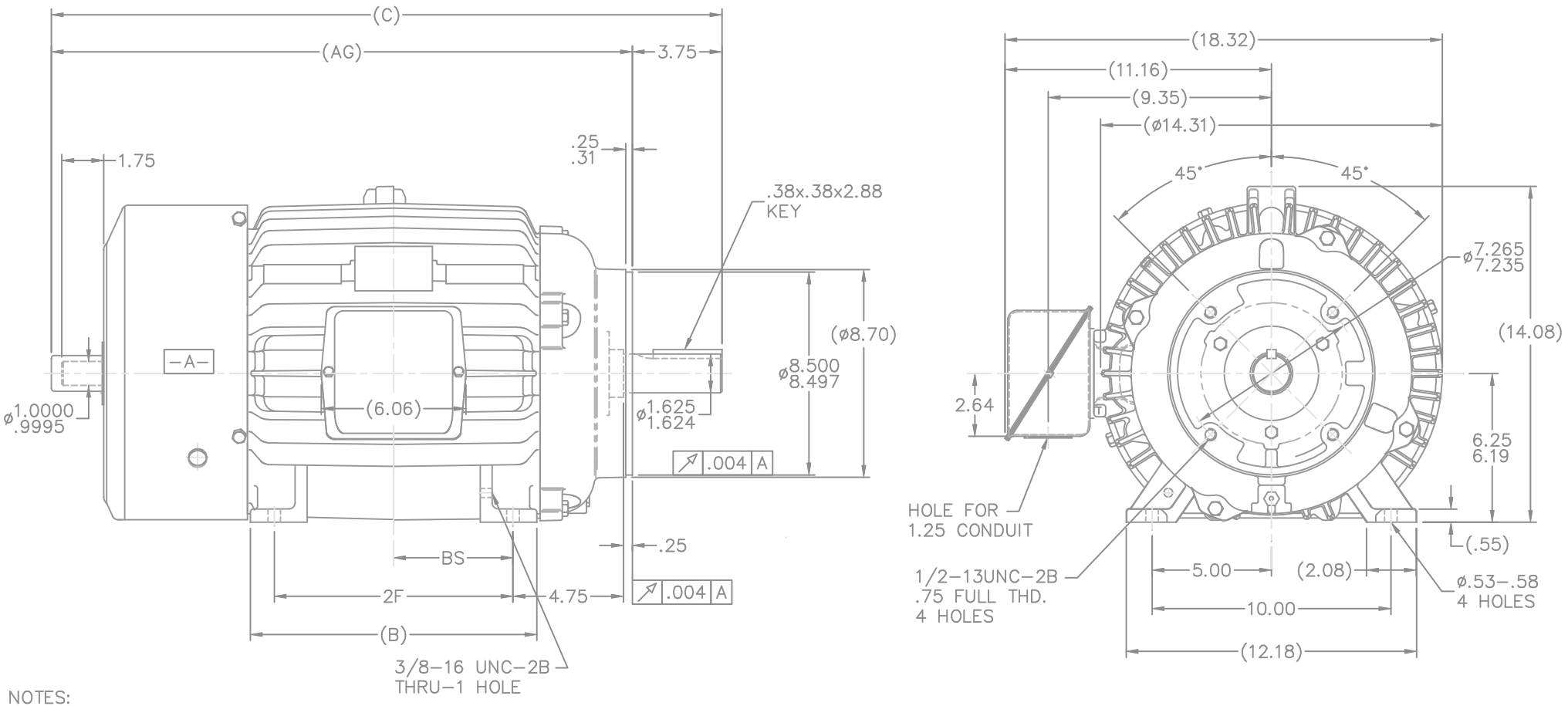
Model No: 254THFNA8038
Catalog No: Y597
15,1800,TEFC,254TC,3/60/230/460
2000:1 With Encoder Provision

Nameplate Specifications

Output HP	**15 Hp**	Output KW	**11.2 kW**
Frequency	**60 Hz**	Voltage	**230/460 V**
Current	**37/18.5 A**	Speed	**1765 rpm**
Service Factor	**1**	Phase	**3**
Efficiency	**90.2 %**	Duty	**CONTINUOUS**
Insulation Class	**H**	Design Code	**INV**
KVA Code	**F**	Frame	**254TC**
Enclosure	**TEFC**	Overload Protector	**NOT**
Ambient Temperature	**40 °C**	Drive End Bearing Size	**6309**
Opp Drive End Bearing Size	**6210**	UL	**Recognized**
CSA	**Y**	CE	**Y**
IP Code	**43**		

Technical Specifications

Electrical Type	**SQ CAGE INV DUTY**	Starting Method	**INVERTER ONLY**
Poles	**4**	Rotation	**REV**
Mounting	**RIGID**	Motor Orientation	**HORIZONTAL**
Drive End Bearing	**BALL**	Opp Drive End Bearing	**BALL**
Frame Material	**CAST IRON**	Shaft Type	**T**
Overall Length	**26.34 in**	Frame Length	**10.5 in**
Shaft Diameter	**1.63 in**	Shaft Extension	**3.75 in**
Assembly/Box Mounting	**F1/F2 CAPABLE**		
Outline Drawing	**B-SS203502-1050**	Connection Diagram	**A-EE7308T**



NOTES:
1. BOX CAN BE ROTATED ON ITS AXIS.
2. BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.
3. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	C	AG	B	2F	BS		
1050	254TC	26.34	22.59	10.25	8.25	4.12		
1225	256TC	28.09	24.34	12.00	10.00	5.00		

NO.	REVISION	BY & DATE	CHK
5	REDRAWN IN AUTOCAD	TAT 06-24-2005	DRS
4	UPDATED SHAFT COVER ON O.D.E. CN 29100-1577	DRS 03-13-2001	
3	REVISED TO NEC CONDUIT BOX CN 28427	NJS 08-28-2000	
2	FRONT EXT. WAS .625 DIA. CN 29100-413	MJD 04-19-2000	

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

MARATHON ELECTRIC

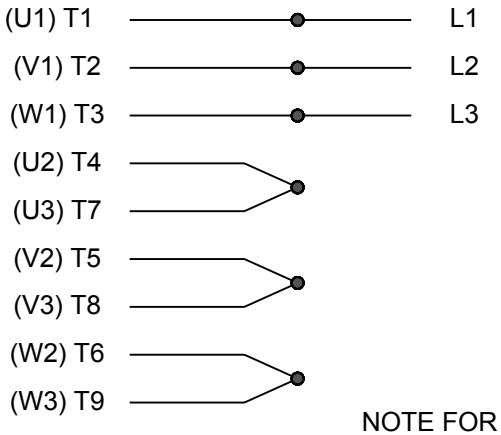
DRAWN CAV 12-20-1999
CHK ML 12-21-1999
APPD GK 12-21-1999
SCALE 1=4
REF
FMF
PREV

TITLE OUTLINE – TEFC – TFNA
250TC FR. – BB – TS – C' FACE
MAT'L.
FINISH
CAD FILE ss203502

RFP
DIST LB

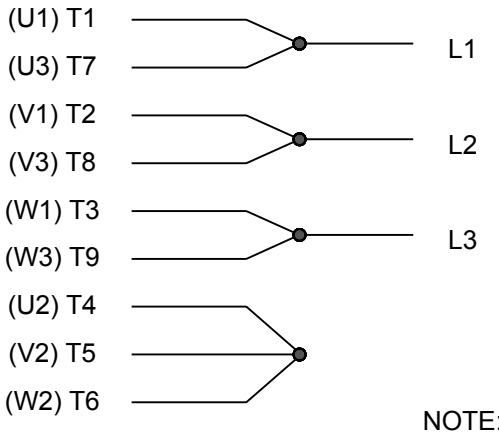
SIZE B | DRAWING NO. SS203502 | PAGE OF | REV. 5

HIGH VOLTAGE

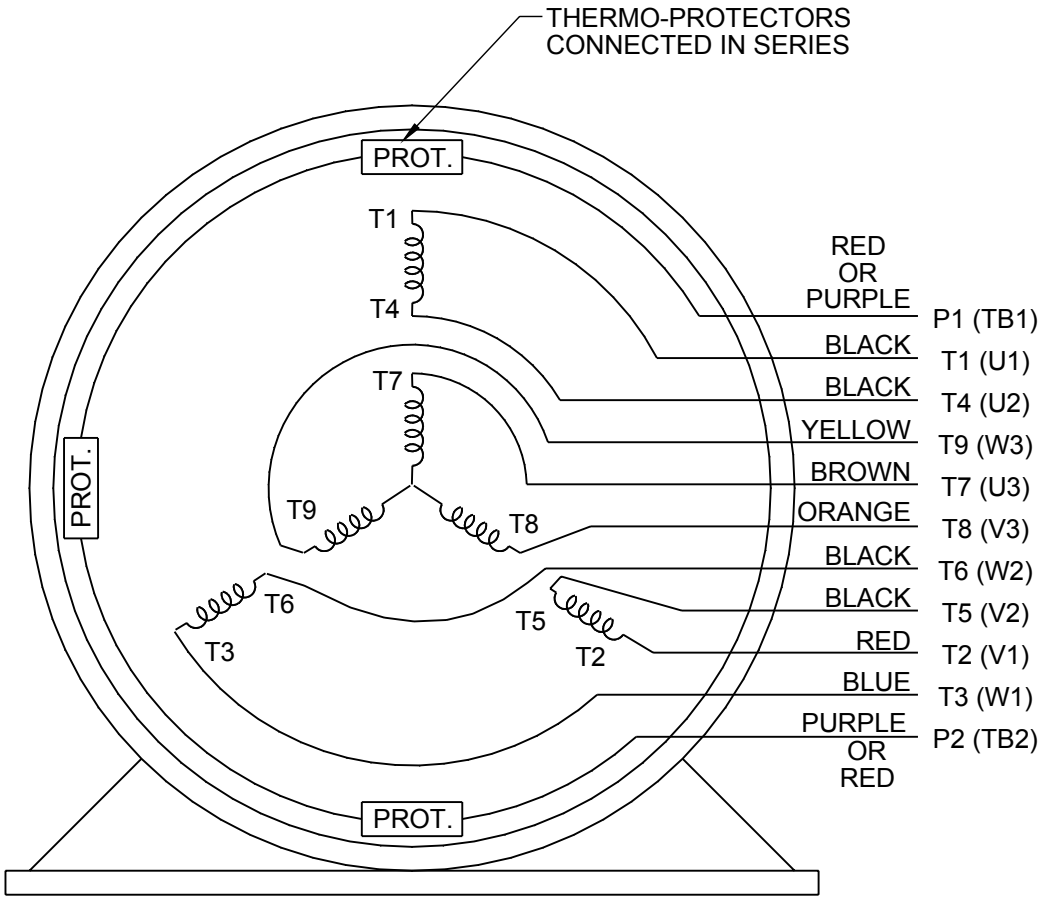


NOTE FOR FACTORY USE ONLY:
TO SURGE TEST FOR COMMON CONNECT:
HIGH VOLT: CONNECT P1 TO T1
THEN P2 TO L1
LOW VOLT: CONNECT P1 TO T1 & T7,
THEN P2 TO L1

LOW VOLTAGE



THREE PHASE DUAL VOLTAGE MOTOR



VIEW OF TERMINAL END

NOTE: LEAD'S COLOR CAN BE YELLOW OR WHITE FOR MT2 PLANT

DRAWING REVISION: R	REVISION BY: AJW	DATE: 07-17-2015		DRAWN BY: SMC	Regal Beloit America, Inc.
ECO: ECO-0081632	APPROVED BY: T. VUE	DATE: 07-17-2015		DATE: 05-13-1992	
ECO DESCRIPTION: REV'D IEC NOTATIONS PER IEC 60034-8				APPROVED BY: TB	DESCRIPTION: CONN DIAGRAM-INTERNAL, 3 PHASE - DUAL VOLTAGE MOTOR
				DATE: 05-13-1992	
				REFERENCE: EE7308/EE7300	MATERIAL / PROCESS/FINISH
				THIRD ANGLE PROJECTION	SIZE: A; DRAWING NUMBER: EE7308T; SHEET: 1 OF 1

CERTIFICATION DATA SHEET

Model#:	254THFNA8038 BC	**WINDING#:**	K2544134 R5 1
CONN. DIAGRAM:	A-EE7308T	**ASSEMBLY:**	F1/F2 CAPABLE
OUTLINE:	B-SS203502-1050		

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
15	11.2	1800	1765	254TC	TEFC	F	INV

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	230/460	37/18.5	INVERTER ONLY	CONTINUOUS	H4	1.0	40	3300

FULL LOAD EFF: 90.2	3/4 LOAD EFF: 90.2	1/2 LOAD EFF: 89.5	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 83.5	3/4 LOAD PF: 80	1/2 LOAD PF: 72	88.5	SQ CAGE INV DUTY	14 / 7

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
44.6 LB-FT	200 / 100	80 LB-FT 179	108 LB-FT 242	60

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
68 dBA	78 dBA	2.4 LB-FT^2	- LB-FT^2	- SEC.	-	325 LBS.

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

R1	R2	X1	X2	XM
0.42903	0.30618	1.44585	1.87488	35.154

RM	ZREF	XR	TD	TD0
1646.19	18.9	4.7	0.02	0.32

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	ENCODER	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 6210	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			
TSTATS (N/C)	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

* NOTES *

INVERTER TORQUE: CONSTANT 2000:1
INV. HP SPEED RANGE: 1.5 X BASE SPEED

ENCODER: PROVISIONS ONLY
DYNAPAR HS35
NONE NONE PPR

BRAKE: NONE NONE
NONE P/N NONE

NONE	NONE		
- FT-LB	NONE V	NONE Hz	

DATE: 06/23/2017 01:21:22 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

254THFNA8038

Submittal

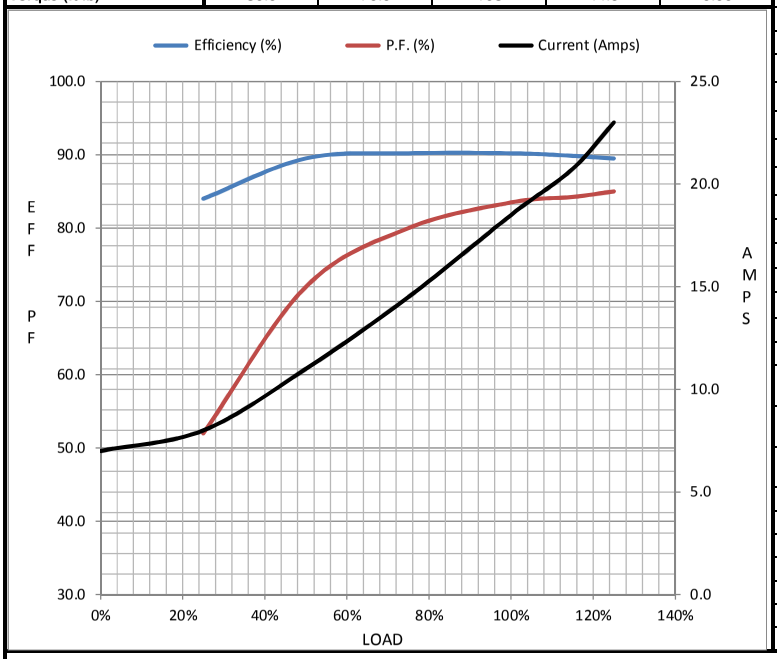
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	7.0	8.0	11.0	14.5	18.5	20.8	23.0	100	
Torque (ft-lb)	0.00	11.0	22.0	33.5	44.6	50.6	56.5	80.0	
RPM	1800	1792	1784	1775	1765	1,761	1755	0	
Efficiency (%)		84.0	89.5	90.2	90.2	89.9	89.5		
P.F. (%)	10.0	52.0	72.0	80.0	83.5	84.3	85.0	41.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1642	1765	1800
Current (Amps)	100	90.0	62.0	18.5	7.0
Torque (ft-lb)	80.0	70.0	108	44.6	0.00



Information Block

HP	15.0
Sync. RPM	1800
Frame	254
Enclosure	TEFC
Construction	TFN
Voltage	230/460 V
Frequency	60 Hz
Design	B
LR Code letter	G
Service Factor	1.0
Temp Rise @ FL	55 ° C
Duty	CONT
Ambient	40 ° C
Elevation	1,000 feet
Rotor/Shaft wk²	2.40 Lb-Ft²
Ref Wdg	K2544134 R5
Sound Pressure @ 1M	68 dBA
VFD Rating	CONSTANT 2000:1
Outline Dwg	B-SS203502-1050
Conn. Diag	A-EE7308T
Additional Specifications:	
0	
0	

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.4290	0.3060	1.4460	1.8750	35.1540

Speed -Torque Curve