PRODUCT INFORMATION PACKET

Model No: 254TTFNA16838
Catalog No: E620-P
15 HP Severe Duty Motor, 3 phase, 1800 RPM, 460 V, 254T Frame, TEFC
Other Severe Duty Motors

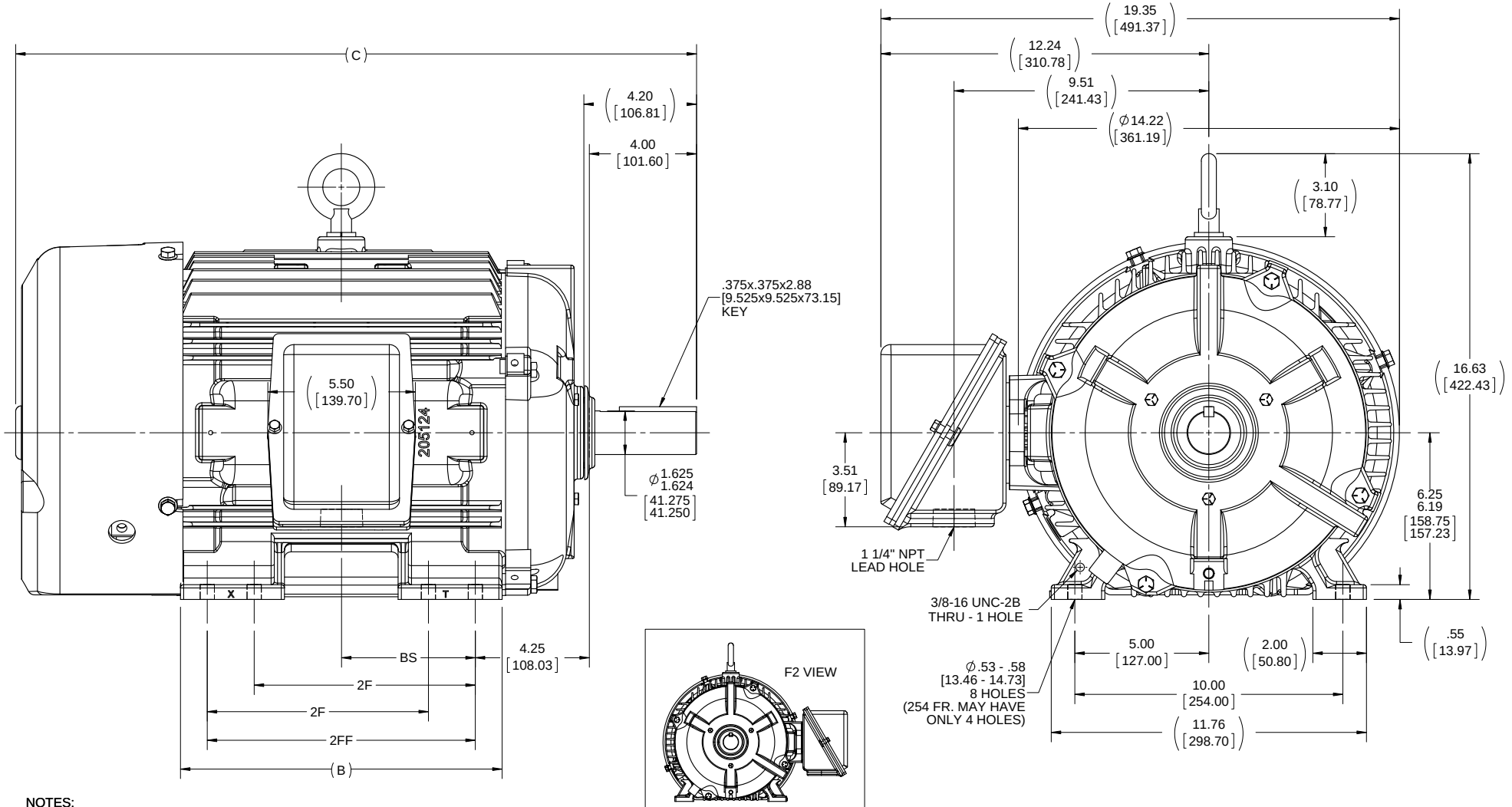
marathon® Motors

Nameplate Specifications

Output HP	15 Hp	Output KW	11.2 kW
Frequency	60 Hz	Voltage	460 V
Current	18.8 A	Speed	1775 rpm
Service Factor	1.15	Phase	3
Efficiency	92.4 %	Power Factor	81
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	254T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No	Ambient Temperature	40 °C
Drive End Bearing Size	6309	Opp Drive End Bearing Size	6210
UL	Recognized	CSA	Y
CE	Y	IP Code	54

Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Line Or Inverter
Poles	4	Rotation	Reversible
Resistance Main	.649 Ohms	Mounting	Rigid base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	23.65 in
Frame Length	10.50 in	Shaft Diameter	1.625 in
Shaft Extension	4.2 in	Assembly/Box Mounting	F1/F2 CAPABLE
Outline Drawing	SS203002-1050	Connection Drawing	EE7300



NOTES:
1. CONDUIT BOX CAN BE ROTATED ON ITS AXIS.
2. CONDUIT 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.

1050	254T	23.65 [600.71]	10.25 [260.35]	- - -	8.25 [209.55]	4.25 [107.95]
1225	254/256T	25.40 [645.16]	12.00 [304.80]	8.25 [209.55]	10.00 [254.00	5.00 [127.00]
DASH	FRAME	C	B	2F	2FF	BS

DRAWING REVISION: E	REVISION BY: M GERTSCHEN	DATE: 11-17-2016
ECO: ECO-0112972	APPROVED BY: T VUE	DATE: 11-17-2016

ECO DESCRIPTION: UPDATED TO CURRENT STANDARDS

TOLERANCES UNLESS OTHERWISE SPECIFIED:

DEC.	INCH	mm	ANGLE
.X	±0.1	[±2.5]	±7' 30"
.XX	±0.03	[±0.76]	
.XXX	±0.005	[±0.127]	
.XXXX	±0.0005	[±0.0127]	

REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.076/.381] X 45°
CORNER FILLETS: R.02 [.51]
MACHINED SURFACES: 200 INCH / 5.1 mm
mm SHOWN IN [BRACKETS]

DRAWN BY: TVUE	
DATE: 12-18-2013	
APPROVED BY: TBROWN	
DATE: 12-18-2013	
REFERENCE	
THIRD ANGLE PROJECTION	

Regal Beloit America, Inc.

DESCRIPTION: OUTLINE
250T FR. - TEFC - BB - STD.

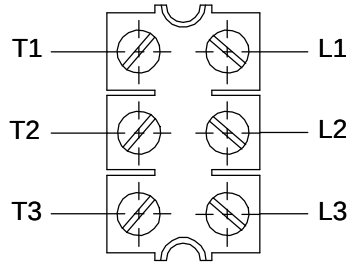
MATERIAL | PROCESS/FINISH

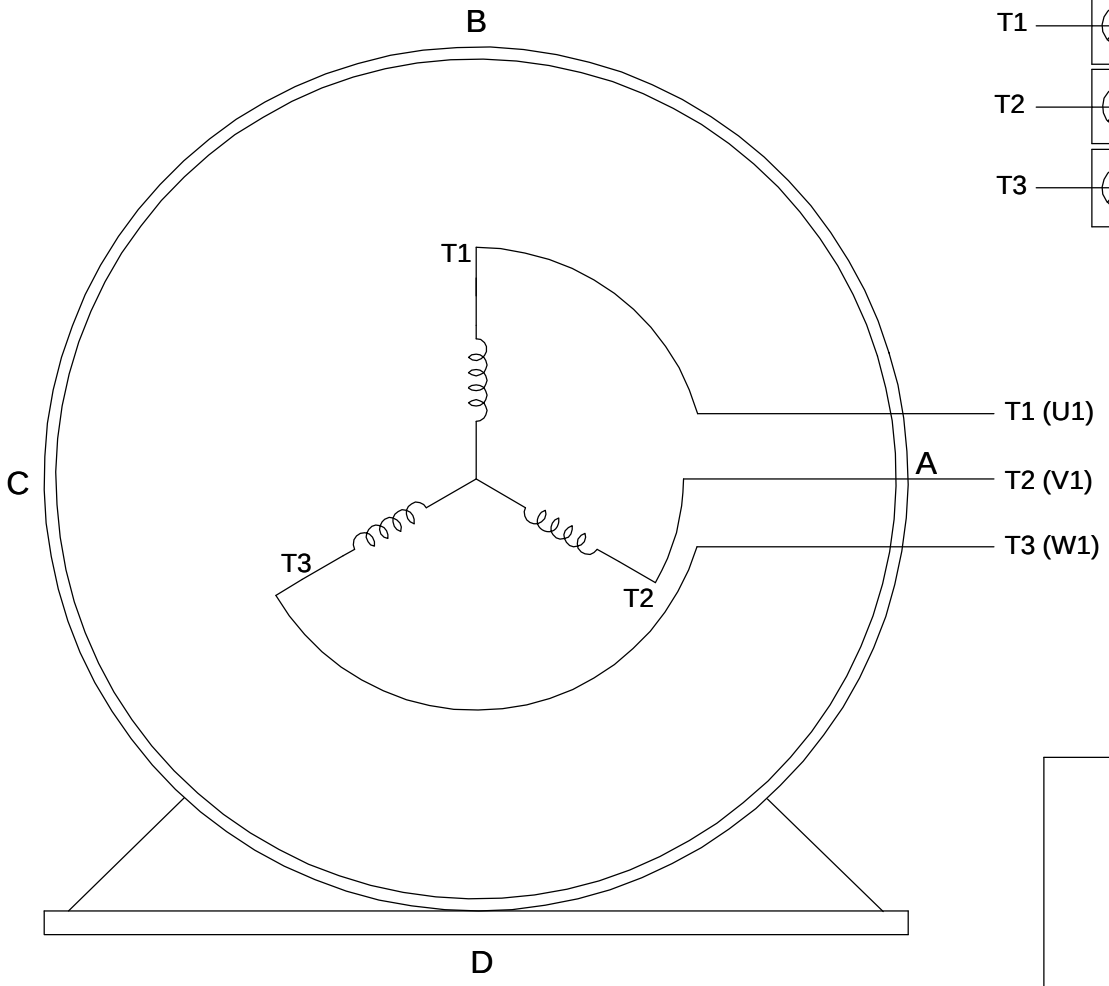
SIZE: B | DRAWING NUMBER: SS203002 | SHEET: 1 OF 1

THREE PHASE - SINGLE VOLTAGE
MOTOR - CONDUIT BOX @ 'A'

TO REVERSE ROTATION:
INTERCHANGE ANY TWO
LINE LEAD CONNECTIONS.

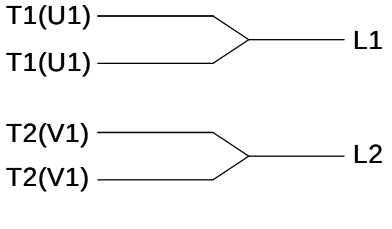
TERMINAL BLOCK WHEN SPECIFIED





VIEW OF TERMINAL END

IF MOTOR HAS
6 LEADS



A-9806 DECAL

OPTIONAL CORD
CONNECTION

L1	WHITE
L2	RED
L3	BLACK

DRAWING REVISION: AB	REVISION BY: JJB	DATE: 06-27-2017
ECO: ECO-0125361	APPROVED BY: TB	DATE: 06-27-2017
ECO DESCRIPTION: UPDATED TO CURRENT STANDARDS		

DRAWN BY: DA	REGAL™ Regal Beloit America, Inc.
DATE: 03-26-1993	
APPROVED BY: TB	DESCRIPTION: CONNECTION DIAGRAM EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR
DATE: 03-26-1993	
REFERENCE	MATERIAL / PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE: A / DRAWING NUMBER: EE7300 / SHEET: 1 OF 1

CERTIFICATION DATA SHEET

Model#:	254TTFNA16838 AA	**WINDING#:**	K2564165 NONE 2
CONN. DIAGRAM:	EE7300	**ASSEMBLY:**	F1/F2 CAPABLE
OUTLINE:	SS203002-1050		

TYPICAL MOTOR PERFORMANCE DATA

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

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	18.8	LINE OR INVERTER	CONTINUOUS	F3	1.15	40	3300

FULL LOAD EFF: 92.4	3/4 LOAD EFF: 92.4	1/2 LOAD EFF: 91	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 81	3/4 LOAD PF: 78	1/2 LOAD PF: 68	91.7	SQ CAGE INV RATED	7.8

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
44.4 LB-FT	110	85 LB-FT 191	125 LB-FT 282	55

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
65 dBA	75 dBA	2.4 LB-FT^2	110 LB-FT^2	25 SEC.	2	325 LBS.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	NONE	FALSE	NONE	BLUE (EPOXY)

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			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

If Inverter equals NONE, contact factory for further information

INVERTER TORQUE: CONSTANT 20:1
INV. HP SPEED RANGE: 1.5 X BASE SPEED

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 04:22:22 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 20-06-2017
Customer:
Attention:
Submitted by: FAREEDA DUDEKULA

marathon electric

254TTFNA16838

Submittal

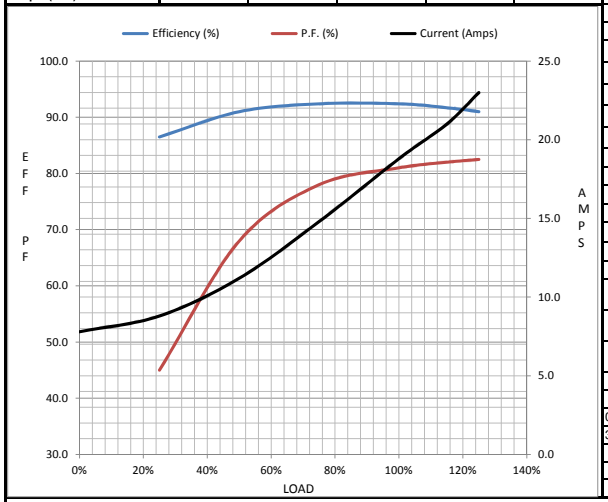
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	7.8	8.8	11.2	14.8	18.8	21.0	23.0	110	
Torque (ft-lb)	0.00	11.0	22.0	33.5	44.4	50.5	56.0	85.0	
RPM	1800	1792	1788	1780	1775	1,770	1765	0	
Efficiency (%)		86.5	91.0	92.4	92.4	91.7	91.0		
P.F. (%)	11.5	45.0	68.0	78.0	81.0	82.0	82.5	40.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1675	1775	1800
Current (Amps)	110	95.0	69.0	18.8	7.8
Torque (ft-lb)	85.0	75.0	125	44.4	0.00



Information Block

HP	15.0
Sync. RPM	1800
Frame	254
Enclosure	TEFC
Construction	TFN
Voltage	460 V
Frequency	60 Hz
Design	B
LR Code letter	G
Service Factor	1.15
Temp Rise @ FL	55 ° C
Duty	CONT
Ambient	40 ° C
Elevation	1,000 feet
Rotor/Shaft wk²	2.40 Lb-Ft²
Ref Wdg	K2564165 NONE
Sound Pressure @ 1M	65 dBA
VFD Rating	CONSTANT 20:1
Outline Dwg	SS203002-1050
Conn. Diag	EE7300
Additional Specifications:	
0	
365THFS8036	

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.3760	0.2380	1.3510	1.7770	32.5080