

# PRODUCT INFORMATION PACKET

Model No: 254TTFNA16838

Catalog No: E620-P

15 HP Severe Duty Motor, 3 phase, 1800 RPM, 460 V, 254T Frame, TEFC  
Severe Duty Motors



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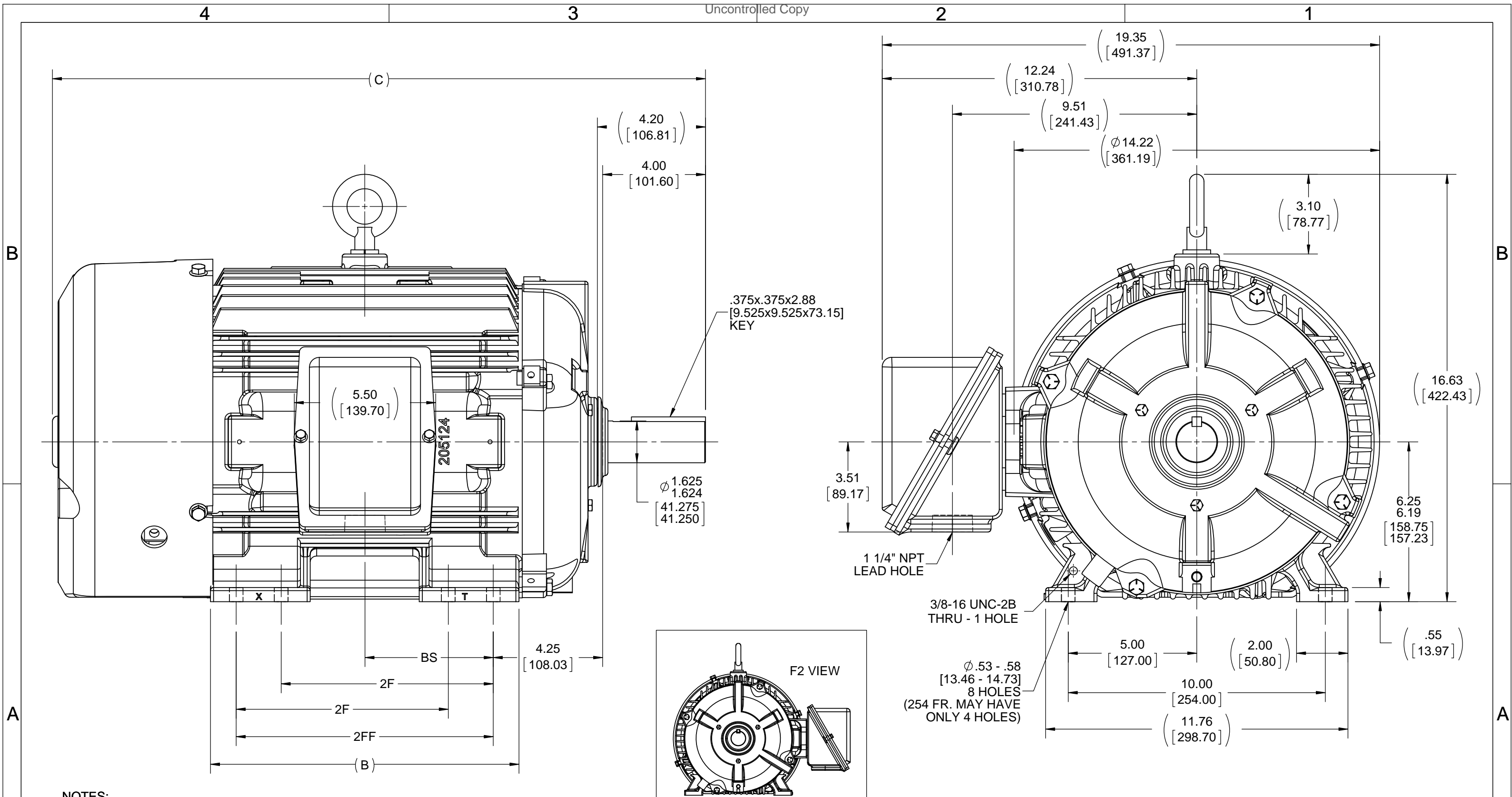
### Nameplate Specifications

Output HP	<b>15 Hp</b>	Output KW	<b>11.2 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>460 V</b>
Current	<b>18.8 A</b>	Speed	<b>1775 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>92.4 %</b>	Power Factor	<b>81</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>G</b>
Frame	<b>254T</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<b>No</b>	Ambient Temperature	<b>40 °C</b>
Drive End Bearing Size	<b>6309</b>	Opp Drive End Bearing Size	<b>6210</b>
UL	<b>Recognized</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>54</b>
Number of Speeds	<b>1</b>		

### Technical Specifications

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

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- 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
		4				

DRAWING REVISION E	REVISION BY M GERTSCHEN	DATE 11-17-2016
ECO ECO-0112972	APPROVED BY T VUE	DATE 11-17-2016
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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 [0.076/.381] X 45°  
 CORNER FILLETS: R.02 [51]  
 MACHINED SURFACES: 200 INCH 5.1 mm SHOWN IN [BRACKETS]

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

<b>REGAL</b> ™ Regal Beloit America, Inc.	
DESCRIPTION <b>OUTLINE</b> 250T FR. - TEFC - BB - STD.	
MATERIAL	PROCESS/FINISH
SIZE <b>B</b>	DRAWING NUMBER <b>SS203002</b>
	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 <b>AB</b>	REVISION BY <b>JJB</b>	DATE <b>06-27-2017</b>
ECO <b>ECO-0125361</b>	APPROVED BY <b>TB</b>	DATE <b>06-27-2017</b>
ECO DESCRIPTION <b>UPDATED TO CURRENT STANDARDS</b>		
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DRAWN BY <b>DA</b>
DATE <b>03-26-1993</b>
APPROVED BY <b>TB</b>
DATE <b>03-26-1993</b>
REFERENCE
THIRD ANGLE PROJECTION

<b>Regal Beloit America, Inc.</b>		
		DESCRIPTION <b>CONNECTION DIAGRAM</b> EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR
MATERIAL	PROCESS/FINISH	
SIZE <b>A</b>	DRAWING NUMBER <b>EE7300</b>	SHEET <b>1 OF 1</b>

**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	BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6309	6210						

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  
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S  
\*

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

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



254TTFNA16838

**Submittal**

Data @ **460 V**

**Motor Load Data**

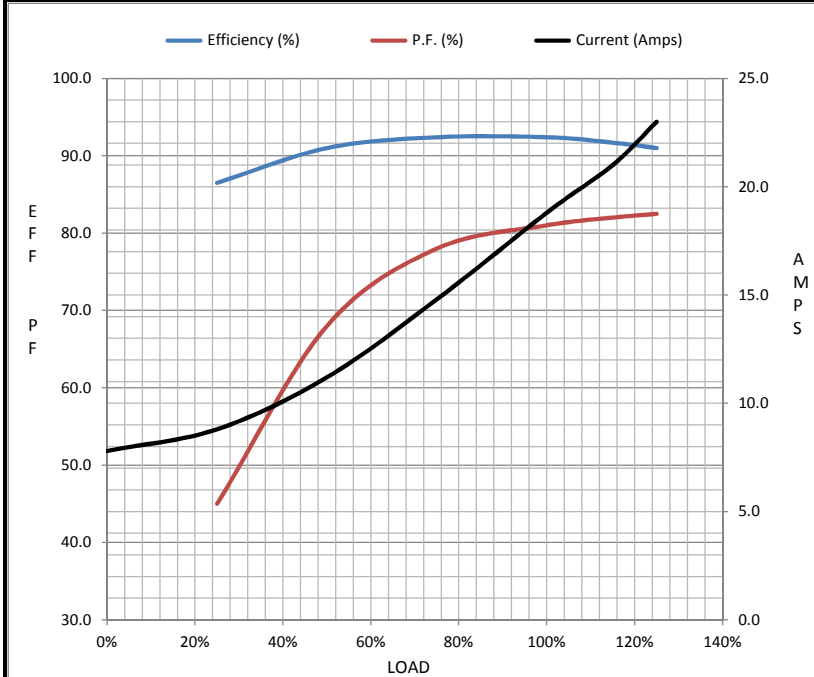
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	7.8	8.8	11.2	14.8	18.8	21.0	23.0	110
Torque (ft-lb)	0.00	11.0	22.0	33.5	44.4	50.5	56.0	85.0
RPM	1800	1792	1788	1780	1775	1,770	1765	0
Efficiency (%)		86.5	91.0	92.4	92.4	91.7	91.0	
P.F. (%)	11.5	45.0	68.0	78.0	81.0	82.0	82.5	40.0

**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 wk <sup>2</sup>	2.40 Lb-Ft <sup>2</sup>			
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



**Speed - Torque Curve**

