

# PRODUCT INFORMATION PACKET

marathon®  
Motors

Model No: 256TTFNA6501

Catalog No: E606

20 HP, Severe Duty Motors, 3 phase, 3600 RPM, 460 V, 256T Frame, TEFC  
Severe Duty Motors



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RegalRexnord

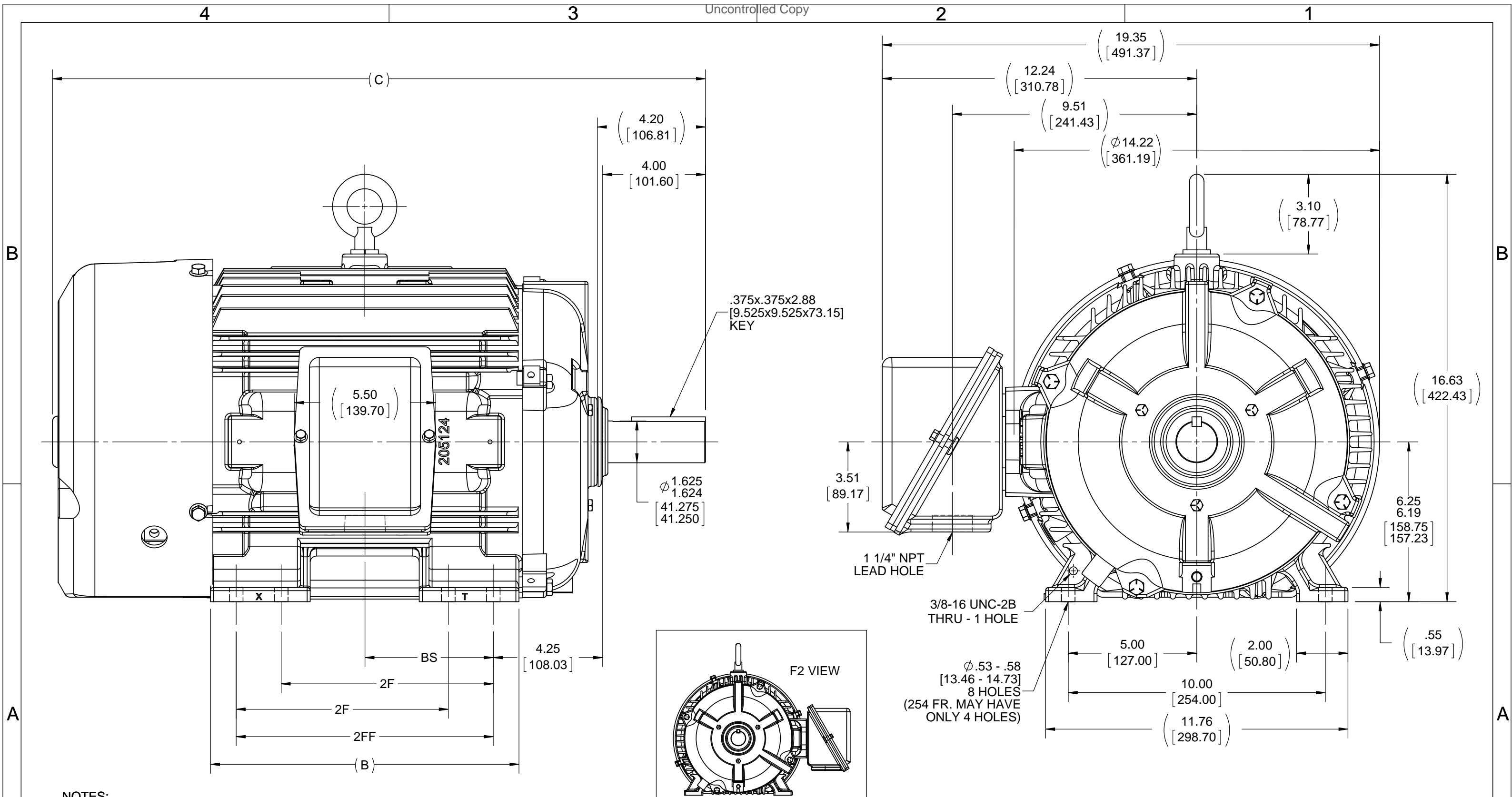


### Nameplate Specifications

Output HP	<b>20 Hp</b>	Output KW	<b>14.9 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>460 V</b>
Current	<b>23.4 A</b>	Speed	<b>3537 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>92.4 %</b>	Power Factor	<b>86</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>G</b>
Frame	<b>256T</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>
Hazardous Location	<b>DIVISION 2 T2B</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>2</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>.394 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>25.40 in</b>
Frame Length	<b>12.25 in</b>	Shaft Diameter	<b>1.625 in</b>
Shaft Extension	<b>4.2 in</b>	Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>
Inverter Load	<b>CONSTANT 20:1</b>		
Outline Drawing	<b>B-SS203002-1225</b>	Connection Drawing	<b>A-EE7300</b>



- 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  
 mm SHOWN IN [BRACKETS]

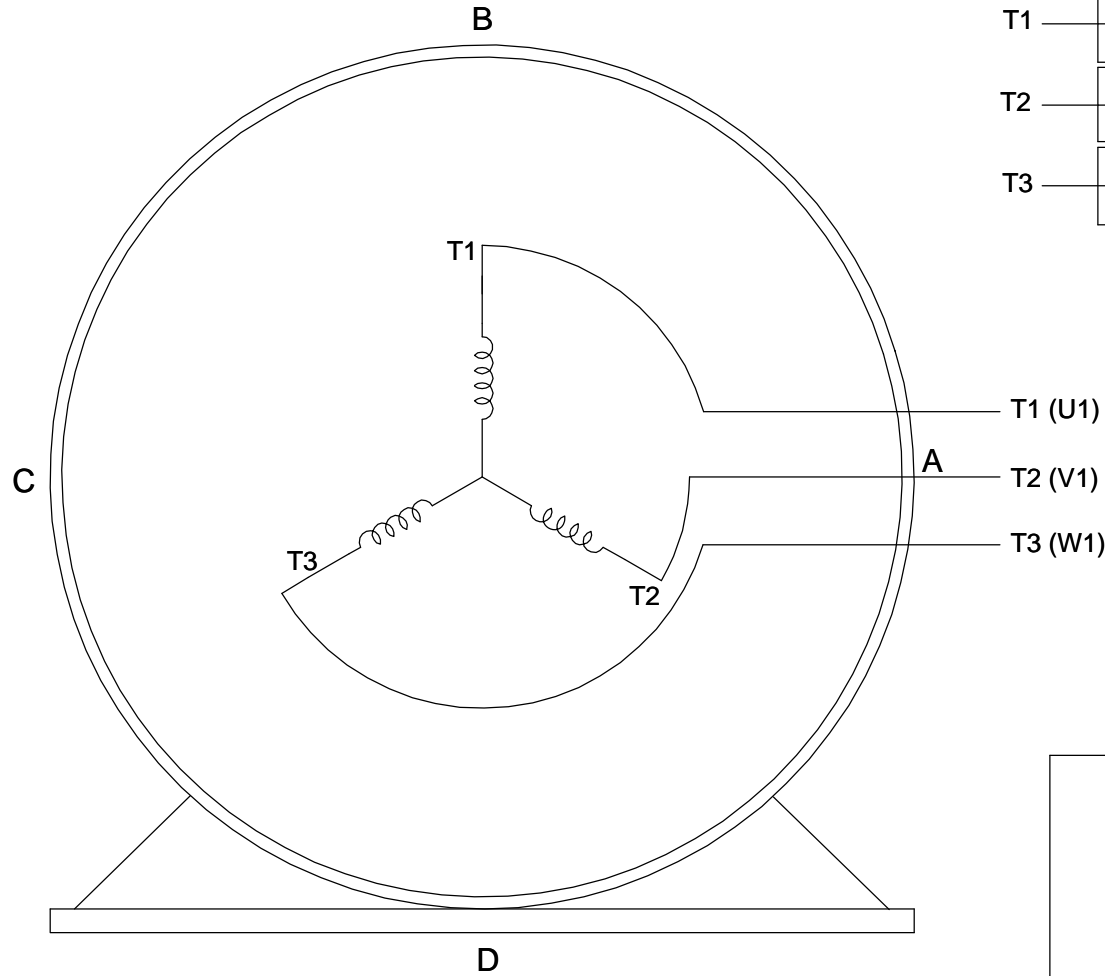
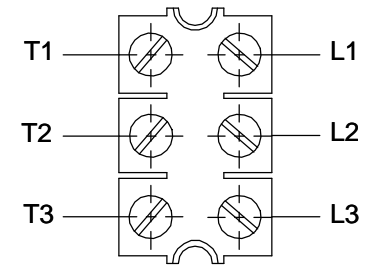
DRAWN BY TVUE
DATE 12-18-2013
APPROVED BY TBROWN
DATE 12-18-2013
REFERENCE
THIRD ANGLE PROJECTION

<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'**

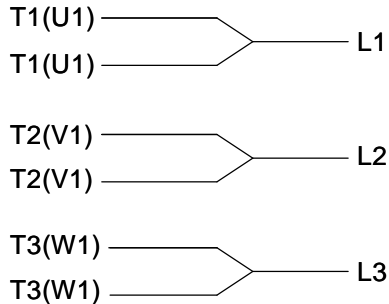
**TO REVERSE ROTATION:  
INTERCHANGE ANY TWO  
LINE LEAD CONNECTIONS.**

**TERMINAL BLOCK WHEN SPECIFIED**



**VIEW OF TERMINAL END**

**IF MOTOR HAS  
6 LEADS**

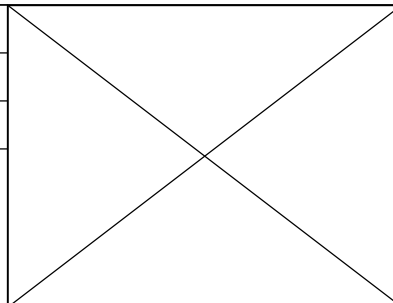


A-9806 DECAL

**OPTIONAL CORD  
CONNECTION**



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#:** 256TTFNA6501 BB      **WINDING#:** K256288 NONE 7  
**CONN. DIAGRAM:** A-EE7300      **ASSEMBLY:** F1/F2 CAPABLE  
**OUTLINE:** B-SS203002-1225

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
20	14.9	3600	3537	256T	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60	460	23.4	LINE OR INVERTER	CONTINUOU S	F3	1.15	40	3300

FULL LOAD EFF: 92.4	3/4 LOAD EFF: 91.7	1/2 LOAD EFF: 91	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 86	3/4 LOAD PF: 85	1/2 LOAD PF: 78	91.7	SQ CAGE INV RATED	7

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
29.7 LB-FT	145	55 LB-FT 185	84 LB-FT 283	55

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
72 dBA	82 dBA	1.3 LB-FT^2	26 LB-FT^2	20 SEC.	2	370 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	DIVISION 2 T2B	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

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

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\*

DATE: 06/21/2017 10:48:12 AM  
 FORM 3531 REV.3 02/07/99  
 \*\* Subject to change without notice.

**Data Sheet**

**Date:** 16-06-2017  
**Customer:** \_\_\_\_\_  
**Attention:** \_\_\_\_\_  
**Submitted by:** FAREEDA DUDEKULA



256TTFNA6501

**Submittal**

Data @ **460 V**

**Motor Load Data**

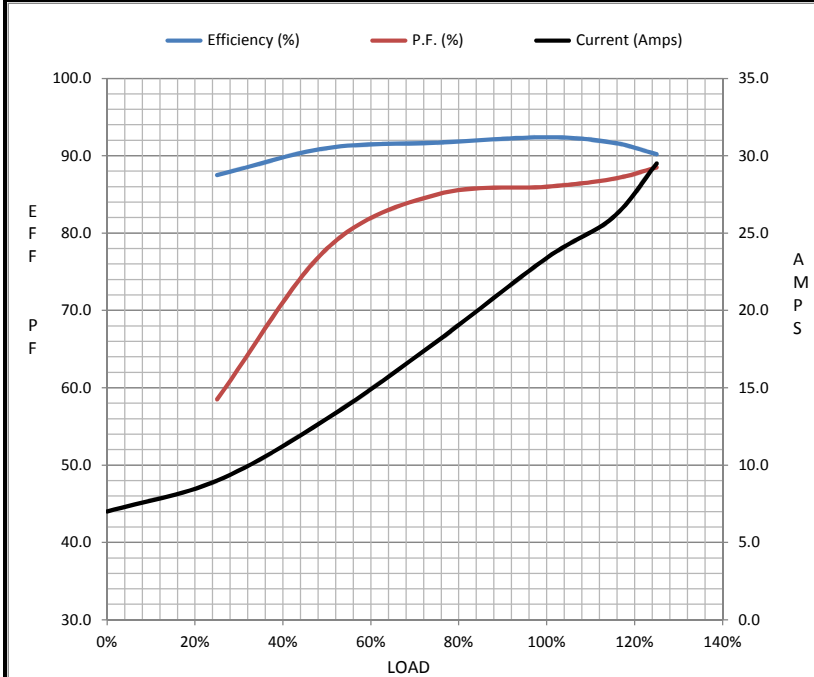
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	7.0	9.0	13.0	18.0	23.4	26.0	29.5	145
Torque (ft-lb)	0.00	7.5	15.0	22.0	29.7	31.0	37.5	55.0
RPM	3600	3585	3570	3555	3537	3,525	3515	0
Efficiency (%)		87.5	91.0	91.7	92.4	91.7	90.2	
P.F. (%)	10.5	58.5	78.0	85.0	86.0	87.0	88.5	37.0

**Motor Speed Data**

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3155	3537	3600
Current (Amps)	145	131	100	23.4	7.0
Torque (ft-lb)	55.0	50.0	84.0	29.7	0.00

**Information Block**

HP	20.0			
Sync. RPM	3600			
Frame	256			
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>	1.30 Lb-Ft <sup>2</sup>			
Ref Wdg	K256288 NONE			
Sound Pressure @ 1M	72 dBA			
VFD Rating	CONSTANT 20:1			
Outline Dwg	B-SS203002-1225			
Conn. Diag	A-EE7300			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.2530	0.2230	1.0790	1.1190	37.7720



**Speed - Torque Curve**

