

# PRODUCT INFORMATION PACKET

Model No: 254TTDBD6008

Catalog No: GT0561

Close-Coupled Pump Motor, 20 HP, 3 Ph, 60 Hz, 575 V, 3600 RPM, 254JM Frame, DP



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**Nameplate Specifications**

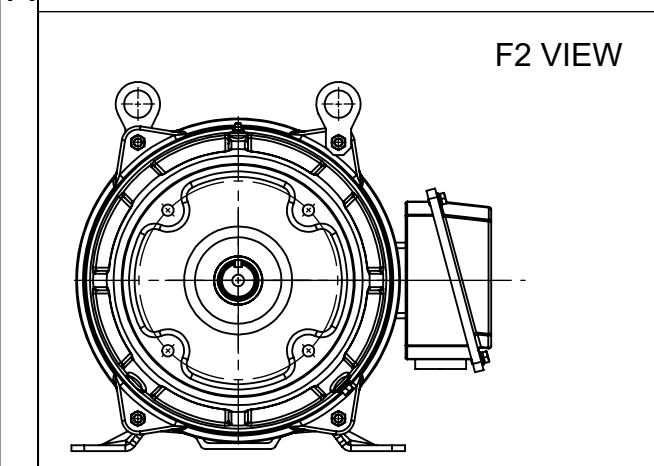
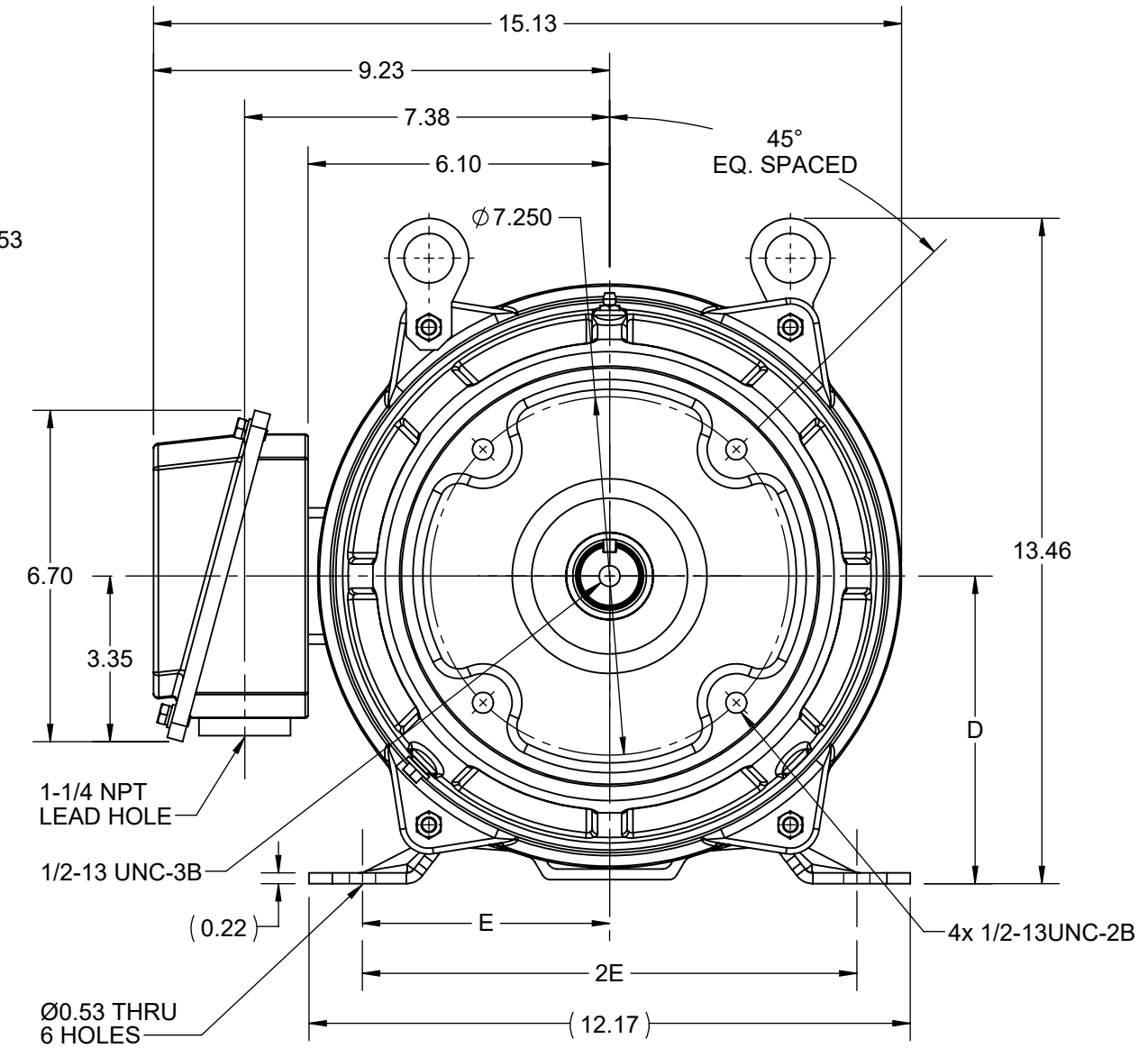
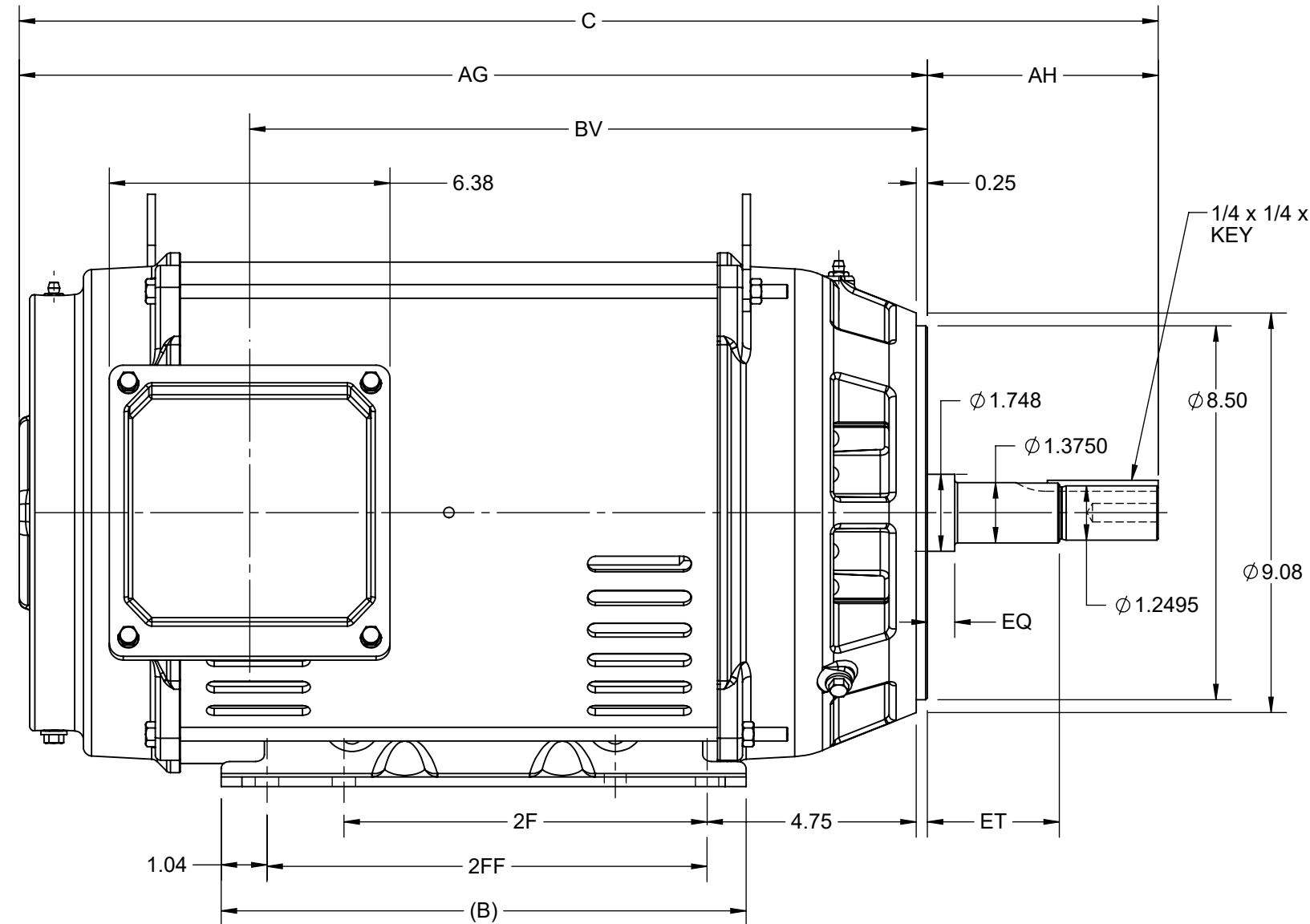
Output HP	<b>20 Hp</b>	Output KW	<b>14.9 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>575 V</b>
Current	<b>19.2 A</b>	Speed	<b>3552 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>91 %</b>	Power Factor	<b>85.5</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>F</b>
Frame	<b>254JM</b>	Enclosure	<b>Drip Proof</b>
Thermal Protection	<b>No Protection</b>	Ambient Temperature	<b>40 °C</b>
Drive End Bearing Size	<b>6309</b>	Opp Drive End Bearing Size	<b>6208</b>
UL	<b>Recognized</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>22</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>.64 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>Rolled Steel</b>
Shaft Type	<b>JM</b>	Overall Length	<b>24.41 in</b>
Frame Length	<b>10.62 in</b>	Shaft Diameter	<b>1.249 in</b>
Shaft Extension	<b>5.5 in</b>	Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>
Inverter Load	<b>CONSTANT 2:1/VARIABLE 10:1</b>		
Outline Drawing	<b>SS620822-100</b>	Connection Drawing	<b>EE7300</b>



DASH NO.	4				3				2				1	
	B	C	D	E	2E	2F	2FF	AG	AH	BV	EQ	ET	MOUNTING	FRAME
100	11.93	24.31	6.25	5.00	10.00	8.25	10.00	19.06	5.248	13.82	0.63	3.00	F1 OR F2	254JM
200		25.88						20.63		15.40				256JM



DRAWING REVISION D	REVISION BY RAM	REV DATE/© DATE 08/02/2022
REQUEST NUMBER CR-0006810	APPROVED BY SBD	DATE 08/02/2022
REQUEST NUMBER DESCRIPTION VIEWS UPDATED AS PER 3D		
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PRIMARY DIMENSIONS ARE INCH  
mm DIMENSIONS IN [BRACKETS]  
ARE FOR REFERENCE ONLY

DRAWN BY VS	Regal Beloit America, Inc.	
DATE 12-02-2021		
APPROVED BY GNK	DESCRIPTION <b>OUTLINE</b> 254/256JM FR NEMA ODP RS	
DATE 12-02-2021	MATERIAL	PROCESS/FINISH
REFERENCE	SIZE B	DRAWING NUMBER SS620822
THIRD ANGLE PROJECTION	SHEET 1 OF 1	

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

TERMINAL BLOCK WHEN SPECIFIED

TO REVERSE ROTATION:  
INTERCHANGE ANY TWO LINE  
LEAD CONNECTIONS



VIEW OF TERMINAL END

**OPTIONAL CORD CONNECTION**

L1	WHITE
L2	RED
L3	BLACK

DRAWING REVISION AC	REVISION BY BS	REV DATE/© DATE 26/07/2022
REQUEST NUMBER CR-0010402	APPROVED BY SN	DATE 26/07/2022
REQUEST NUMBER DESCRIPTION DRAWING UPDATED		
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DRAWN BY DA
DATE 03-26-1993
APPROVED BY TB
DATE 03-26-1993
REFERENCE
THIRD ANGLE PROJECTION

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



**P.O. BOX 8003  
WAUSAU, WI 54401-8003  
PH. 715-675-3311**

**CERTIFICATION DATA SHEET**

**CUSTOMER:**

**CUSTOMER PO#:**

**ORDER #:**

**MODEL #:** 254TTDBD6008 AA

**CONN. DIAGRAM:** EE7300

**CUSTOMER PART #:**

**OUTLINE:** SS620822-254

**MOUNTING:** F1/F2 CAPABLE

**WINDING #:** HE31602015 3

**TYPICAL MOTOR PERFORMANCE DATA**

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
20	14.9	3600	3552	254JM	DP	F	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60	575	19.2	LINE OR INVERTER	CONTINUOUS	F7	1.15	40

FULL LOAD EFF:	91	3/4 LOAD EFF:	91	1/2 LOAD EFF:	90.6	GTD. EFF		ELEC. TYPE	
FULL LOAD PF:	85.5	3/4 LOAD PF:	80.5	1/2 LOAD PF:	69.5	90.2		SQ CAGE INV RATED	

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
29.6 LB-FT	109.6	52 LB-FT 176 %	74 LB-FT 250 %	45

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
75 dBA	85 dBA	1.1 LB-FT^2	- LB-FT^2	15 SEC.	3	300 LBS.

**\*\*\* SUPPLEMENTAL INFORMATION \*\*\***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	STANDARD	RIGID	HORIZONTAL	FALSE	NONE	FALSE	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	ODE						
BALL	BALL	POLYREX EM	JM	NONE	NONE	1045 HOT ROLLED (C-204)	ROLLED STEEL
6309	6208						

THERMO-PROTECTORS				THERMISTORS	CONTROL	SPACE HEATERS
THERMOSTATS	PROTECTORS	WDG RTDs	BRG RTDs			
NONE	NOT	NONE	NONE	NONE	FALSE	NONE VOLTS

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<b>INVERTER</b> TORQUE: CONSTANT 2:1/VARIABLE 20:1 INV. HP SPEED RANGE: NONE
<b>ENCODER:</b> NONE NONE NONE NONE NONE PPR
<b>BRAKE:</b> NONE NONE NONE P/N NONE NONE NONE NONE FT-LB NONE V NONE Hz

**PREPARED BY:** Fareeda Dudekula  
**DATE:** 05/09/2018 08:17:32 AM  
FORM 3531 REV.3 02/07/99  
\*\* Subject to change without notice.

Data Sheet

Date: 12/2/2021  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: \_\_\_\_\_



254TTDBD6008

Submittal

Data @ 575 V

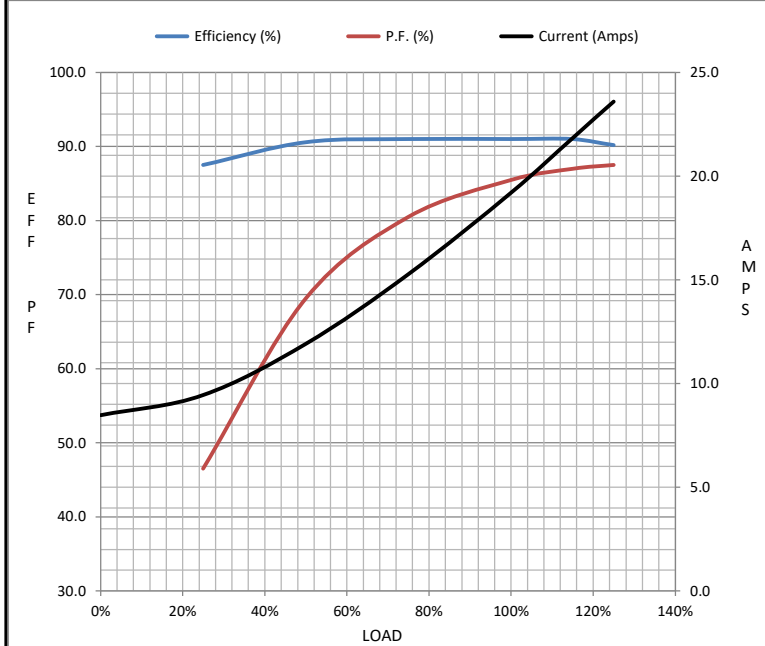
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	8.5	9.4	11.9	15.3	19.2	21.8	23.6	110
Torque (ft-lb)	0.00	7.3	14.7	22.2	29.6	34.2	37.2	52.0
RPM	3600	3588	3578	3566	3552	3,545	3540	0
Efficiency (%)		87.5	90.6	91.0	91.0	91.0	90.2	
P.F. (%)	7.0	46.5	69.5	80.5	85.5	87.0	87.5	39.0

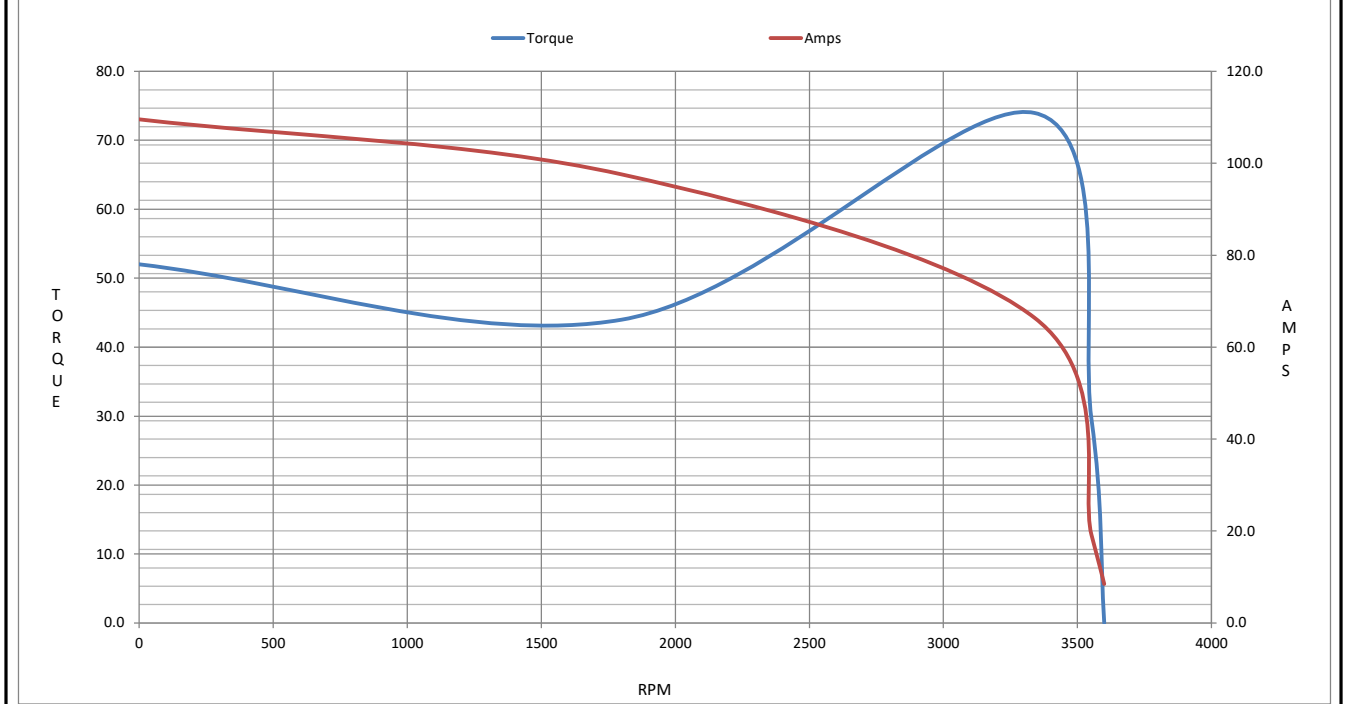
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3340	3552	3600
Current (Amps)	110	97.6	66.4	19.2	8.5
Torque (ft-lb)	52.0	44.0	74.0	29.6	0.00

Information Block				
HP	20.0			
Sync. RPM	3600			
Frame	254			
Enclosure	DP			
Construction	TDB			
Voltage	575 V			
Frequency	60 Hz			
Design	B			
LR Code letter	F			
Service Factor	1.15			
Temp Rise @ FL	45 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	3,300 feet			
Rotor/Shaft wk <sup>2</sup>	1.10 Lb-F <sup>2</sup>			
Ref Wdg	HA31602015 NONE			
Sound Pressure @ 1M	75 dBA			
VFD Rating	CONSTANT 2:1/VARIABLE 20:1			
Outline Dwg	SS620822-100			
Conn. Diag	EE7300			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.6160	0.2330	1.8100	1.3670	41.3210



Speed - Torque Curve



## EC Declaration of Conformity

The undersigned representing  
the manufacturer:

Regal Beloit America  
100 East Randolph St.  
Wausau, WI 54401

and the authorized representative  
established within the Community:

Marathon Electric UK  
6F Thistleton Road Ind. Estate  
Market Overton  
Oakham, Rutland LE15 7PP UK

are committed to providing customers with products that comply with applicable regulations and international protocols to which they are subject, including the requirements of the European Parliament Directive on the Harmonization of the laws relating to electrical equipment designed for use within certain voltage limits (2014/35/EU).

Regal Beloit America declares that the following product(s), to which this declaration relates, are in conformity with the relevant sections of the EC standards listed below.

This statement supersedes any statements previously issued pertaining to the product(s) listed below and is subject to change without notice.

Model No : 254TTDBD6008

(Model No. may contain prefix and/or suffix characters)

Catalog No : GT0561

Rework No : N/A

Directives :

Low Voltage Directive 2014/35/EU

Harmonized Standards Used :

EN 60034-1: 2010 (IEC 60034-1: 2010)

EN 60034-5: 2001/A1:2007 (IEC 60034-5: 2000/A1:2006)

Authorized Representative:



Michael A. Logsdon  
Vice President, Technology

Authorized Representative in the Community:



Julian Clark  
Marketing Engineer

Created on 09/01/2022

**CE 22**