

# PRODUCT INFORMATION PACKET

Model No: 254TTDBD6012

Catalog No: GT2461

Close-Coupled Pump Motor, 20 HP, 3 Ph, 60 Hz, 208-230/460 V, 3600 RPM, 254JP Frame, DP



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**Nameplate Specifications**

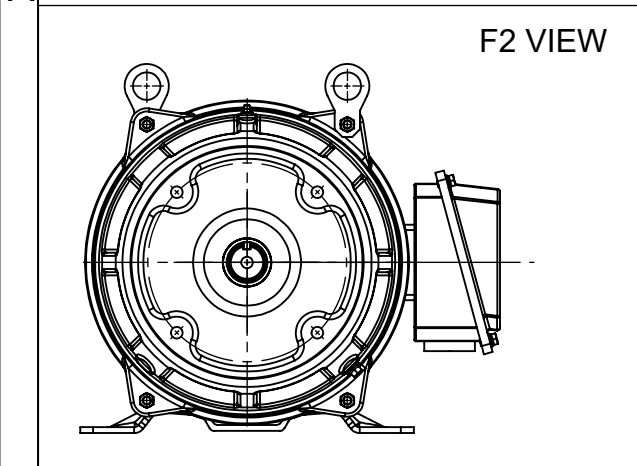
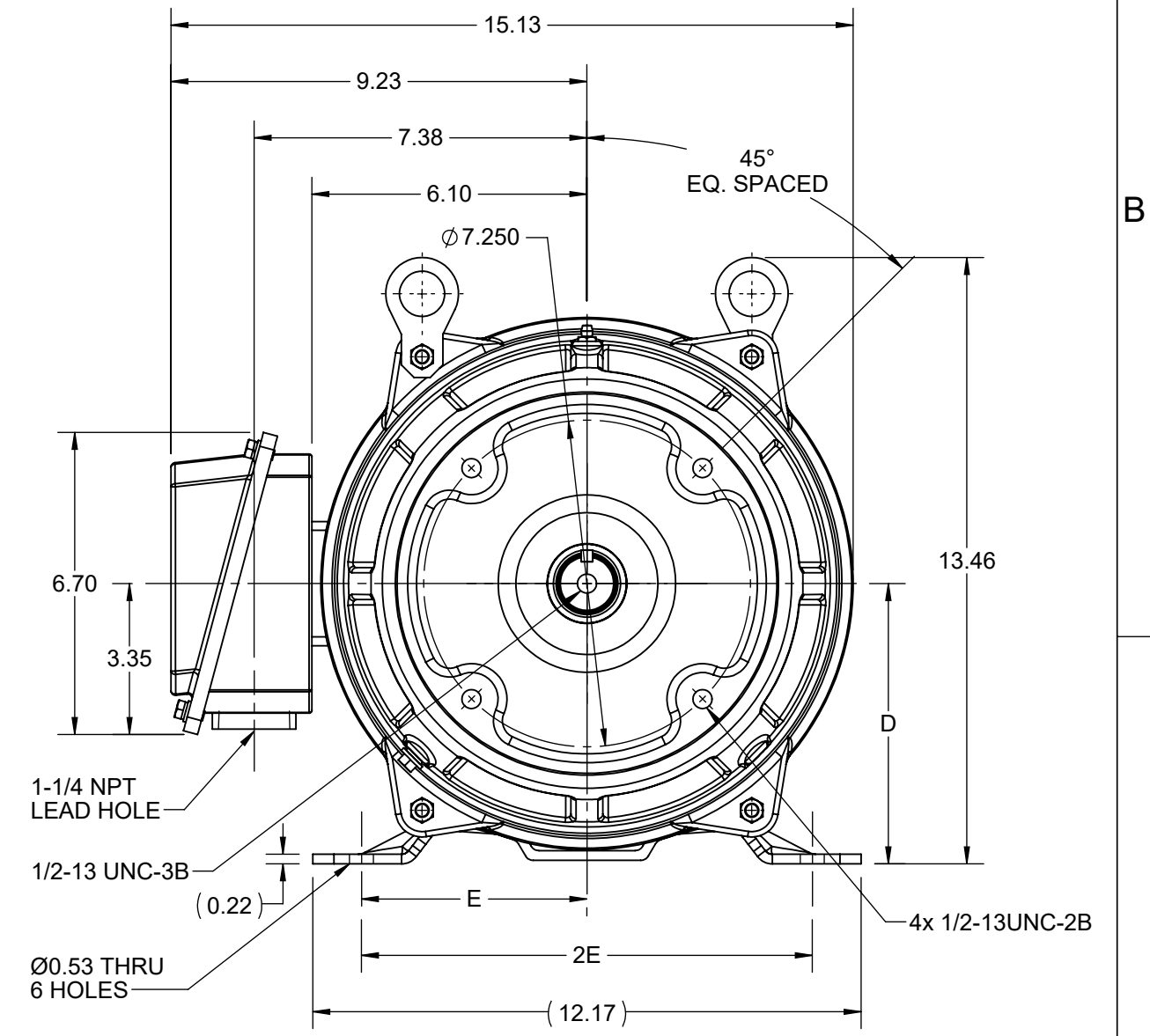
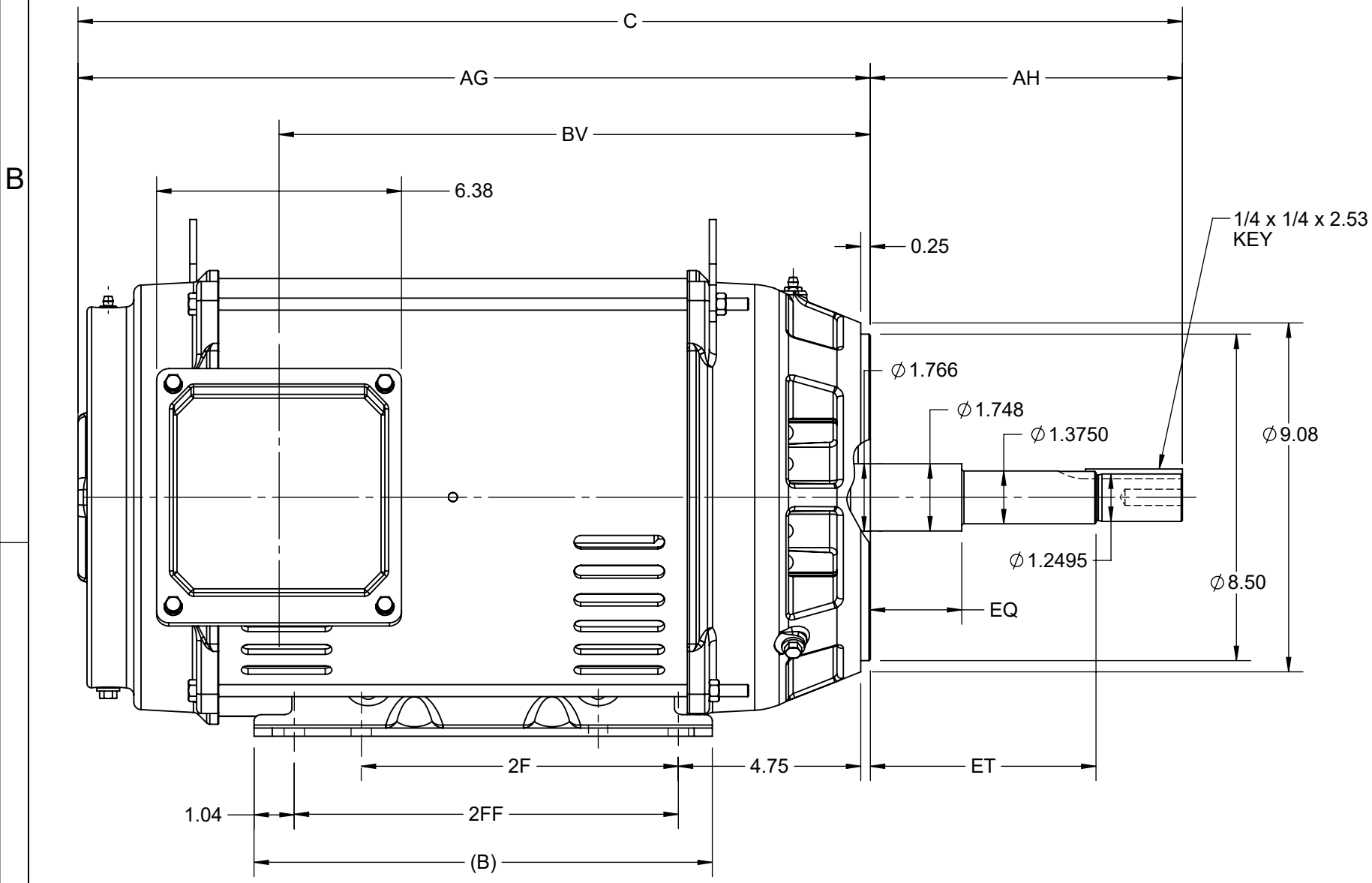
Output HP	<b>20 Hp</b>	Output KW	<b>14.9 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>208-230/460 V</b>
Current	<b>51.5-48.0/24.0 A</b>	Speed	<b>3552 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>91 %</b>	Power Factor	<b>85.5</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</b>	KVA Code	<b>F</b>
Frame	<b>254JP</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>JP</b>	Overall Length	<b>27.32 in</b>
Frame Length	<b>10.62 in</b>	Shaft Diameter	<b>1.249 in</b>
Shaft Extension	<b>8.41 in</b>	Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>
Inverter Load	<b>CONSTANT 2:1/VARIABLE 10:1</b>		
Connection Drawing	<b>EE7308K</b>	Outline Drawing	<b>SS620825-100</b>



4				3				2				1		
DASH NO.	B	C	D	E	2E	2F	2FF	AG	AH	BV	EQ	ET	MOUNTING	FRAME
100	11.93	27.18	6.25	5.00	10.00	8.25	10.00	19.06	8.122	13.82	2.38	5.87	F1 OR F2	254JP
200		28.76						20.63		15.40				256JP

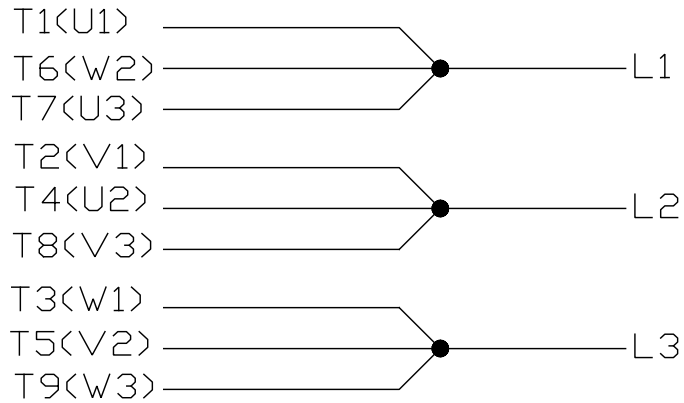


DRAWING REVISION C	REVISION BY RAM	REV DATE/© DATE 08/02/2022
REQUEST NUMBER CR-0006810	APPROVED BY SBD	DATE 08/02/2022
REQUEST NUMBER DESCRIPTION VIEWS UPDATED AS PER 3D		
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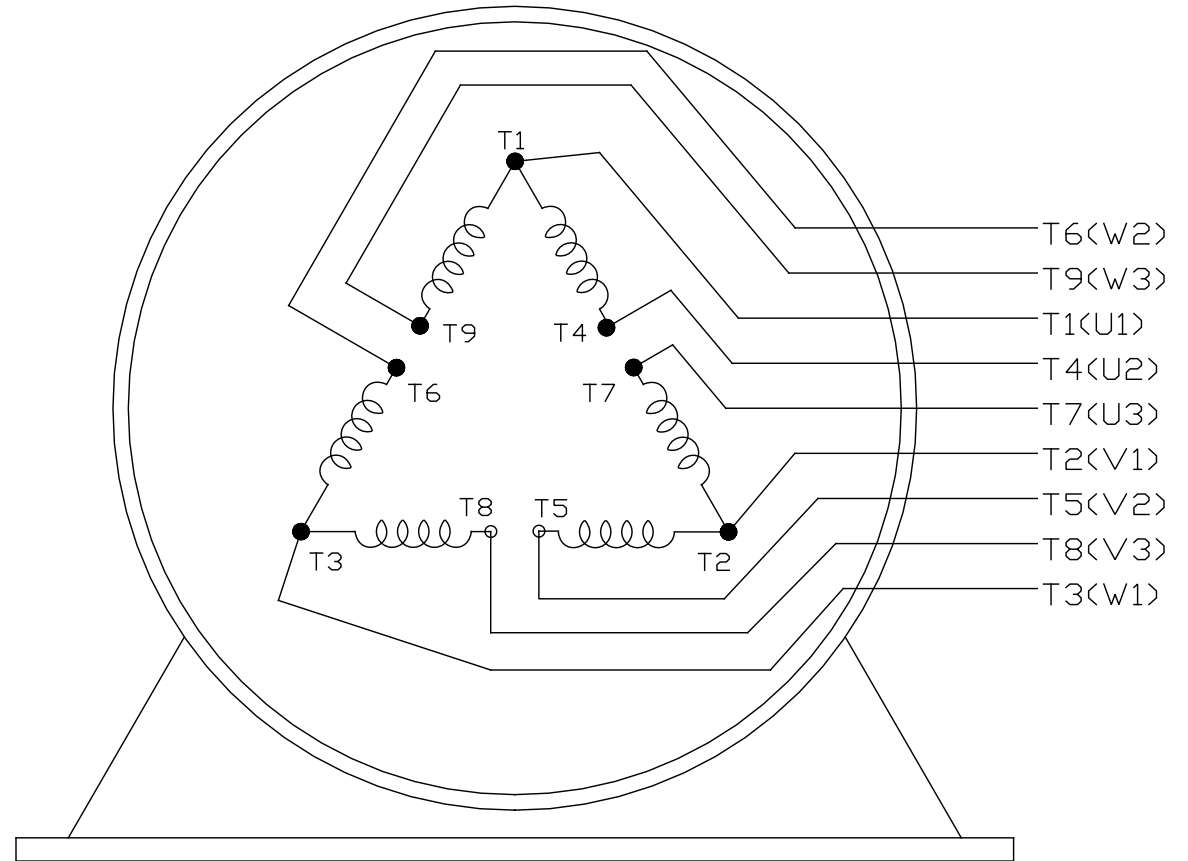
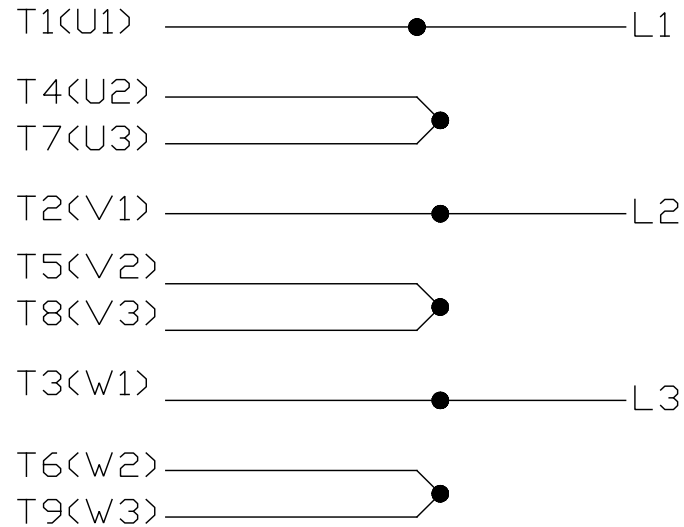
PRIMARY DIMENSIONS ARE INCH  
mm DIMENSIONS IN [BRACKETS]  
ARE FOR REFERENCE ONLY

DRAWN BY ZXW	Regal Beloit America, Inc.
DATE 25/02/2016	
APPROVED BY WY	DESCRIPTION <b>OUTLINE</b> 254/256JP FR NEMA ODP RS
DATE 25/02/2016	MATERIAL
REFERENCE	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE B
	DRAWING NUMBER SS620825
	SHEET 1 OF 1


LOW VOLTAGE



HIGH VOLTAGE



VIEW OF TERMINAL END

				TOLERANCES UNLESS SPECIFIED		 REGAL - BELOIT CORPORATION	DRAWN PGK 06-04-1997			
NO.	REVISION	BY & DATE	CHK	ANG	±		UNIT	CHK	ML 06-05-1997	
E	CORRECTED IEC MARKINGS ECD-0111208	WGJ 01-23-2017	EMH	DEC.		INCHES				
D	RE-DRAWN WITH REGAL LOGO ECD-0110493	WGJ 09-30-2016	EMH	.X	±.1			APPD GK 06-15-1997		
8	ADDED IEC DESIGNATIONS MU95020	TJW 4/30/2010	MJS	.XX	±.02		TITLE	SCALE		
7	REVISED HIGH VOLTAGE L2 WAS L3 CN52600-354	MRB 09-21-1998		.XXX	±.005		CONNECTION DIAGRAM	REF		
6	REDRAWN ON CADD	PGK 06-05-1997		.XXXX	±.0005		DELTA CON. - 3Ø - 9 LEADS	FMF		
					±7'30"		MAT'L.	PREV		
			RFP				FINISH			
THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED THIS IS AN ELECTRONICALLY GENERATED DOCUMENT - DO NOT SCALE THIS PRINT							CAD FILE EE7308K	SIZE	DRAWING NO. PAGE OF	REV.
							A	EE7308K	E	



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

**CERTIFICATION DATA SHEET**

**CUSTOMER:**

**CUSTOMER PO#:**

**ORDER #:**

**MODEL #:** 254TTDBD6012 AA

**CONN. DIAGRAM:** EE7308K

**CUSTOMER PART #:**

**OUTLINE:** SS620825-254

**MOUNTING:** F1/F2 CAPABLE

**WINDING #:** HE31602015 2

**TYPICAL MOTOR PERFORMANCE DATA**

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
20&15	14.9&11.2	3600	3552&2958	254JP	DP	F	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	230/460&190/380	48/24&45/22.5	LINE OR INVERTER	CONTINUOUS	F7	1.15/1.15	40

FULL LOAD EFF:	91&91	3/4 LOAD EFF:	91	1/2 LOAD EFF:	90.6	GTD. EFF		ELEC. TYPE	
FULL LOAD PF:	85.5&84.5	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	274 / 137	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	JP	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

* N O T E S  *	<b>INVERTER</b> <b>TORQUE:</b> CONSTANT 2:1/VARIABLE 20:1 <b>INV. HP SPEED RANGE:</b> 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 08:35:13 AM

FORM 3531 REV.3 02/07/99

\*\* Subject to change without notice.

Data Sheet

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



254TTDBD6012

Submittal

Data @ 460 V

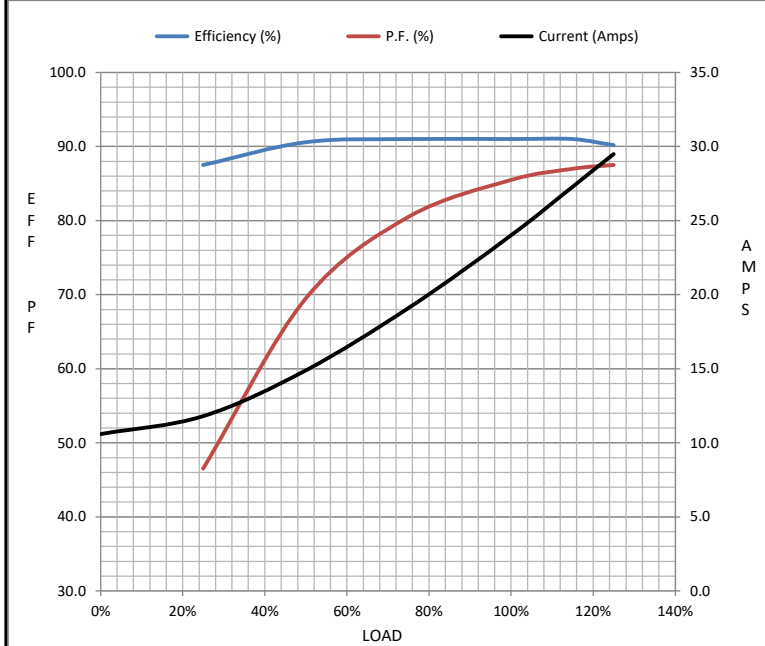
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	10.6	11.8	14.9	19.1	24.0	27.3	29.5	137
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

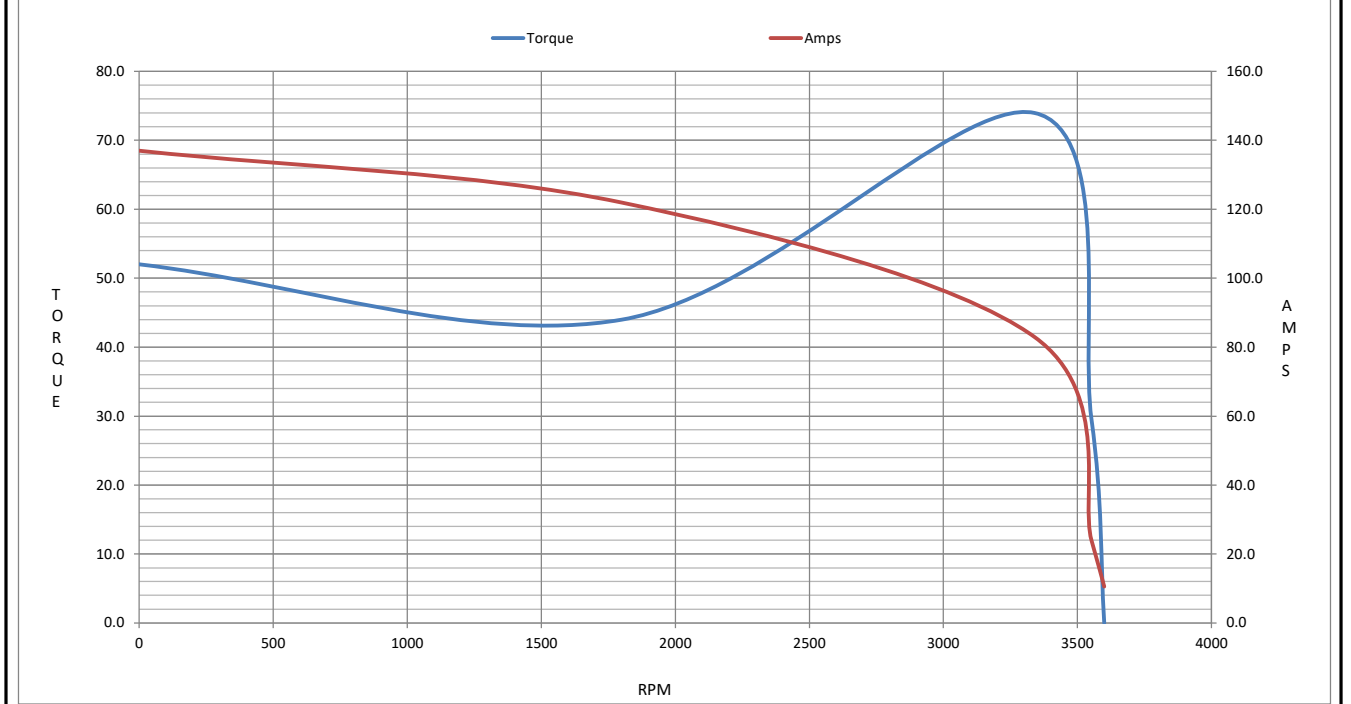
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3340	3552	3600
Current (Amps)	137	122	83.0	24.0	10.6
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	208-230/460#190/380 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	SS620825-100			
Conn. Diag	EE7308K			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.3940	0.1490	1.1590	0.8750	26.4460



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 : 254TTDBD6012

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

Catalog No : GT2461

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**