

# PRODUCT INFORMATION PACKET

Model No: 254TTDBD7208

Catalog No: Y418A

Multispeed Motor, 7.50 & 3.33 HP, 3 Ph, 60 & 60 Hz, 460 & 460 V, 1800 & 1800 RPM, 254T Frame, DP



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**Nameplate Specifications**

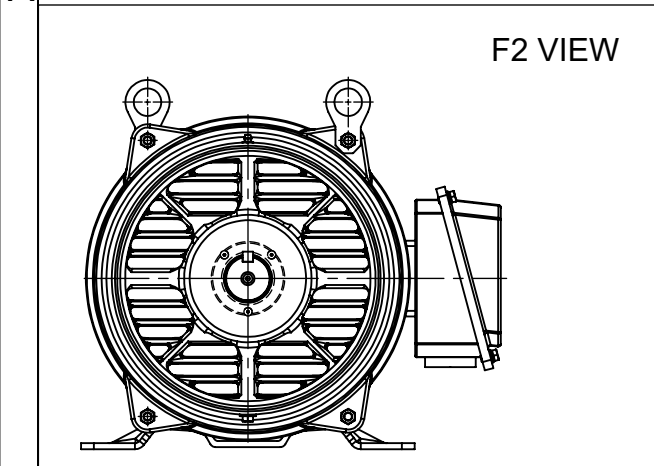
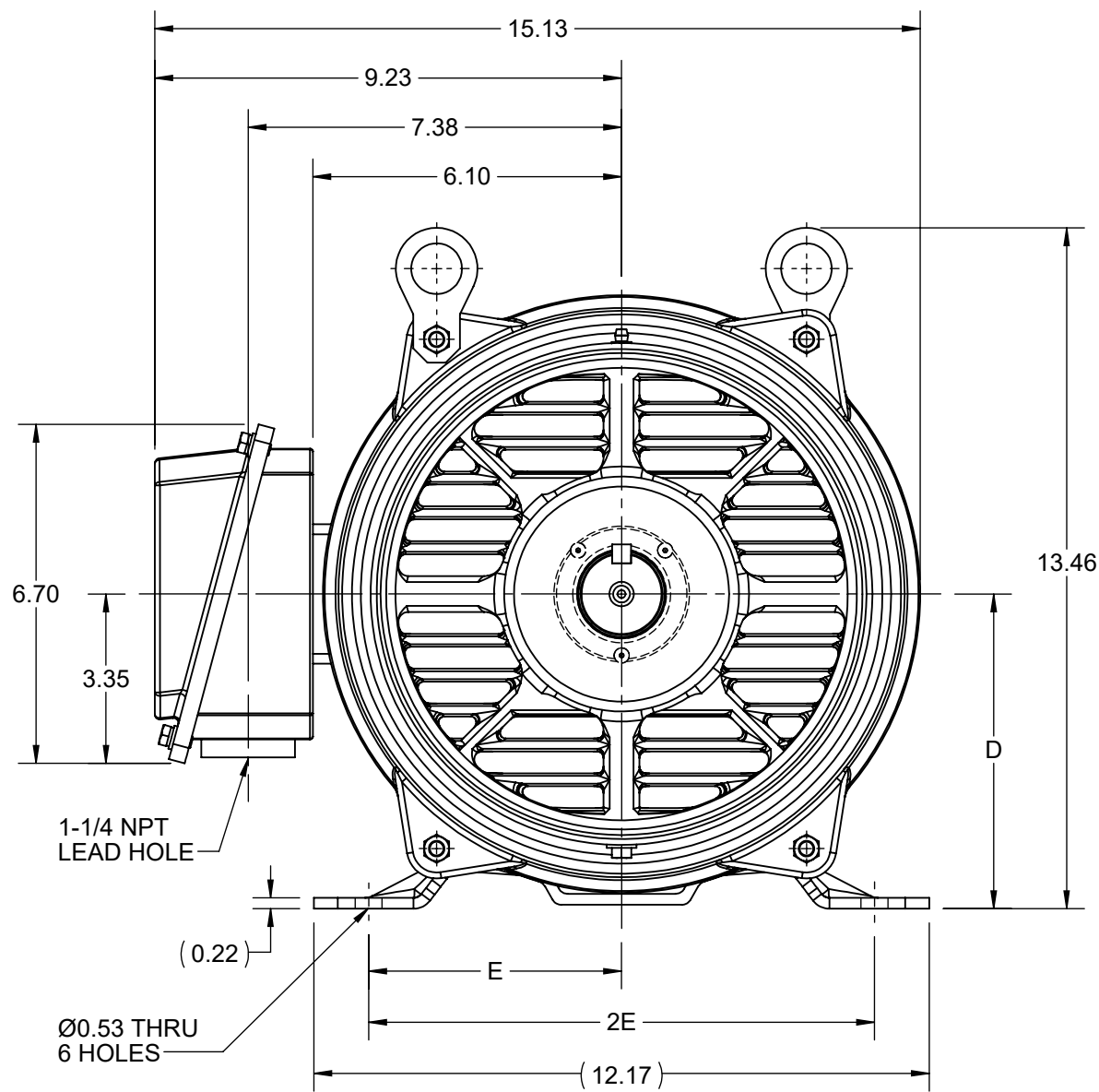
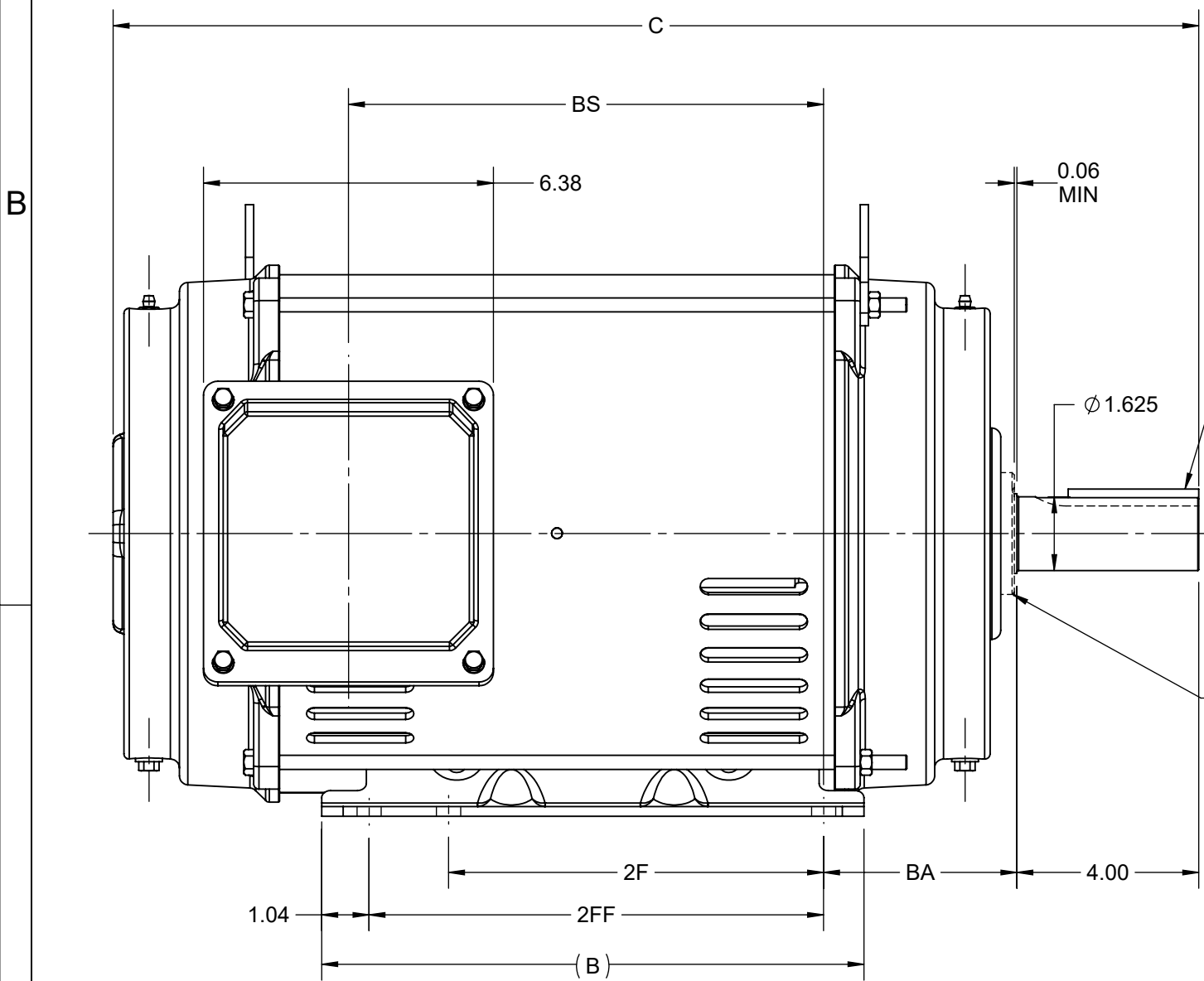
Phase	<b>3</b>	Output HP	<b>7.50 &amp; 3.33 Hp</b>
Output KW	<b>5.6 &amp; 2.5 kW</b>	Voltage	<b>460 &amp; 460 V</b>
Speed	<b>1780 &amp; 1183 rpm</b>	Service Factor	<b>1.15 &amp; 1.15</b>
Frame	<b>254T</b>	Enclosure	<b>Drip Proof</b>
Thermal Protection	<b>No Protection</b>	Efficiency	<b>88.5 &amp; 86 %</b>
Ambient Temperature	<b>40 °C</b>	Frequency	<b>60 &amp; 60 Hz</b>
Current	<b>9.1 &amp; 4.8 A</b>	Power Factor	<b>83</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>2VT</b>	KVA Code	<b>H</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>2</b>		

**Technical Specifications**

Electrical Type	<b>Squirrel Cage Induction Run</b>	Starting Method	<b>Across The Line</b>
Poles	<b>4//6</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>1.7815 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>T</b>	Shaft Diameter	<b>1.625 in</b>
Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>		
Connection Drawing	<b>EE7317</b>	Outline Drawing	<b>SS620685-100</b>

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4				3				2			1
DASH NO.	B	C	D	E	2E	2F	2FF	BA	BS	MOUNTING	FRAME
100	11.93	22.31	6.25	5.00	10.00	8.25	10.00	4.25	8.82	F1 OR F2	254T
200		23.88							10.45		256T

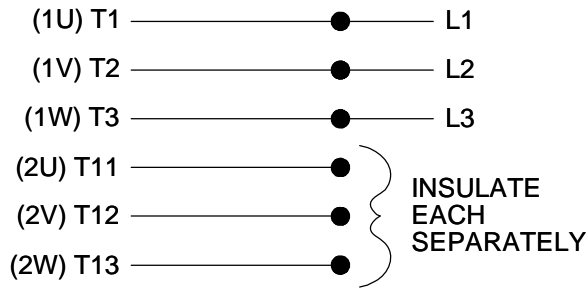


DRAWING REVISION C	REVISION BY GOPI J	REV DATE/© DATE 08/02/2022
REQUEST NUMBER CR-0006810	APPROVED BY SBD	DATE 08/02/2022
REQUEST NUMBER DESCRIPTION VIEWS UPDATED AS PER 3D		
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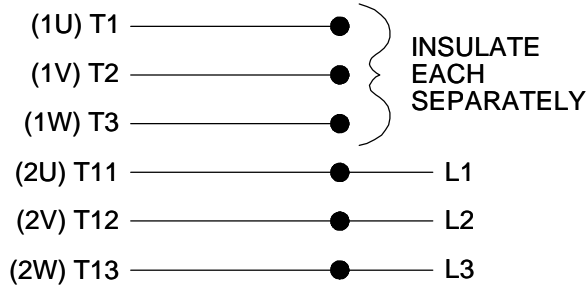
PRIMARY DIMENSIONS ARE INCH  
mm DIMENSIONS IN [BRACKETS]  
ARE FOR REFERENCE ONLY

DRAWN BY XZ	<b>Regal Rexnord</b> Regal Beloit America, Inc.	
DATE 25/02/2016	DESCRIPTION <b>OUTLINE</b> 254/256T FR NEMA ODP RS	
APPROVED BY	MATERIAL	PROCESS/FINISH
DATE	SIZE B	DRAWING NUMBER SS620685
REFERENCE	THIRD ANGLE PROJECTION	SHEET 1 OF 1

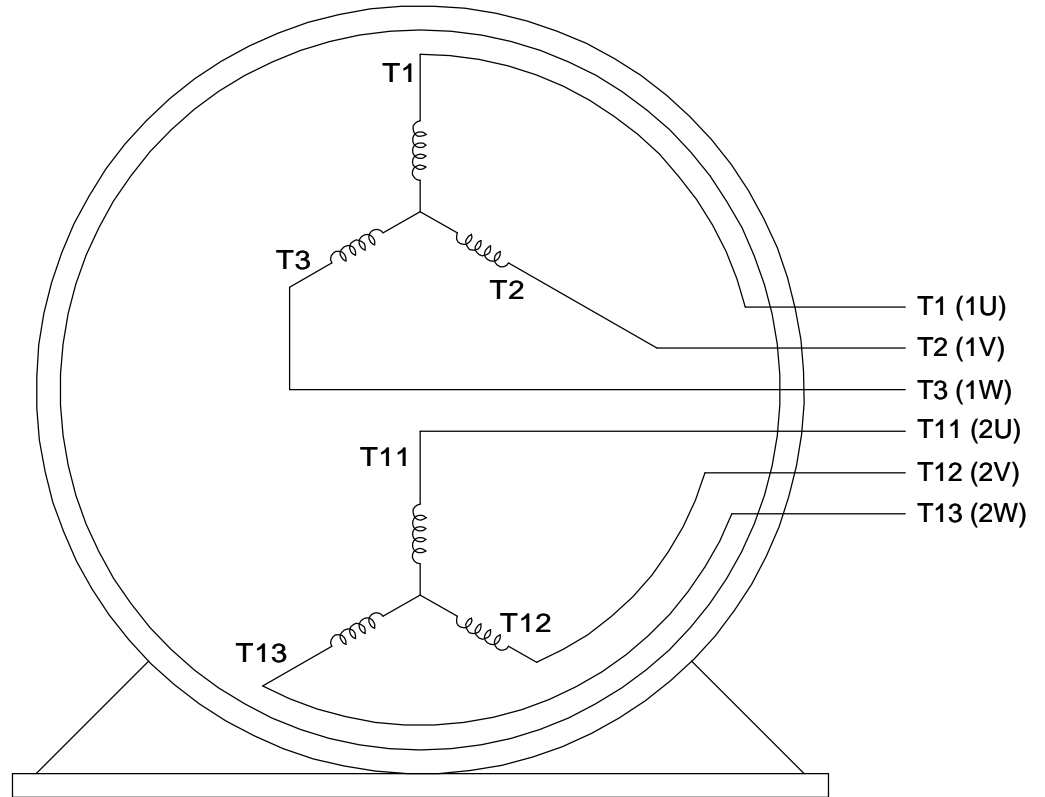
LOW SPEED



HIGHSPEED



**THREE PHASE, SINGLE VOLT, 6 LEAD  
2 SPEED REVERSIBLE MOTOR**



VIEW OF TERMINAL END

TO REVERSE ROTATION ON  
EITHER SPEED: INTERCHANGE  
ANY 2 LEADS ON THE  
WINDING IN USE.

DRAWING REVISION <b>C</b>	REVISION BY <b>JJB</b>	DATE <b>10-25-2017</b>
ECO <b>ECO-0132917</b>	APPROVED BY <b>TLB</b>	DATE <b>10-30-2017</b>

**ECO DESCRIPTION**  
**REVISED PER ECO & UPDATED TO STANDARDS**  
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DRAWN BY <b>LZ</b>	
DATE <b>01-05-1994</b>	
APPROVED BY <b>GK</b>	
DATE <b>01-17-1994</b>	
REFERENCE	
THIRD ANGLE PROJECTION	

**REGAL**™ Regal Beloit America, Inc.

DESCRIPTION  
**CONN DIAGRAM-INTERNAL**  
3 PHASE - SINGLE - 2 SPEED REVERSIBLE

MATERIAL PROCESS/FINISH

SIZE <b>A</b>	DRAWING NUMBER <b>EE7317</b>	SHEET <b>1 OF 1</b>
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Data Sheet

Date: 12/14/2021  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: SHERYL KUEHMICHEL



254TTDBD7208

Submittal

Data @ 460 V

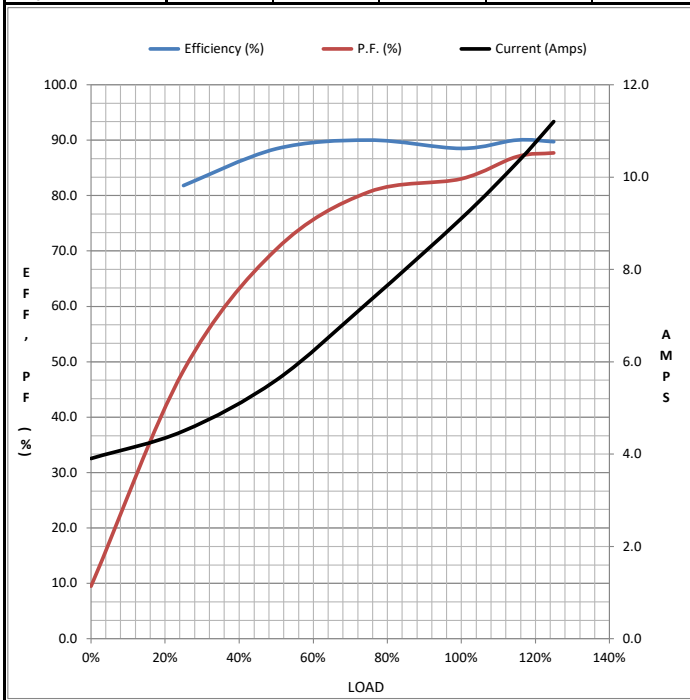
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	3.9	4.5	5.6	7.3	9.1	10.3	11.2	62.0
Torque(ft-lb)	0.00	5.5	11.0	16.6	22.1	25.4	27.7	38.0
RPM	1800	1795	1790	1785	1780	1,777	1774	0
Efficiency (%)		81.8	88.4	90.0	88.5	90.0	89.7	
P.F. (%)	9.5	48.4	70.3	80.6	83.0	87.0	87.7	43

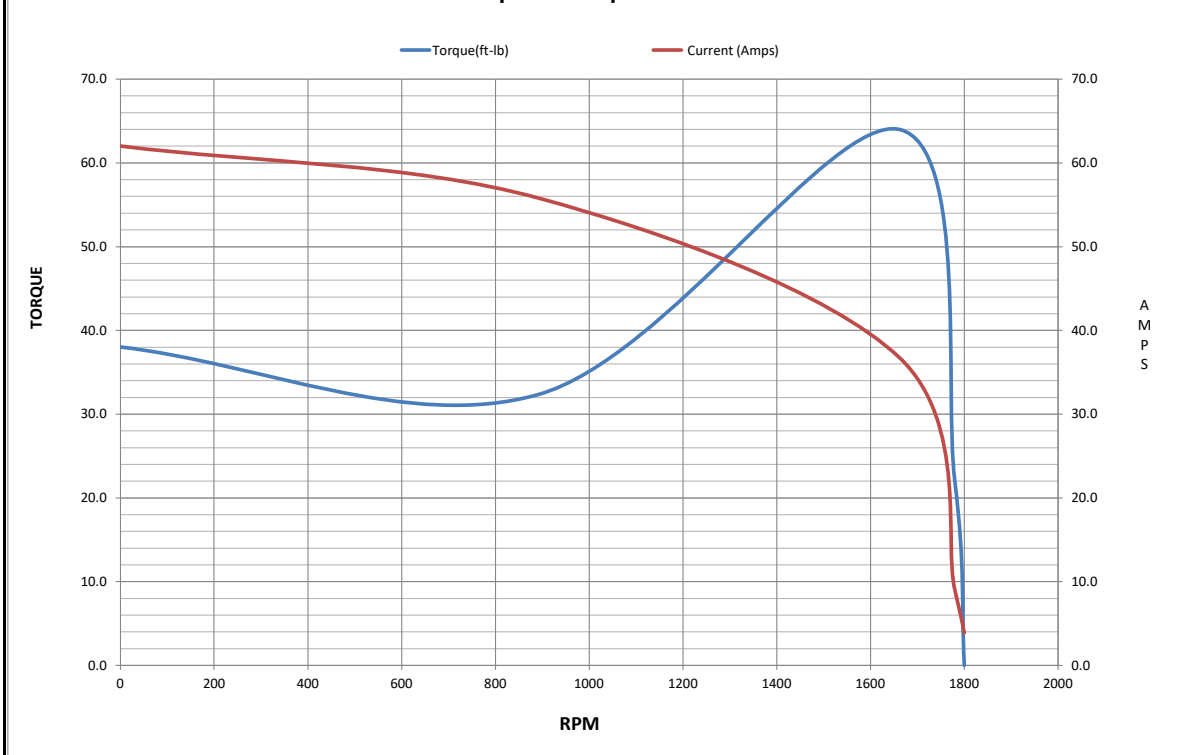
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	890	1661	1780	1800
Current (Amps)	62.0	55.8	36.8	9.1	3.9
Torque(ft-lb)	38.0	32.3	64.0	22.1	0.00

Information Block				
HP	7.5			
Sync. RPM	1800			
Frame	254T			
Enclosure	DP			
Construction	TDX			
Voltage	460 V			
Frequency	60 Hz			
Design	2VT			
LR Code letter	H			
Service Factor	1.15			
Temp Rise @ FL	75 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	3,300 feet			
Rotor/Shaft wk <sup>2</sup>	0.70 Lb-Ft <sup>2</sup>			
Ref Wdg	HA3160(4-6)11 HS			
Sound Pressure @ 1M	70 dBA			
VFD Rating	NA			
Outline Dwg	SS620685-100			
Conn. Diag	EE7317			
Additional Specifications:				
CATALOG # Y470A				
HIGH SPEED PERFORMANCE				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
1.1157	0.3404	2.4204	2.3713	66.4064



Speed -Torque Curve



Data Sheet

Date: 12/14/2021  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: SHERYL KUEHMICHEL



254TTDBD7208

Submittal

Data @ 460 V

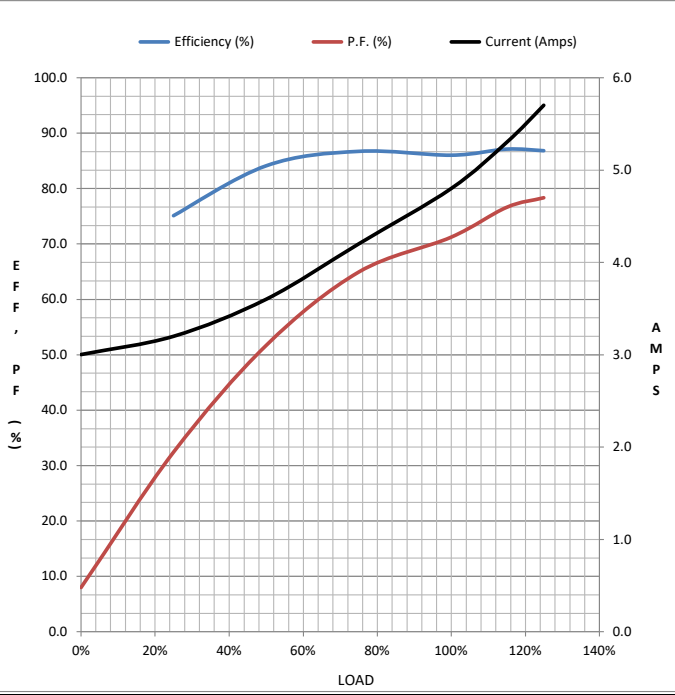
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	3.0	3.2	3.6	4.2	4.8	5.3	5.7	27.0
Torque(ft-lb)	0.00	3.6	7.3	10.9	14.6	16.8	18.4	27.0
RPM	1200	1196	1193	1189	1183	1,182	1180	0
Efficiency (%)		75.1	84.1	86.7	86.0	87.1	86.8	
P.F. (%)	8.0	32.4	51.7	64.9	71.2	76.6	78.3	49

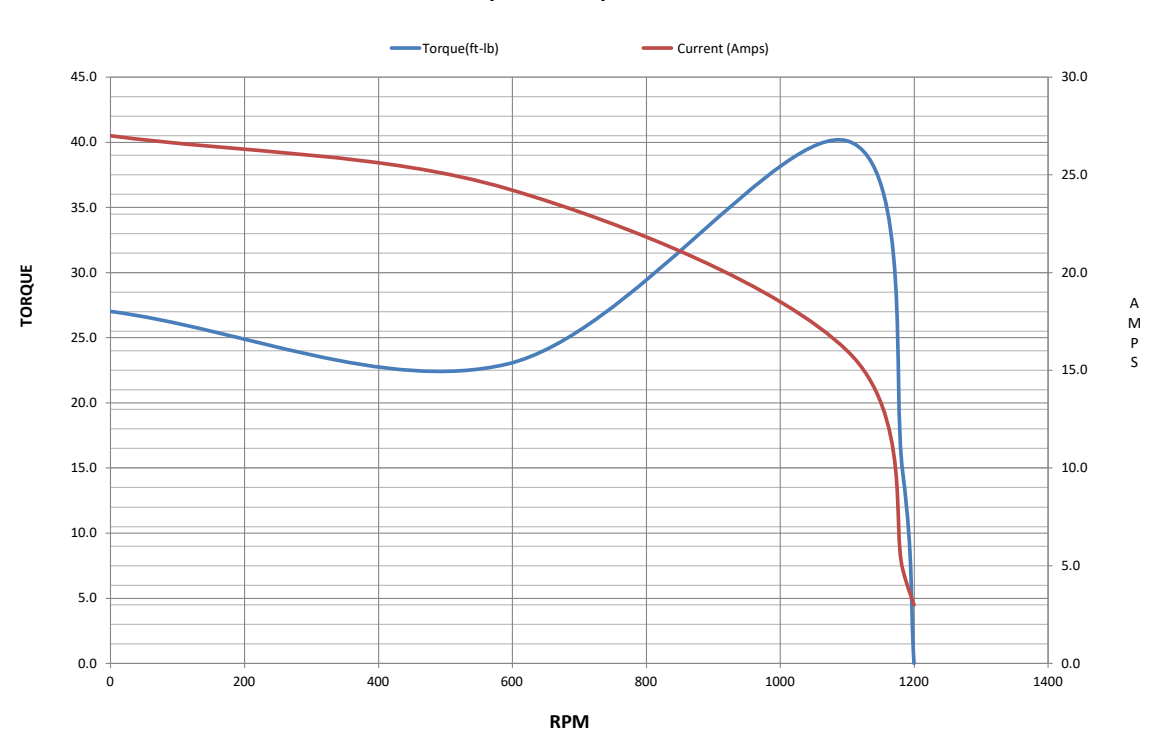
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	592	1100	1183	1200
Current (Amps)	27.0	24.3	16.0	4.8	3.0
Torque(ft-lb)	27.0	23.0	40.1	14.6	0.00

Information Block				
HP	3.3			
Sync. RPM	1200			
Frame	254T			
Enclosure	DP			
Construction	TDX			
Voltage	460 V			
Frequency	60 Hz			
Design	2VT			
LR Code letter	H			
Service Factor	1.15			
Temp Rise @ FL	80 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	3,300 feet			
Rotor/Shaft wk <sup>2</sup>	0.70 Lb-Ft <sup>2</sup>			
Ref Wdg	HA3160(4-6)11 HS			
Sound Pressure @ 1M	64 dBA			
VFD Rating	NA			
Outline Dwg	SS620685-100			
Conn. Diag	EE7317			
Additional Specifications:				
CATALOG # Y470A				
LOW SPEED PERFORMANCE				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
3.0512	0.7736	4.0139	6.5408	83.3715



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 : 254TTDBD7208

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

Catalog No : Y418A

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**