

# PRODUCT INFORMATION PACKET

Model No: 254TTFC6576

Catalog No: E636A

XRI®-SD Severe Duty Motor, 7.50 HP, 3 Ph, 60 Hz, 460 V, 1200 RPM, 254T Frame, TEFC



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**Nameplate Specifications**

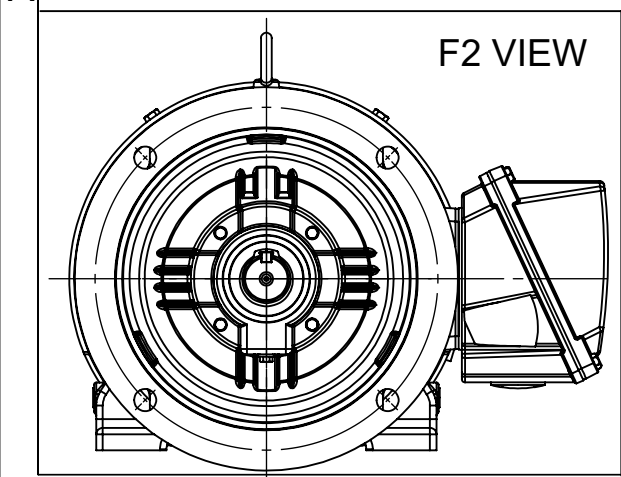
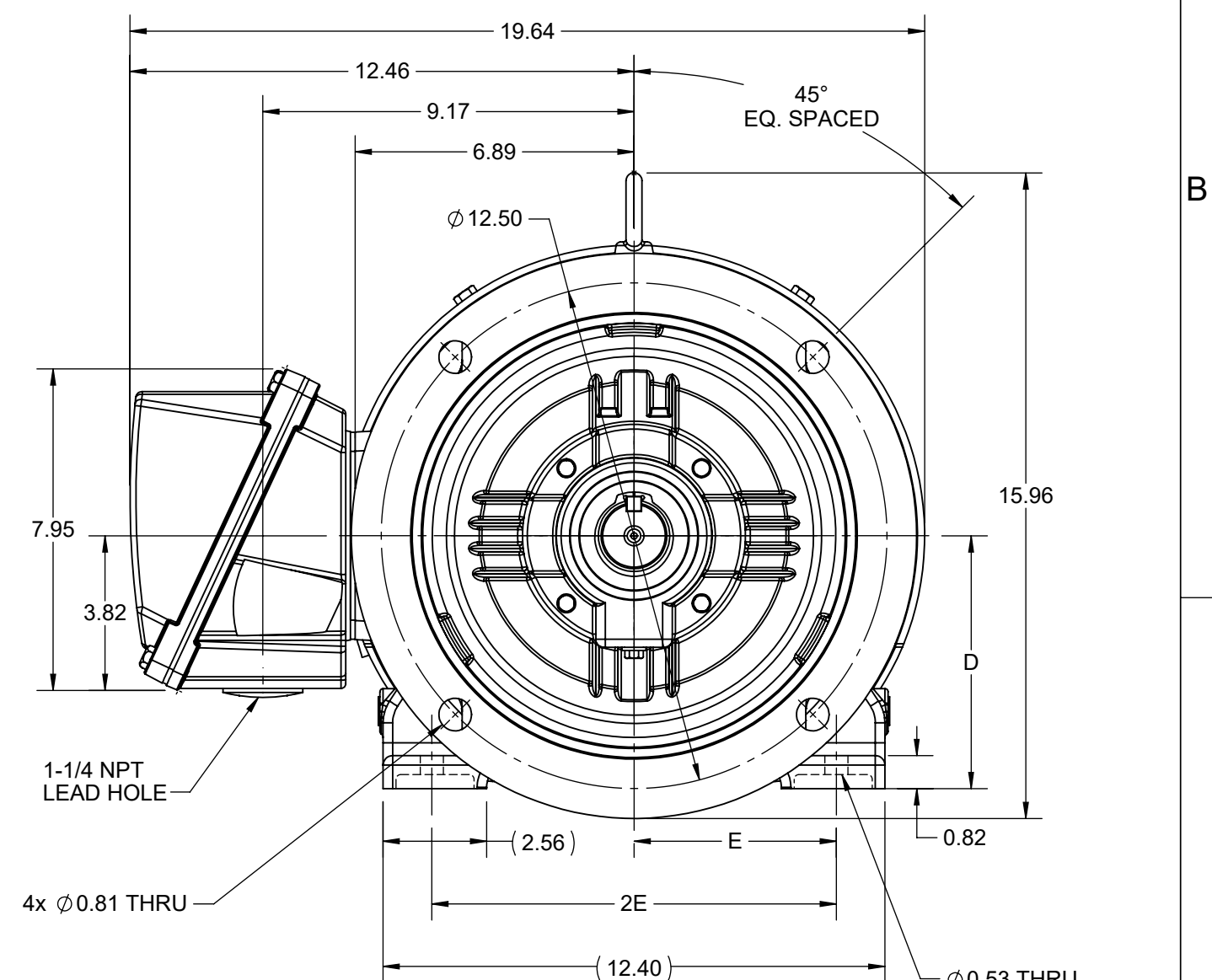
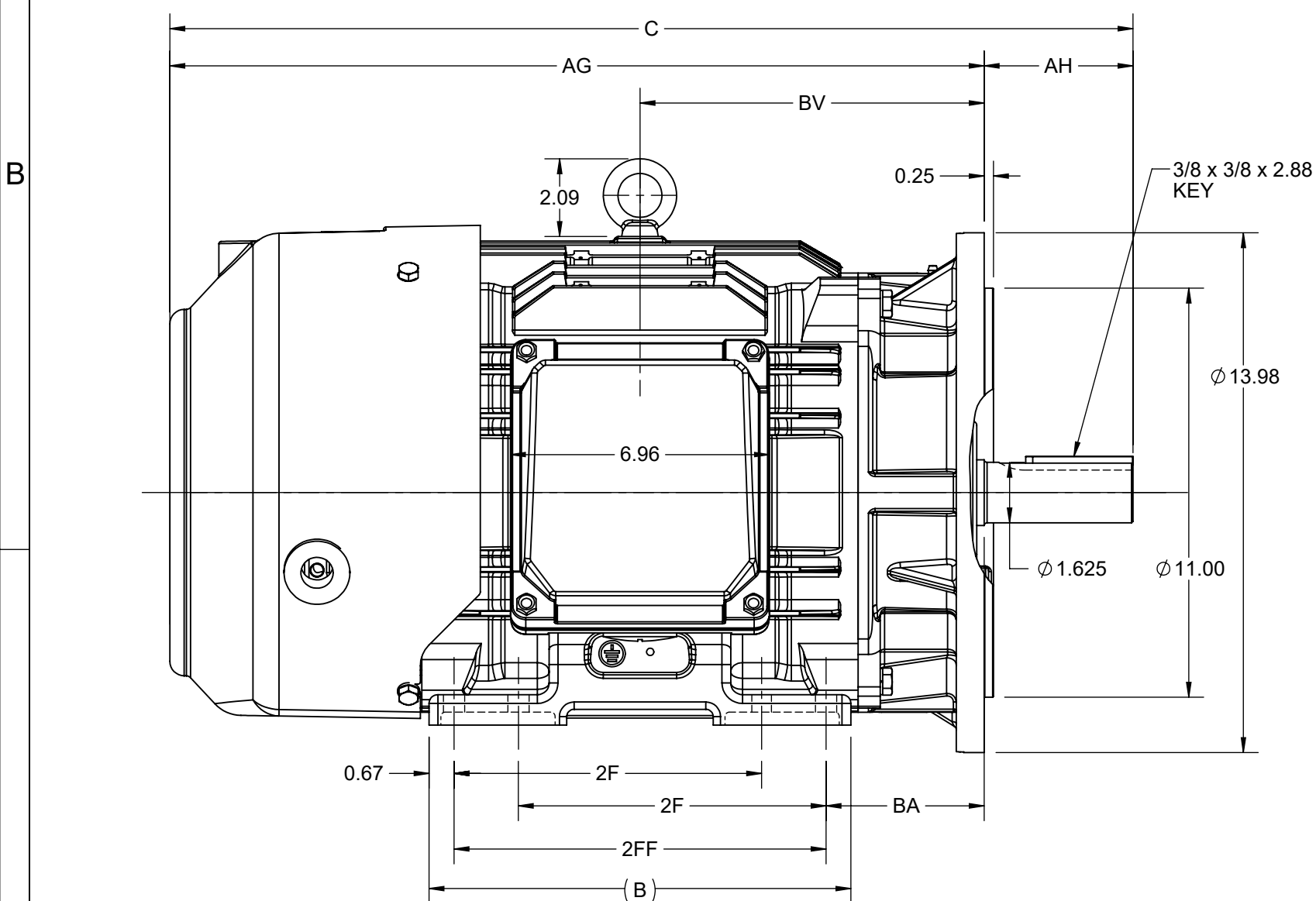
Phase	<b>3</b>	Output HP	<b>7.50 Hp</b>
Output KW	<b>5.6 kW</b>	Voltage	<b>460 V</b>
Speed	<b>1182 rpm</b>	Service Factor	<b>1.15</b>
Frame	<b>254T</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<b>No Protection</b>	Efficiency	<b>91 %</b>
Ambient Temperature	<b>40 °C</b>	Frequency	<b>60 Hz</b>
Current	<b>9.9 A</b>	Power Factor	<b>78.5</b>
Duty	<b>Continuous</b>	Insulation Class	<b>H</b>
Design Code	<b>B</b>	KVA Code	<b>H</b>
Drive End Bearing Size	<b>6309</b>	Opp Drive End Bearing Size	<b>6209</b>
UL	<b>Listed</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>55</b>
Number of Speeds	<b>1</b>	Hazardous Location	<b>DIVISION 2 T2B</b>

**Technical Specifications**

Electrical Type	<b>Squirrel Cage Inverter Rated</b>	Starting Method	<b>Line Or Inverter</b>
Poles	<b>6</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>1.366 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>	Shaft Diameter	<b>1.625 in</b>
Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>	Inverter Load	<b>CONSTANT 10:1/VARIABLE 10:1</b>
Outline Drawing	<b>SS208560-100</b>	Connection Drawing	<b>EE7300</b>

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DASH NO.	B	C	D	E	2E	2F	2FF	AG	AH	BA	BV	MOUNTING	FRAME
100	9.60	24.16	6.25	5.00	10.00	-	8.25	20.16	4.00	4.25	8.39	F1 OR F2	254TD
200	11.34	25.89				8.25	10.00	21.89			9.25		254/256TD



DRAWING REVISION A	REVISION BY RAM	REV DATE/© DATE 29/06/2022
REQUEST NUMBER CR-0009883	APPROVED BY SBD	DATE 29/06/2022
REQUEST NUMBER DESCRIPTION NEW DRAWING RELEASE		
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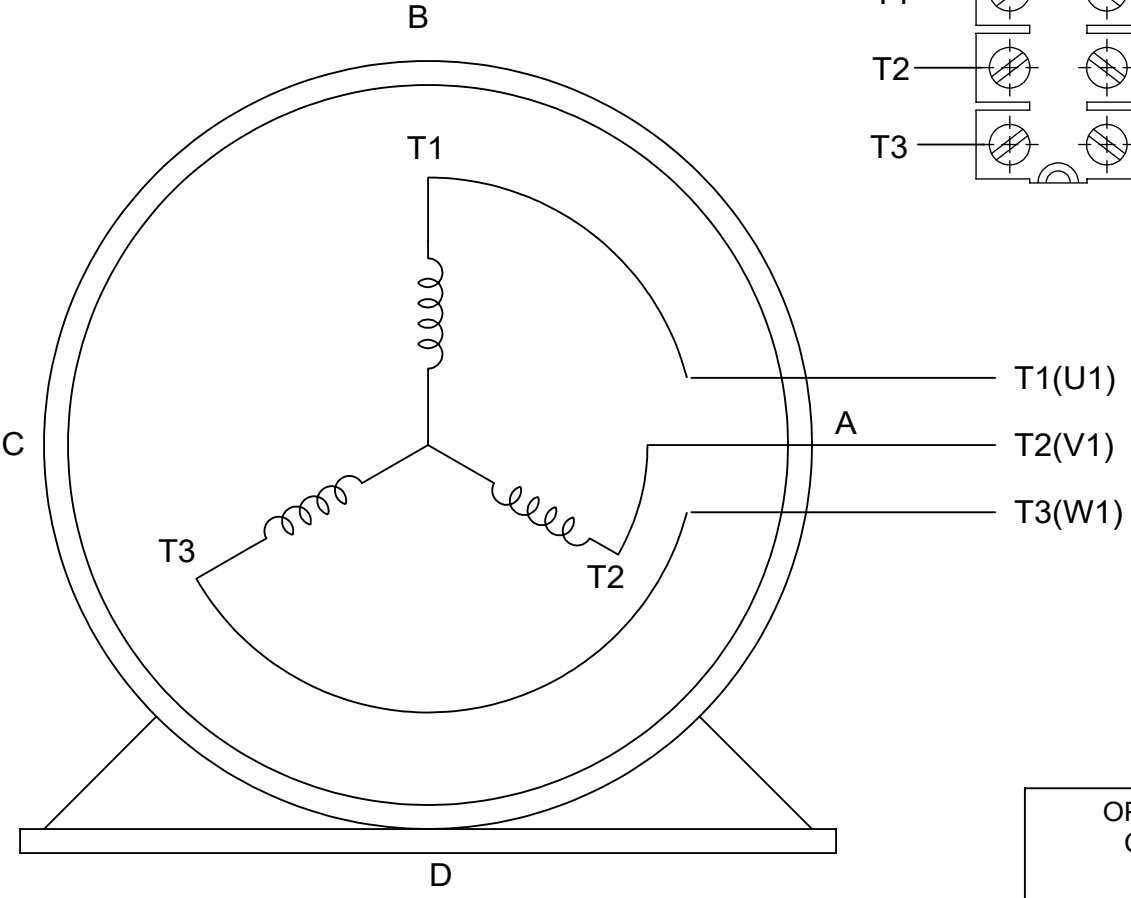
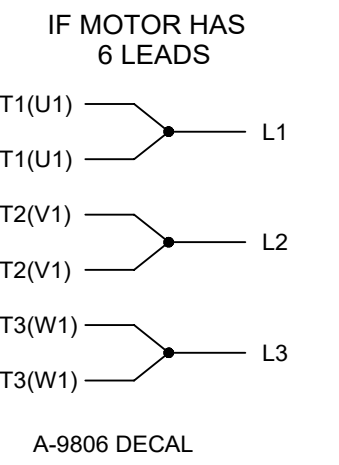
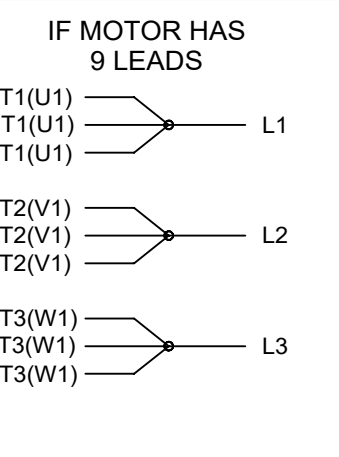
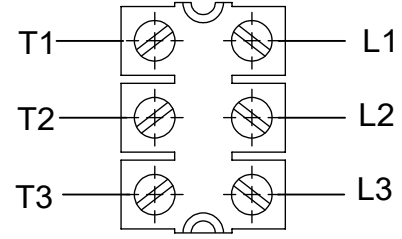
PRIMARY DIMENSIONS ARE INCH  
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ARE FOR REFERENCE ONLY

DRAWN BY RAM	Regal Beloit America, Inc.
DATE 29/06/2022	
APPROVED BY SBD	DESCRIPTION <b>OUTLINE</b> 254/256TD FR NEMA SD & IEEE841 D-FLANGE KIT
DATE 29/06/2022	MATERIAL
REFERENCE SS208560	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE B
	DRAWING NUMBER SS208560B
	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



DATA VOLTS: 460

**CERTIFICATION DATA SHEET**

CONN. DIAGRAM: EE7300  
 REFERENCE MODEL #: 254TTFCD6576  
 OUTLINE: SS208560  
 CAT #: E636A  
 WINDING: HA31606007 NONE 4  
 MOUNTING: F1/F2 CAPABLE

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN	
7.5	5.6	1200	1182	254T	TEFC	TFC	H	B	
PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (° C)	ELEV. (Ft)
3	60	460	9.9	LINE OR INVERTER	CONT	H	1.15	40	3300
F.L. EFF	91.0	3/4 LD EFF	91.0	1/2 LD EFF	89.5	GTD EFF	90.2	ELECT. TYPE	
F.L. PF	78.5	3/4 LD PF	72.0	1/2 LD PF	60.0	SQ CAGE INV RATED			
F.L. TORQUE	LR AMPS	L.R. TORQUE		B.D. TORQUE		F.L. RISE (° C)			
33.4	60.0	65.0	150	195%	89.0	266%	40		
SOUND PRESSURE	SOUND	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	APROX.			
56	65 dBA	2.30	150	20	2	299	LB.		
*** SUPPLEMENTAL INFORMATION ***									
DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT	
STANDARD	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	DIVISION 2 T2B	NO	NONE	BLUE (EPOXY)	
BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL		
DE	ODE	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON		
BALL	BALL								
6309	6209								
THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS			
NONE	NOT	NONE	NONE	NONE	FALSE	NA			
R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)	FLOAT			
0.839	0.465	2.37	3.081	51.106	0.080	ODE			
* N O T E S *	If Inverter equals NONE, contact factory for further information								
	INVERTER TORQUE: CONSTANT 10:1/VARIABLE 10:1 INV. HP SPEED RANGE: NONE								
	ENCODER: NONE NONE NONE NONE PPR								
	BRAKE: NONE NONE FT-LB: NA VOLTAGE: NONE HZ:								
PREPARED BY:									
DATE: 5/13/2020									
FORM: 3531 REV_4 2/27/06 ** Subject to change without notice.									

Data Sheet

Date: 5/6/2020  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: \_\_\_\_\_

254TTFCD6576



Submittal

Data @ 460 V

Motor Load Data

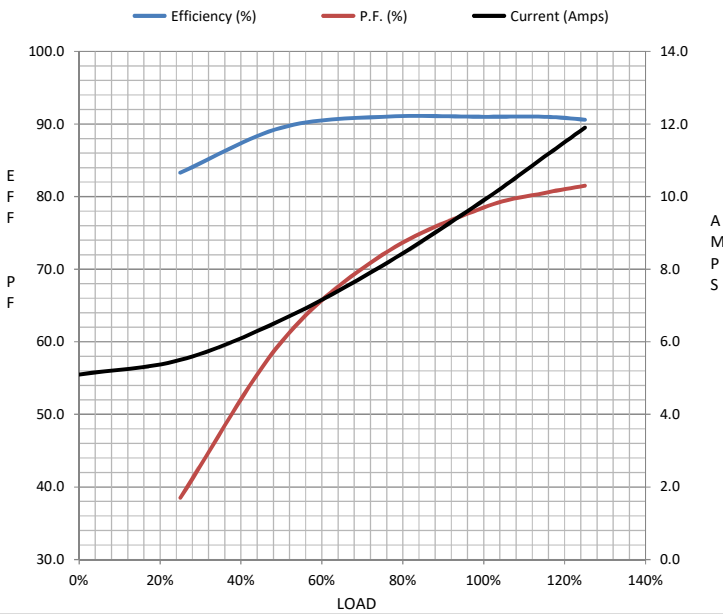
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	5.1	5.5	6.6	8.1	9.9	11.1	11.9	60.0
Torque (ft-lb)	0.00	8.3	16.5	25.0	33.4	38.5	41.9	65.0
RPM	1200	1195	1190	1185	1182	1,178	1175	0
Efficiency (%)		83.3	89.5	91.0	91.0	91.0	90.6	
P.F. (%)	6.5	38.5	60.0	72.0	78.5	80.5	81.5	42.0

Motor Speed Data

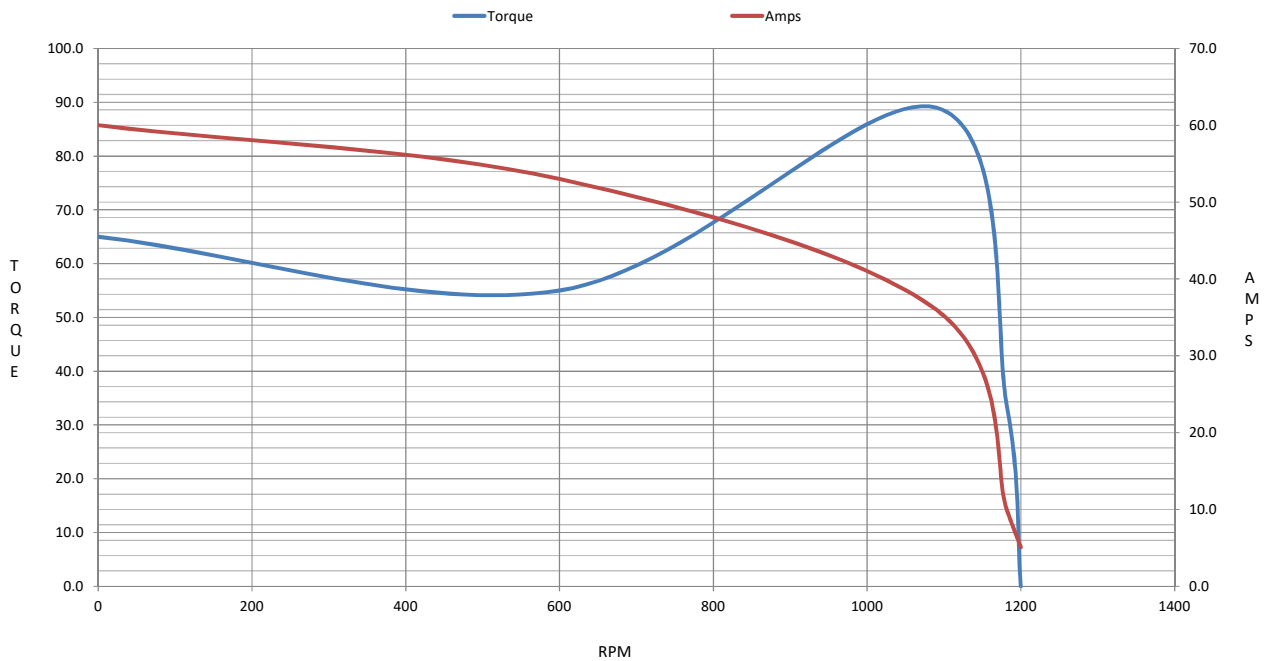
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1090	1182	1200
Current (Amps)	60.0	53.0	36.0	9.9	5.1
Torque (ft-lb)	65.0	55.0	89.0	33.4	0.00

Information Block

HP	7.5			
Sync. RPM	1200			
Frame	254			
Enclosure	TEFC			
Construction	TFC			
Voltage	460 V			
Frequency	60 Hz			
Design	B			
LR Code letter	H			
Service Factor	1.15			
Temp Rise @ FL	40 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	3,300 feet			
Rotor/Shaft wk <sup>2</sup>	2.30 Lb-Ft <sup>2</sup>			
Ref Wdg	HA31606007 NONE			
Sound Pressure @ 1M	56 dBA			
VFD Rating	CONSTANT 10:1/VARIABLE 10:1			
Outline Dwg	SS208560			
Conn. Diag	EE7300			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.8390	0.4650	2.3700	3.0810	51.1060



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 : 254TTFCD6576

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

Catalog No : E636A

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**