

# PRODUCT INFORMATION PACKET

Model No: 254TTFL16076

Catalog No: E2117

XRI® General Purpose General Purpose Motor, 7.50 & 7.50 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V,  
1200 & 1000 RPM, 254T Frame, TEFC



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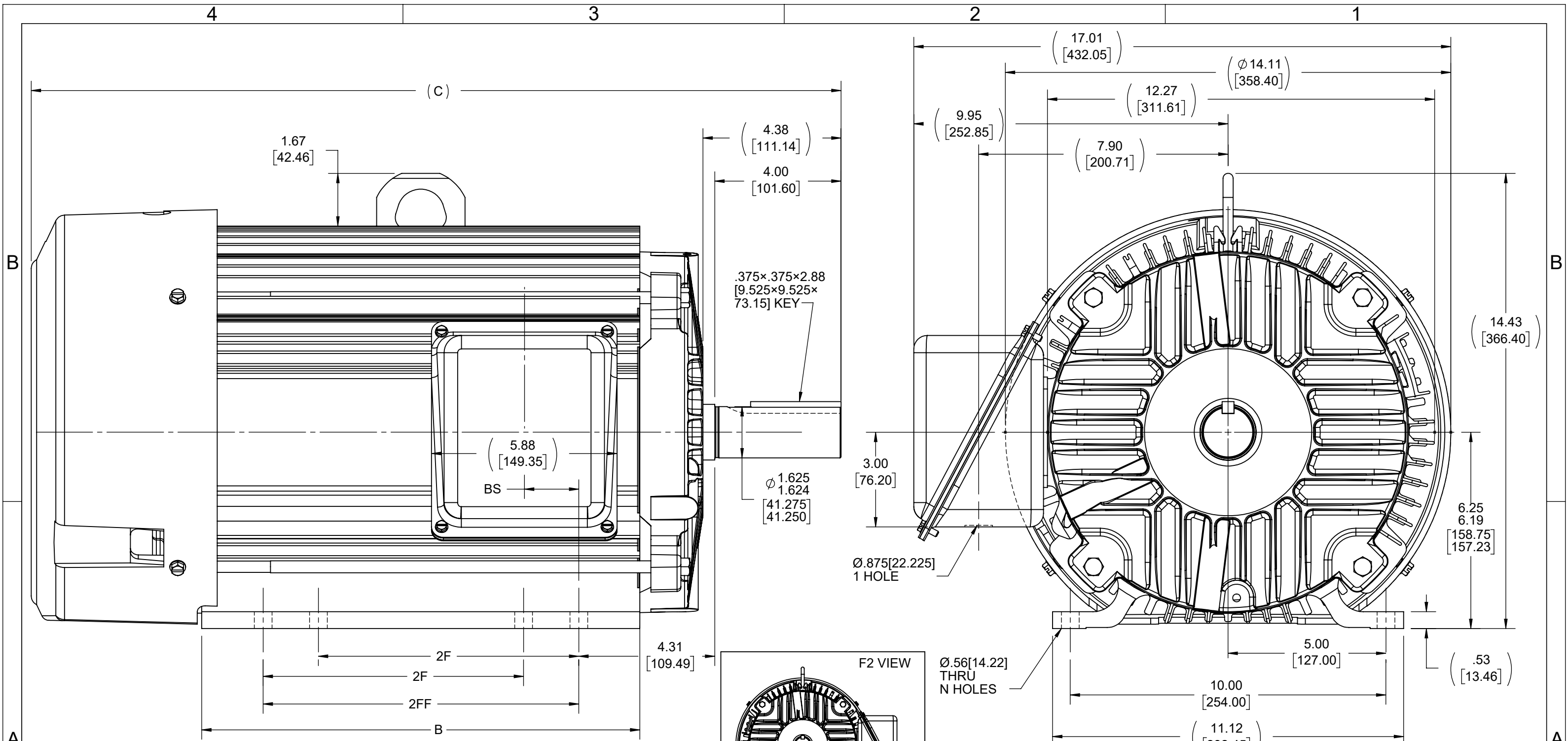
### Nameplate Specifications

Phase	<b>3</b>	Output HP	<b>7.50 &amp; 7.50 Hp</b>
Output KW	<b>5.6 &amp; 5.6 kW</b>	Voltage	<b>230/460 &amp; 190/380 V</b>
Speed	<b>1175 &amp; 960 rpm</b>	Service Factor	<b>1.15 &amp; 1.15</b>
Frame	<b>254T</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<b>No Protection</b>	Efficiency	<b>91 &amp; 88.5 %</b>
Ambient Temperature	<b>40 °C</b>	Frequency	<b>60 &amp; 50 Hz</b>
Current	<b>19.8/9.9 &amp; 23/11.5 A</b>	Power Factor	<b>78</b>
Duty	<b>Continuous</b>	Insulation Class	<b>F</b>
Design Code	<b>B</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>43</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>6</b>	Rotation	<b>Reversible</b>
Resistance Main	<b>1.319 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>Aluminum</b>
Shaft Type	<b>T</b>	Overall Length	<b>23.51 in</b>
Frame Length	<b>12.00 in</b>	Shaft Diameter	<b>1.625 in</b>
Shaft Extension	<b>4.37 in</b>	Assembly/Box Mounting	<b>F1 ONLY</b>
Inverter Load	<b>CONSTANT 10:1</b>		
Outline Drawing	<b>B-SS321100-1200</b>	Connection Drawing	<b>A-EE7308</b>





- NOTES:  
 1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.  
 2. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

DASH	FRAME	C	B	2F	2FF	BS	N
1200	254T	23.78 [603.90]	12.13 [308.10]	8.25 [209.55]	-----	1.73 [43.94]	4
1375	254/6T	25.66 [651.65]	13.88 [352.55]	8.25 [209.55]	10.00 [254.00]	1.73 [43.94]	8

DRAWING REVISION D	REVISION BY SP	DATE 05-26-2021
ECO CR-0001205	APPROVED BY AS	DATE 05-26-2021
ECO DESCRIPTION REPLACED FAN GUARD 3C223-E3 TO 205016B		
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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 mm 5.1  
 mm SHOWN IN [BRACKETS]

DRAWN BY  
RJW  
DATE  
02-01-2005  
APPROVED BY  
BW  
DATE  
02-01-2005  
REFERENCE  
THIRD ANGLE PROJECTION

**REGAL**™ Regal Beloit America, Inc.

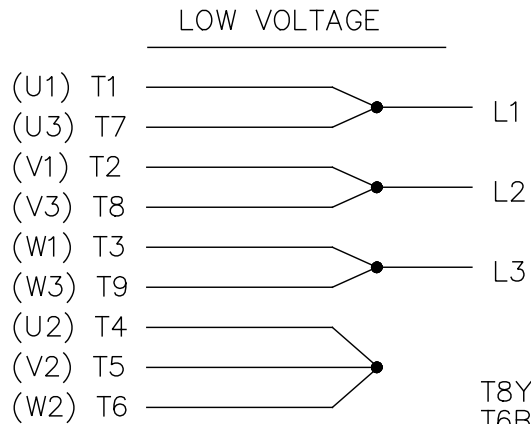
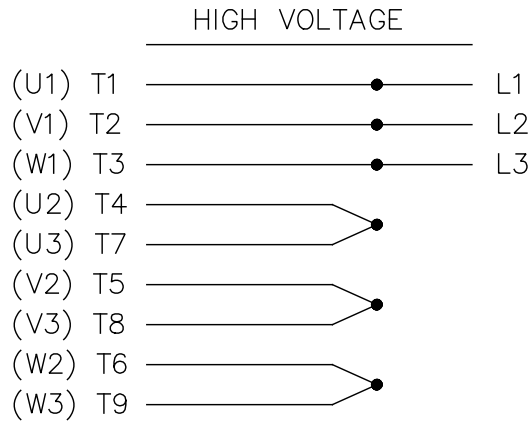
DESCRIPTION  
**OUTLINE**  
250T FR.-ALUM. FR.-TEFC

MATERIAL PROCESS/FINISH

SIZE DRAWING NUMBER SHEET  
B SS321100 1 OF 1

EE7308

THREE PHASE  
DUAL VOLTAGE MOTOR



VIEW OF TERMINAL END

REF.  
WINDING DIAGRAM

T8Y, T2Y, T2BL, T4BX, T2EC, T2G  
T6BZ, T2B, T6BL, T4AV, T6B, T4B

OPTIONAL CORD  
CONNECTION

L1 — WHITE  
L2 — RED  
L3 — BLACK

NO.	REVISION	BY & DATE	CHK	ANG	TOLERANCES UNLESS SPECIFIED		FINISH	DRAWN RM 11/20/1990				
					DEC.	INCHES						
5	CHG TO REGAL LOGO	SL 09/10/2015	AB					CHK ML 11/21/1990				
4	REVISED IEC NOTATIONS	MSG 11/15/2011	CMN	.X	±.1			APPD SAS 04/24/2003				
3	ADDED IEC NOTATIONS... (U1), (V1) ETC. MU95194	MSG 5/10/2010	MJS	.XX	±.02			SCALE 1=1				
2	ADDED THE OPTIONAL CORD CONNECTION MU46318	RDH 04/24/2003	DRS	.XXX	±.005		TITLE CONNECTION DIAGRAM 3Ø - DUAL VOLTAGE MOTOR	REF				
1	REDRAWN	RM 11/20/1990		.XXXX	±.0005		MAT'L.	FMF				
					±7'30"			PREV				
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							RFP	CAD FILE ee7308	SIZE A	DRAWING NO. EE7308	PAGE OF 5	REV. 5
							DIST WP					



Regal Beloit America, Inc.



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

**CERTIFICATION DATA SHEET**

**CUSTOMER:**  
**ORDER #:**  
**CONN. DIAGRAM:** A-EE7308  
**OUTLINE:** B-SS321100-1200  
**WINDING #:** 254653 R14 6

**CUSTOMER PO#:**  
**MODEL #:** 254TTFL16076 AA  
**CUSTOMER PART #:**  
**MOUNTING:** F1 ONLY

**TYPICAL MOTOR PERFORMANCE DATA**

HP	kW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
7 1/2 & 7 1/2	5.60 & 5.60	1200	1175 & 960	254T	TEFC	H	B

PH	Hz	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB°C
3	60/50	230/460 & 190/380	19.8/9.9 & 23/11.5	LINE OR INVERTER	CONTINUOUS	F3	1.15/1.15	40

FULL LOAD EFF:	91 & 88.5	3/4 LOAD EFF:	91	1/2 LOAD EFF:	90.2	GTD. EFF		ELEC. TYPE	
FULL LOAD PF:	78 & 80.5	3/4 LOAD PF:	72.5	1/2 LOAD PF:	61	90.2		SQ CAGE INV RATED	

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
33.5 LB-FT	127 / 63.5	72 LB-FT 215 %	103 LB-FT 307 %	40

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS / HOUR	APPROX. MOTOR WGT
56 dBA	66 dBA	2.5 LB-FT^2	170 LB-FT^2	20 SEC.	2	350 LBS.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	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	T	NONE	NONE	1045 HOT ROLLED (C-204)	ALUMINUM
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 TORQUE:</b> CONSTANT 10:1
<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:** Dinesh  
Suddula **DATE:**  
02/14/2019 03:19:17 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



254TTFL16076

Submittal

Data @ 460 V

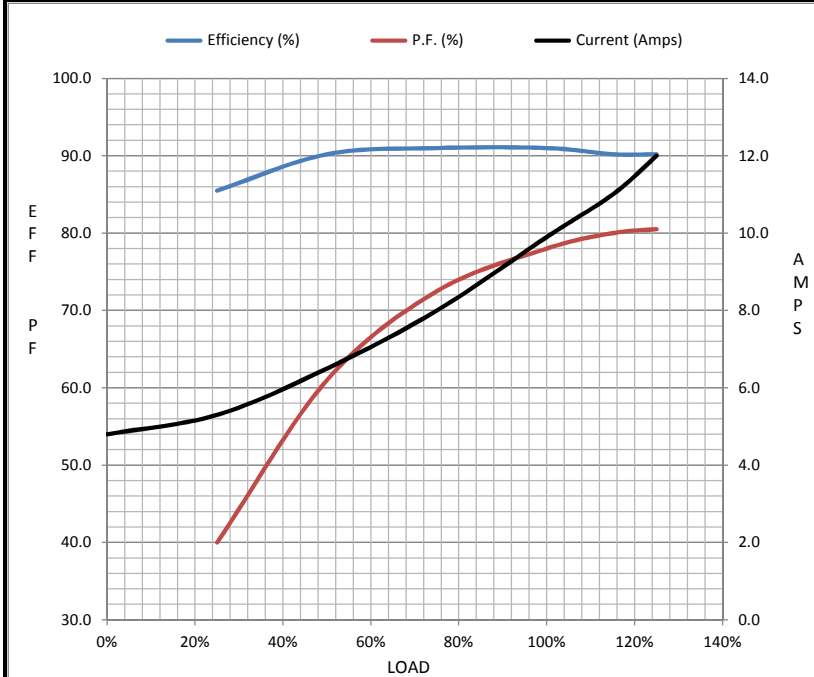
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	4.8	5.3	6.5	8.0	9.9	11.0	12.0	63.5
Torque (ft-lb)	0.00	8.0	16.5	25.0	33.5	38.5	42.0	72.0
RPM	1200	1195	1190	1180	1175	1,170	1165	0
Efficiency (%)		85.5	90.2	91.0	91.0	90.2	90.2	
P.F. (%)	7.0	40.0	61.0	72.5	78.0	80.0	80.5	42.0

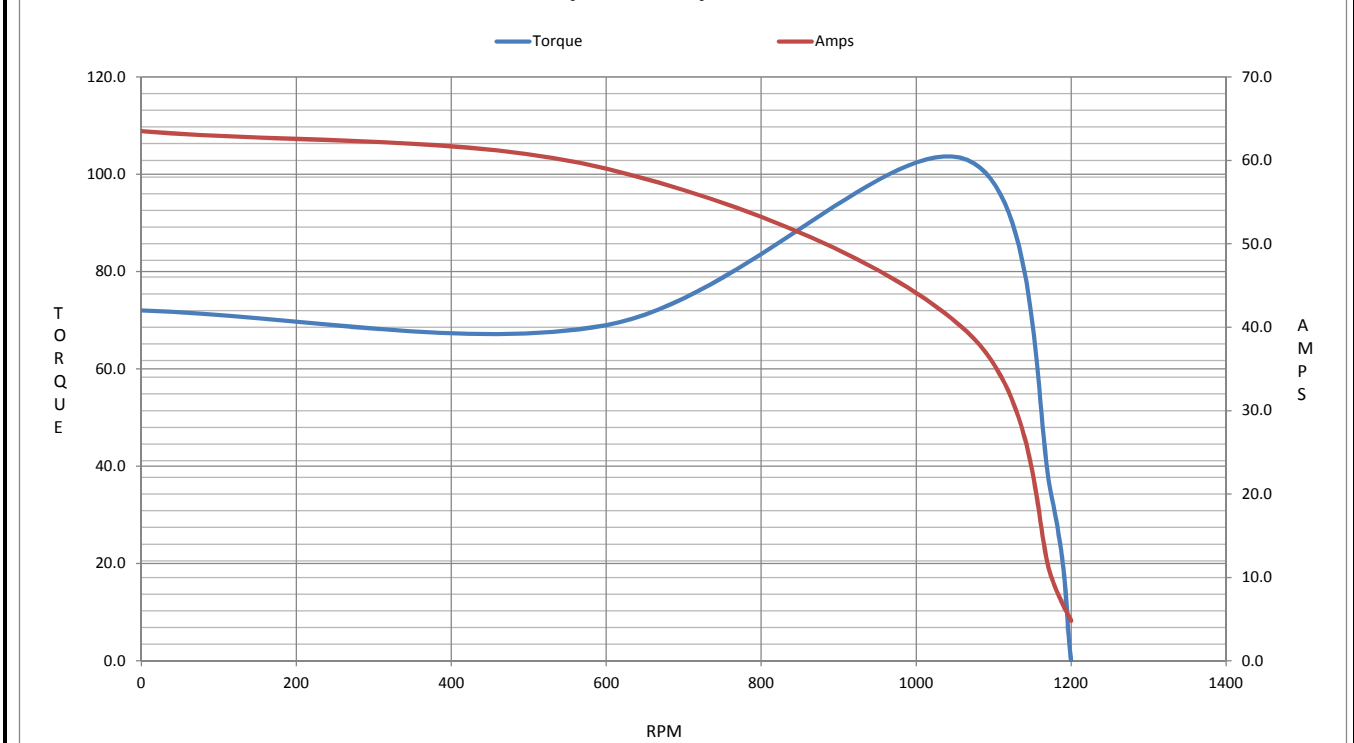
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1065	1175	1200
Current (Amps)	63.5	59.0	39.5	9.9	4.8
Torque (ft-lb)	72.0	69.0	103	33.5	0.00

Information Block				
HP	7.5			
Sync. RPM	1200			
Frame	254			
Enclosure	TEFC			
Construction	TFY			
Voltage	230/460#190/38(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	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	2.50 Lb-Ft <sup>2</sup>			
Ref Wdg	254653 R14			
Sound Pressure @ 1M	56 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	B-SS321100-1200			
Conn. Diag	A-EE7308			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.7370	0.6730	2.9030	3.1530	53.4870



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 : 254TTFL16076

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

Catalog No : E2117

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**