

# PRODUCT INFORMATION PACKET

marathon®  
Motors

Model No: 405TTFC6683

Catalog No: Y852A

XRI® Crusher Duty Crusher Duty Motor, 75 & 60 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V,  
1200 & 1000 RPM, 405T Frame, TEFC



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RegalRexnord

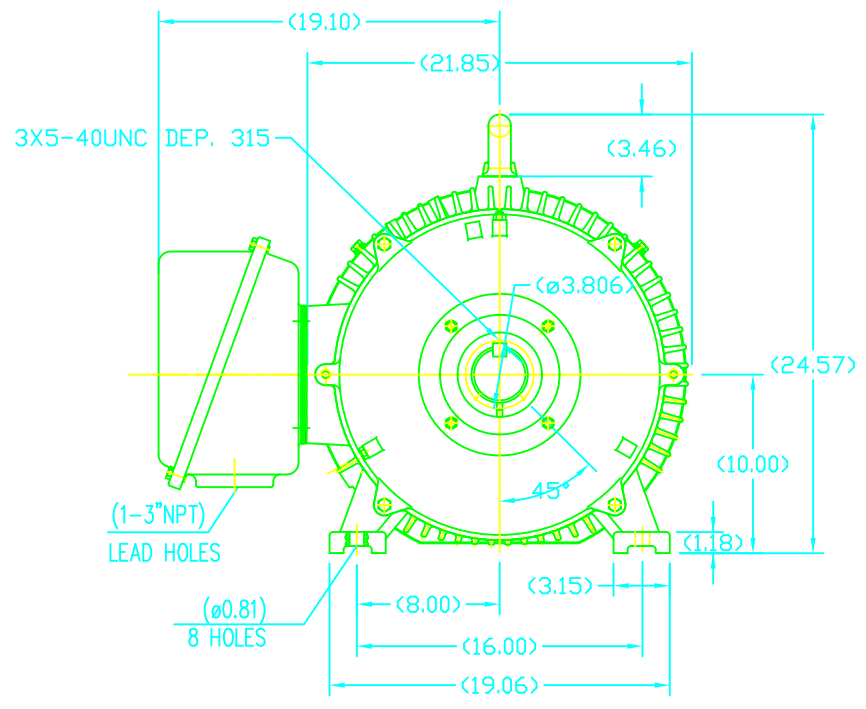
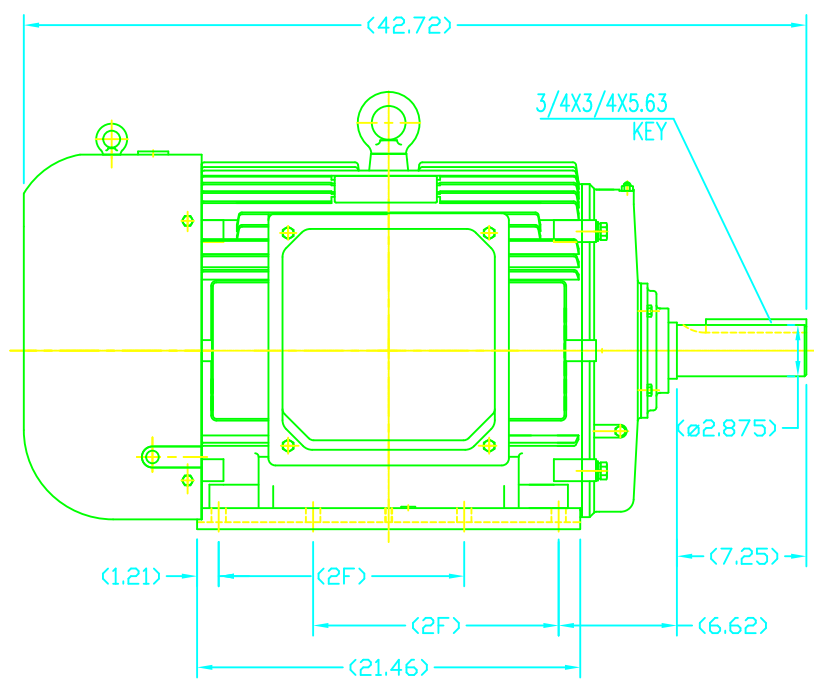
### Nameplate Specifications

Phase	3	Output HP	75 & 60 Hp
Output KW	56.0 & 45.0 kW	Voltage	230/460 & 190/380 V
Speed	1188 & 990 rpm	Service Factor	1.15 & 1.15
Frame	405T	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Efficiency	94.5 & 94.1 %
Ambient Temperature	40 °C	Frequency	60 & 50 Hz
Current	178/89 & 173/86.5 A	Power Factor	83
Duty	Continuous	Insulation Class	F
Design Code	C	KVA Code	G
Drive End Bearing Size	NU316	Opp Drive End Bearing Size	6315
UL	Recognized	CSA	Y
CE	Y	IP Code	55
Number of Speeds	1		

### Technical Specifications

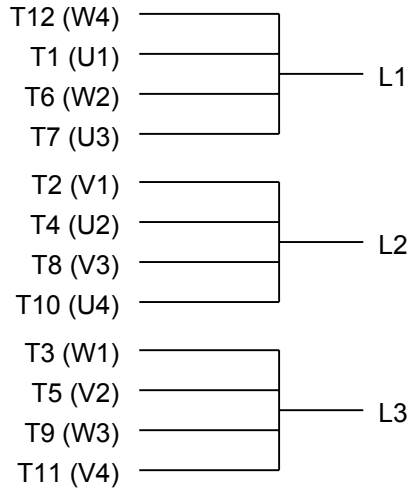
Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Part Wdg Start Low Volt Only & Wye Start Delta Run Or Inverter
Poles	6	Rotation	Reversible
Resistance Main	.07 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Roller
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	42.72 in
Shaft Diameter	2.875 in	Shaft Extension	7.25 in
Assembly/Box Mounting	F1/F2 CAPABLE	Inverter Load	CONSTANT 10:1
Connection Drawing	EE7308AA	Outline Drawing	SS620676-405T

SS620676

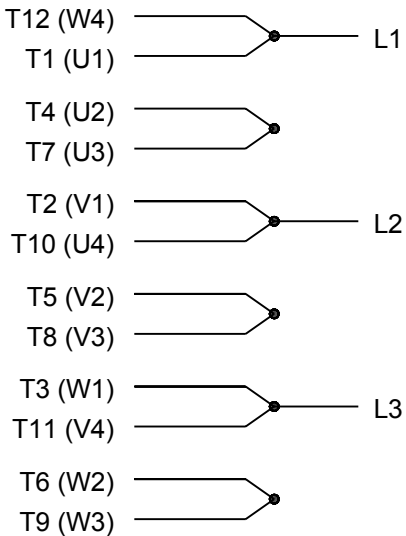


404T	12.25
405T	13.75
FRAME	2F

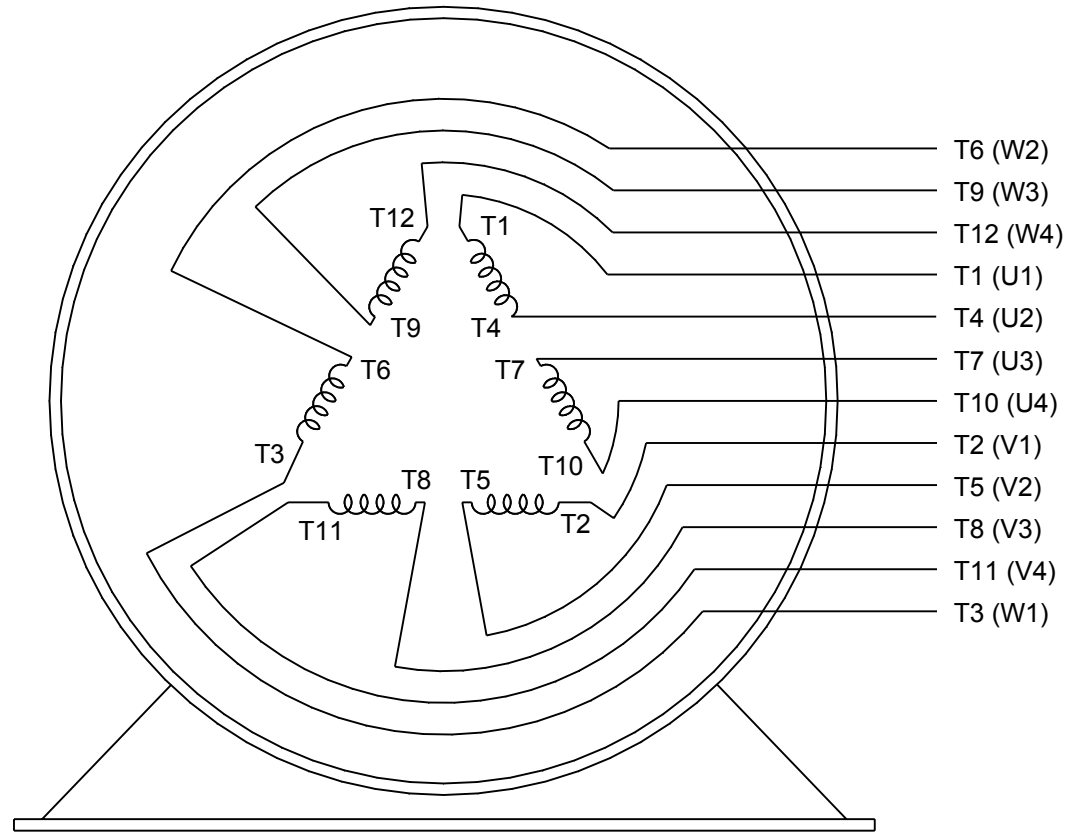
TOLERANCES UNLESS SPECIFIED		REGAL REGAL - BELOIT CORPORATION		DRAWN ZYH 12-02-2014	
DEC.	INCHES	CHK	HZJ 12-02-2014	APPD	CL 12-02-2014
X	±.1	XX	±.03	TITLE OUTLINE 404/405T FR-TEFC CAST IRON severe duty	
XXX	±.005	XXXX	±.0005	SCALE	
A RELEASED FOR PRODUCTION ECD-0074303		WGJ 5/12/15 AB		REF	
NO. REVISION		BY & DATE		FMF Wuxi	
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		CHK ANG ±1/2		PREV	
RFP CAD FILE				SIZE DRAWING NO.	
DIST				B SS620676	
				REV. A	



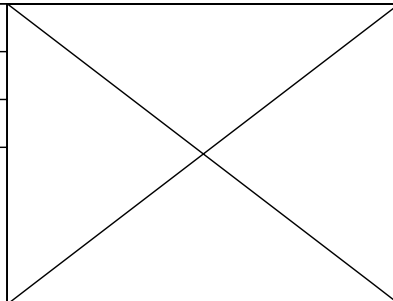
### LOW VOLTAGE



### HIGH VOLTAGE



DRAWING REVISION <b>K</b>	REVISION BY <b>AJW</b>	DATE <b>07-17-2015</b>
ECO <b>ECO-0081632</b>	APPROVED BY <b>T. VUE</b>	DATE <b>07-17-2015</b>
ECO DESCRIPTION <b>REV'D IEC MARKINGS PER IEC 60034-8</b>		
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DRAWN BY <b>LZ</b>
DATE <b>01-12-1994</b>
APPROVED BY <b>GK</b>
DATE <b>01-14-1994</b>
REFERENCE
THIRD ANGLE PROJECTION

<b>Regal Beloit America, Inc.</b>	
<b>DESCRIPTION</b> <b>CONN DIAGRAM-EXTERNAL</b> <b>3Ø-2/1 DELTA-12 LEADS</b>	
MATERIAL	PROCESS/FINISH
SIZE <b>A</b>	DRAWING NUMBER <b>EE7308AA</b>
SHEET <b>1 OF 1</b>	

**CERTIFICATION DATA SHEET**

**Model#:** 405TTFC6683 AA      **WINDING#:** CHT40560003 NONE 1  
**CONN. DIAGRAM:** EE7308AA      **ASSEMBLY:** F1/F2 CAPABLE  
**OUTLINE:** SS620676

**TYPICAL MOTOR PERFORMANCE DATA**

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
75&60	56&45	1200	1188&990	405T	TEFC	G	C

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	178/89&173/8 6.5	PWS & YDRUN OR INV	CONTINUOU S	F7	1.15/1.15	40	3300

FULL LOAD EFF: 94.5&94.1	3/4 LOAD EFF: 94.1	1/2 LOAD EFF: 93.6	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 83&83.5	3/4 LOAD PF: 81	1/2 LOAD PF: 73	93	SQ CAGE INV RATED	62 / 31

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
332 LB-FT	1084 / 542	700 LB-FT 210	750 LB-FT 225	75

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
68 dBA	78 dBA	50 LB-FT^2	1200 LB-FT^2	25 SEC.	2	1650 LBS.

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

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
STANDARD	STANDARD	RIGID	HORIZONTAL	PREMIUM SEVERE DUTY	NONE	FALSE	NONE	BLUE (EPOXY)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
ROLLER NU316	BALL 6315	SHC- 100/POLYREX	T	NONE	NONE	4140 STRESSPROOF (C-214)	CAST IRON

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

If Inverter equals NONE, contact factory for further information

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INVERTER TORQUE: CONSTANT 10:1 INV. HP SPEED RANGE: NONE
ENCODER: NONE NONE NONE NONE NONE PPR
BRAKE: NONE NONE NONE P/N NONE NONE NONE NONE FT-LB NONE V NONE Hz

\*\* Subject to change without notice.

Data Sheet

Date: 16-06-2017  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



405TTC6683

Submittal

Data @ 460 V

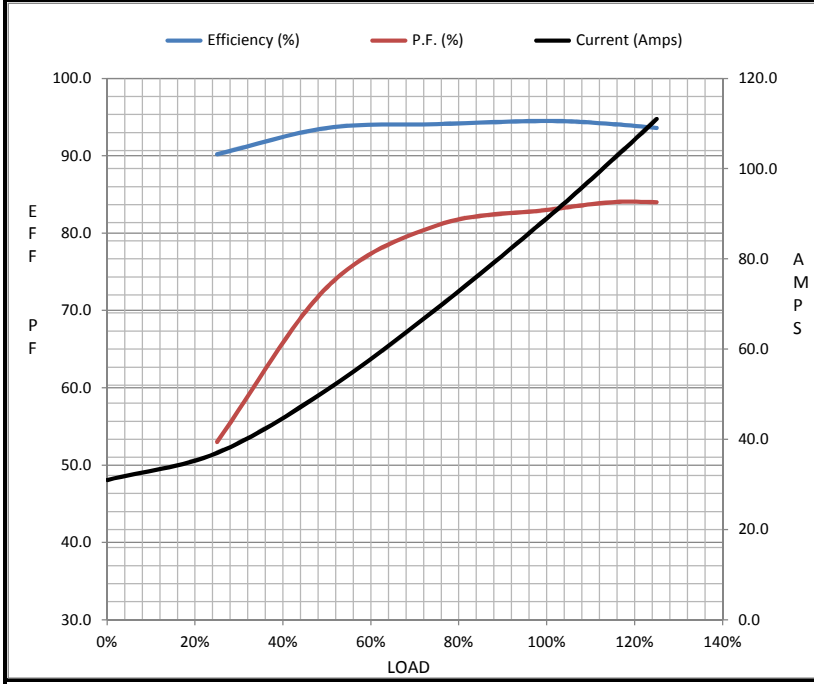
Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	31.0	37.0	51.0	69.0	89.0	102	111	542
Torque (ft-lb)	0.00	82.5	165	248	332	382	416	700
RPM	1200	1196	1194	1192	1188	1,186	1182	0
Efficiency (%)		90.2	93.6	94.1	94.5	94.1	93.6	
P.F. (%)	5.5	53.0	73.0	81.0	83.0	84.0	84.0	36.0

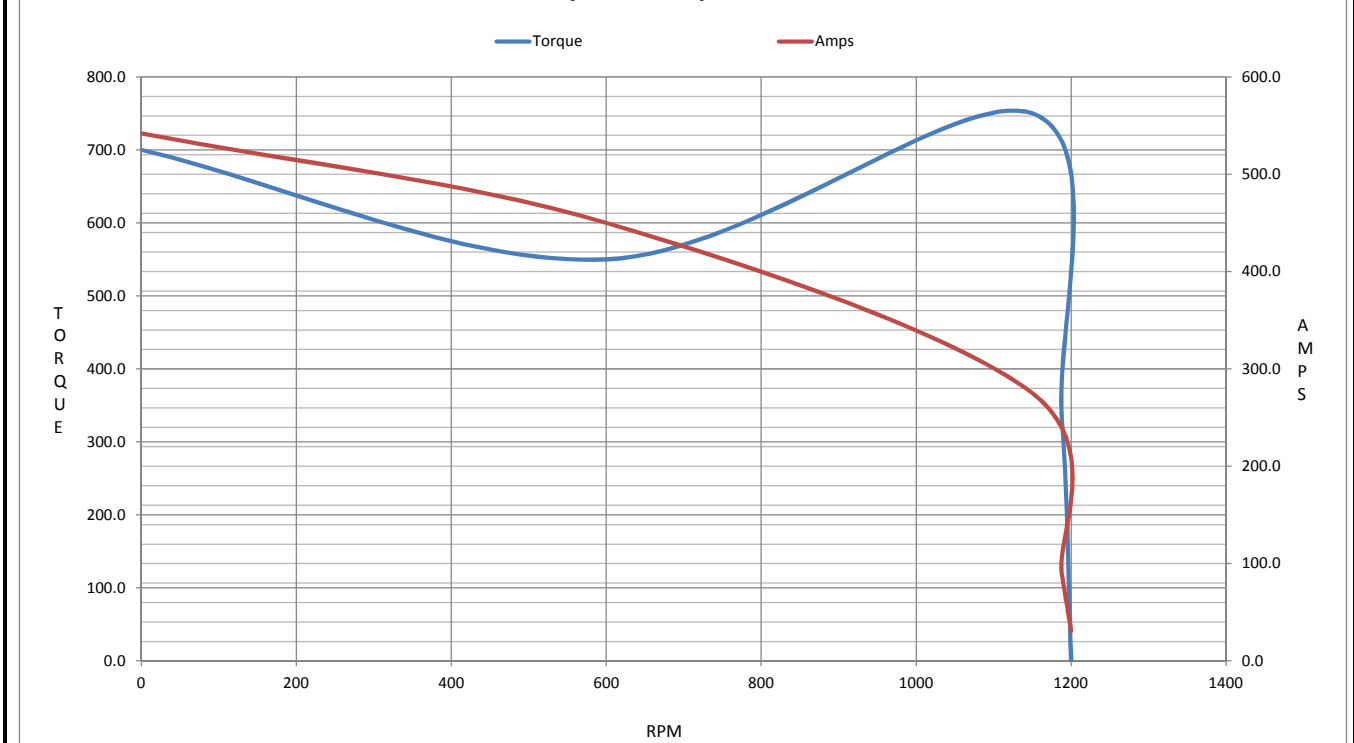
Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	600	1150	1188	1200
Current (Amps)	542	450	275	89.0	31.0
Torque (ft-lb)	700	550	750	332	0.00

Information Block				
HP	75.0			
Sync. RPM	1200			
Frame	405			
Enclosure	TEFC			
Construction	TFC			
Voltage	230/460#190/38(V)			
Frequency	60 Hz			
Design	B			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	75 ° C			
Duty	CONT			
Ambient	40 ° C			
Elevation	1,000 feet			
Rotor/Shaft wk <sup>2</sup>	50.0 Lb-Ft <sup>2</sup>			
Ref Wdg	CHT40560003 NONE			
Sound Pressure @ 1M	68 dBA			
VFD Rating	CONSTANT 10:1			
Outline Dwg	SS620676			
Conn. Diag	EE7308AA			
Additional Specifications:				
0				
365THFS8036				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0510	0.0280	0.2510	0.5180	8.6560



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 : 405TTFC6683

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

Catalog No : Y852A

Rework No : N/A

Directives :

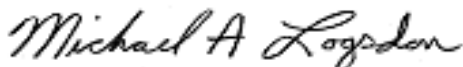
Low Voltage Directive 2014/35/EU

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**