

PRODUCT INFORMATION PACKET

Model No: 405TSTFCD6001

Catalog No: GT1045A

General Purpose Motor, 100 HP, 3 Ph, 60 Hz, 230/460 V, 3600 RPM, 405TS Frame, TEFC



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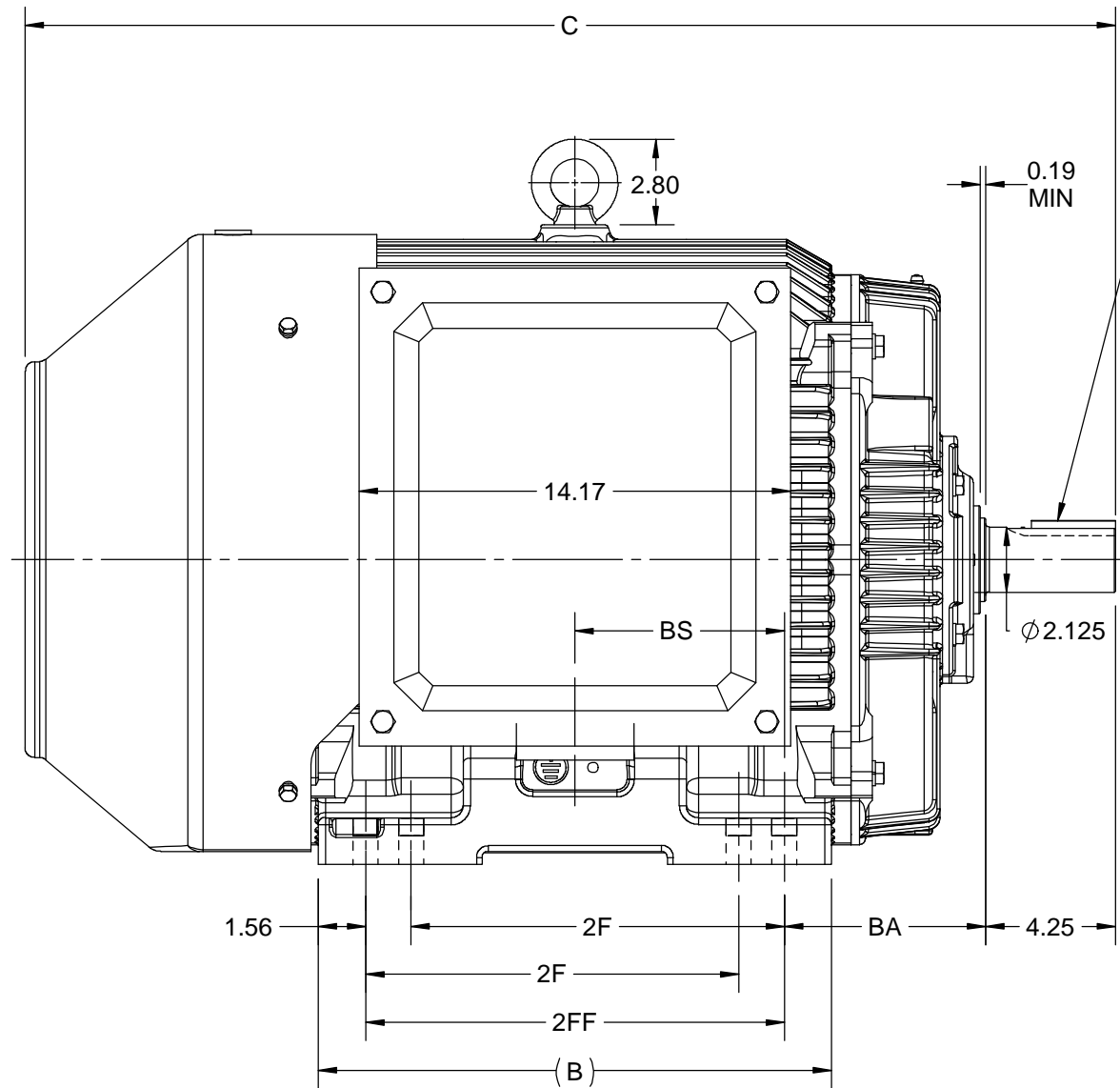
Nameplate Specifications

Output HP	100 Hp	Output KW	75.0 kW
Frequency	60 Hz	Voltage	230/460 V
Current	222.0/111.0 A	Speed	3575 rpm
Service Factor	1.15	Phase	3
Efficiency	94.5 %	Power Factor	89
Duty	Continuous	Insulation Class	F
Design Code	B	KVA Code	G
Frame	405TS	Enclosure	Totally Enclosed Fan Cooled
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6314	Opp Drive End Bearing Size	6314
UL	Listed	CSA	Y
CE	Y	IP Code	55
Hazardous Location	DIVISION 2 T2B	Number of Speeds	1

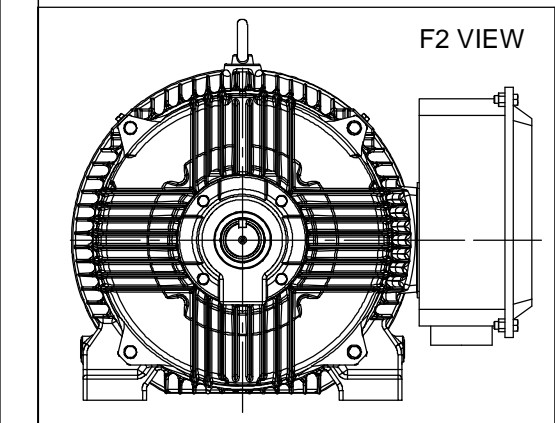
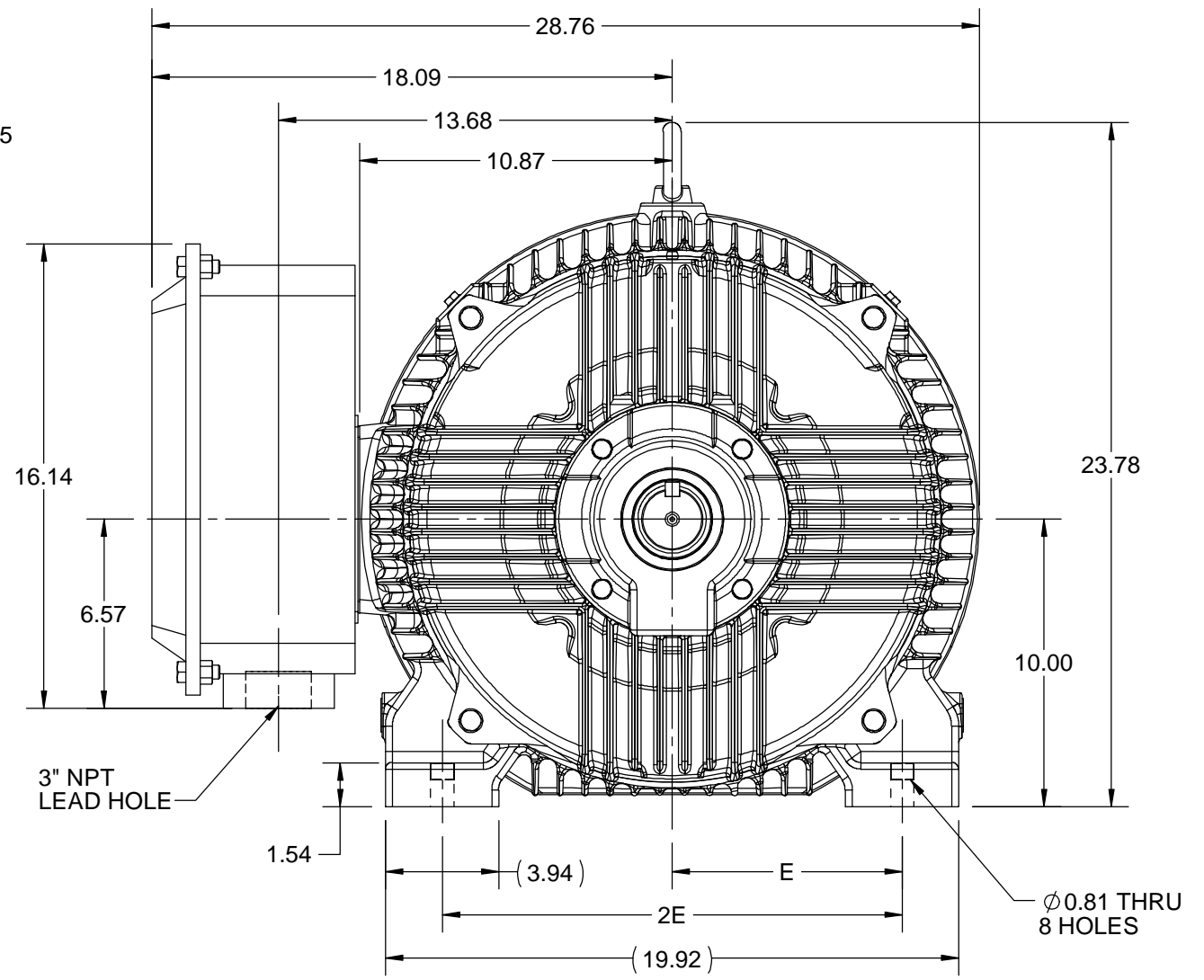
Technical Specifications

Electrical Type	Squirrel Cage Inverter Rated	Starting Method	Part Wdg Start Low Volt Only & Wye Start Delta Run Or Inverter
Poles	2	Rotation	Reversible
Resistance Main	.056 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	TS	Overall Length	35.77 in
Shaft Diameter	2.125 in	Shaft Extension	4.25 in
Assembly/Box Mounting	F1/F2 CAPABLE	Inverter Load	CONSTANT 2:1/VARIABLE 10:1
Outline Drawing	SS557004	Connection Drawing	EE7308AA

4			3					2	1
B	C	E	2E	2F	2FF	BA	BS	MOUNTING	
16.85	35.77	8.00	16.00	12.25	13.75	6.62	6.87	F1 OR F2	



1/2 x 1/2 x 2.75 KEY



DRAWING REVISION C	REVISION BY VS	REV DATE/© DATE 25-11-2020
ECO ECO-0195088	APPROVED BY GNK	DATE 25-11-2020
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DRAWN BY NIV	REGAL ® Regal Beloit America, Inc.
DATE 25/03/2016	
APPROVED BY SBD	DESCRIPTION OUTLINE 404/405TS FR NEMA-TEFC
DATE 25/03/2016	MATERIAL
REFERENCE	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE B
	DRAWING NUMBER SS557004
	SHEET 1 OF 1



LOW VOLTAGE



HIGH VOLTAGE



VIEW OF TERMINAL END

DRAWING REVISION K	REVISION BY AJW	DATE 07-17-2015
ECO ECO-0081632	APPROVED BY T. VUE	DATE 07-17-2015
ECO DESCRIPTION REV'D IEC MARKINGS PER IEC 60034-8		
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DRAWN BY LZ	Regal Beloit America, Inc.	
DATE 01-12-1994		
APPROVED BY GK	DESCRIPTION CONN DIAGRAM-EXTERNAL 3Ø-2/1 DELTA-12 LEADS	
DATE 01-14-1994		
REFERENCE	MATERIAL	PROCESS/FINISH
THIRD ANGLE PROJECTION	SIZE A	DRAWING NUMBER EE7308AA
		SHEET 1 OF 1

CERTIFICATION DATA SHEET

Model#: 405TSTFCD6001 AA **WINDING#:** HE32502006 NONE 2
CONN. DIAGRAM: EE7308AA **ASSEMBLY:** F1/F2 CAPABLE
OUTLINE: SS557004

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC. RPM	F.L. RPM	FRAME	ENCLOSURE	KVA CODE	DESIGN
100&75	75&56	3600	3575&2978	405TS	TEFC	G	B

PH	Hz	VOLTS	FL AMPS	START TYPE	DUTY	INSL	S.F	AMB°C	ELEVATION
3	60/50	230/460#190/ 380	222/111&203/ 102	Y START D RUN OR INV	CONTINUOU S	F7	1.15/1.15	40	3300

FULL LOAD EFF: 94.5&94.5	3/4 LOAD EFF: 94.5	1/2 LOAD EFF: 94.1	GTD. EFF	ELEC. TYPE	NO LOAD AMPS
FULL LOAD PF: 89&88.5	3/4 LOAD PF: 85.8	1/2 LOAD PF: 79	93.6	SQ CAGE INV RATED	68 / 34

F.L. TORQUE	LOCKED ROTOR AMPS	L.R. TORQUE	B.D. TORQUE	F.L. RISE°C
147 LB-FT	1450 / 725	265 LB-FT 180	427 LB-FT 290	65

SOUND PRESSURE @ 3 FT.	SOUND POWER	ROTOR WK^2	MAX. WK^2	SAFE STALL TIME	STARTS /HOUR	APPROX. MOTOR WGT
78 dBA	88 dBA	19 LB-FT^2	65 LB-FT^2	15 SEC.	2	1500 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	DIVISION 2 T2B	FALSE	NONE	BLUE (ENAMEL)

BEARINGS		GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
DE	OPE						
BALL	BALL	POLYREX EM	TS	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON
6314	6314						

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: VARIABLE 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

DATE: 07/03/2017 02:02:44 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

405TSTFCD6001

Date: 12/12/2018
 Customer: _____
 Attention: _____
 Submitted by: FAREEDA DUDEKULA



Submittal

Data @ 460 V

Motor Load Data

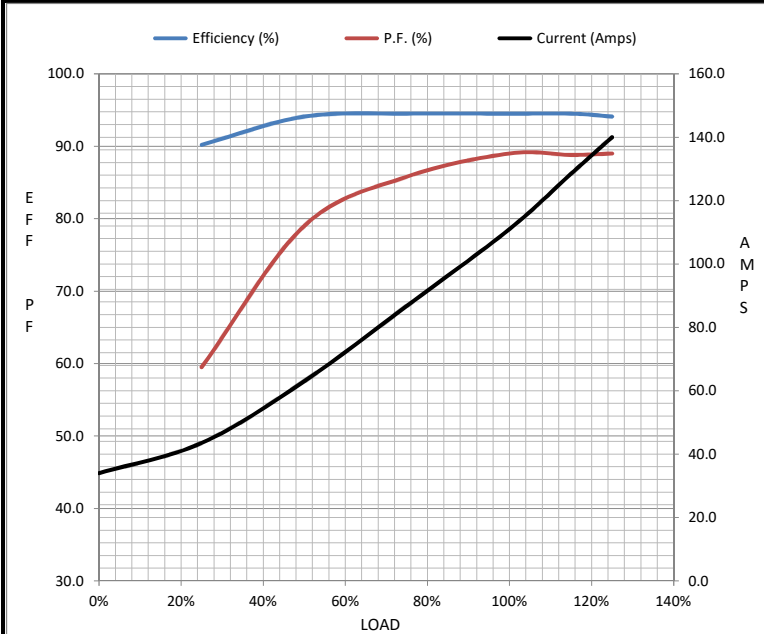
Load	0%	25%	50%	75%	100%	115%	125%	LR
Current (Amps)	34.0	43.5	63.0	86.8	111	129	140	725
Torque (ft-lb)	0.00	36.5	73.5	110	147	170	185	265
RPM	3600	3595	3588	3582	3575	3570	3565	0
Efficiency (%)		90.2	94.1	94.5	94.5	94.5	94.1	
P.F. (%)	6.5	59.5	79.0	85.8	89.0	88.8	89.0	29.0

Motor Speed Data

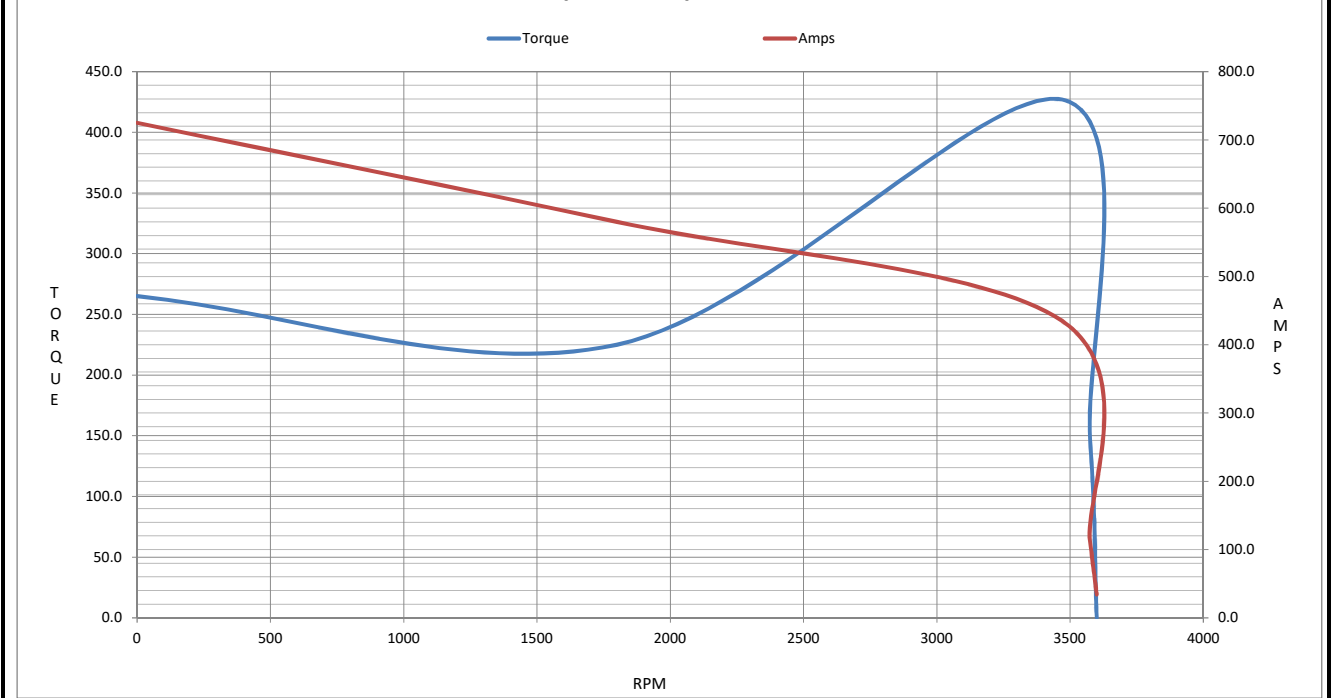
	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	1800	3470	3575	3600
Current (Amps)	725	580	435	111	34.0
Torque (ft-lb)	265	225	427	147	0.00

Information Block

HP	100.0			
Sync. RPM	3600			
Frame	405			
Enclosure	TEFC			
Construction	TFC			
Voltage	230/460#190/380 V			
Frequency	60 Hz			
Design	A			
LR Code letter	G			
Service Factor	1.15			
Temp Rise @ FL	65 °C			
Duty	CONT			
Ambient	40 °C			
Elevation	1,000 feet			
Rotor/Shaft wk ²	19.0 Lb-Ft ²			
Ref Wdg	HE32502006 NONE			
Sound Pressure @ 1M	78 dBA			
VFD Rating	VARIABLE 10:1			
Outline Dwg	SS557004			
Conn. Diag	EE7308AA			
Additional Specifications:				
0				
0				
EQUIV CKT (OHMS / PHASE)				
R1	R2	X1	X2	Xm
0.0340	0.0170	0.2330	0.2250	7.7830



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 : 405TSTFCD6001

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

Catalog No : GT1045A

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