

# PRODUCT INFORMATION PACKET

Model No: 405THFCD9086  
Catalog No: W596A  
75 HP, Severe Duty Motors, 3 phase, 1200 RPM, 460 V, 405T Frame, TEFC  
IEEE 841 Motors



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**REGAL**



### Nameplate Specifications

Output HP	<b>75 Hp</b>	Output KW	<b>56.0 kW</b>
Frequency	<b>60 Hz</b>	Voltage	<b>460 V</b>
Current	<b>89.0 A</b>	Speed	<b>1188 rpm</b>
Service Factor	<b>1.15</b>	Phase	<b>3</b>
Efficiency	<b>94.5 %</b>	Power Factor	<b>83.5</b>
Duty	<b>Continuous</b>	Insulation Class	<b>H</b>
Design Code	<b>B</b>	KVA Code	<b>G</b>
Frame	<b>405T</b>	Enclosure	<b>Totally Enclosed Fan Cooled</b>
Thermal Protection	<b>No</b>	Ambient Temperature	<b>40 °C</b>
Drive End Bearing Size	<b>6316</b>	Opp Drive End Bearing Size	<b>6314</b>
UL	<b>Listed</b>	CSA	<b>Y</b>
CE	<b>Y</b>	IP Code	<b>56</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>Selective Clockwise</b>
Resistance Main	<b>.0904 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>2.875 in</b>
Assembly/Box Mounting	<b>F1/F2 CAPABLE</b>		
Outline Drawing	<b>SS557665</b>	Connection Drawing	<b>EE7300</b>

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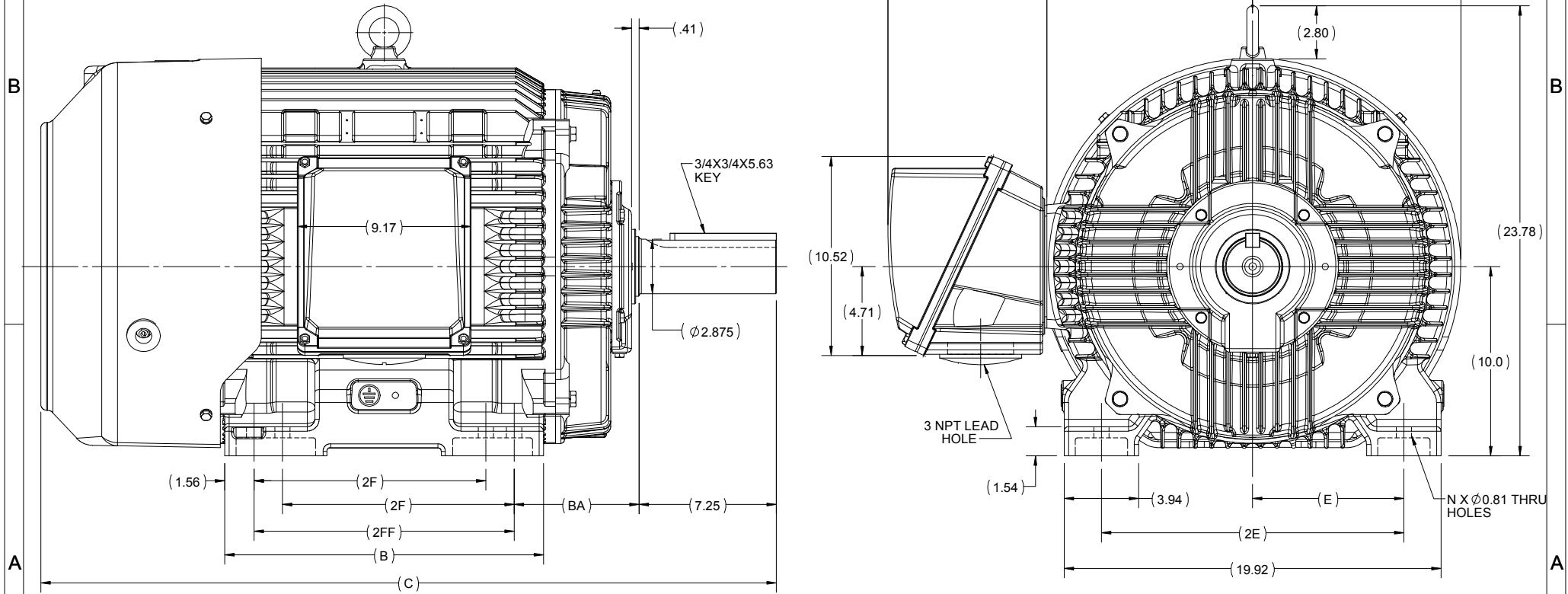
4

3

2

1

**OUTLINE**



DRAWING REVISION B	REVISION BY BISWA	DATE 25/01/2018
ECO ECO-0160791	APPROVED BY SBD	DATE 25/01/2018

**DRAWING UPDATED**  
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DRAWN BY BISWA
DATE 12/24/2018
APPROVED BY SBD
DATE 12/24/2018
REFERENCE

**REGAL™** Regal Beloit America, Inc.

DESCRIPTION  
**OUTLINE**  
 404/405T FR-SD & IEEE841

404/405T	16.85	38.88	13.75	12.25	6.62	8.00	16.00	8	F1 OR F2
FRAME	B	C	2FF	2F	BA	E	2E	N	MOUNTING

MATERIAL	PROCESS/FINISH
SIZE B	DRAWING NUMBER SS557665
THIRD ANGLE PROJECTION	SHEET 1 OF 1

4

3

2

1

**THREE PHASE - SINGLE VOLTAGE  
MOTOR - CONDUIT BOX @ 'A'**

**TO REVERSE ROTATION:  
INTERCHANGE ANY TWO  
LINE LEAD CONNECTIONS.**

**TERMINAL BLOCK WHEN SPECIFIED**



**VIEW OF TERMINAL END**

**IF MOTOR HAS  
6 LEADS**



A-9806 DECAL

**OPTIONAL CORD  
CONNECTION**



DRAWING REVISION <b>AB</b>	REVISION BY <b>JJB</b>	DATE <b>06-27-2017</b>
ECO <b>ECO-0125361</b>	APPROVED BY <b>TB</b>	DATE <b>06-27-2017</b>
ECO DESCRIPTION <b>UPDATED TO CURRENT STANDARDS</b>		
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DRAWN BY <b>DA</b>
DATE <b>03-26-1993</b>
APPROVED BY <b>TB</b>
DATE <b>03-26-1993</b>
REFERENCE
THIRD ANGLE PROJECTION

<b>Regal Beloit America, Inc.</b>	
DESCRIPTION <b>CONNECTION DIAGRAM</b> EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR	
MATERIAL	PROCESS/FINISH
SIZE <b>A</b>	DRAWING NUMBER <b>EE7300</b>
SHEET <b>1 OF 1</b>	



DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: EE7300  
 OUTLINE: SS557665-405T  
 WINDING: HE32506005 NONE 4

MODEL #: 405THFCD9086  
 CAT #: W596A

MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
75	56	1200	1188	405T	TEFC	TFC	G	B

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB (°C)	ELEV.(ft)
3	60	460	89	LINE OR INVERTER	CONT	H	1.15	40	3300

F.L. EFF	94.5	3/4 LD EFF	94.5	1/2 LD EFF	94.1	GTD EFF	ELECT. TYPE
F.L. PF	83.5	3/4 LD PF	79.5	1/2 LD PF	70.5	94.1	SQ CAGE INV RATED

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
332 LB-FT	542	646 LB-FT 195%	844 LB-FT 254%	65

SOUND PRESSURE @	SOUND	ROTOR WK <sup>1</sup>	MAX. LOAD WK <sup>2</sup>	SAFE STALL TIME	STARTS/HOUR	APROX.	MOTOR
68 dBA	77 dBA	50.0 LB-FT <sup>2</sup>	1200 LB-FT <sup>2</sup>	25 SEC.	2	1381	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							
BALL	BALL	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)		CAST IRON
6316	6314							

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)
0.057	0.028	0.246	0.442	7.56	0.080

*If Inverter equals NONE, contact factory for further information*

* N O T E S *		INVERTER TORQUE: VARIABLE 10:1
		INV. HP SPEED RANGE: NONE
		ENCODER: NONE
		NONE NONE NONE PPR
		BRAKE: NONE

PREPARED BY: ANUSHA M  
 DATE: 3/10/2020

FT-LB: NA  
 VOLTAGE: NONE HZ:

FORM: 3531 REV\_4 2/27/06  
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