

PRODUCT INFORMATION PACKET

Model No: 405THFCD8378

Catalog No: Y588A

Blue Max® Inverter Duty Encoder Motor, 75 HP, 3 Ph, 60 Hz, 230/460 V, 1200 RPM, 405TC Frame,
TEBC-AXIAL



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Nameplate Specifications

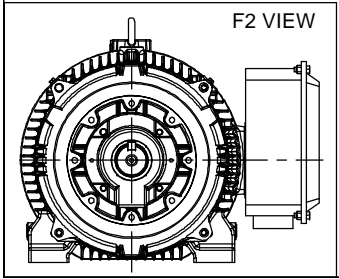
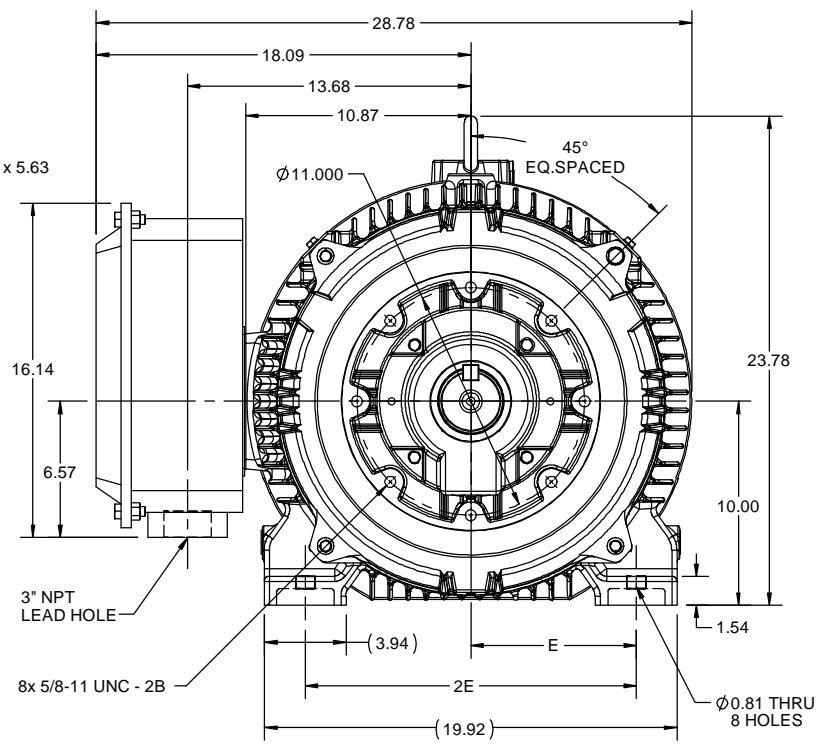
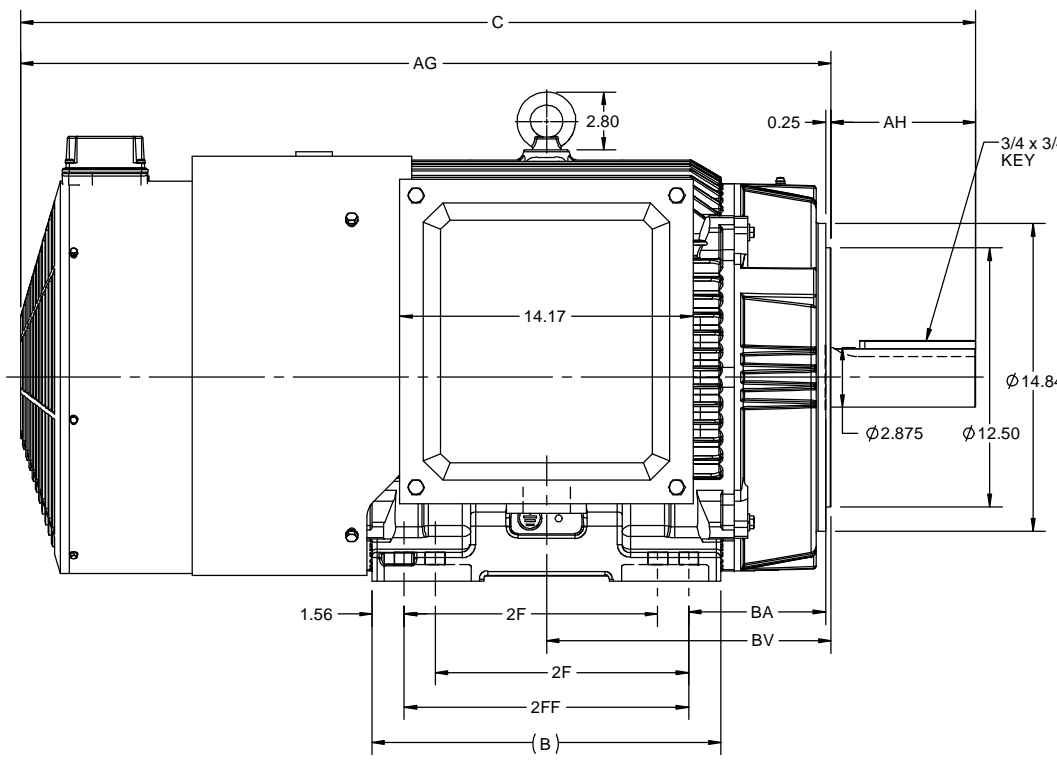
| | | | |
|------------------------|---------------------|----------------------------|---|
| Output HP | 75 Hp | Output KW | 56.0 kW |
| Frequency | 60 Hz | Voltage | 230/460 V |
| Current | 174.0/87.0 A | Speed | 1185 rpm |
| Service Factor | 1 | Phase | 3 |
| Efficiency | 94.1 % | Power Factor | 83 |
| Duty | Continuous | Insulation Class | H |
| Design Code | INV | KVA Code | H |
| Frame | 405TC | Enclosure | Totally Enclosed Blower cooled - Axial |
| Thermal Protection | Thermostat | Ambient Temperature | 40 °C |
| Drive End Bearing Size | 6316 | Opp Drive End Bearing Size | 6314 |
| UL | Recognized | CSA | Y |
| CE | Y | IP Code | 55 |
| Number of Speeds | 1 | | |

Technical Specifications

| | | | |
|-----------------------|------------------------------------|-------------------|------------------------|
| Electrical Type | Squirrel Cage Inverter Duty | Starting Method | Inverter Only |
| Poles | 6 | Rotation | Reversible |
| Resistance Main | .0982 Ohms | Mounting | Rigid Base |
| Motor Orientation | Horizontal | Drive End Bearing | Ball |
| Opp Drive End Bearing | Ball | Frame Material | Cast Iron |
| Shaft Type | T | Shaft Diameter | 2.875 in |
| Assembly/Box Mounting | F1/F2 CAPABLE | Inverter Load | CONSTANT 2000:1 |
| Connection Drawing | EE7308T | Outline Drawing | SS621112 |

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| | | | | | | | | | | | | |
|-------|-------|------|-------|-------|-------|-------|------|------|-------|----------|--|---|
| 4 | | | | 3 | | | | | | 2 | | 1 |
| B | C | E | 2E | 2F | 2FF | AG | AH | BA | BV | MOUNTING | | |
| 16.85 | 46.13 | 8.00 | 16.00 | 12.25 | 13.75 | 39.13 | 7.00 | 6.62 | 13.73 | F1 OR F2 | | |



| | | |
|---|----------------------|-------------------------------|
| DRAWING REVISION A | REVISION BY BISWA | REV DATE/© DATE 15/12/2020 |
| ECO CR-0000250 | APPROVED BY SBD | DATE 15/12/2020 |
| ECO DESCRIPTION NEW DRAWING RELEASE | | |
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PRIMARY DIMENSIONS ARE INCH
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ARE FOR REFERENCE ONLY

| | | |
|---------------------------|--|-----------------|
| DRAWN BY BISWA | REGAL Regal Beloit America, Inc. | |
| DATE 15/12/2020 | DESCRIPTION OUTLINE 404/405TC FR NEMA-TEBC AXIAL BLOWER | |
| APPROVED BY SBD | MATERIAL | PROCESS/FINISH |
| DATE 15/12/2020 | DRAWING NUMBER SS621112 | |
| REFERENCE | SIZE B | SHEET 1 OF 1 |
| THIRD ANGLE PROJECTION | | |

HIGH VOLTAGE



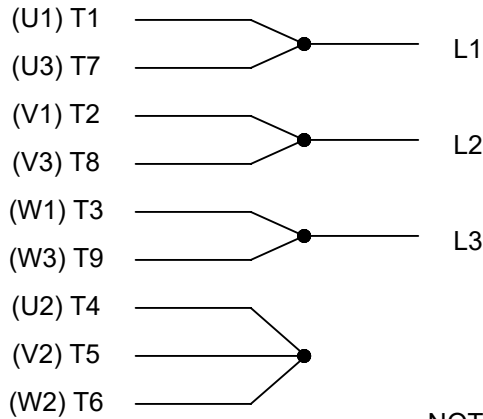
**THREE PHASE
DUAL VOLTAGE MOTOR**

THERMO-PROTECTORS
CONNECTED IN SERIES



NOTE FOR FACTORY USE ONLY:
TO SURGE TEST FOR COMMON CONNECT:
HIGH VOLT: CONNECT P1 TO T1
THEN P2 TO L1
LOW VOLT: CONNECT P1 TO T1 & T7,
THEN P2 TO L1

LOW VOLTAGE



VIEW OF TERMINAL END

NOTE: LEAD'S COLOR CAN BE YELLOW OR WHITE FOR MT2 PLANT

| | | | | | |
|---|-------------------|--------------------|----------------------------|--------------------|---|
| DRAWING REVISION T | REVISION BY ZR | DATE 01-14-2019 | | DRAWN BY SMC | Regal Beloit America, Inc. |
| ECO ECO-0159915 | APPROVED BY DR | DATE 01-15-2019 | | DATE 05-13-1992 | |
| ECO DESCRIPTION ADDED TERMINAL CONNECTION DIAGRAM | | | | APPROVED BY TB | DESCRIPTION CONN DIAGRAM-INTERNAL 3 PHASE - DUAL VOLTAGE MOTOR |
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| | | | REFERENCE EE7308/EE7300 | SIZE A | DRAWING NUMBER EE7308T |
| | | | THIRD ANGLE PROJECTION | | |

Data Sheet

Date: 8/29/2022
 Customer: _____
 Attention: _____
 Submitted by: _____



405THFCD8378
 NA _____ FAN
Submittal
 Data @ 460 V

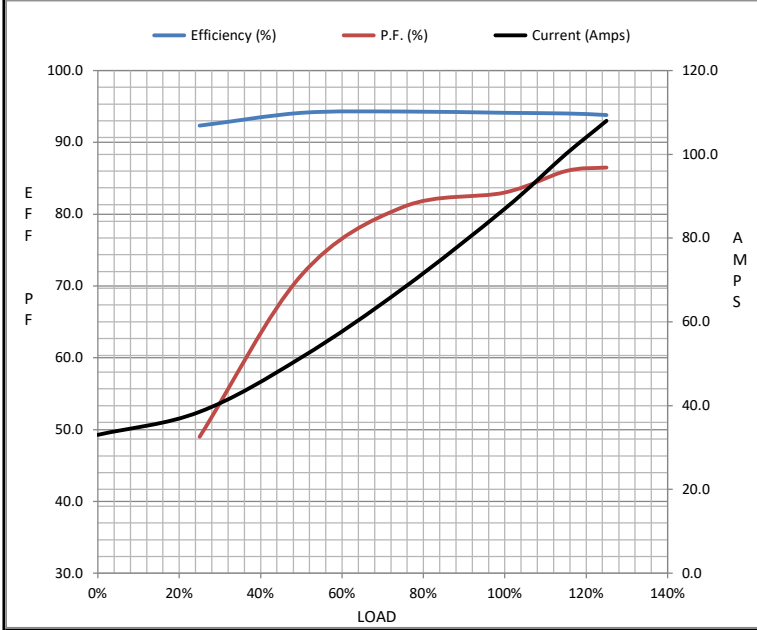
Motor Load Data

| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR |
|----------------|------|------|------|------|------|-------|------|------|
| Current (Amps) | 33.0 | 38.5 | 51.5 | 68.0 | 87.0 | 100 | 108 | 630 |
| Torque (ft-lb) | 0.00 | 82.0 | 165 | 248 | 332 | 382 | 415 | 675 |
| RPM | 1200 | 1195 | 1192 | 1190 | 1185 | 1,185 | 1182 | 0 |
| Efficiency (%) | | 92.3 | 94.1 | 94.3 | 94.1 | 94.0 | 93.8 | |
| P.F. (%) | 4.0 | 49.0 | 71.5 | 81.0 | 83.0 | 86.0 | 86.5 | 39.0 |

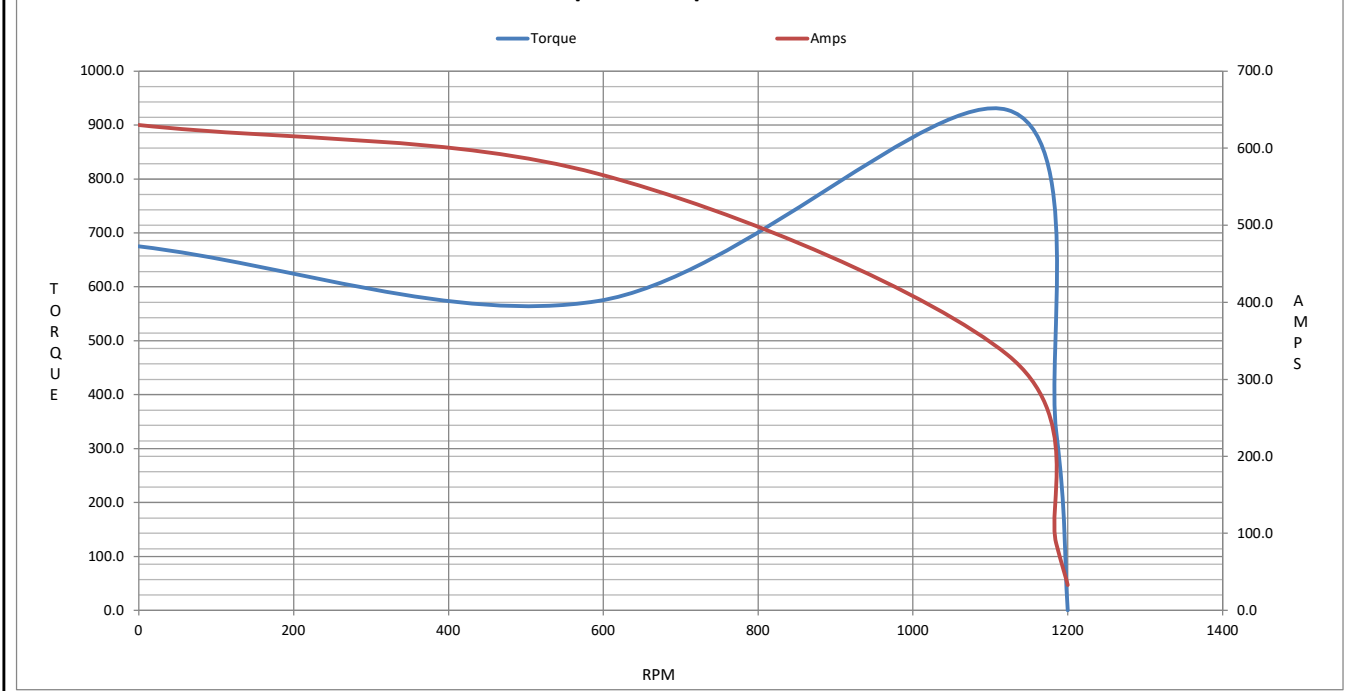
Motor Speed Data

| | LR | Pull-Up | BD | Rated | Idle |
|----------------|-----|---------|------|-------|------|
| Speed (RPM) | 0 | 593 | 1122 | 1185 | 1200 |
| Current (Amps) | 630 | 567 | 332 | 87.0 | 33.0 |
| Torque (ft-lb) | 675 | 574 | 928 | 332 | 0.00 |

| Information Block | | | | |
|-----------------------------|-------------------------|--------|--------|--------|
| HP | 75.0 | | | |
| Sync. RPM | 1200 | | | |
| Frame | 405 | | | |
| Enclosure | TEBC-AXIAL | | | |
| Construction | TBC | | | |
| Voltage | 230/460 V | | | |
| Frequency | 60 Hz | | | |
| Design | B | | | |
| LR Code letter | H | | | |
| Service Factor | 1.0 | | | |
| Temp Rise @ FL | 65 °C | | | |
| Duty | CONT | | | |
| Ambient | 40 °C | | | |
| Elevation | 3,300 feet | | | |
| Rotor/Shaft wk ² | 53.1 Lb-Ft ² | | | |
| Ref Wdg | HA32506015 NONE | | | |
| Sound Pressure @ 1M | 75 dBA | | | |
| VFD Rating | CONSTANT 2000:1 | | | |
| Outline Dwg | SS621112 | | | |
| Conn. Diag | EE7308T | | | |
| Additional Specifications: | | | | |
| 0 | | | | |
| 0 | | | | |
| EQUIV CKT (OHMS / PHASE) | | | | |
| R1 | R2 | X1 | X2 | Xm |
| 0.0650 | 0.0310 | 0.2570 | 0.3790 | 7.7600 |



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 : 405THFCD8378

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

Catalog No : Y588A

Rework No : N/A

Directives :

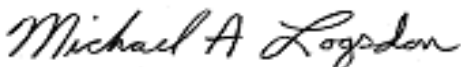
Low Voltage Directive 2014/35/EU

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