

PRODUCT INFORMATION PACKET



Model No: 056PNRA10100

Catalog No: SY001

SyMAX® Fan & Blower Motor, 0.50 HP, 3 Ph, 90 Hz, 230/460 V, 1800 RPM, S56C Frame, TENV



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Nameplate Specifications

| | | | |
|------------------------|----------------------|----------------------------|--|
| Phase | 3 | Output HP | 0.50 Hp |
| Output KW | 0.37 kW | Voltage | 230/460 V |
| Speed | 1800 rpm | Service Factor | 1.00 |
| Frame | S56C | Enclosure | Totally Enclosed Non Ventilated |
| Thermal Protection | No Protection | Efficiency | 83 % |
| Ambient Temperature | 40 °C | Frequency | 90 Hz |
| Current | 1.9/0.80 A | Power Factor | 80 |
| Duty | Continuous | Insulation Class | F |
| Design Code | B | KVA Code | NO KVA CODE |
| Drive End Bearing Size | 6203 | Opp Drive End Bearing Size | 6203 |
| UL | Recognized | CSA | Y |
| CE | Y | IP Code | 54 |
| Number of Speeds | 1 | | |

Technical Specifications

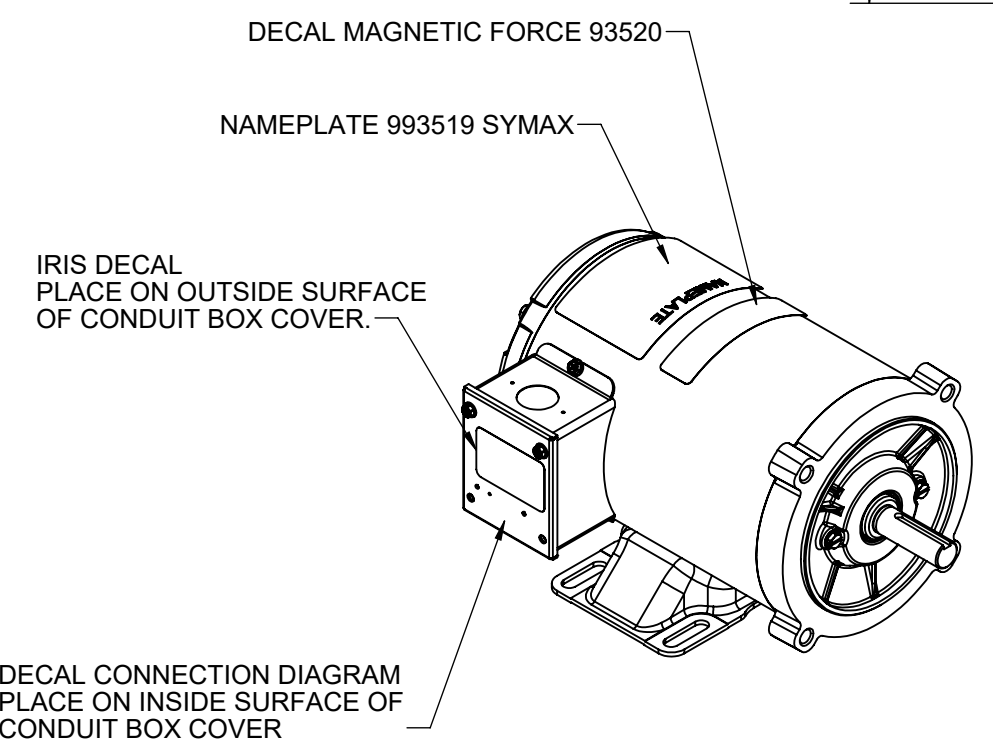
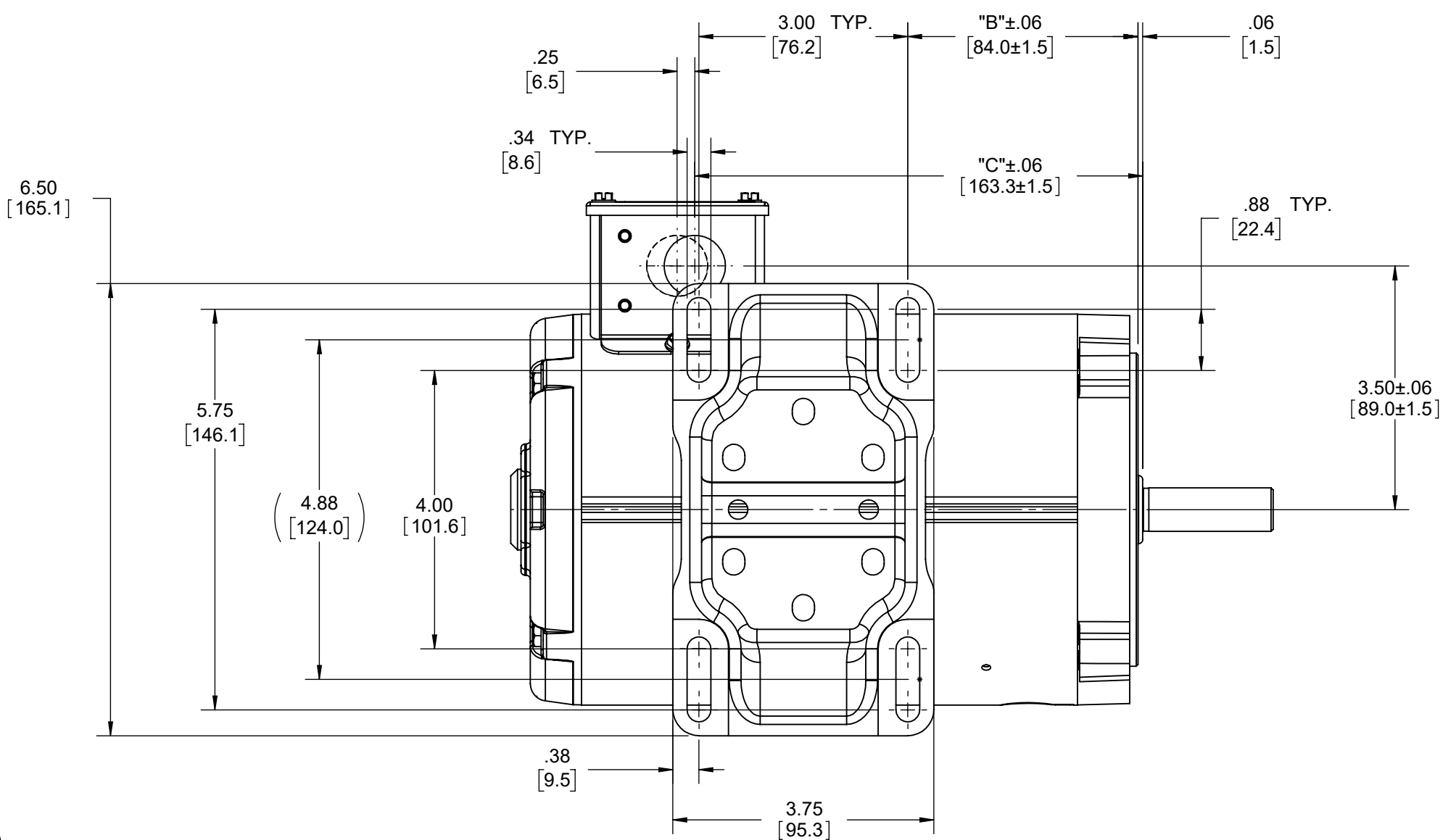
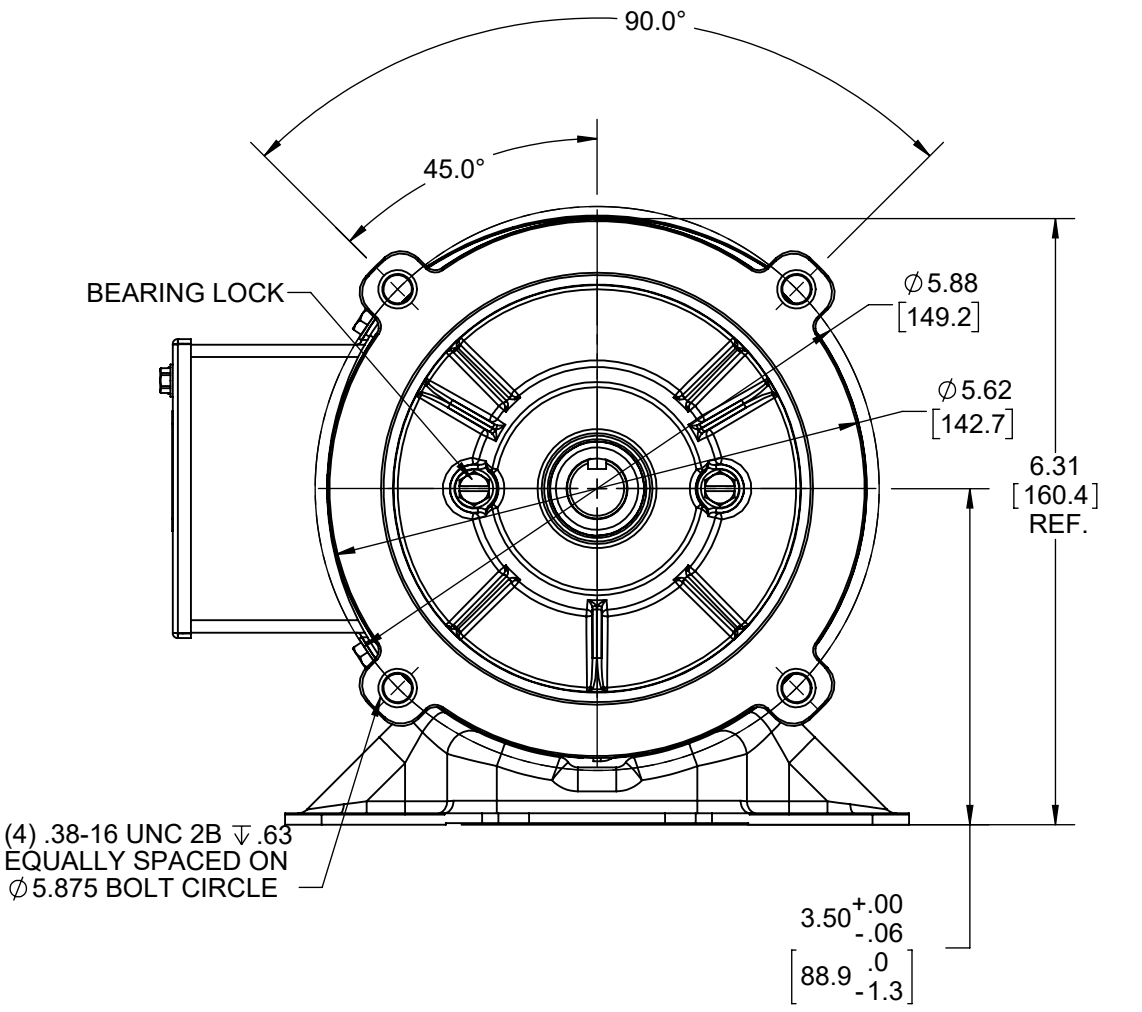
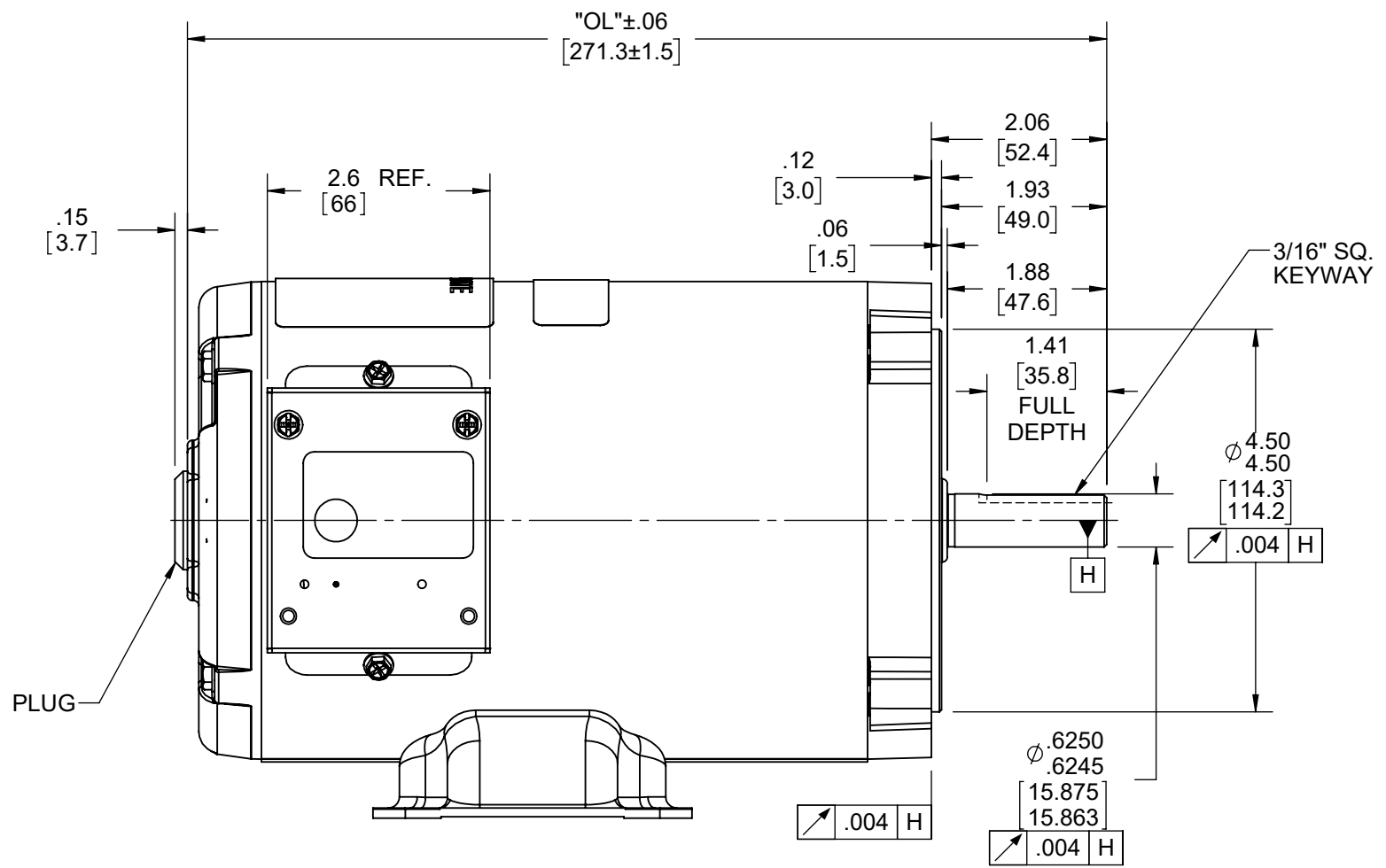
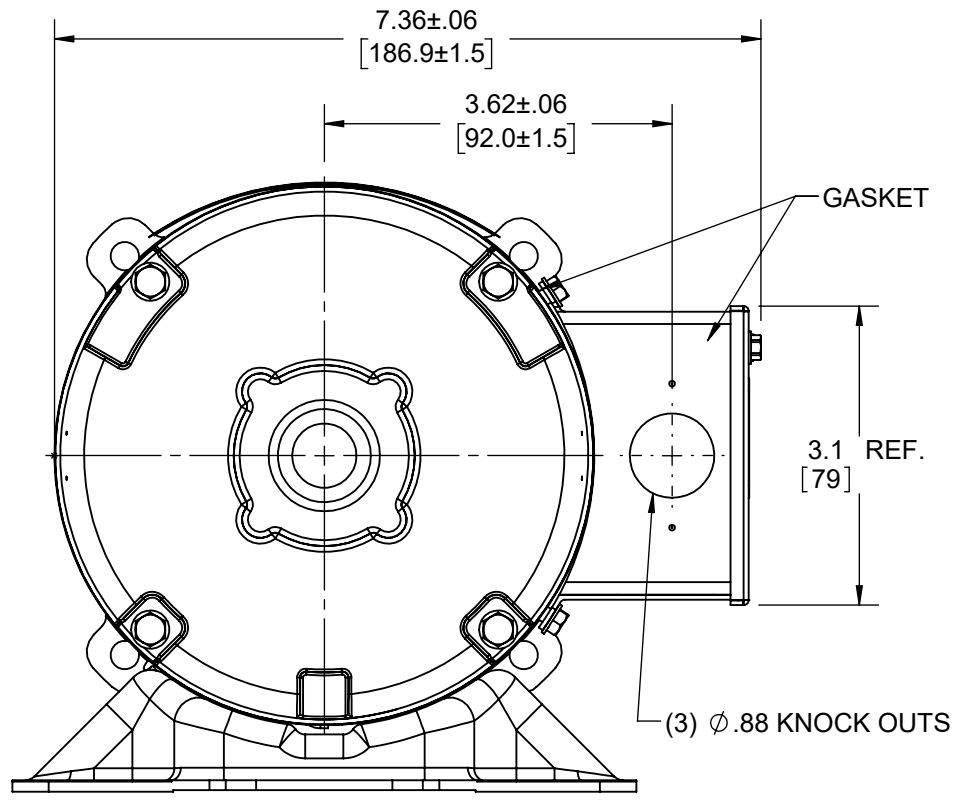
| | | | |
|-----------------------|----------------------------|-------------------|----------------------|
| Electrical Type | AC Permanent Magnet | Starting Method | Inverter Only |
| Poles | 6 | Rotation | Reversible |
| Resistance Main | 0 Ohms | Mounting | Rigid Base |
| Motor Orientation | Horizontal | Drive End Bearing | Ball |
| Opp Drive End Bearing | Ball | Frame Material | Rolled Steel |
| Shaft Type | NEMA 56 | Overall Length | 7.68 in |
| Shaft Diameter | 0.625 in | Shaft Extension | 2.06 in |
| Assembly/Box Mounting | F1 ONLY | | |
| Connection Drawing | EE7308 | Outline Drawing | 614-0004-001 |

4

3

2

1



| | | | | | |
|----------|------------|------|------|-------|-----------|
| -005 | 4.0 | 2.75 | 6.43 | 10.68 | 00 |
| -004 | 3.0 | 2.75 | 5.43 | 9.68 | 00 |
| -003 | 2.0 | 2.75 | 4.43 | 8.68 | 00 |
| -002 | 1.5 | 2.50 | 3.93 | 8.18 | 00 |
| -001 | 1.0 | 2.00 | 3.43 | 7.68 | 00 |
| ITEM NO. | STACK REF. | "B" | "C" | "OL" | ITEM REV. |

| | | | | | |
|--|-------------------|-----------------------------|---|------------------------|---|
| DRAWING REVISION F | REVISION BY SY | REV DATE/DATE 06/05/2025 | TOLERANCES (EXCEPT AS NOTED): DEC. INCH mm ANGLE .X ±0.1 [±3] ±0.5° .XX ±0.03 [±0.8] .XXX ±0.005 [±0.13] .XXXX ±0.0005 [±0.013] | DRAWN BY DWH | Regal Beloit America, Inc. |
| REQUEST NUMBER EQR-0243334 | APPROVED BY RK | DATE 06/05/2025 | REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [.08/.38] X 45° CORNER FILLETS: R.02 [.5] MACHINED SURFACES: .125/ mm 3.2 mm DIMENSIONS IN [BRACKETS] ARE FOR REFERENCE ONLY | DATE 11/27/2012 | |
| REQUEST NUMBER DESCRIPTION UPDATED DWG AS PER ECR. | | | | APPROVED BY | DESCRIPTION MOTOR ASSY 3 PHASE PMAC |
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| | | | | THIRD ANGLE PROJECTION | PROCESS/FINISH |
| | | | | SIZE C | DRAWING NUMBER 614-0004 |
| | | | | | SHEET 1 OF 1 |



| 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 | | | | | |



CERTIFICATION DATA SHEET

CUSTOMER:

CUSTOMER PO#:

ORDER #:

MODEL #: 56PNRA10100 A

CONN. DIAGRAM: EE7308

CUSTOMER PART #:

OUTLINE: 614-0004-001

MOUNTING: F1 ONLY

WINDING #: PM04806026 1

TYPICAL MOTOR PERFORMANCE DATA

| HP | kW | SYNC. RPM | F.L. RPM | FRAME | ENCLOSURE | KVA CODE | DESIGN |
|-----|------|-----------|----------|-------|-----------|-------------|--------|
| 1/2 | 0.37 | 1800 | 1800 | S56C | TENV | NO KVA CODE | B |

| PH | Hz | VOLTS | AMPS | START TYPE | DUTY | INSL | S.F. | AMB°C |
|----|----|---------|--------|---------------|------------|------|------|-------|
| 3 | 90 | 230/460 | 1.9/.8 | INVERTER ONLY | CONTINUOUS | F3 | 1.00 | 40 |

| FULL LOAD EFF: | 83 | 3/4 LOAD EFF: | 82.9 | 1/2 LOAD EFF: | 81.2 | GTD. EFF | ELEC. TYPE |
|----------------|----|---------------|------|---------------|------|----------|---------------------|
| FULL LOAD PF: | 80 | 3/4 LOAD PF: | 0 | 1/2 LOAD PF: | 0 | 82.2 | AC PERMANENT MAGNET |

| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE | B.D. TORQUE | F.L. RISE°C |
|-------------|-------------------|-------------|-------------|-------------|
| 17.5 LB-IN | / | - LB-IN - % | - LB-IN - % | 67 |

| SOUND PRESSURE @ 3 FT. | SOUND POWER | ROTOR WK^2 | MAX. WK^2 | SAFE STALL TIME | STARTS / HOUR | APPROX. MOTOR WGT |
|------------------------|-------------|--------------|-----------|-----------------|---------------|-------------------|
| 60 dBA | 70 dBA | 3.17 LB-FT^2 | 0 LB-FT^2 | 0 SEC. | 0 | 15 LBS. |

***** SUPPLEMENTAL INFORMATION *****

| DE BRACKET TYPE | ODE BRACKET TYPE | MOUNT TYPE | ORIENTATION | SEVERE DUTY | HAZARDOUS LOCATION | DRIP COVER | SCREENS | PAINT |
|-----------------|------------------|------------|-------------|-------------|--------------------|------------|---------|----------------|
| C-FACE | STANDARD | RIGID | HORIZONTAL | FALSE | NONE | FALSE | NONE | BLACK (POWDER) |

| BEARINGS | | GREASE | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT MATERIAL | FRAME MATERIAL |
|----------|------|------------|-------------|------------|-------------|--------------------------|----------------|
| DE | ODE | | | | | | |
| BALL | BALL | POLYREX EM | STANDARD 56 | NONE | NONE | 1144 STRESSPROOF (C-223) | ROLLED STEEL |
| 6203 | 6203 | | | | | | |

| 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 * | INVERTER TORQUE: NONE |
| | 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 |

PREPARED BY: Venkata Datta Ganesh Kothapalli **DATE:**

04/10/2025 05:06:37 AM

FORM 3531 REV.3 02/07/99

** Subject to change without notice.

REV 1 - CHANGED LOGO FROM MARATHON TO LEESON - 3/25/2025

EC Declaration of Conformity

The undersigned representing
the manufacturer:

Regal Beloit America
1946 West Cook Road
Fort Wayne, IN 46818

and the authorized representative
established within the Community:

Regal Beloit Italy
Via Modena, 18
24040 Ciserano(BG) - Italy

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 : 056PNRA10100

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

Catalog No : SY001

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:



Zach Stauffer
Vice President, Engineering

Authorized Representative in the Community:



Stefano Casiraghi
Technology Director, Engineering

Created on 07/08/2025

CE 25