# PRODUCT INFORMATION PACKET

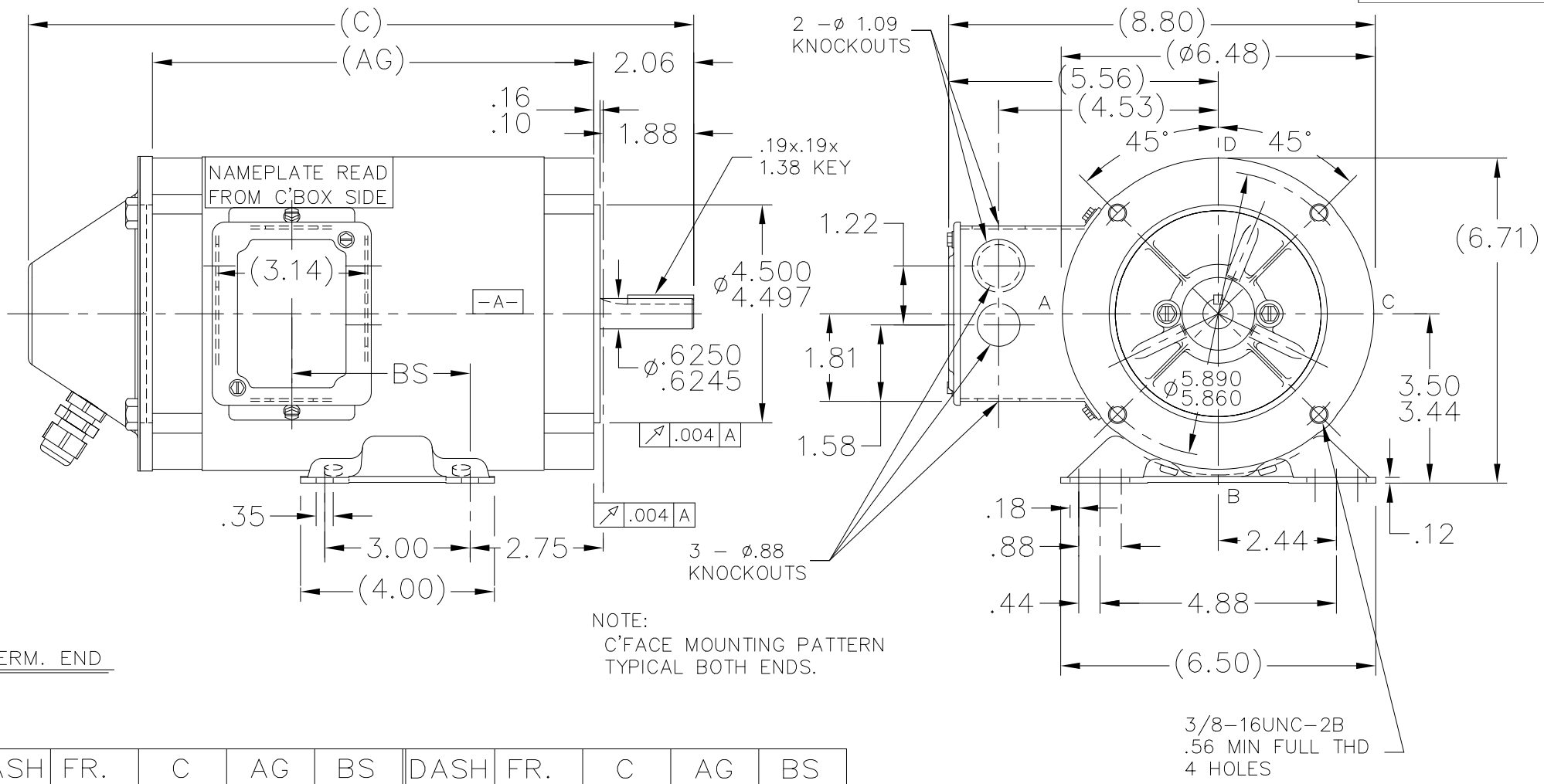
Model No: 056H17T15526
Catalog No: Y280
Encoder Motor, 0.50 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 56C Frame, TENV

## Nameplate Specifications

| | | | |
|---|---|---|---|
| Phase | 3 | Output HP | 0.50 Hp |
| Output KW | 0.37 kW | Voltage | 230/460 V |
| Speed | 1725 rpm | Service Factor | 1.0 |
| Frame | 56C | Enclosure | Totally Enclosed Non Ventilated |
| Thermal Protection | No Protection | Efficiency | 80 % |
| Ambient Temperature | 40 °C | Frequency | 60 Hz |
| Current | 1.6/0.80 A | Power Factor | 72 |
| Duty | Continuous | Insulation Class | H |
| Design Code | INV | KVA Code | L |
| Drive End Bearing Size | 6203 | Opp Drive End Bearing Size | 6203 |
| UL | Recognized | CSA | Y |
| CE | Y | IP Code | 43 |
| Number of Speeds | 1 | | |

## Technical Specifications

| | | | |
|---|---|---|---|
| Electrical Type | Squirrel Cage Inverter Duty | Starting Method | Inverter Only |
| Poles | 4 | Rotation | Reversible |
| Resistance Main | 36.2 Ohms | Mounting | Bolt-on Base |
| Motor Orientation | Horizontal | Drive End Bearing | Ball |
| Opp Drive End Bearing | Ball | Frame Material | Rolled Steel |
| Shaft Type | NEMA 56 | Overall Length | 13.74 in |
| Frame Length | 7.06 in | Shaft Diameter | 0.625 in |
| Shaft Extension | 2.06 in | Assembly/Box Mounting | F1 ONLY |
| Inverter Load | CONSTANT 1000:1 | | |
| Connection Drawing | A-EE7308 | Outline Drawing | A-107388-706 |




NOTE:
C'FACE MOUNTING PATTERN
TYPICAL BOTH ENDS.

| DASH | FR. | C | AG | BS | DASH | FR. | C | AG | BS |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | 756 | 56-75 | 14.24 | 9.61 | 4.25 |
| 606 | 56-60 | 12.74 | 8.11 | 2.75 | 806 | 56-80 | 14.74 | 10.11 | 4.75 |
| 656 | 56-65 | 13.24 | 8.61 | 3.25 | 856 | 56-85 | 15.24 | 10.61 | 5.25 |
| 706 | 56-70 | 13.74 | 9.11 | 3.75 | | | | | |

NOTES:
1. REMOVABLE BASE
2. CONDUIT BOX CAN BE ROTATED 180°.

| NO. | REVISION | BY & DATE | CHK |
|---|---|---|---|
| 1 | CHANGED DRAWING TEMPLATE TO RRX PER ECR-0233449 | KVDG 05-29-2024 | DS |

| TOLERANCES UNLESS SPECIFIED | |
|---|---|
| DEC. | INCHES |
| .X | ±.1 |
| .XX | ±.03 |
| .XXX | ±.005 |
| .XXXX | ±.0005 |
| ANG | ±7'30" |

Regal Rexnord — Regal Beloit America, Inc.

TITLE OUTLINE – HS 20 TACH.
56 FR. – TENV – BB – DBL. C'FACE

MAT'L.

FINISH

CAD FILE 107388

RFP

DIST WP

| | |
|---|---|
| DRAWN | JJB 03-26-2008 |
| CHK | ML 03-27-2008 |
| APPD | GK 03-27-2008 |
| SCALE | 5=16 |
| REF | 104043A |
| FMF | MU86303 |
| PREV | ME080078 |

| SIZE | DRAWING NO. | PAGE | OF | REV. |
|---|---|---|---|---|
| A | 107388 | | | 1 |

EE7308

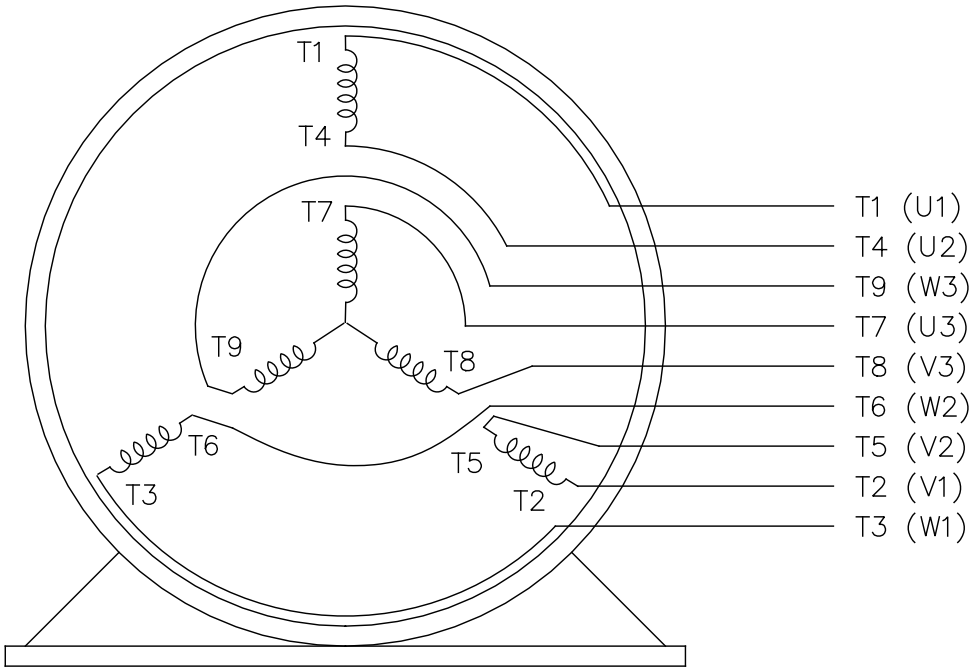
# THREE PHASE
# DUAL VOLTAGE MOTOR

## HIGH VOLTAGE

(U1) T1 — L1
(V1) T2 — L2
(W1) T3 — L3
(U2) T4
(U3) T7
(V2) T5
(V3) T8
(W2) T6
(W3) T9

## LOW VOLTAGE

(U1) T1
(U3) T7 — L1
(V1) T2
(V3) T8 — L2
(W1) T3
(W3) T9 — L3
(U2) T4
(V2) T5
(W2) T6




VIEW OF TERMINAL END

REF.
WINDING DIAGRAM

T8Y, T2Y, T2BL, T4BX, T2EC, T2G
T6BZ, T2B, T6BL, T4AV, T6B, T4B

## OPTIONAL CORD CONNECTION

L1 — WHITE
L2 — RED
L3 — BLACK

| NO. | REVISION | BY & DATE | CHK |
|---|---|---|---|
| 5 | CHG TO REGAL LOGO | SL 09/10/2015 | AB |
| 4 | REVISED IEC NOTATIONS | MSG 11/15/2011 | CMN |
| 3 | ADDED IEC NOTATIONS... (U1), (V1) ETC. MU95194 | MSG 5/10/2010 | MJS |
| 2 | ADDED THE OPTIONAL CORD CONNECTION MU46318 | RDH 04/24/2003 | DRS |
| 1 | REDRAWN | RM 11/20/1990 | |

TOLERANCES UNLESS SPECIFIED

| ANG | DEC. | INCHES |
|---|---|---|
| | .X | ±.1 |
| | .XX | ±.02 |
| | .XXX | ±.005 |
| | .XXXX | ±.0005 |
| ANG | | ±7'30" |

Regal Beloit America, Inc.

TITLE CONNECTION DIAGRAM
3ø – DUAL VOLTAGE MOTOR

MAT'L.
FINISH
CAD FILE ee7308
RFP
DIST WP

| | |
|---|---|
| DRAWN RM | 11/20/1990 |
| CHK ML | 11/21/1990 |
| APPD SAS | 04/24/2003 |
| SCALE | 1=1 |
| REF | |
| FMF | |
| PREV | |

SIZE A | DRAWING NO. EE7308 | PAGE OF | REV. 5

## CERTIFICATION DATA SHEET

| | | | |
|---|---|---|---|
| **Model#:** | 56H17T15526 A | **WINDING#:** | ZT471 F 4 |
| **CONN. DIAGRAM:** | A-EE7308 | **ASSEMBLY:** | F1 ONLY |
| **OUTLINE:** | A-107388-706 | | |

## TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNC. RPM | F.L. RPM | FRAME | ENCLOSURE | KVA CODE | DESIGN |
|---|---|---|---|---|---|---|---|
| 1/2 | .37 | 1800 | 1725 | 56C | TENV | L | INV |

| PH | Hz | VOLTS | FL AMPS | START TYPE | DUTY | INSL | S.F | AMB°C | ELEVATION |
|---|---|---|---|---|---|---|---|---|---|
| 3 | 60 | 230/460 | 1.6/.8 | INVERTER ONLY | CONTINUOUS | H1 | 1.0 | 40 | 3300 |

| FULL LOAD EFF: 80 | 3/4 LOAD EFF: 78.5 | 1/2 LOAD EFF: 75 | GTD. EFF | ELEC. TYPE | NO LOAD AMPS |
|---|---|---|---|---|---|
| FULL LOAD PF: 72 | 3/4 LOAD PF: 63 | 1/2 LOAD PF: 50.5 | 77.5 | SQ CAGE INV DUTY | 1 / .5 |

| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE | B.D. TORQUE | F.L. RISE°C |
|---|---|---|---|---|
| 1.52 LB-FT | 11.2 / 5.6 | 4.6 LB-FT 303 | 5.8 LB-FT 382 | 55 |

| SOUND PRESSURE @ 3 FT. | SOUND POWER | ROTOR WK^2 | MAX. WK^2 | SAFE STALL TIME | STARTS /HOUR | APPROX. MOTOR WGT |
|---|---|---|---|---|---|---|
| 62 dBA | 72 dBA | 0.056 LB-FT^2 | 0 LB-FT^2 | 0 SEC. | 0 | 25 LBS. |

## EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

| R1 | R2 | X1 | X2 | XM |
|---|---|---|---|---|
| 22.30668 | 17.028 | 24.123 | 18.1632 | 532.9764 |

| RM | ZREF | XR | TD | TD0 |
|---|---|---|---|---|
| 20263.32 | 567.6 | 1.5 | 0.0054 | 0.885 |

## *** SUPPLEMENTAL INFORMATION ***

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

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

| 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

INVERTER TORQUE: CONSTANT 1000:1
INV. HP SPEED RANGE: 2.0 X BASE SPEED

ENCODER: REGAL SUPPLIED - REGAL MOUNT
DYNAPAR HS20
MS CONNECTOR 1024 PPR

BRAKE: NONE NONE

* NOTES *

| | | | |
|---|---|---|---|
| NONE | P/N NONE | | |
| NONE | NONE | | |
| NONE FT-LB | | NONE V | NONE Hz |

DATE: 06/28/2017 01:07:04 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

# Data Sheet

Date: 3/1/2018
Customer:
Attention:
Submitted by:

LEESON

56H17T15526

**Submittal**

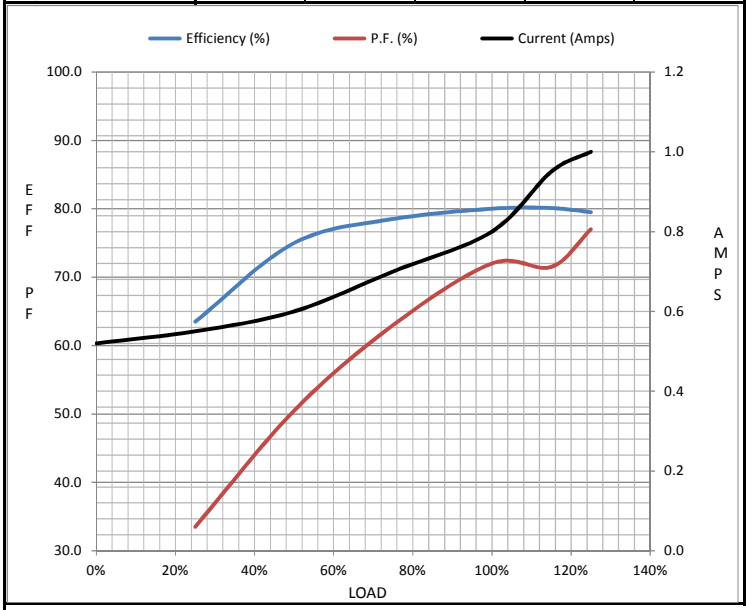
Data @ 460 V

## Motor Load Data

| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR | |
|---|---|---|---|---|---|---|---|---|---|
| Current (Amps) | 0.52 | 0.55 | 0.60 | 0.70 | 0.80 | 0.95 | 1.00 | 5.6 | |
| Torque (ft-lb) | 0.00 | 0.37 | 0.75 | 1.10 | 1.52 | 1.70 | 1.90 | 4.6 | |
| RPM | 1800 | 1785 | 1775 | 1760 | 1735 | 1,735 | 1725 | 0 | |
| Efficiency (%) | | 63.5 | 75.0 | 78.5 | 80.0 | 80.1 | 79.5 | | |
| P.F. (%) | 11.0 | 33.5 | 50.5 | 63.0 | 72.0 | 71.5 | 77.0 | 69.5 | |

## Motor Speed Data

| | LR | Pull-Up | BD | Rated | Idle |
|---|---|---|---|---|---|
| Speed (RPM) | 0 | 800 | 1330 | 1735 | 1800 |
| Current (Amps) | 5.6 | 5.0 | 3.5 | 0.80 | 0.52 |
| Torque (ft-lb) | 4.6 | 4.2 | 5.8 | 1.52 | 0.00 |

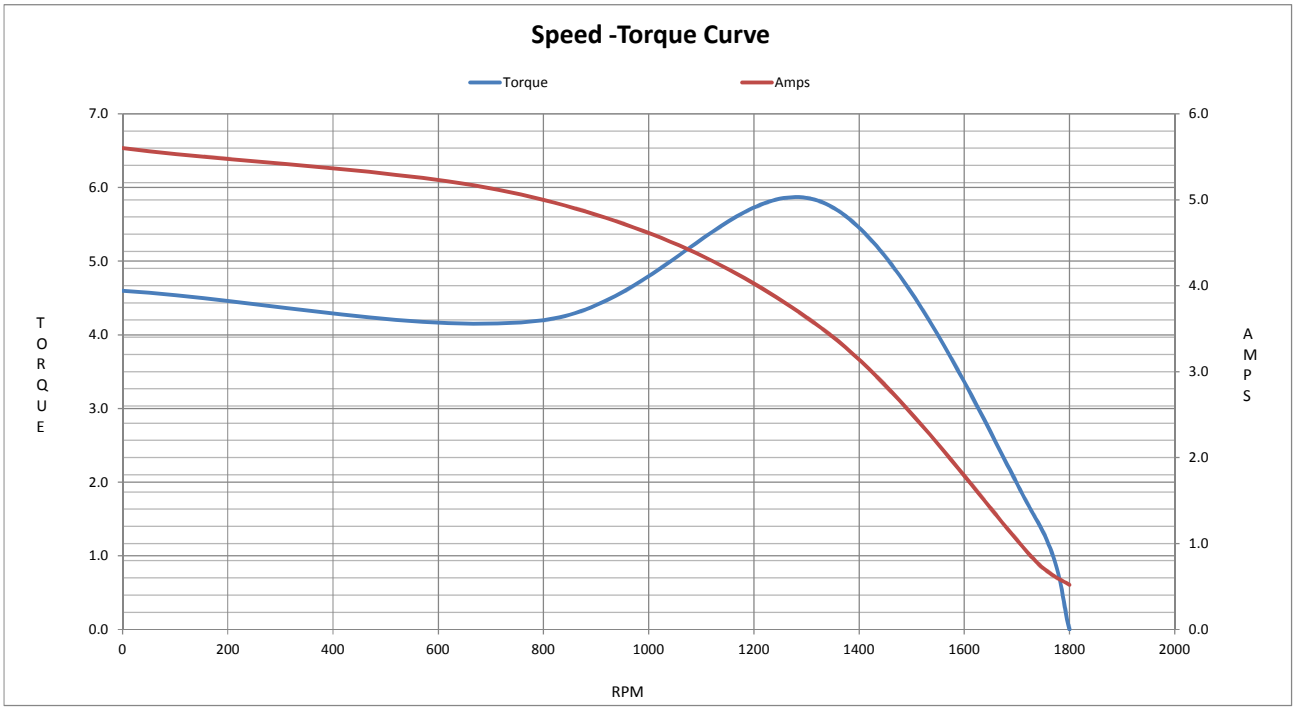



## Information Block

| | | |
|---|---|---|
| HP | 0.5 | |
| Sync. RPM | 1800 | |
| Frame | 56 | |
| Enclosure | TENV | |
| Construction | TTR | |
| Voltage | 230/460 | V |
| Frequency | 60 | Hz |
| Design | B | |
| LR Code letter | L | |
| Service Factor | 1.15 | |
| Temp Rise @ FL | 55 | °C |
| Duty | CONT | |
| Ambient | 40 | °C |
| Elevation | 1,000 | feet |
| Rotor/Shaft wk² | 0.06 | Lb-Ft² |
| Ref Wdg | ZT471 F | |
| Sound Pressure @ 1M | 62 | dBA |
| VFD Rating | CONSTANT 1000:1 | |
| Outline Dwg | A-107388-706 | |
| Conn. Diag | A-EE7308 | |
| Additional Specifications: | | |
| 0 | | |
| 0 | | |

EQUIV CKT (OHMS / PHASE)

| R1 | R2 | X1 | X2 | Xm |
|---|---|---|---|---|
| 22.3070 | 17.0280 | 24.1230 | 18.1630 | 532.9760 |




REV 1 - CHANGED HEADER FROM MARATHON TO LESSON - 8/4/2025

# 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 : 056H17T15526

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

Catalog No : Y280

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