

PRODUCT INFORMATION PACKET

Model No: 182THTY7726

Catalog No: Y541A

Black Max® Inverter Duty Speed Ratio Motor, 3 HP, 3 Ph, 60 Hz, 230/460 V, 1800 RPM, 182TC Frame,
TENV



Regal and Marathon are trademarks of Regal Rexnord Corporation or one of its affiliated companies.
©2022 Regal Rexnord Corporation, All Rights Reserved. MC017097E

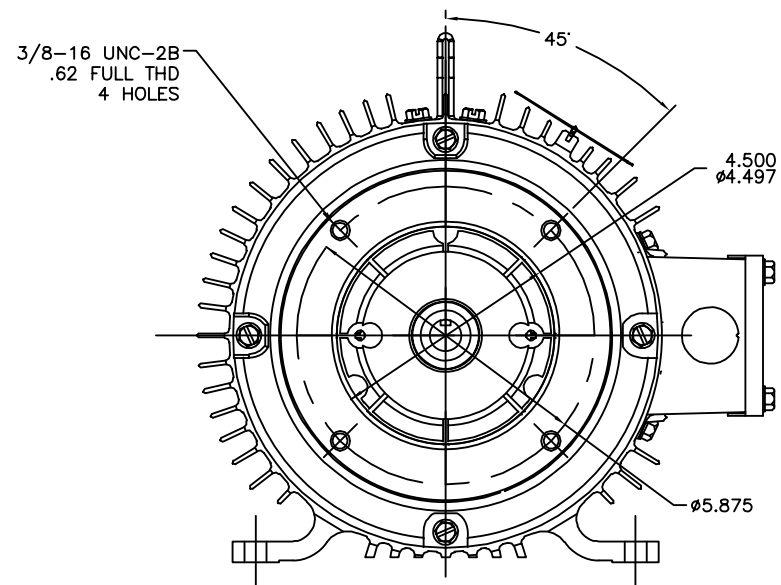
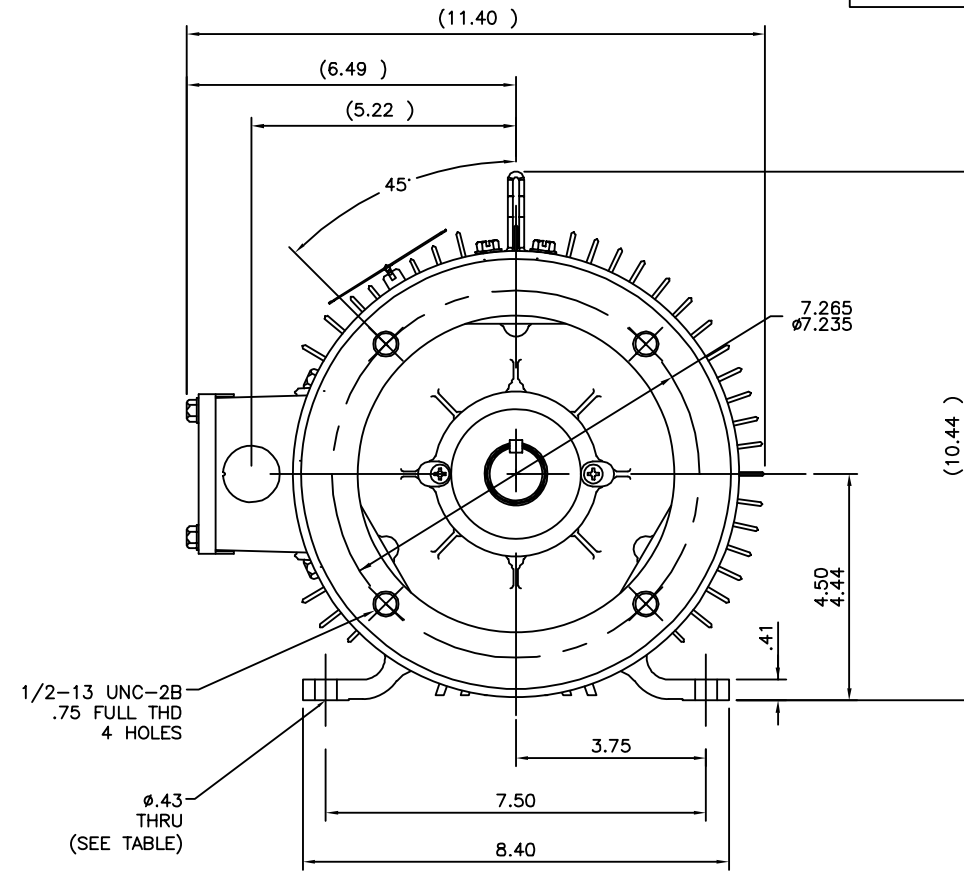
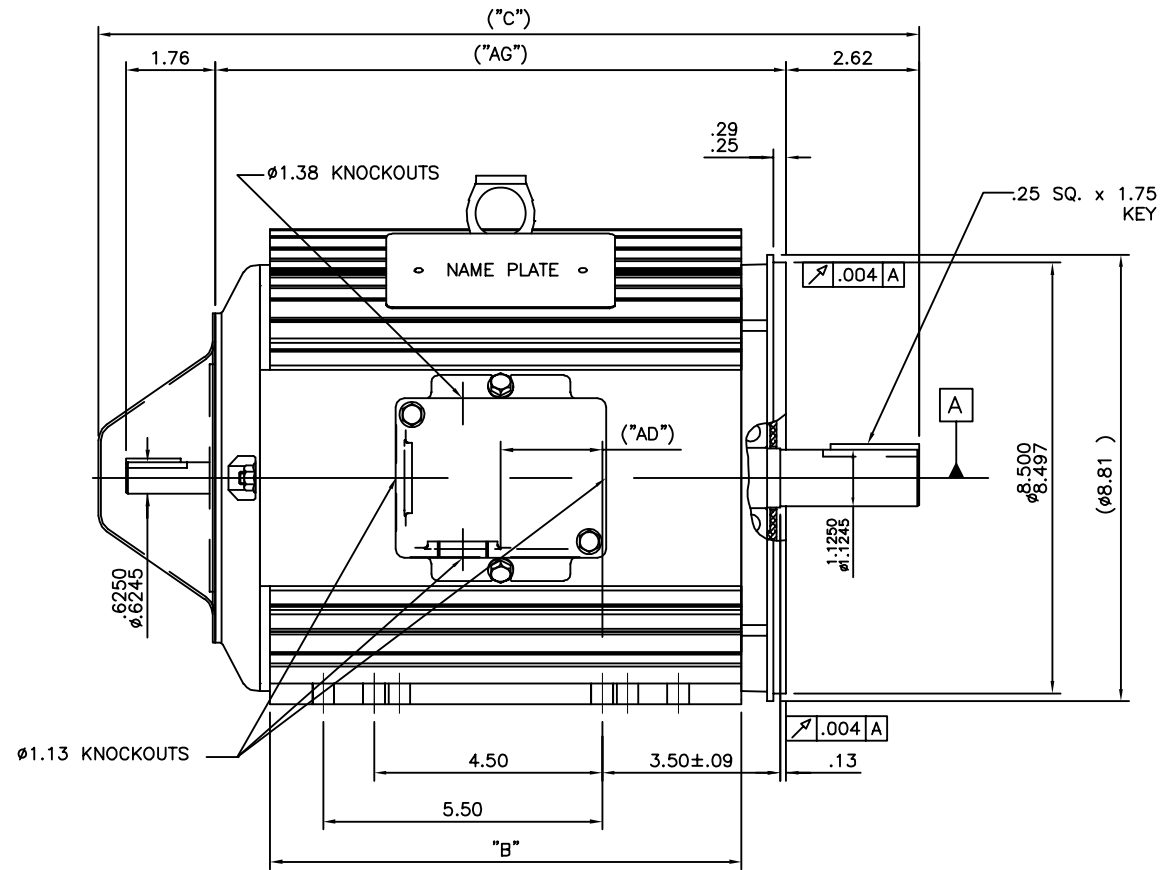
Nameplate Specifications

| | | | |
|------------------------|-------------------|----------------------------|--|
| Output HP | 3 Hp | Output KW | 2.2 kW |
| Frequency | 60 Hz | Voltage | 230/460 V |
| Current | 8.2/4.1 A | Speed | 1755 rpm |
| Service Factor | 1 | Phase | 3 |
| Efficiency | 87.5 % | Power Factor | 78.5 |
| Duty | Continuous | Insulation Class | F |
| Design Code | INV | KVA Code | N |
| Frame | 182TC | Enclosure | Totally Enclosed Non Ventilated |
| Thermal Protection | Thermostat | Ambient Temperature | 40 °C |
| Drive End Bearing Size | 6207 | Opp Drive End Bearing Size | 6206 |
| 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 | 0 Ohms | Mounting | Rigid Base |
| Motor Orientation | Horizontal | Drive End Bearing | Ball |
| Opp Drive End Bearing | Ball | Frame Material | Aluminum |
| Shaft Type | T | Overall Length | 16.19 in |
| Frame Length | 9.50 in | Shaft Diameter | 1.125 in |
| Shaft Extension | 2.62 in | Assembly/Box Mounting | F1/F2 CAPABLE |
| Inverter Load | CONSTANT 1000:1 | | |
| Outline Drawing | 036119ME-950 | Connection Drawing | 005010.20ME |

036119ME

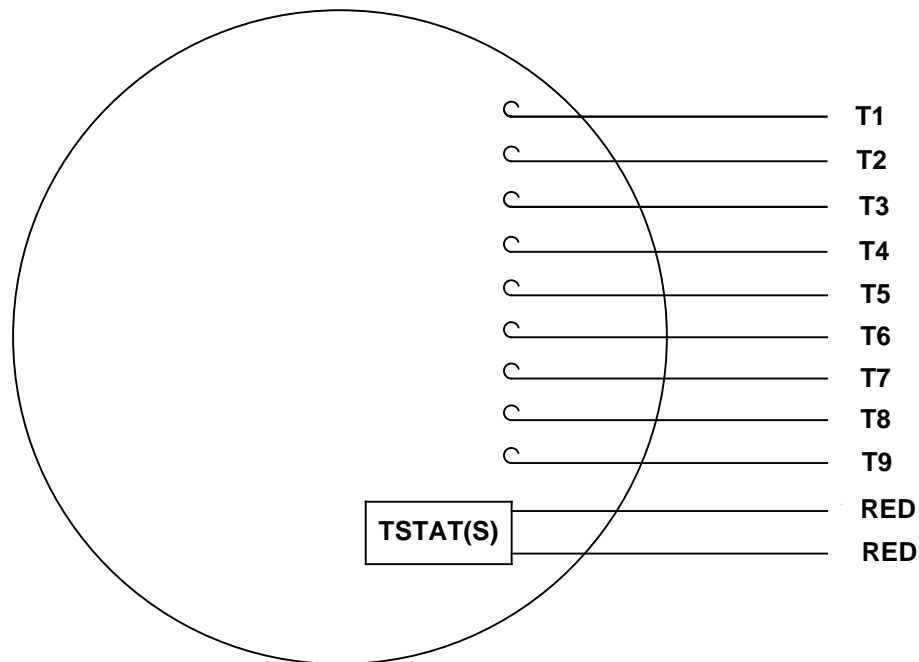


LEAD END BRACKET DETAIL
(COVER REMOVED)

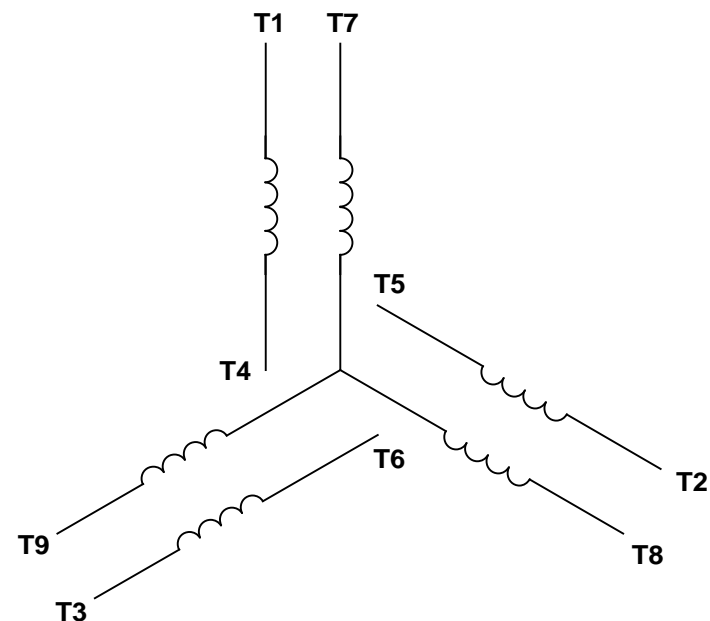
| | | | | | |
|---------|-------|------|-----|-------|------------|
| | | | | | |
| 950 | 16.19 | 2.00 | 9.3 | 11.26 | 12 |
| DASH NO | "C" | "AD" | "B" | "AG" | FOOT HOLES |

| | | TOLERANCES UNLESS SPECIFIED | | MARATHON ELECTRIC | | DRAWN PVR 02/03/15 | |
|--|----------|-----------------------------|--------|------------------------------------|-------------|--------------------|--------|
| | | DEC. | INCHES | | | CHK ST 02/03/15 | |
| | | .X | ±.1 | | | APPD | |
| | | .XX | ±.03 | TITLE | | SCALE 3=8 | |
| | | .XXX | ±.005 | 182/184T-RIGID-TENV-C FACE OUTLINE | | REF 035977ME | |
| | | .XXXX | ±.0005 | MAT'L. BRAKE/ENCODER PROVISION | | FMF | |
| NO. | REVISION | BY & DATE | CHK | ANG | ±1/2' | FINISH | 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 | 036119ME | SIZE B |
| | | | | DIST | DRAWING NO. | 036119ME | REV. |

VIEW FROM OUTSIDE OF MOTOR AT SWITCH END.



LINE LEADS



RBC PROPRIETARY AND CONFIDENTIAL INFORMATION
 This document is the property of REGAL BELOIT CORPORATION ("RBC") including its subsidiaries and divisions and contains proprietary information of RBC. This document is loaned on the express condition that neither it nor the information contained therein shall be disclosed to others without the express written consent of RBC, and that the information shall be used by the recipient only as approved expressly by RBC. This document shall be returned to RBC upon its request. This document may be subject to certain restrictions under U.S. export control laws and regulations.

| VOLTAGE | L1 | L2 | L3 | JOIN & INSULATE |
|---------|--------|--------|--------|----------------------------------|
| HIGH | T1 | T2 | T3 | (T4, T7) (T5, T8) (T6, T9) |
| LOW | T1, T7 | T2, T8 | T3, T9 | T4, T5, T6 |

| | | | | | | | |
|------------------------|-----------------------|-----------------------------|------------------------------|--------|-------------------------------|---------------------------------------|------------|
| | | TOLERANCES UNLESS SPECIFIED | | | | DRAWN RDW 04/13/04 | |
| | | DEC | INCHES | | | CHK | |
| | | .X | ±.1 | | | APPR | |
| | | .XX | ±.01 | | | SCALE 1:1 | |
| | | | .XXX | ±.005 | TITLE EXTERNAL WIRING DIAGRAM | | REF |
| | | | .XXX | ±.0005 | 3 PHASE | | |
| -- | REDRAWN IN SOLIDWORKS | VJB 02/08/11 | | .XXX | ±.0005 | MAT'L DECAL - 004014 (TSTAT) - 080582 | FMF 129027 |
| NO | REVISION | BY & DATE | CHK | ANG | ±1/2° | FINISH | PAGE OF |
| THIRD ANGLE PROJECTION | | | RFP | PREV | | | SIZE |
| | | | NETWORK FILE NAME 00501020ME | | | DRAWING NO | |
| | | | | | | A | |
| | | | | | | 005010-20ME | |
| | | | | | | REV | |
| | | | | | | -- | |

CERTIFICATION DATA SHEET

Model#: 182THTY7726 AA
 CONN. DIAGRAM: 005010.20ME
 OUTLINE: 036119ME-950

WINDING#: T84180 NONE 3
 ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNC. RPM | F.L. RPM | FRAME | ENCLOSURE | KVA CODE | DESIGN | | | |
|------------------------|-------------|-------------------|-----------|--------------------|--------------|-------------------|--------|------------------|-----------|--------------|
| 3 | 2.24 | 1800 | 1755 | 182TC | TENV | N | INV | | | |
| PH | Hz | VOLTS | FL AMPS | START TYPE | DUTY | INSL | S.F | AMB°C | ELEVATION | |
| 3 | 60 | 230/460 | 8.2/4.1 | INVERTER ONLY | CONTINUOUS | F4 | 1.0 | 40 | 3300 | |
| FULL LOAD EFF: 87.5 | | 3/4 LOAD EFF: 84 | | 1/2 LOAD EFF: 82.5 | | GTD. EFF | | ELEC. TYPE | | NO LOAD AMPS |
| FULL LOAD PF: 78.5 | | 3/4 LOAD PF: 73 | | 1/2 LOAD PF: 61 | | 87.5 | | SQ CAGE INV DUTY | | 4.6 / 2.3 |
| F.L. TORQUE | | LOCKED ROTOR AMPS | | L.R. TORQUE | | B.D. TORQUE | | F.L. RISE°C | | |
| 9 LB-FT | | 92 / 46 | | 34 LB-FT 378 | | 49.3 LB-FT 548 | | 75 | | |
| SOUND PRESSURE @ 3 FT. | SOUND POWER | ROTOR WK^2 | MAX. WK^2 | SAFE STALL TIME | STARTS /HOUR | APPROX. MOTOR WGT | | | | |
| 62 dBA | 72 dBA | 0.42 LB-FT^2 | 0 LB-FT^2 | 0 SEC. | 0 | 77 LBS. | | | | |

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

| R1 | R2 | X1 | X2 | XM |
|-------|-------|-------|-------|-------|
| 1.578 | 1.802 | 2.838 | 2.091 | 94.13 |
| RM | ZREF | XR | TD | TD0 |
| 0 | 1 | 0 | 0 | 0 |

*** SUPPLEMENTAL INFORMATION ***

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

| BEARINGS | | GREASE | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT MATERIAL | FRAME MATERIAL |
|----------|------|------------|------------|------------|-------------|--------------------------|----------------|
| DE | OPE | | | | | | |
| BALL | BALL | | | | | | |
| 6207 | 6206 | POLYREX EM | T | NONE | NONE | 1144 STRESSPROOF (C-223) | ALUMINUM |

| THERMO-PROTECTORS | | | | THERMISTORS | CONTROL | SPACE /n HEATERS |
|-------------------|------------|----------|----------|-------------|---------|------------------|
| THERMOSTATS | PROTECTORS | WDG RTDs | BRG RTDs | | | |
| TSTATS (N/C) | 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: PROVISIONS ONLY |
| NONE NONE |
| NONE NONE PPR |
| BRAKE: PROVISIONS ONLY NONE |

*
N
O
T
E
S
*

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

DATE: 06/27/2017 01:23:23 AM
FORM 3531 REV.3 02/07/99
** Subject to change without notice.

Data Sheet

Date: 1/4/2019
 Customer: _____
 Attention: _____
 Submitted by: FAREEDA DUDEKULA



182THTY7726

Submittal
 Data @ 460 V

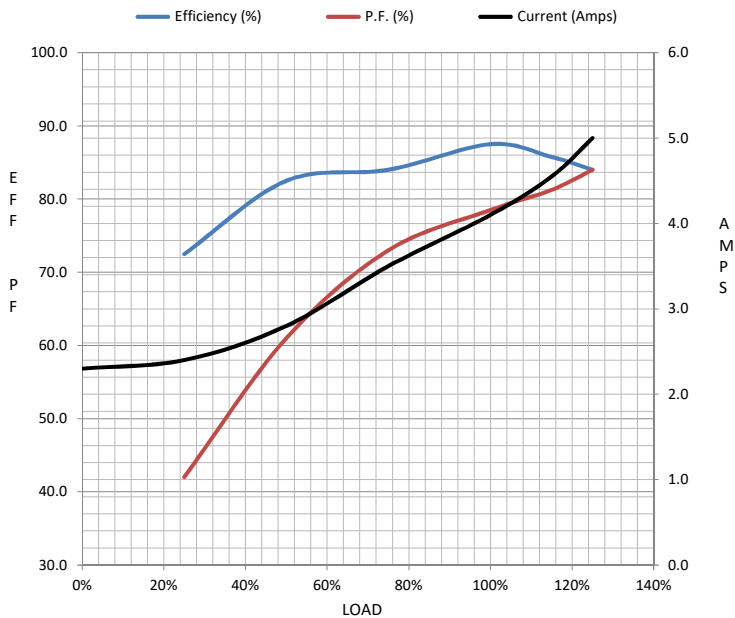
Motor Load Data

| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR |
|----------------|------|------|------|------|------|-------|------|------|
| Current (Amps) | 2.30 | 2.40 | 2.80 | 3.5 | 4.1 | 4.6 | 5.0 | 46.0 |
| Torque (ft-lb) | 0.00 | 2.20 | 4.4 | 6.7 | 9.0 | 10.2 | 11.3 | 34.0 |
| RPM | 1800 | 1790 | 1780 | 1765 | 1755 | 1,751 | 1745 | 0 |
| Efficiency (%) | | 72.5 | 82.5 | 84.0 | 87.5 | 85.8 | 84.0 | |
| P.F. (%) | 10.5 | 42.0 | 61.0 | 73.0 | 78.5 | 81.3 | 84.0 | 60.5 |

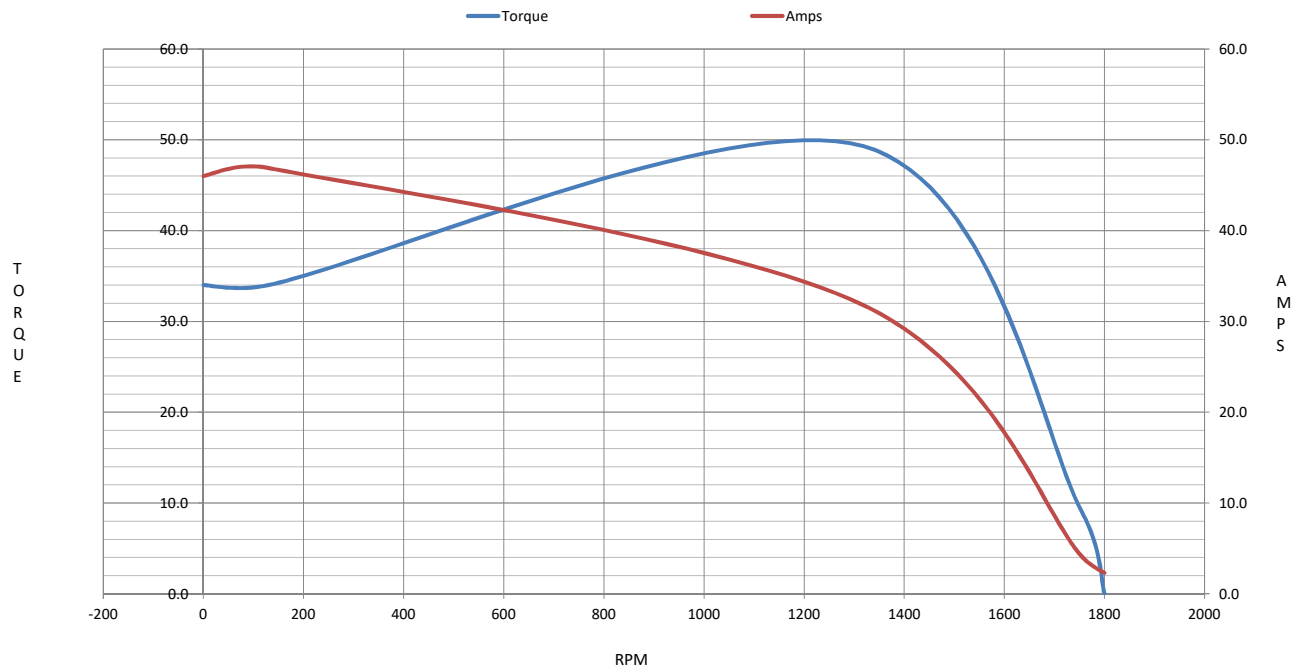
Motor Speed Data

| | LR | Pull-Up | BD | Rated | Idle |
|----------------|------|---------|------|-------|------|
| Speed (RPM) | 0 | 130 | 1318 | 1755 | 1800 |
| Current (Amps) | 46.0 | 46.9 | 31.8 | 4.1 | 2.30 |
| Torque (ft-lb) | 34.0 | 34.0 | 49.3 | 9.0 | 0.00 |

| Information Block | | | | |
|-----------------------------|-------------------------|--------|--------|---------|
| HP | 3.0 | | | |
| Sync. RPM | 1800 | | | |
| Frame | 182 | | | |
| Enclosure | TENV | | | |
| Construction | TTL | | | |
| Voltage | 230/460 V | | | |
| Frequency | 60 Hz | | | |
| Design | INV | | | |
| LR Code letter | N | | | |
| Service Factor | 1.15 | | | |
| Temp Rise @ FL | 75 °C | | | |
| Duty | CONT | | | |
| Ambient | 40 °C | | | |
| Elevation | 3,300 feet | | | |
| Rotor/Shaft wk ² | 0.42 Lb-Ft ² | | | |
| Ref Wdg | T84180 NONE | | | |
| Sound Pressure @ 1M | 62 dBA | | | |
| VFD Rating | CONSTANT 1000:1 | | | |
| Outline Dwg | 036119ME-950 | | | |
| Conn. Diag | 005010.20ME | | | |
| Additional Specifications: | | | | |
| 0 | | | | |
| 0 | | | | |
| EQUIV CKT (OHMS / PHASE) | | | | |
| R1 | R2 | X1 | X2 | Xm |
| 1.5780 | 1.8020 | 2.8380 | 2.0910 | 94.1300 |



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 : 182THTY7726

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

Catalog No : Y541A

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