

PRODUCT INFORMATION PACKET

Model No: 254TTGN6576

Catalog No: E500

Hazardous Duty® Explosion Proof Motor, 7.50 & 5 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V,
1200 & 1000 RPM, 254T Frame, EPFC



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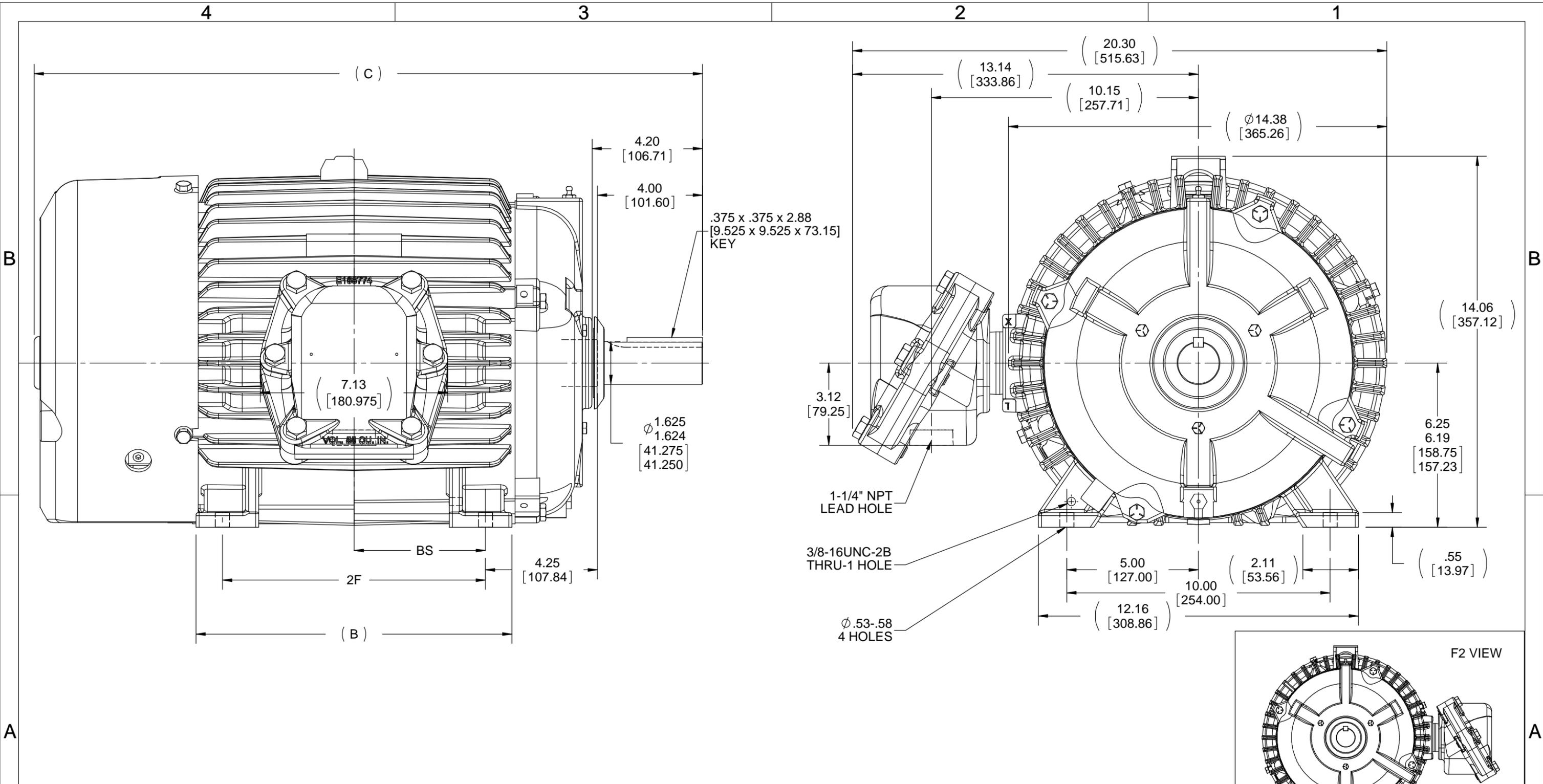
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Nameplate Specifications

| | | | |
|------------------------|------------------------------------|----------------------------|---|
| Phase | 3 | Output HP | 7.50 & 5 Hp |
| Output KW | 5.6 & 3.7 kW | Voltage | 230/460 & 190/380 V |
| Speed | 1175 & 975 rpm | Service Factor | 1.15 & 1.0 |
| Frame | 254T | Enclosure | Explosion Proof Fan cooled |
| Thermal Protection | Thermostat | Efficiency | 91 & 89.5 % |
| Ambient Temperature | 40 °C | Frequency | 60 & 50 Hz |
| Current | 19.8/9.9 & 17/8.5 A | Power Factor | 78 |
| Duty | Continuous | Insulation Class | F |
| Design Code | B | KVA Code | H |
| Drive End Bearing Size | 6309 | Opp Drive End Bearing Size | 6210 |
| UL | UL Listed And CSA Certified | CSA | Y |
| CE | N | IP Code | 54 |
| Number of Speeds | 1 | Hazardous Location | DIV 1 EXP PROOF CL I GR CD CL II GR FG T3B |

Technical Specifications

| | | | |
|-----------------------|-------------------------------------|-----------------------|-------------------------|
| Electrical Type | Squirrel Cage Inverter Rated | Starting Method | Line Or Inverter |
| Poles | 6 | Rotation | Reversible |
| Resistance Main | 1.319 Ohms | Mounting | Rigid Base |
| Motor Orientation | Horizontal | Drive End Bearing | Ball |
| Opp Drive End Bearing | Ball | Frame Material | Cast Iron |
| Shaft Type | T | Overall Length | 23.52 in |
| Frame Length | 10.50 in | Shaft Diameter | 1.625 in |
| Shaft Extension | 4.2 in | Assembly/Box Mounting | F1 ONLY |
| Inverter Load | CONSTANT 10:1 | | |
| Connection Drawing | A-EE7308T | Outline Drawing | B-SS203001-1050 |



NOTES:
 1. CONDUIT BOX CAN ONLY BE ROTATED CLOCKWISE UP TO 270° FROM ITS ORIGINAL POSITION.
 2. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

| DASH | FRAME | B | C | 2F | 2FF | BS |
|------|-------|-------------------|-------------------|-----|-------------------|------------------|
| 1050 | 254T | 10.25 [260.35] | 23.65 [600.71] | --- | 8.25 [209.55] | 4.12 [104.65] |
| 1225 | 256T | 12.00 [304.80] | 25.40 [645.16] | --- | 10.00 [254.00] | 5.00 [127.00] |

| | | |
|---|--------------------|--------------------|
| DRAWING REVISION F | REVISION BY SD | DATE 11/18/2019 |
| ECO ECO-0177002 | APPROVED BY VMR | DATE 11/18/2019 |
| ECO DESCRIPTION OUTLINE DESCRIPTION AND C DIMENSION UPDATED | | |
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TOLERANCES UNLESS OTHERWISE SPECIFIED:

| DEC. | INCH | mm | ANGLE |
|-------|---------|-----------|---------|
| .X | ±0.1 | [±2.5] | ±7° 30" |
| .XX | ±0.03 | [±0.76] | |
| .XXX | ±0.005 | [±0.127] | |
| .XXXX | ±0.0005 | [±0.0127] | |

REMOVE BURRS & BREAK SHARP
 EDGES: .003/.015 [.076/.381]
 CORNER FILLETS: .02 [.51]
 MACHINED SURFACES: 200 INCH/mm 5.1
 mm SHOWN IN [BRACKETS]

| | |
|------------------------|--------------------|
| DRAWN BY RM | DATE 12-14-1993 |
| APPROVED BY FG | DATE 12-15-1993 |
| REFERENCE | |
| THIRD ANGLE PROJECTION | |

REGAL™ Regal Beloit America, Inc.

DESCRIPTION
 250T FR. EXP. PR. - BB - T - STD.

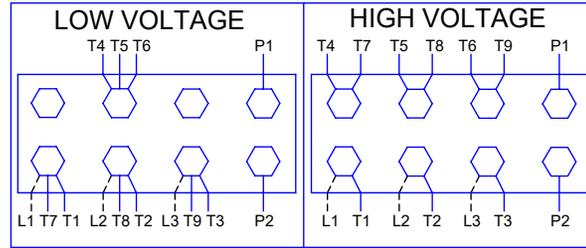
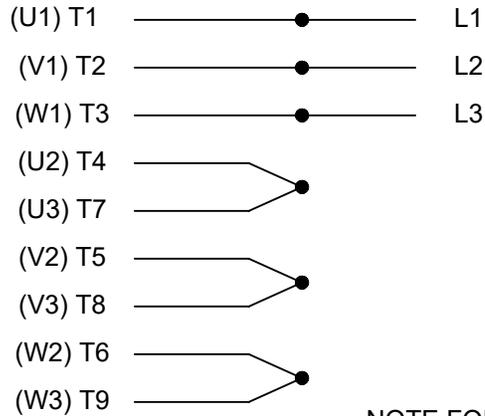
MATERIAL
 PROCESS/FINISH

SIZE
B

DRAWING NUMBER
SS203001

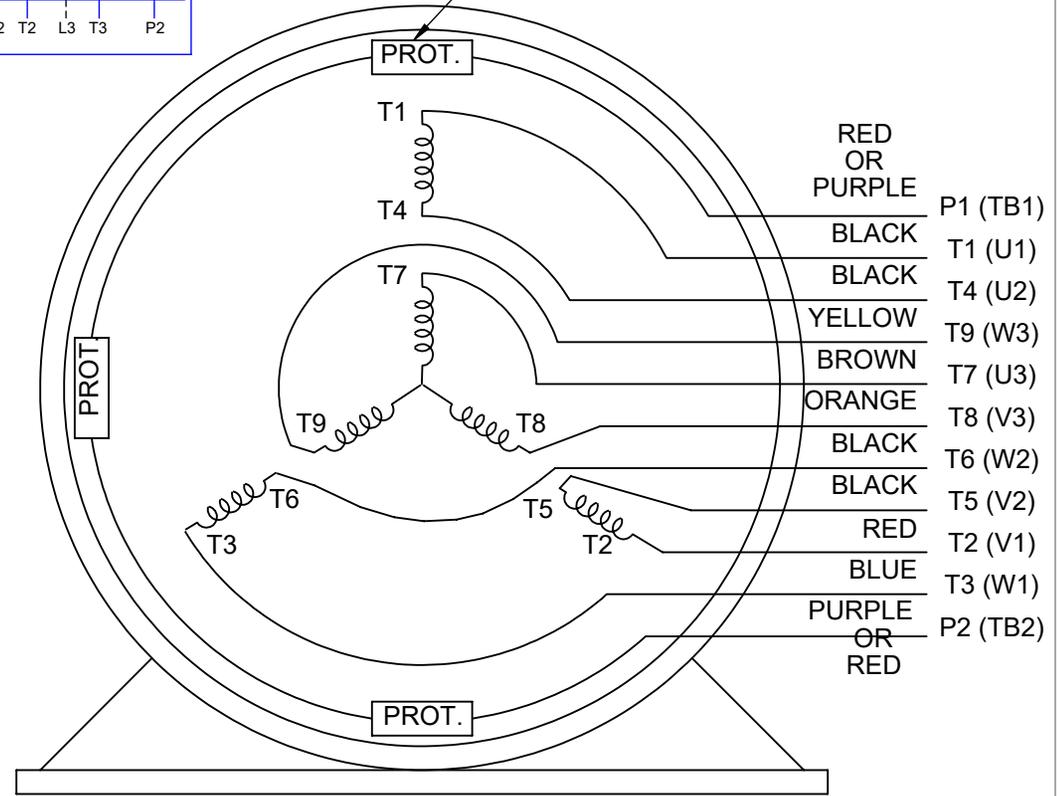
SHEET
 1 OF 1

HIGH VOLTAGE



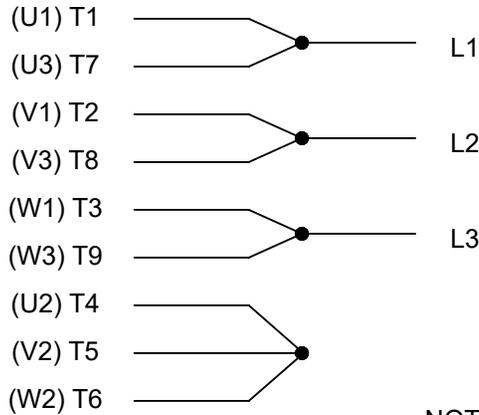
**THREE PHASE
DUAL VOLTAGE MOTOR**

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: 6/19/2017

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA



254TTGN6576

Submittal

Data @ 460 V

Motor Load Data

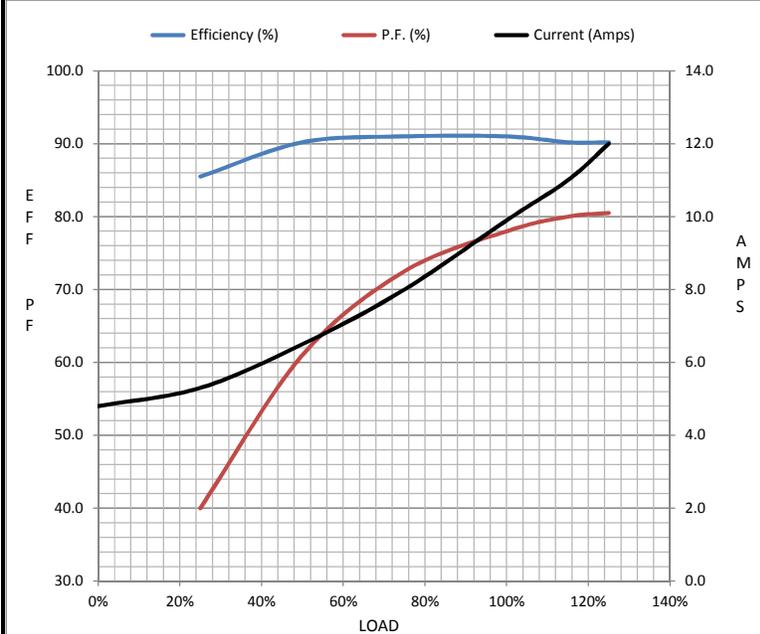
| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR |
|----------------|------|------|------|------|------|-------|------|------|
| Current (Amps) | 4.8 | 5.3 | 6.5 | 8.0 | 9.9 | 11.0 | 12.0 | 63.5 |
| Torque (ft-lb) | 0.00 | 8.0 | 16.5 | 25.0 | 33.5 | 38.5 | 42.0 | 72.0 |
| RPM | 1200 | 1195 | 1190 | 1180 | 1175 | 1,170 | 1165 | 0 |
| Efficiency (%) | | 85.5 | 90.2 | 91.0 | 91.0 | 90.2 | 90.2 | |
| P.F. (%) | 7.0 | 40.0 | 61.0 | 72.5 | 78.0 | 80.0 | 80.5 | 42.0 |

Motor Speed Data

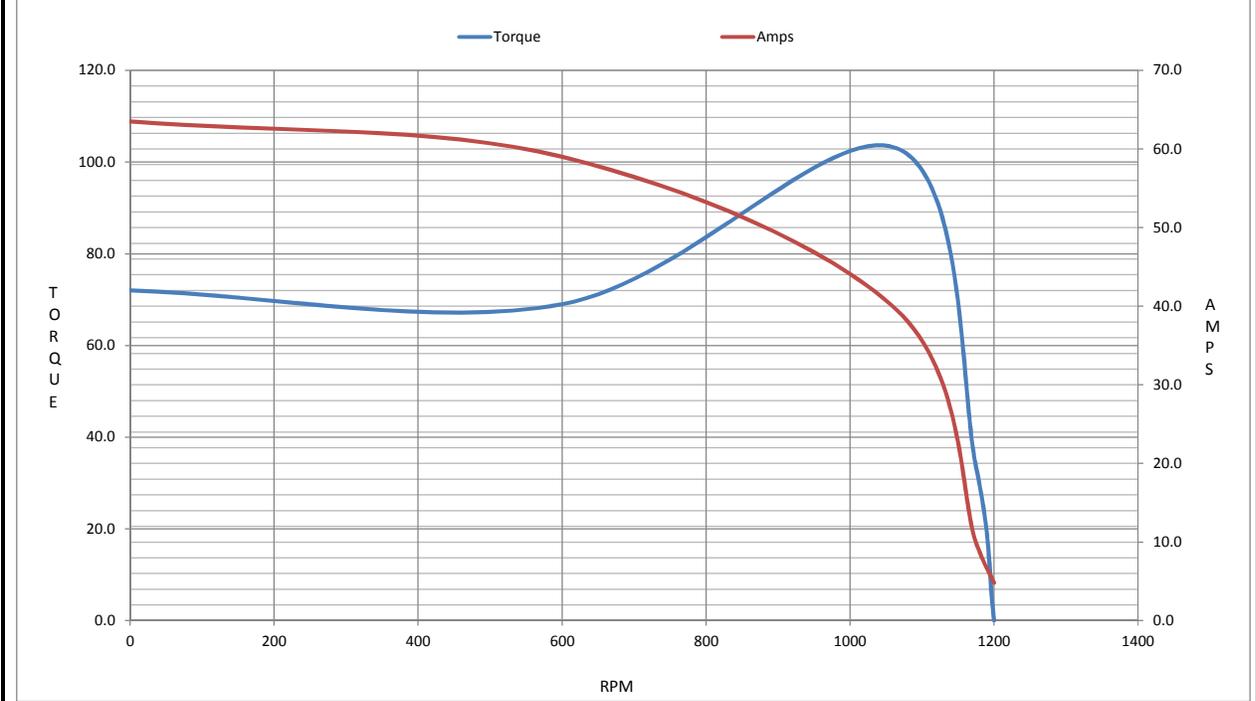
| | LR | Pull-Up | BD | Rated | Idle |
|----------------|------|---------|------|-------|------|
| Speed (RPM) | 0 | 600 | 1065 | 1175 | 1200 |
| Current (Amps) | 63.5 | 59.0 | 39.5 | 9.9 | 4.8 |
| Torque (ft-lb) | 72.0 | 69.0 | 103 | 33.5 | 0.00 |

Information Block

| | | | | |
|-----------------------------|-------------------------|--------|--------|---------|
| HP | 7.5 | | | |
| Sync. RPM | 1200 | | | |
| Frame | 254 | | | |
| Enclosure | TEFC | | | |
| Construction | TFN | | | |
| Voltage | 30/460#190/381V | | | |
| Frequency | 60 Hz | | | |
| Design | B | | | |
| LR Code letter | H | | | |
| Service Factor | 1.15 | | | |
| Temp Rise @ FL | 40 °C | | | |
| Duty | CONT | | | |
| Ambient | 40 °C | | | |
| Elevation | 1,000 feet | | | |
| Rotor/Shaft wk ² | 2.50 Lb-Ft ² | | | |
| Ref Wdg | 254653 NONE | | | |
| Sound Pressure @ 1M | 56 dBA | | | |
| VFD Rating | CONSTANT 10:1 | | | |
| Outline Dwg | B-SS203001-1050 | | | |
| Conn. Diag | A-EE7308T | | | |
| Additional Specifications: | | | | |
| 0 | | | | |
| 0 | | | | |
| EQUIV CKT (OHMS / PHASE) | | | | |
| R1 | R2 | X1 | X2 | Xm |
| 0.7370 | 0.6730 | 2.9030 | 3.1530 | 53.4870 |



Speed -Torque Curve



CERTIFICATE OF COMPLIANCE

Certificate Number 20220311- E12044
Report Reference E12044-19950413
Issue Date 2022-MARCH-11

Issued to: REGAL BELOIT AMERICA INC
1946 W COOK RD
FORT WAYNE IN 46818

Tradename: Marathon

**This certificate confirms that
representative samples of**

MOTORS FOR USE IN HAZARDOUS LOCATIONS
Electric motors for use in hazardous locations; Class I,
Groups C and D; Class II, Groups F and G; Inclusive of
Model Number 254TTGN6576 (may have prefix and/or
suffix characters).

Have been investigated by UL in accordance with the
Standard(s) indicated on this Certificate.

Standard(s) for Safety: UL 674 - Electric Motors and Generators for Use in Division
1 Hazardous (Classified) Locations,
CSA C22.2 No. 145, Electric Motors and Generators for
Use in Hazardous (Classified) Locations

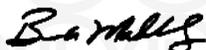
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Look for the UL Certification Mark on the product.

This is to certify that representative samples of the product as specified on this certificate were tested
according to the current UL requirements.



Bruce Mahrenholz, Director North American Certification Program
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