

PRODUCT INFORMATION PACKET

marathon[®]
Motors

Model No: 254TTFCD6080
Catalog No: GT1117A
7.5, 1200, TEFC, 254T, 3/60/575
Totally Enclosed Fan Cooled (TEFC)



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REGAL[®]



Nameplate Specifications

| | | | |
|----------------------------|------------------------------------|------------------------|-------------------|
| Output HP | 7.50 Hp | Output KW | 5.6 kW |
| Frequency | 60 Hz | Voltage | 575 V |
| Current | 7.9 A | Speed | 1182 rpm |
| Service Factor | 1.15 | Phase | 3 |
| Efficiency | 91 % | Duty | Continuous |
| Insulation Class | F | Design Code | B |
| KVA Code | H | Frame | 254T |
| Enclosure | Totally Enclosed Fan Cooled | Overload Protector | No |
| Ambient Temperature | 40 °C | Drive End Bearing Size | 6309 |
| Opp Drive End Bearing Size | 6209 | UL | Listed |
| CSA | Y | CE | Y |
| IP Code | 55 | | |

Technical Specifications

| | | | |
|-------------------|-------------------------------------|-----------------------|-------------------------|
| Electrical Type | Squirrel Cage Inverter Rated | Starting Method | Line Or Inverter |
| Poles | 6 | Rotation | Reversible |
| Mounting | Rigid base | Motor Orientation | Horizontal |
| Drive End Bearing | Ball | Opp Drive End Bearing | Ball |
| Frame Material | Cast Iron | Shaft Type | T |
| Frame Length | 10.00 in | Shaft Diameter | 1.626 in |
| Shaft Extension | 4 in | Assembly/Box Mounting | F1/F2 Capable |
| Outline Drawing | SS620703 | Connection Diagram | EE7300 |

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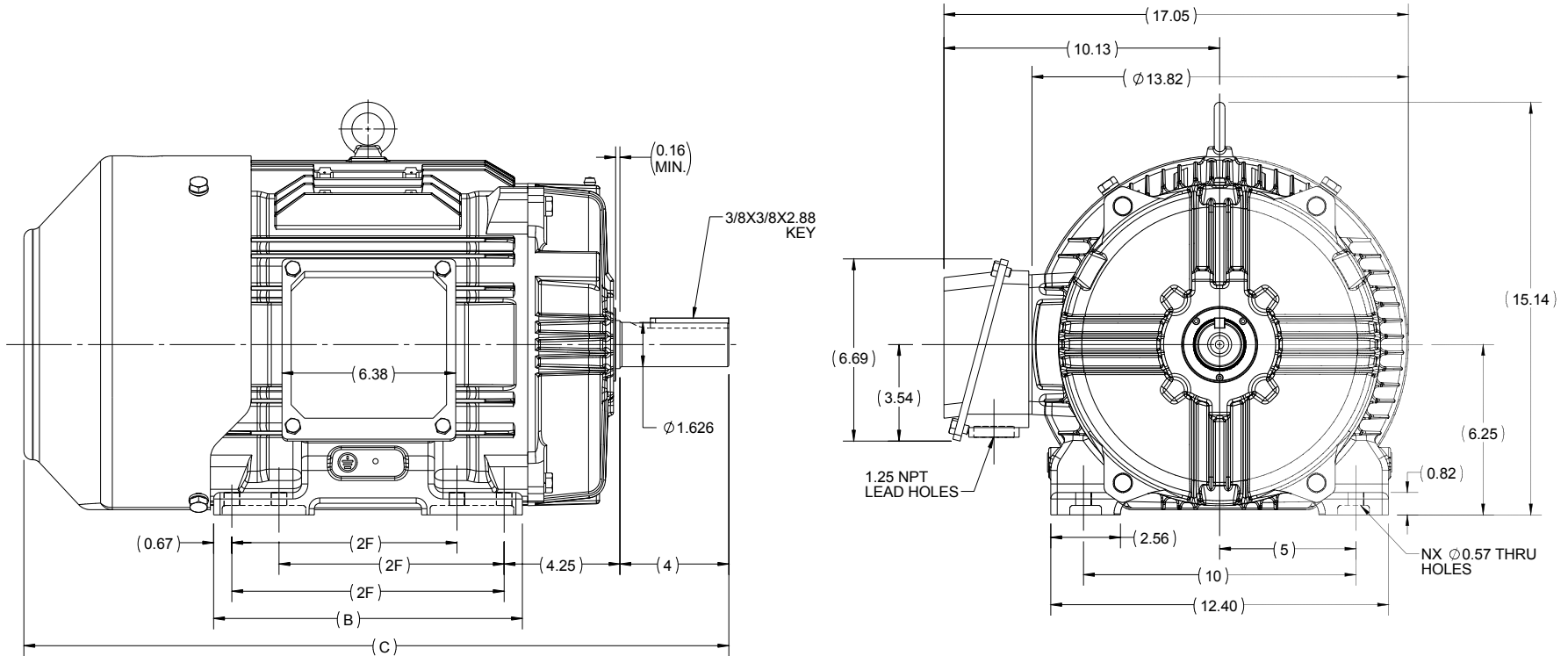
2

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OUTLINE

B

B

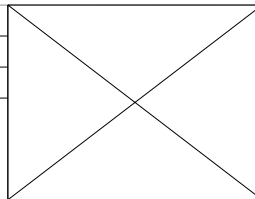


A

A

| | | | | |
|-------|-------|-------|------|---|
| 256T | 11.34 | 25.89 | 10 | 8 |
| 254T | 9.60 | 24.15 | 8.25 | 4 |
| FRAME | B | C | 2F | N |

| | | |
|---|---------------------|--------------------|
| DRAWING REVISION A | REVISION BY UDAY | DATE 08/09/2015 |
| ECO SBD | APPROVED BY SBD | DATE 08/09/2015 |
| ECO DESCRIPTION NEW DRAWING RELEASE | | |
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|---------------------------|
| DRAWN BY MR |
| DATE 4/5/2015 |
| APPROVED BY KRK |
| DATE 4/5/2015 |
| REFERENCE |
| THIRD ANGLE PROJECTION |

| | |
|---|----------------------------|
| REGAL-BELOIT CORPORATION | |
| DESCRIPTION OUTLINE 254/256T FR-TEFC-CAST IRON | |
| MATERIAL | PROCESS/FINISH |
| SIZE B | DRAWING NUMBER SS620703 |
| | SHEET 1 OF 1 |

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2

1

**THREE PHASE - SINGLE VOLTAGE
MOTOR - CONDUIT BOX @ 'A'**

**TO REVERSE ROTATION:
INTERCHANGE ANY TWO
LINE LEAD CONNECTIONS.**

TERMINAL BLOCK WHEN SPECIFIED



VIEW OF TERMINAL END

**IF MOTOR HAS
6 LEADS**



A-9806 DECAL

**OPTIONAL CORD
CONNECTION**

- L1 _____ WHITE
- L2 _____ RED
- L3 _____ BLACK

| | | |
|---|--------------------|--------------------|
| DRAWING REVISION AB | REVISION BY JJB | DATE 06-27-2017 |
| ECO ECO-0125361 | APPROVED BY TB | DATE 06-27-2017 |
| ECO DESCRIPTION UPDATED TO CURRENT STANDARDS | | |
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| |
|---------------------------|
| DRAWN BY DA |
| DATE 03-26-1993 |
| APPROVED BY TB |
| DATE 03-26-1993 |
| REFERENCE |
| THIRD ANGLE PROJECTION |

| | |
|----------------------------|---------------------------------|
| Regal Beloit America, Inc. | |
| | |
| MATERIAL | PROCESS/FINISH |
| SIZE A | DRAWING NUMBER EE7300 |
| SHEET 1 OF 1 | |



**P.O. BOX 8003
WAUSAU, WI 54401-8003
PH. 715-675-3311**

CERTIFICATION DATA SHEET

CUSTOMER: CUSTOMER PO #:
ORDER #: MODEL #: 254TTFCDD6080 AA
CONN. DIAGRAM: EE7300 CUSTOMER PART #:
OUTLINE: SS620703 MOUNTING: F1/F2 CAPABLE
WINDING #: HE31606007 3

TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNC. RPM | F.L. RPM | FRAME | ENCLOSURE | KVA CODE | DESIGN | |
|-------|------|-----------|----------|------------------|------------|----------|--------|-------|
| 7 1/2 | 5.60 | 1200 | 1182 | 254T | TEFC | H | B | |
| PH | HZ | VOLTS | AMPS | START TYPE | DUTY | INSL | S.F. | AMB°C |
| 3 | 60 | 575 | 7.9 | LINE OR INVERTER | CONTINUOUS | F7 | 1.15 | 40 |

| FULL LOAD EFF: | 91 | 3/4 LOAD EFF: | 91 | 1/2 LOAD EFF: | 89.5 | GTD. EFF | ELEC. TYPE |
|----------------------|-------------------|---------------------|-------------|---------------------|-------|----------|-------------------|
| FULL LOAD PF: | 78.5 | 3/4 LOAD PF: | 72 | 1/2 LOAD PF: | 60 | 90.2 | SQ CAGE INV RATED |
| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE | B.D. TORQUE | F.L. RISE°C | | | |
| 33.4 LB-FT | 48 | 65 LB-FT | 195 % | 89 LB-FT | 266 % | 40 | |

| SOUND PRESSURE @ 3 FT. | SOUND POWER | ROTOR WK^2 | MAX. WK^2 | SAFE STALL TIME | STARTS / HOUR | APPROX. MOTOR WGT |
|------------------------|-------------|-------------|-------------|-----------------|---------------|-------------------|
| 56 DBA | 66 DBA | 2.3 LB-FT^2 | 150 LB-FT^2 | 20 SEC. | 2 | 325 LBS. |

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

| DE BRACKET TYPE | ODE BRACKET TYPE | MOUNT TYPE | ORIENTATION | SEVERE DUTY | HAZARDOUS LOCATION | DRIP COVER | SCREENS | PAINT |
|-----------------|------------------|------------|-------------|-------------|--------------------|-------------------------|----------------|---------------|
| STANDARD | STANDARD | RIGID | HORIZONTAL | FALSE | DIVISION 2 T2B | FALSE | NONE | BLUE (ENAMEL) |
| BEARINGS DE | ODE | GREASE | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT MATERIAL | FRAME MATERIAL | |
| BALL | BALL | POLYREX EM | T | NONE | NONE | 1045 HOT ROLLED (C-204) | CAST IRON | |
| 6309 | 6209 | | | | | | | |

| THERMO-PROTECTORS | | | | THERMISTORS | | | CONTROL | | SPACE HEATERS | |
|-------------------|------------|----------|----------|-------------|-------|------|---------|------|---------------|-------|
| THERMOSTATS | PROTECTORS | WDG RTDS | BRG RTDS | NONE | FALSE | NONE | FALSE | NONE | NONE | VOLTS |
| NONE | NOT | NONE | NONE | NONE | FALSE | NONE | FALSE | NONE | NONE | NONE |

| INVERTER | |
|----------------------|-----------------------------|
| TORQUE: | CONSTANT 20:1/VARIABLE 20:1 |
| INV. HP SPEED RANGE: | NONE |
| ENCODER: | NONE |
| NONE | NONE |
| NONE | PPR |
| BRAKE: | NONE |
| NONE | P/N NONE |
| NONE | NONE |
| NONE | FT-LB NONE V NONE HZ |

PREPARED BY: Anusha Muthyala
DATE: 05/04/2018 12:23:18 AM
FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

MARATHON ELECTRIC CORPORATION

TYPICAL PERFORMANCE CURVE for AC MOTOR

Customer

Curve at

575

Volts

HP 7.50

PHASE 3

Model No 254TTFCD6080

60

HZ

VOLTS 575

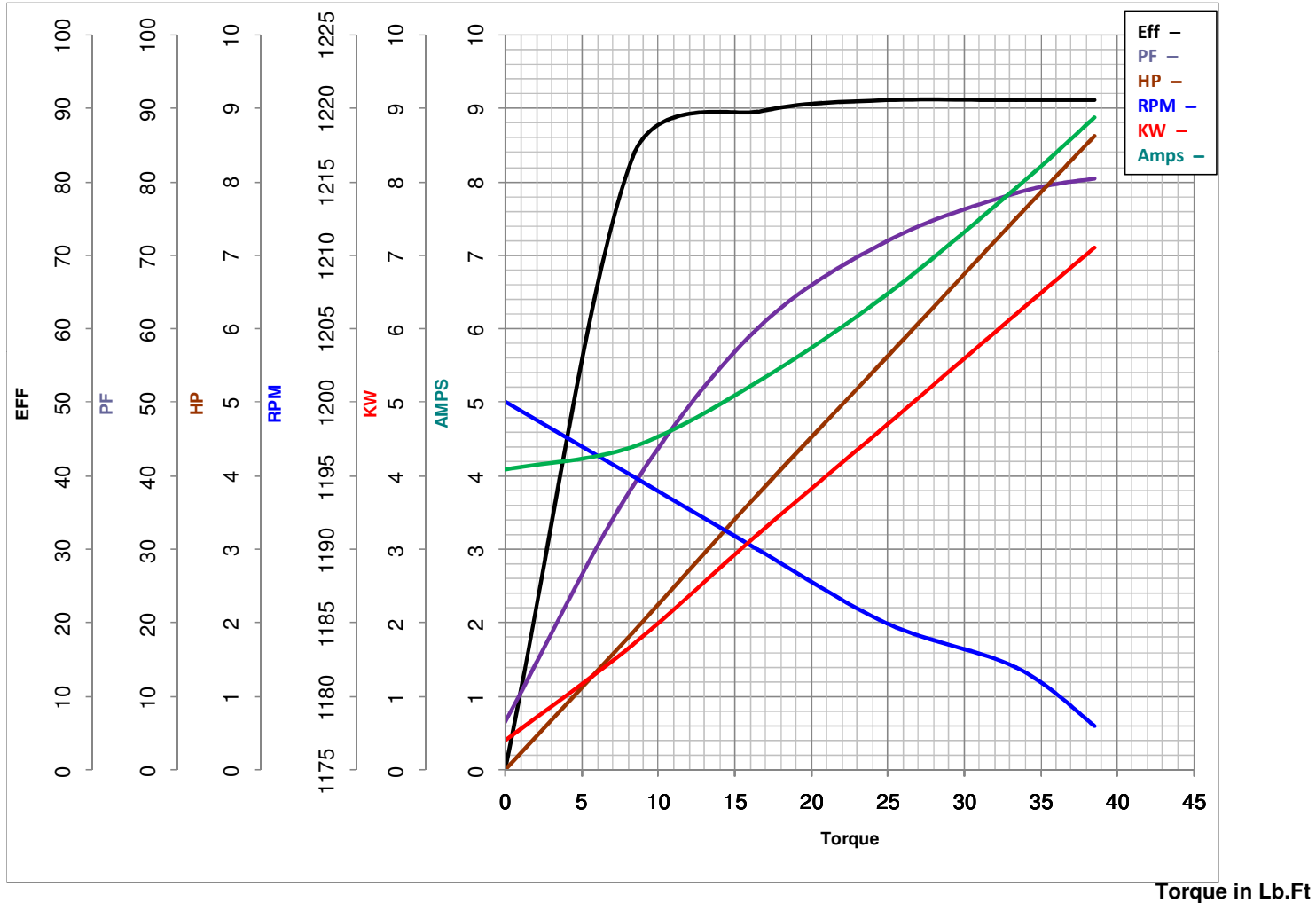
7.5

HP

Catalog No GT1117A

HZ 60

RPM 1182



| | | | | | |
|-----------|--------------|-------------|-----------|-------------|----------|
| FL TORQUE | <u>33.4</u> | Lb.Ft | FL AMPS | <u>7.9</u> | |
| BD TORQUE | <u>89.0</u> | Lb.Ft | PU TORQUE | <u>55.0</u> | Lb.Ft |
| LR TORQUE | <u>65</u> | Lb.Ft | LR AMPS | <u>48</u> | |
| WINDING | HE31606007-3 | Prepared By | ANUSHA M | Date | 5/4/2018 |