

PRODUCT INFORMATION PACKET

marathon[®]
Motors

Model No: 256TTFCA6026
Catalog No: GT1025
20,1800,TEFC,256T,3/60/230/460
Totally Enclosed Fan Cooled (TEFC)



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REGAL[®]



Nameplate Specifications

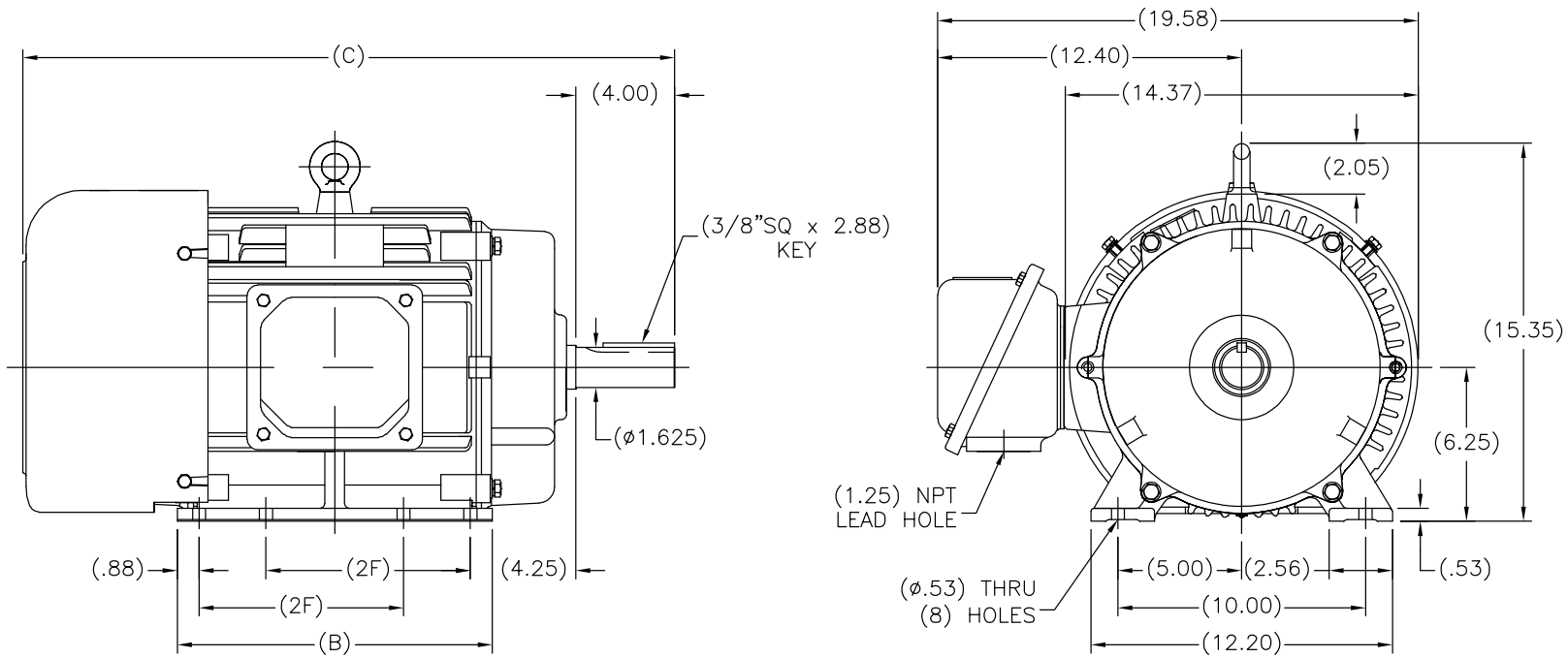
| | | | |
|----------------------------|------------------------------------|------------------------|-------------------|
| Output HP | 20 Hp | Output KW | 14.9 kW |
| Frequency | 60 Hz | Voltage | 230/460 V |
| Current | 48.0/24.0- A | Speed | 1768 rpm |
| Service Factor | 1.15 | Phase | 3 |
| Efficiency | 93 % | Duty | Continuous |
| Insulation Class | F | Design Code | B |
| KVA Code | G | Frame | 256T |
| Enclosure | Totally Enclosed Fan Cooled | Overload Protector | No |
| Ambient Temperature | 40 °C | Drive End Bearing Size | 6309 |
| Opp Drive End Bearing Size | 6209 | UL | Recognized |
| CSA | Y | CE | Y |
| IP Code | 43 | | |

Technical Specifications

| | | | |
|-------------------|------------------------------------|-----------------------|------------------------|
| Electrical Type | Squirrel Cage Induction Run | Starting Method | Across The Line |
| Poles | 4 | Rotation | Reversible |
| Mounting | Rigid base | Motor Orientation | Horizontal |
| Drive End Bearing | Ball | Opp Drive End Bearing | Ball |
| Frame Material | Cast Iron | Shaft Type | T |
| Overall Length | 27.8 in | Shaft Diameter | 1.625 in |
| Shaft Extension | 4 in | Assembly/Box Mounting | F1/F2 Capable |
| Outline Drawing | B-SS620244 | Connection Diagram | A-EE7308K |

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SS620244



(MAY NOT BE DRAWN TO SCALE)

(DIMENSIONS IN TABLE ARE CONSIDERED REFERENCE)

| | | | |
|-------|-------|-------|-------|
| 254T | 26.60 | 12.80 | 8.25 |
| 256T | 27.80 | 13.98 | 10.00 |
| FRAME | C | B | 2F |

| | | | | | |
|--|--|-----------------------------|-----------------|----------------------|----------------------|
| | | TOLERANCES UNLESS SPECIFIED | | DRAWN MSG 01-12-2010 | |
| | | DEC. | INCHES | CHK MUS 01-13-2010 | |
| | | .X | ±.1 | APPD SB 01-13-2010 | |
| | | .XX | ±.03 | SCALE 1=4 | |
| | | .XXX | ±.005 | REF | |
| D | CHANGED BORDER LOGO TO "REGAL" ECO-0075536 | WGJ 04-09-2015 | EH .XXXX ±.0005 | TITLE OUTLINE | |
| NO. | REVISION | BY & DATE | CHK ANG ±7.30° | 254T FR. - TEFC | |
| 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 01-14-2010 | MATERIAL MAT'L | |
| | | | DIST | FINISH | PREV |
| | | | | SIZE B | DRAWING NO. SS620244 |
| | | | | PAGE | OF REV. D |

LOW VOLTAGE



HIGH VOLTAGE



VIEW OF TERMINAL END

| | | | TOLERANCES UNLESS SPECIFIED | | REGAL REGAL-BELOIT CORPORATION | DRAWN PGK 06-04-1997 | | |
|--|--|----------------|-----------------------------|------------------|--------------------------------|--|---------------------|---------|
| NO. | REVISION | BY & DATE | CHK | ANG | | SIZE | DRAWING NO. PAGE OF | REV. |
| E | CORRECTED IEC MARKINGS ECD-0111208 | WGJ 01-23-2017 | EMH | DEC. | INCHES | TITLE CONNECTION DIAGRAM DELTA CON. - 3Ø - 9 LEADS | CHK ML 06-05-1997 | |
| D | RE-DRAWN WITH REGAL LOGO ECD-0110493 | WGJ 09-30-2016 | EMH | .X | ±.1 | | APPD GK 06-15-1997 | |
| 8 | ADDED IEC DESIGNATIONS MU95020 | TJW 4/30/2010 | MJS | .XX | ±.02 | | SCALE | |
| 7 | REVISED HIGH VOLTAGE L2 WAS L3 CN52600-354 | MRB 09-21-1998 | | .XXX | ±.005 | | REF | |
| 6 | REDRAWN ON CADD | PGK 06-05-1997 | | .XXXX | ±.0005 | | FMF | |
| | | | | | ±7'30" | | 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 EE7308K | | | A | EE7308K |
| | | | DIST | | | | | |

CERTIFICATION DATA SHEET

Model#: 256TTFCA6026 AA WINDING#: CHT25640001 NONE 2
 CONN. DIAGRAM: A-EE7308K ASSEMBLY: F1/F2 CAPABLE
 OUTLINE: B-SS620244

TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNC. RPM | F.L. RPM | FRAME | ENCLOSURE | KVA CODE | DESIGN |
|-------|-----------|-----------|-----------|-------|-----------|----------|--------|
| 20&15 | 14.9&11.2 | 1800 | 1768&1475 | 256T | TEFC | G | B |

| PH | Hz | VOLTS | FL AMPS | START TYPE | DUTY | INSL | S.F | AMB°C | ELEVATION |
|----|-------|---------------------|--------------------|--------------------|----------------|------|-----------|-------|-----------|
| 3 | 60/50 | 230/460#190/ 380 | 48/24- &45/22.5 | ACROSS THE LINE | CONTINUOU S | F7 | 1.15/1.15 | 40 | 3300 |

| FULL LOAD EFF: 93&92.4 | 3/4 LOAD EFF: 93 | 1/2 LOAD EFF: 92.4 | GTD. EFF | ELEC. TYPE | NO LOAD AMPS |
|---------------------------|------------------|--------------------|----------|-----------------|--------------|
| FULL LOAD PF: 82&82.5 | 3/4 LOAD PF: 78 | 1/2 LOAD PF: 68 | 92.4 | SQ CAGE IND RUN | 19.6 / 9.8 |

| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE | B.D. TORQUE | F.L. RISE°C |
|-------------|-------------------|---------------|---------------|-------------|
| 60 LB-FT | 276 / 138 | 116 LB-FT 192 | 165 LB-FT 278 | 60 |

| SOUND PRESSURE @ 3 FT. | SOUND POWER | ROTOR WK^2 | MAX. WK^2 | SAFE STALL TIME | STARTS /HOUR | APPROX. MOTOR WGT |
|---------------------------|-------------|-------------|-------------|-----------------|-----------------|----------------------|
| 65 dBA | 75 dBA | 3.2 LB-FT^2 | 125 LB-FT^2 | 20 SEC. | 2 | 380 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 | NONE | FALSE | NONE | BLUE (ENAMEL) |

| BEARINGS | | GREASE | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT MATERIAL | FRAME MATERIAL |
|--------------|--------------|------------|------------|------------|-------------|----------------------------|-------------------|
| DE | OPE | | | | | | |
| BALL 6309 | BALL 6209 | POLYREX EM | T | NONE | NONE | 1045 HOT ROLLED (C-204) | CAST IRON |

| 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: 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 |

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DATE: 06/21/2017 10:38:38 AM
 FORM 3531 REV.3 02/07/99
 ** Subject to change without notice.

Data Sheet

256TTFCA6026



Submittal
Data @ 460 V

Date: 6/29/2017

Customer: _____
Attention: _____
Submitted by: FAREEDA DUDEKULA

Motor Load Data

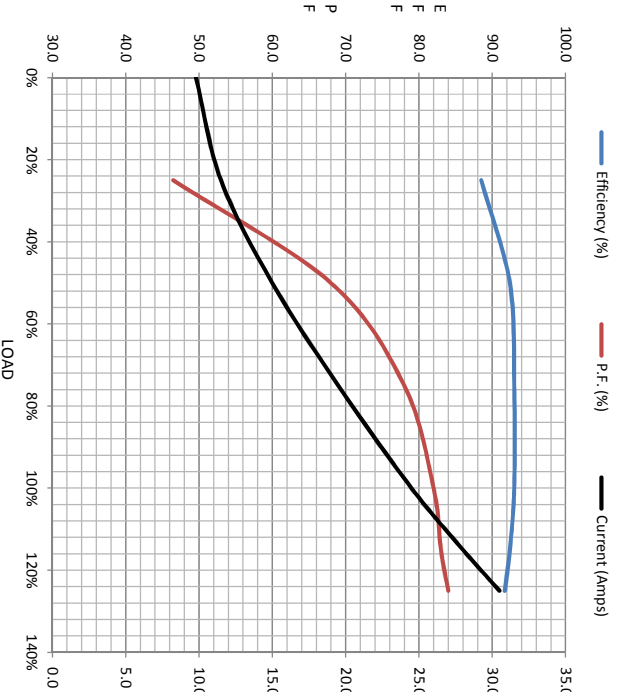
| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR |
|----------------|------|------|------|------|------|------|------|------|
| Current (Amps) | 9.8 | 11.5 | 15.0 | 19.5 | 24.5 | 28.0 | 30.5 | 138 |
| Torque (ft-lb) | 0.00 | 15.0 | 29.5 | 44.5 | 60.0 | 68.6 | 75.0 | 116 |
| RPM | 1800 | 1792 | 1785 | 1778 | 1768 | 1765 | 1760 | 0 |
| Efficiency (%) | | 88.5 | 92.4 | 93.0 | 93.0 | 92.4 | 91.7 | |
| P.F. (%) | 5.5 | 46.5 | 68.0 | 78.0 | 82.0 | 83.0 | 84.0 | 39.0 |

Motor Speed Data

| | LR | Pull-Up | BD | Rated | Idle |
|----------------|-----|---------|------|-------|------|
| Speed (rpm) | 0 | 900 | 1650 | 1768 | 1800 |
| Current (Amps) | 138 | 120 | 87.0 | 24.5 | 9.8 |
| Torque (ft-lb) | 116 | 95.0 | 165 | 60.0 | 0.00 |

Information Block

| | | | | |
|----------------------------|------------------|--------|--------|---------|
| HP | 20.0 | | | |
| Sync. RPM | 1800 | | | |
| Frame | 256 | | | |
| Enclosure | TEFC | | | |
| Construction | TFC | | | |
| Voltage | 30/460#190/381 V | | | |
| Frequency | 60 Hz | | | |
| Design | B | | | |
| LR Code letter | G | | | |
| Service Factor | 1.15 | | | |
| Temp Rise @ FL | 60 °C | | | |
| Duty | CONT | | | |
| Ambient | 40 °C | | | |
| Elevation | 1,000 feet | | | |
| Rotor/Shaft wkt | 3.2 Ld-Fe | | | |
| Rel Wdg | CHT25640001 NONE | | | |
| Sound Pressure @ 1M | 65 dbA | | | |
| VFD Rating | NONE | | | |
| Outline Dwg | B-SS620244 | | | |
| Conn. Diag | A-EE7308K | | | |
| Additional Specifications: | | | | |
| 0 | | | | |
| EQUIV CKT (OHMS / PHASE) | | | | |
| R1 | R2 | X1 | X2 | Xm |
| 0.2770 | 0.2060 | 0.8660 | 1.4770 | 28.2580 |



Speed - Torque Curve

