

PRODUCT INFORMATION PACKET

marathon[®]
Motors

Model No: 213TTFN16101
Catalog No: L411B
2/1.5,900/750,TEFC,213T,3/60/50/230/460#190/380
Totally Enclosed Fan Cooled (TEFC)



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REGAL[®]

Nameplate Specifications

| | | | |
|----------------------------|------------------------------------|------------------------|-------------------|
| Output HP | 2 Hp | Output KW | 1.5 kW |
| Frequency | 60 Hz | Voltage | 230/460 V |
| Current | 8.0/4.0 A | Speed | 885 rpm |
| Service Factor | 1.15 | Phase | 3 |
| Efficiency | 86.5 % | Duty | Continuous |
| Insulation Class | F | Design Code | B |
| KVA Code | L | Frame | 213T |
| Enclosure | Totally Enclosed Fan Cooled | Overload Protector | No |
| Ambient Temperature | 40 °C | Drive End Bearing Size | 6307 |
| Opp Drive End Bearing Size | 6208 | UL | Recognized |
| CSA | Y | CE | Y |
| IP Code | 43 | | |

Technical Specifications

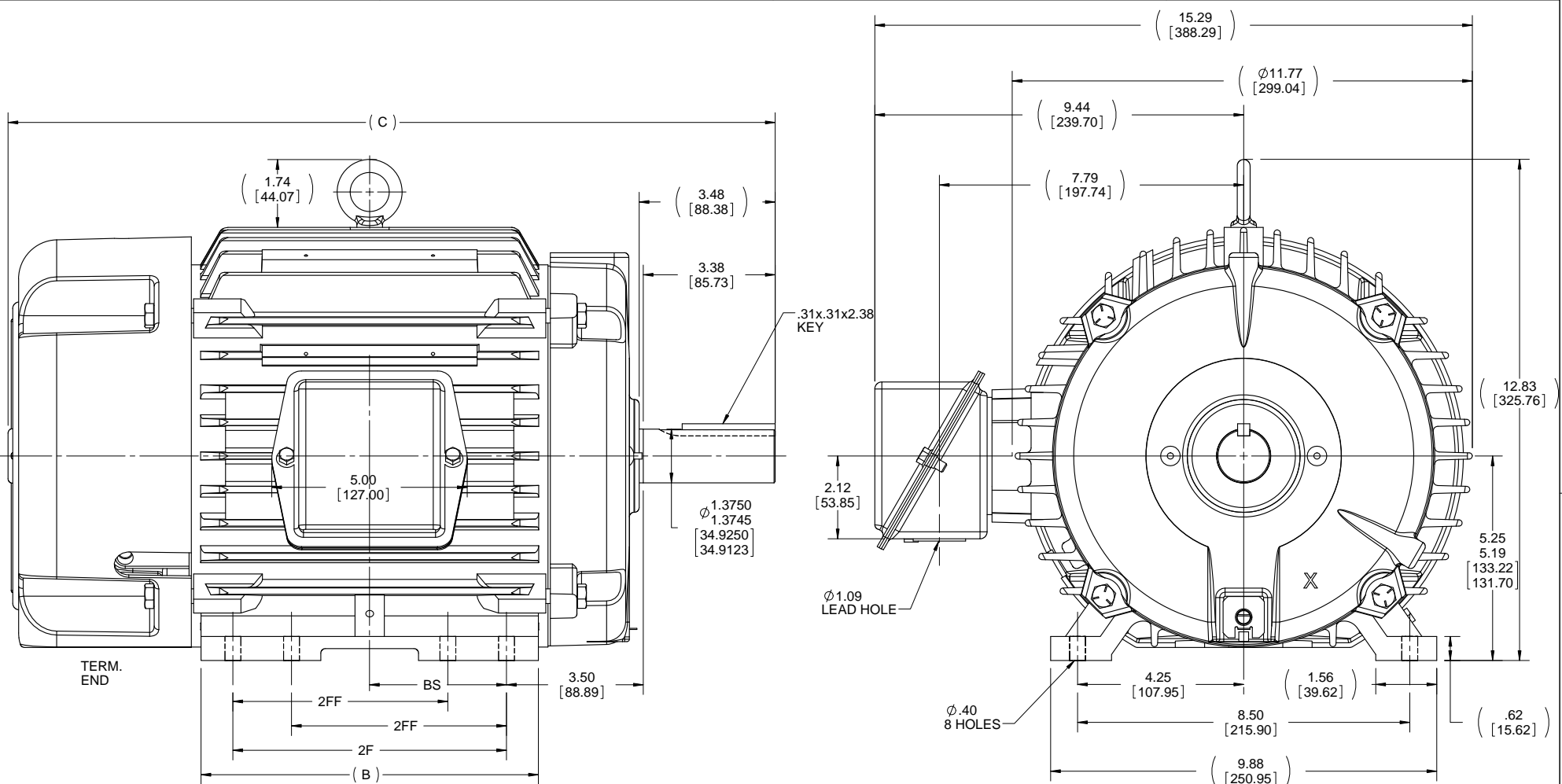
| | | | |
|-----------------------|------------------------------------|-----------------------|------------------------|
| Electrical Type | Squirrel Cage Induction Run | Starting Method | Across The Line |
| Poles | 8 | Rotation | Reversible |
| Mounting | Rigid base | Motor Orientation | HORIZONTAL |
| Drive End Bearing | BALL | Opp Drive End Bearing | BALL |
| Frame Material | Cast Iron | Shaft Type | T |
| Overall Length | 19.63 in | Frame Length | 9.12 in |
| Shaft Diameter | 1.375 in | Shaft Extension | 3.38 in |
| Assembly/Box Mounting | F1/F2 CAPABLE | | |
| Outline Drawing | 037659-912 | Connection Diagram | EE7308 |

B

B

A

A



NOTES:

1. CONDUIT BOX CAN BE ROTATED IN 90° STEPS.
2. CONDUIT BOX CAN BE MOUNTED IN OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.
3. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

| | | | | | | |
|------|---------|-------------------|-------------------|-------------------|------------------|------------------|
| 1212 | 213/215 | 22.63 [574.80] | 11.76 [298.70] | 10.00 [254.00] | 7.00 [177.80] | 5.00 [127.00] |
| 912 | 213/215 | 19.63 [498.60] | 8.63 [219.20] | 7.00 [177.80] | 5.50 [139.70] | 3.50 [88.90] |
| DASH | FRAME | C | B | 2F | 2FF | BS |

| | | |
|---|---------------------------|-------------------|
| DRAWING REVISION D | REVISION BY M. VERBICK | DATE 5-29-2015 |
| ECO ECO-0078542 | APPROVED BY | DATE |
| ECO DESCRIPTION TITLE BLOCK LOGO CHANGE | | |
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| | | | |
|--|---------|-----------|-------|
| TOLERANCES UNLESS OTHERWISE SPECIFIED: | | | |
| DEC. | INCH | mm | ANGLE |
| .X | ±0.1 | [±2.5] | ±0.5° |
| .XX | ±0.03 | [±0.76] | |
| .XXX | ±0.005 | [±0.127] | |
| .XXXX | ±0.0005 | [±0.0127] | |
| REMOVE BURRS & BREAK SHARP EDGES: .003/.015 [0.076/.381] X 45° CORNER FILLETS: R.02 [51] | | | |
| MACHINED SURFACES: 125/3.2 | | | |
| mm SHOWN IN [BRACKETS] | | | |

| | |
|------------------------|--------------------|
| DRAWN BY AK | DATE 10-05-2009 |
| APPROVED BY SK | DATE 10-05-2009 |
| REFERENCE | |
| THIRD ANGLE PROJECTION | |

| | |
|----------------------------|--------------------------|
| Regal Beloit America, Inc. | |
| DESCRIPTION | OUTLINE 210 FR. TEFC |
| MATERIAL | PROCESS/FINISH |
| SIZE B | DRAWING NUMBER 037659 |
| | SHEET 1 OF 1 |



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

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER P.O. #:
 ORDER #: EE7308 REFERENCE MODEL #: 213TTN16101
 CONN. DIAGRAM: 037659-912 CAT #: L411B
 OUTLINE: 215838 R5 6 CUSTOMER PART #:
 WINDING: MOUNTING: F1/F2 CAPABLE
 SPEED:
 TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNC RPM | FL RPM | FRAME | ENCLOSURE | TYPE | KVA CODE | DESIGN |
|----|-----|----------|--------|-------|-----------|------|----------|--------|
| 2 | 1.5 | 900 | 885 | 213T | TEFC | TEN | L | B |

| PH | HZ | VOLTS | AMPS | START TYPE | DUTY | INSL | S.F. | AMB | ELEV. |
|-------------|-----------------|-------------------------|---------------------------|-----------------|-------------|-----------|---------|-----------------|-------|
| 3 | 60/50 | 230/460#190/380 | 8/48.2/4.1 | ACROSS-THE LINE | CONT | F | 1.15 | 40 | 3300 |
| | F.L. EFF | 86.5 | 3/4 LD EFF | 86.0 | 1/2 LD EFF | 82.5 | GTD EFF | ELECT. TYPE | |
| | F.L. PF | 56.0 | 3/4 LD PF | 46.0 | 1/2 LD PF | 35.0 | 84.0 | SQ CAGE IND RUN | |
| F.L. TORQUE | LR AMPS @ 460 V | L.R. TORQUE | B.D. TORQUE | F.L. RISE (°C) | | | | | |
| 12.0 LB-FT | 24.0 | 27.5 LB-FT | 229% | 46.0 LB-FT | 383% | 25 | | | |
| @ 3 FT. | POWER | ROTOR WK ² | MAX. LOAD WK ² | SAFE STALL TIME | START/SHOUR | MOTOR WGT | | | |
| 52 DBA | 61 DBA | 0.95 LB-FT ² | 0 LB-FT ² | 20 SEC. | 4 | 215 LB. | | | |

*** SUPPLEMENTAL INFORMATION ***

| DE BRACKET TYPE | ODE BRACKET TYPE | MOUNT TYPE | MOTOR ORIENTATION | SEVERE DUTY | HAZARDOUS LOCATION | DRIP COVER | SCREENS | PAINT |
|------------------------|------------------|------------|-------------------|-------------|-------------------------|------------|----------------|---------------|
| STANDARD | STANDARD | RIGID | HORIZONTAL | NO | NONE | NO | NONE | BLUE (ENAMEL) |
| BEARINGS | GREASE | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT | MATERIAL | FRAME MATERIAL | |
| BALL BALL 6307 6208 | POLYREX EM | T | NONE | NONE | 1045 HOT ROLLED (C-204) | | CAST IRON | |

| THERMOSTATS | PROTECTORS | WDG RTD's | BRG RTD's | THERMISTORS | CONTROL | SPACE HEATERS |
|--------------|--------------|--------------|--------------|--------------|--------------------|---------------|
| NONE | NOT | NONE | NONE | NONE | FALSE | NA |
| R1 (ohms/ph) | R2 (ohms/ph) | X1 (ohms/ph) | X2 (ohms/ph) | Xm (ohms/ph) | VIBRATION (in/sec) | FLOAT |
| 1.931 | 1.86 | 9.017 | 10.622 | 81.366 | 0.150 | ODE |

| | | | |
|-----|--|---------------------------|--|
| * N | | INVERTER TORQUE: NONE | |
| O | | INV. HP SPEED RANGE: NONE | |
| T | | ENCODER: NONE | |
| E | | BRAKE: NONE | |
| S | | FT-LB: NONE | |
| | | VOLTAGE: NONE | |
| | | HZ: NONE | |

PREPARED BY: FAREEDA DUDEKULA
 DATE: 9/11/2018
 FORM: 3531 REV 4 2/27/06
 UL: V:INS, CONST UL REC

Data Sheet

213TFFN16101



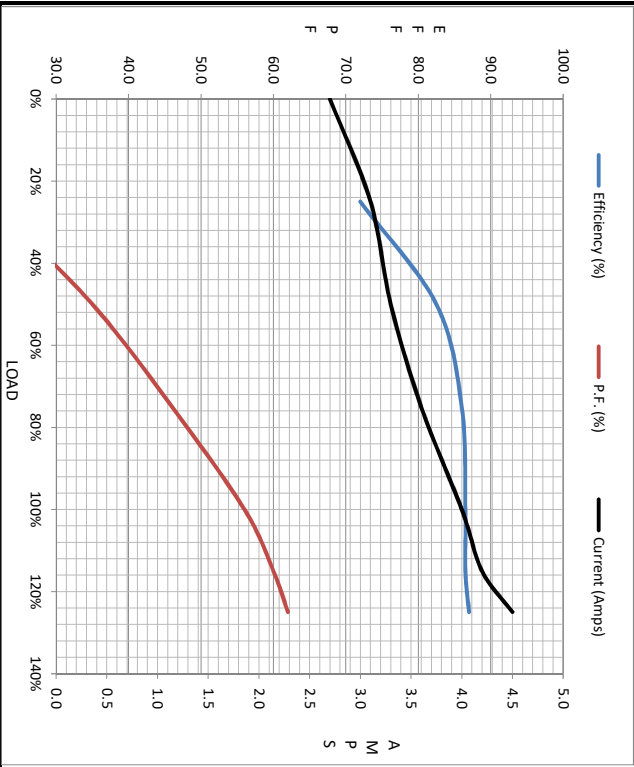
Submital
Data @ 460 V

Date: 9/11/2018
 Customer: _____
 Attention: _____
 Submitted by: FAREEDA DUDEKULA

| Load | Motor Load Data | | | | | | | | | |
|----------------|-----------------|------|------|------|------|------|------|------|--|--|
| | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR | | |
| Current (Amps) | 2.70 | 3.1 | 3.3 | 3.6 | 4.0 | 4.2 | 4.5 | 24.0 | | |
| Torque (ft-lb) | 0.00 | 3.0 | 6.0 | 9.0 | 12.0 | 13.8 | 15.0 | 27.5 | | |
| RPM | 900 | 895 | 891 | 888 | 885 | 880 | 878 | 0 | | |
| Efficiency (%) | | 72.0 | 82.5 | 86.0 | 86.5 | 86.5 | 87.0 | | | |
| P.F. (%) | 7.0 | 21.0 | 35.0 | 46.0 | 56.0 | 60.0 | 62.0 | 40.0 | | |

| Motor Speed Data | | | | | |
|------------------|------|---------|------|-------|------|
| | LR | Pull-Up | BD | Rated | Idle |
| Speed (RPM) | 0 | 450 | 770 | 885 | 900 |
| Current (Amps) | 24.0 | 21.5 | 16.0 | 4.0 | 2.70 |
| Torque (ft-lb) | 27.5 | 24.5 | 46.0 | 12.0 | 0.00 |

| Information Block | | | | |
|-----------------------------|-------------------------|--------|---------|---------|
| HP | 2.0 | | | |
| Sync. RPM | 900 | | | |
| Frame | 2151B2TFC080 | | | |
| Enclosure | TEFC | | | |
| Construction | TFN | | | |
| Voltage | 230/460#190/380 V | | | |
| Frequency | 60 Hz | | | |
| Design | B | | | |
| LR Code letter | L | | | |
| Service Factor | 1.15 | | | |
| Temp Rise @ FL | 25 °C | | | |
| Duty | CONT | | | |
| Ambient | 40 °C | | | |
| Elevation | 1,000 feet | | | |
| Rotor/Shaft wk ² | 0.95 Lb-Ft ² | | | |
| Ret Wdg | 215838 F5 | | | |
| Sound Pressure @ 1M | 52 DBA | | | |
| VFD Rating | NONE | | | |
| Outline Dwg | 037659-912 | | | |
| Conn. Diag | EE7308 | | | |
| Additional Specifications: | | | | |
| EQUIV CKT (OHMS / PHASE) | | | | |
| R1 | R2 | X1 | X2 | Xm |
| 1.9310 | 1.8800 | 9.0170 | 10.6220 | 81.3660 |



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