

PRODUCT INFORMATION PACKET

marathon®
Motors

Model No: 213TTFN16101

Catalog No: L411B

XRI® General Purpose General Purpose Motor, 2 & 1.50 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V,
900 & 750 RPM, 213T Frame, TEFC



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RegalRexnord

Nameplate Specifications

| | | | |
|------------------------|-----------------|----------------------------|-----------------------------|
| Phase | 3 | Output HP | 2 & 1.50 Hp |
| Output KW | 1.5 & 1.1 kW | Voltage | 230/460 & 190/380 V |
| Speed | 885 & 725 rpm | Service Factor | 1.15 & 1.15 |
| Frame | 213T | Enclosure | Totally Enclosed Fan Cooled |
| Thermal Protection | No Protection | Efficiency | 86.5 & 78.5 % |
| Ambient Temperature | 40 °C | Frequency | 60 & 50 Hz |
| Current | 8/4 & 8.2/4.1 A | Power Factor | 56 |
| Duty | Continuous | Insulation Class | F |
| Design Code | B | KVA Code | L |
| Drive End Bearing Size | 6307 | Opp Drive End Bearing Size | 6208 |
| UL | Recognized | CSA | Y |
| CE | Y | IP Code | 43 |
| Number of Speeds | 1 | | |

Technical Specifications

| | | | |
|-----------------------|-----------------------------|-----------------------|-----------------|
| Electrical Type | Squirrel Cage Induction Run | Starting Method | Across The Line |
| Poles | 8 | Rotation | Reversible |
| Resistance Main | 3.5 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 | 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 Drawing | EE7308 |





| NO. | REVISION | BY & DATE | CHK | ANG | TOLERANCES UNLESS SPECIFIED | | DRAWN RM | 11/20/1990 |
|---|--|----------------|-----|-------|--------------------------------|-----------------|----------|--------------------------|
| | | | | | DEC. | INCHES | | |
| 5 | CHG TO REGAL LOGO | SL 09/10/2015 | AB | | | | CHK | ML 11/21/1990 |
| 4 | REVISED IEC NOTATIONS | MSG 11/15/2011 | CMN | .X | ±.1 | | APPD | SAS 04/24/2003 |
| 3 | ADDED IEC NOTATIONS... (U1), (V1) ETC. MU95194 | MSG 5/10/2010 | MJS | .XX | ±.02 | | SCALE | 1=1 |
| 2 | ADDED THE OPTIONAL CORD CONNECTION MU46318 | RDH 04/24/2003 | DRS | .XXX | ±.005 | | REF | |
| 1 | REDRAWN | RM 11/20/1990 | | .XXXX | ±.0005 | | FMF | |
| | | | | | ±7'30" | | 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 ee7308 | SIZE | DRAWING NO. PAGE OF REV. |
| | | | | | DIST WP | | A | EE7308 5 |



Regal Beloit America, Inc.

TITLE CONNECTION DIAGRAM
3Ø – DUAL VOLTAGE MOTOR

MAT'L.

FINISH



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

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CUSTOMER: _____ CUSTOMER P.O. #: _____
ORDER #: _____ REFERENCE MODEL #: 213TTFN16101
CONN. DIAGRAM: EE7308 CAT #: L411B
OUTLINE: 037659-912 CUSTOMER PART #: _____
WINDING: 215838 R5 6 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 | TFN | L | B |

| PH | HZ | VOLTS | AMPS | START TYPE | DUTY | INSL | S.F. | AMB | ELEV. |
|----|-------|-----------------|-------------|-----------------|------|------|------|-----|-------|
| 3 | 60/50 | 230/460#190/380 | 8/4&8.2/4.1 | 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 | 84.0 | ELECT. TYPE | SQ CAGE IND RUN |
|----------|------|------------|------|------------|------|---------|------|-------------|-----------------|
| F.L. PF | 56.0 | 3/4 LD PF | 46.0 | 1/2 LD PF | 35.0 | | | | |

| 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 WK² | MAX. LOAD WK² | SAFE STALL TIME | STARTS/HOUR | MOTOR WGT |
|---------|--------|-------------|---------------|-----------------|-------------|-----------|
| 52 dBA | 61 dBA | 0.95 LB-FT² | 0 LB-FT² | 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 |
|----------------------------------|------------|------------|------------|-------------|-------------------------|----------------|
| DE ODE 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 O T E S * | | INVERTER TORQUE: NONE INV. HP SPEED RANGE: NONE |
| | | |
| | | |
| | | |
| | | |
| | ENCODER: NONE NONE NONE | NONE PPR |

| | |
|--|--|
| PREPARED BY: FAREEDA DUDEKULA DATE: 9/11/2018 | BRAKE: NONE NONE FT-LB: NA VOLTAGE: NONE UL: V-INS, CONST UL REC |
|--|--|

FORM: 3531 REV_4 2/27/06

Data Sheet

Date: 12/3/2018

Customer: _____

Attention: _____

Submitted by: FAREEDA DUDEKULA

213TTFN16101



Submittal

Data @ 460 V

Motor Load Data

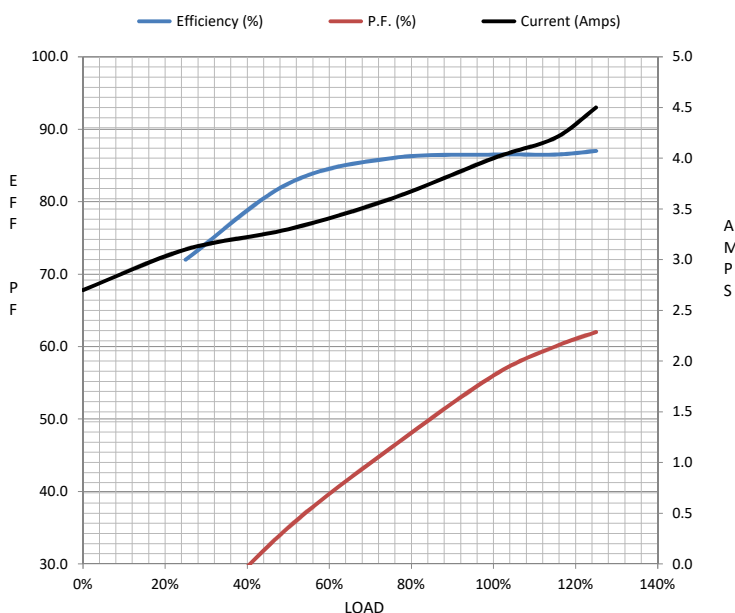
| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR | |
|----------------|------|------|------|------|------|------|------|------|--|
| Current (Amps) | 2.70 | 3.1 | 3.3 | 3.6 | 4.0 | 4.2 | 4.5 | 24.0 | |
| Torque (ft-lb) | 0.00 | 3.0 | 6.0 | 9.0 | 12.0 | 13.8 | 15.0 | 27.5 | |
| RPM | 900 | 895 | 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 | 213 | | | |
| Enclosure | TEFC | | | |
| Construction | TFS | | | |
| 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 wk² | 0.95 Lb-Ft² | | | |
| Ref Wdg | 215838 R5 | | | |
| Sound Pressure @ 1M | 52 dBA | | | |
| VFD Rating | NONE | | | |
| Outline Dwg | 037659-912 | | | |
| Conn. Diag | EE7308 | | | |
| Additional Specifications: | | | | |
| 0 | | | | |
| 0 | | | | |
| EQUIV CKT (OHMS / PHASE) | | | | |
| R1 | R2 | X1 | X2 | Xm |
| 1.9310 | 1.8600 | 9.0170 | 10.6220 | 81.3660 |



Speed -Torque Curve

