

# PRODUCT INFORMATION PACKET

Model No: 213THTL7726  
Catalog No: Y545  
7 1/2, 1800, TENV, 213TC, 3/60/230/460  
1000:1 Speed Ratio



Regal and Marathon are trademarks of Regal Beloit Corporation or one of its affiliated companies.  
©2019 Regal Beloit Corporation, All Rights Reserved. MC017097E



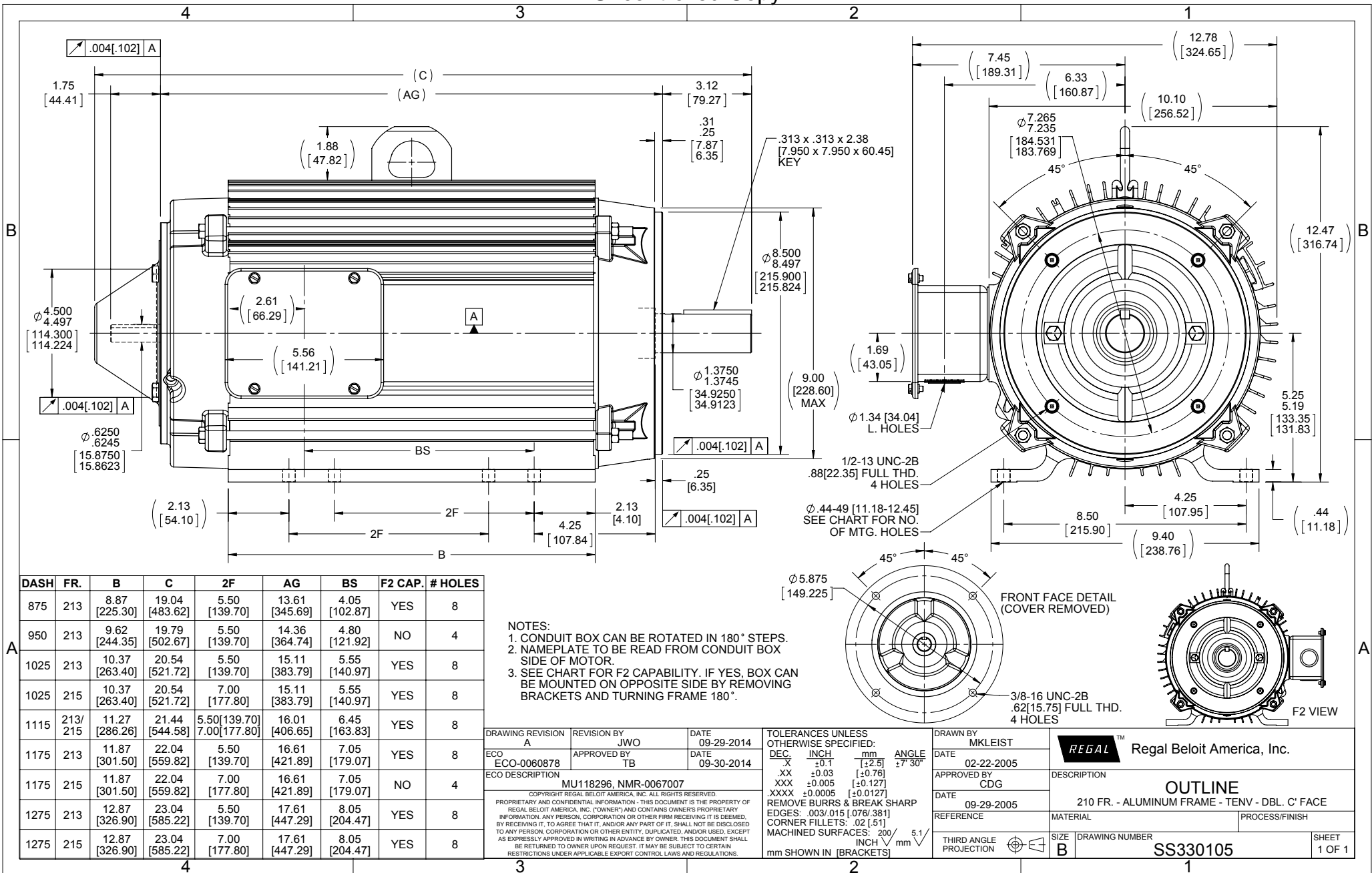


### Nameplate Specifications

|                            |  |                        |                   |
|----------------------------|--|------------------------|-------------------|
| Output HP                  | <b>7.50 HP</b>                         | Output KW              | <b>5.6 kW</b>     |
| Frequency                  | <b>60 Hz</b>                           | Voltage                | <b>230/460 V</b>  |
| Current                    | <b>21.0/10.5 A</b>                     | Speed                  | <b>1765 RPM</b>   |
| Service Factor             | <b>1</b>                               | Phase                  | <b>3</b>          |
| Efficiency                 | <b>90.2 %</b>                          | Duty                   | <b>Continuous</b> |
| Insulation Class           | <b>F</b>                               | Design Code            | <b>INV</b>        |
| KVA Code                   | <b>L</b>                               | Frame                  | <b>213TC</b>      |
| Enclosure                  | <b>Totally Enclosed Non Ventilated</b> | Overload Protector     | <b>No</b>         |
| Ambient Temperature        | <b>40 °C</b>                           | Drive End Bearing Size | <b>6309</b>       |
| Opp Drive End Bearing Size | <b>6206</b>                            | UL                     | <b>Recognized</b> |
| CSA                        | <b>Y</b>                               | CE                     | <b>Y</b>          |
| IP Code                    | <b>43</b>                              |                        |                   |

### Technical Specifications

|                       |                                    |                       |                      |
|-----------------------|------------------------------------|-----------------------|----------------------|
| Electrical Type       | <b>Squirrel Cage Inverter Duty</b> | Starting Method       | <b>Inverter Only</b> |
| Poles                 | <b>4</b>                           | Rotation              | <b>Reversible</b>    |
| Mounting              | <b>Rigid Base</b>                  | Motor Orientation     | <b>Horizontal</b>    |
| Drive End Bearing     | <b>Ball</b>                        | Opp Drive End Bearing | <b>Ball</b>          |
| Frame Material        | <b>Aluminum</b>                    | Shaft Type            | <b>T</b>             |
| Overall Length        | <b>20.54 in</b>                    | Frame Length          | <b>10.25 in</b>      |
| Shaft Diameter        | <b>1.375 in</b>                    | Shaft Extension       | <b>3.12 in</b>       |
| Assembly/Box Mounting | <b>F1/F2 Capable</b>               |                       |                      |
| Outline Drawing       | <b>B-SS330105-1025</b>             | Connection Diagram    | <b>A-EE7308T</b>     |



| DASH | FR.         | B                 | C                 | 2F                                   | AG                | BS               | F2 CAP. | # HOLES |
|------|-------------|-------------------|-------------------|--------------------------------------|-------------------|------------------|---------|---------|
| 875  | 213         | 8.87<br>[225.30]  | 19.04<br>[483.62] | 5.50<br>[139.70]                     | 13.61<br>[345.69] | 4.05<br>[102.87] | YES     | 8       |
| 950  | 213         | 9.62<br>[244.35]  | 19.79<br>[502.67] | 5.50<br>[139.70]                     | 14.36<br>[364.74] | 4.80<br>[121.92] | NO      | 4       |
| 1025 | 213         | 10.37<br>[263.40] | 20.54<br>[521.72] | 5.50<br>[139.70]                     | 15.11<br>[383.79] | 5.55<br>[140.97] | YES     | 8       |
| 1025 | 215         | 10.37<br>[263.40] | 20.54<br>[521.72] | 7.00<br>[177.80]                     | 15.11<br>[383.79] | 5.55<br>[140.97] | YES     | 8       |
| 1115 | 213/<br>215 | 11.27<br>[286.26] | 21.44<br>[544.58] | 5.50<br>[139.70]<br>7.00<br>[177.80] | 16.01<br>[406.65] | 6.45<br>[163.83] | YES     | 8       |
| 1175 | 213         | 11.87<br>[301.50] | 22.04<br>[559.82] | 5.50<br>[139.70]                     | 16.61<br>[421.89] | 7.05<br>[179.07] | YES     | 8       |
| 1175 | 215         | 11.87<br>[301.50] | 22.04<br>[559.82] | 7.00<br>[177.80]                     | 16.61<br>[421.89] | 7.05<br>[179.07] | NO      | 4       |
| 1275 | 213         | 12.87<br>[326.90] | 23.04<br>[585.22] | 5.50<br>[139.70]                     | 17.61<br>[447.29] | 8.05<br>[204.47] | YES     | 8       |
| 1275 | 215         | 12.87<br>[326.90] | 23.04<br>[585.22] | 7.00<br>[177.80]                     | 17.61<br>[447.29] | 8.05<br>[204.47] | YES     | 8       |

- NOTES:  
 1. CONDUIT BOX CAN BE ROTATED IN 180° STEPS.  
 2. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.  
 3. SEE CHART FOR F2 CAPABILITY. IF YES, BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°.

|  |                    |                    |
|--|--------------------|--------------------|
| DRAWING REVISION<br>A                    | REVISION BY<br>JWO | DATE<br>09-29-2014 |
| ECO<br>ECO-0060878                       | APPROVED BY<br>TB  | DATE<br>09-30-2014 |
| ECO DESCRIPTION<br>MU118296, NMR-0067007 |                    |                    |

COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED.  
 PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF REGAL BELOIT AMERICA, INC. (OWNER) AND CONTAINS OWNER'S PROPRIETARY INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED, BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.

|   |         |
|---|---------|
| TOLERANCES UNLESS OTHERWISE SPECIFIED:                  | ANGLE   |
| DEC. INCH mm  | ±7° 30' |
| .X ±0.1 [±2.5]  |         |
| .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] |         |
| CORNER FILLETS: .02 [51]                                |         |
| MACHINED SURFACES: 200 INCH/mm                          | 5.1     |
| mm SHOWN IN [BRACKETS]                                  |         |

|                     |                        |
|---------------------|------------------------|
| DRAWN BY<br>MKLEIST | DATE<br>02-22-2005     |
| APPROVED BY<br>CDG  | DATE<br>09-29-2005     |
| REFERENCE           | THIRD ANGLE PROJECTION |

|   |                            |
|---|----------------------------|
| Regal Beloit America, Inc.                                    |                            |
| DESCRIPTION<br>210 FR. - ALUMINUM FRAME - TENV - DBL. C' FACE |                            |
| MATERIAL  | PROCESS/FINISH             |
| SIZE<br>B   | DRAWING NUMBER<br>SS330105 |
| SHEET<br>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<br>T   | REVISION BY<br>ZR | DATE<br>01-14-2019 |                            | DRAWN BY<br>SMC    | Regal Beloit America, Inc.  |
| ECO<br>ECO-0159915  | APPROVED BY<br>DR | DATE<br>01-15-2019 |                            | DATE<br>05-13-1992 |   |
| ECO DESCRIPTION<br><b>ADDED TERMINAL CONNECTION DIAGRAM</b>   |                   |                    |                            | APPROVED BY<br>TB  | DESCRIPTION<br><b>CONN DIAGRAM-INTERNAL</b><br>3 PHASE - DUAL VOLTAGE MOTOR |
| <small>COPYRIGHT REGAL BELOIT AMERICA, INC. ALL RIGHTS RESERVED.<br/>PROPRIETARY AND CONFIDENTIAL INFORMATION - THIS DOCUMENT IS THE PROPERTY OF<br/>REGAL BELOIT AMERICA, INC. ("OWNER") AND CONTAINS OWNER'S PROPRIETARY<br/>INFORMATION. ANY PERSON, CORPORATION OR OTHER FIRM RECEIVING IT IS DEEMED,<br/>BY RECEIVING IT, TO AGREE THAT IT, AND/OR ANY PART OF IT, SHALL NOT BE DISCLOSED<br/>TO ANY PERSON, CORPORATION OR OTHER ENTITY, DUPLICATED, AND/OR USED, EXCEPT<br/>AS EXPRESSLY APPROVED IN WRITING IN ADVANCE BY OWNER. THIS DOCUMENT SHALL<br/>BE RETURNED TO OWNER UPON REQUEST. IT MAY BE SUBJECT TO CERTAIN<br/>RESTRICTIONS UNDER APPLICABLE EXPORT CONTROL LAWS AND REGULATIONS.</small> |                   |                    | DATE<br>05-13-1992         | MATERIAL           | PROCESS/FINISH  |
|   |                   |                    | REFERENCE<br>EE7308/EE7300 | SIZE<br>A          | DRAWING NUMBER<br>EE7308T   |
|   |                   |                    | THIRD ANGLE<br>PROJECTION  |                    |   |

CERTIFICATION DATA SHEET

Model#: 213THTL7726 CE  
 CONN. DIAGRAM: A-EE7308T  
 OUTLINE: B-SS330105-1025

WINDING#: K2134177 NONE 1  
 ASSEMBLY: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

|       |      |           |          |               |            |          |        |       |           |
|-------|------|-----------|----------|---------------|------------|----------|--------|-------|-----------|
| HP    | KW   | SYNC. RPM | F.L. RPM | FRAME         | ENCLOSURE  | KVA CODE | DESIGN |       |           |
| 7 1/2 | 5.60 | 1800      | 1765     | 213TC         | TENV       | L        | INV    |       |           |
| PH    | Hz   | VOLTS     | FL AMPS  | START TYPE    | DUTY       | INSL     | S.F    | AMB°C | ELEVATION |
| 3     | 60   | 230/460   | 21/10.5  | INVERTER ONLY | CONTINUOUS | F3       | 1.0    | 40    | 3300      |

|                     |                    |                    |          |                  |              |
|---------------------|--------------------|--------------------|----------|------------------|--------------|
| FULL LOAD EFF: 90.2 | 3/4 LOAD EFF: 89.5 | 1/2 LOAD EFF: 87.5 | GTD. EFF | ELEC. TYPE       | NO LOAD AMPS |
| FULL LOAD PF: 76    | 3/4 LOAD PF: 69    | 1/2 LOAD PF: 56.5  | 88.5     | SQ CAGE INV DUTY | 11 / 5.5     |

|             |                   |                |                |             |
|-------------|-------------------|----------------|----------------|-------------|
| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE    | B.D. TORQUE    | F.L. RISE°C |
| 22.3 LB-FT  | 180 / 90          | 59.5 LB-FT 267 | 95.5 LB-FT 428 | 80          |

|                        |             |             |           |                 |              |                   |
|------------------------|-------------|-------------|-----------|-----------------|--------------|-------------------|
| SOUND PRESSURE @ 3 FT. | SOUND POWER | ROTOR WK^2  | MAX. WK^2 | SAFE STALL TIME | STARTS /HOUR | APPROX. MOTOR WGT |
| 62 dBA                 | 72 dBA      | 0.9 LB-FT^2 | 0 LB-FT^2 | 0 SEC.          | 0            | 135 LBS.          |

EQUIVALENT WYE CKT.PARAMETERS (OHMS PER PHASE)

|         |       |         |         |        |
|---------|-------|---------|---------|--------|
| R1      | R2    | X1      | X2      | XM     |
| 0.69993 | 0.567 | 1.76526 | 2.26044 | 38.178 |
| RM      | ZREF  | XR      | TD      | TD0    |
| 1946.7  | 37.8  | 3.2     | 0.0108  | 0.189  |

\*\*\* SUPPLEMENTAL INFORMATION \*\*\*

|                 |                  |            |             |             |                    |                         |                |                |
|-----------------|------------------|------------|-------------|-------------|--------------------|-------------------------|----------------|----------------|
| DE BRACKET TYPE | ODE BRACKET TYPE | MOUNT TYPE | ORIENTATION | SEVERE DUTY | HAZARDOUS LOCATION | DRIP COVER              | SCREENS        | PAINT          |
| C-FACE          | BRAKE OR ENCODER | RIGID      | HORIZONTAL  | FALSE       | NONE               | FALSE                   | NONE           | BLACK (ENAMEL) |
| BEARINGS        |                  | GREASE     | SHAFT TYPE  | SPECIAL DE  | SPECIAL ODE        | SHAFT MATERIAL          | FRAME MATERIAL |                |
| DE              | OPE              |            |             |             |                    |                         |                |                |
| BALL            | BALL             | POLYREX EM | T           | NONE        | NONE               | 1045 HOT ROLLED (C-204) | ALUMINIUM      |                |
| 6309            | 6206             |            |             |             |                    |                         |                |                |

|                   |            |          |          |             |      |         |      |                  |       |
|-------------------|------------|----------|----------|-------------|------|---------|------|------------------|-------|
| THERMO-PROTECTORS |            |          |          | THERMISTORS |      | CONTROL |      | SPACE /n HEATERS |       |
| THERMOSTATS       | PROTECTORS | WDG RTDs | BRG RTDs |             |      |         |      |                  |       |
| TSTATS (NIC)      | NOT        | NONE     | NONE     | NONE        | NONE | FALSE   | NONE | NONE             | VOLTS |

If Inverter equals NONE, contact factory for further information

|                                       |
|---------------------------------------|
| INVERTER TORQUE: CONSTANT 1000.1      |
| INV. HP SPEED RANGE: 2.0 X BASE SPEED |
| ENCODER: PROVISIONS ONLY              |
| NORTHSTAR ST56                        |
| NONE NONE PPR                         |
| BRAKE: PROVISIONS ONLY NONE           |
| NONE P/N NONE                         |

\*  
 N  
 O  
 T  
 E  
 S  
 \*

|            |        |      |         |
|------------|--------|------|---------|
| NONE       | NONE   | NONE | NONE HZ |
| NONE FT-LB | NONE V |      |         |

DATE: 06/22/2017 04:03:46 AM  
FORM 3531 REV.3 02/07/99  
\*\* Subject to change without notice.

Data Sheet

Date: 16-06-2017  
 Customer: \_\_\_\_\_  
 Attention: \_\_\_\_\_  
 Submitted by: FAREEDA DUDEKULA



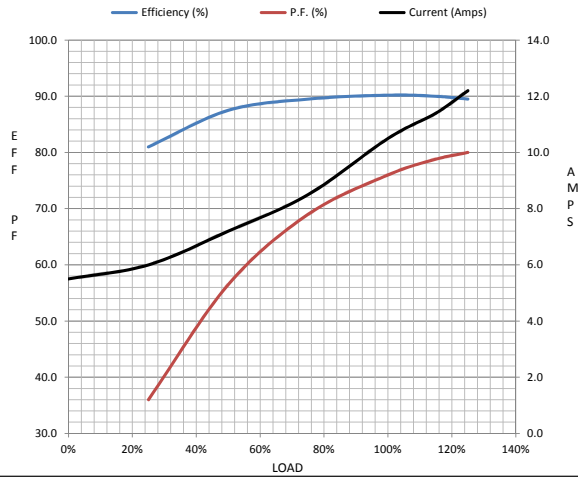
213THTL7726

Submittal

Data @ 460 V

| Motor Load Data |      |      |      |      |      |       |      |      |  |
|-----------------|------|------|------|------|------|-------|------|------|--|
| Load            | 0%   | 25%  | 50%  | 75%  | 100% | 115%  | 125% | LR   |  |
| Current (Amps)  | 5.5  | 6.0  | 7.2  | 8.5  | 10.5 | 11.4  | 12.2 | 90.0 |  |
| Torque (ft-lb)  | 0.00 | 5.5  | 11.0 | 16.8 | 22.3 | 25.7  | 28.0 | 59.5 |  |
| RPM             | 1800 | 1792 | 1782 | 1772 | 1765 | 1,760 | 1755 | 0    |  |
| Efficiency (%)  |      | 81.0 | 87.5 | 89.5 | 90.2 | 90.0  | 89.5 |      |  |
| P.F. (%)        | 6.5  | 36.0 | 56.5 | 69.0 | 76.0 | 78.8  | 80.0 | 41.5 |  |

| Motor Speed Data |      |         |      |       |      | Information Block |      |
|------------------|------|---------|------|-------|------|-------------------|------|
|                  | LR   | Pull-Up | BD   | Rated | Idle |                   |      |
| Speed (RPM)      | 0    | 900     | 1515 | 1765  | 1800 | HP                | 7.5  |
| Current (Amps)   | 90.0 | 85.0    | 55.0 | 10.5  | 5.5  | Sync. RPM         | 1800 |
| Torque (ft-lb)   | 59.5 | 55.0    | 95.5 | 22.3  | 0.00 | Frame             | 213  |
|                  |      |         |      |       |      | Enclosure         | TENV |



|                             |                         |        |        |         |
|-----------------------------|-------------------------|--------|--------|---------|
| Construction                | TTL                     |        |        |         |
| Voltage                     | 230/460 V               |        |        |         |
| Frequency                   | 60 Hz                   |        |        |         |
| Design                      | A                       |        |        |         |
| LR Code letter              | L                       |        |        |         |
| Service Factor              | 1.15                    |        |        |         |
| Temp Rise @ FL              | 80 ° C                  |        |        |         |
| Duty                        | CONT                    |        |        |         |
| Ambient                     | 40 ° C                  |        |        |         |
| Elevation                   | 1,000 feet              |        |        |         |
| Rotor/Shaft wk <sup>2</sup> | 0.90 Lb-Ft <sup>2</sup> |        |        |         |
| Ref Wdg                     | K2134177 NONE           |        |        |         |
| Sound Pressure @ 1M         | 62 dBA                  |        |        |         |
| VFD Rating                  | CONSTANT 1000:1         |        |        |         |
| Outline Dwg                 | B-SS330105-1025         |        |        |         |
| Conn. Diag                  | A-EE7308T               |        |        |         |
| Additional Specifications:  |                         |        |        |         |
| 0                           |                         |        |        |         |
| 365THFS8036                 |                         |        |        |         |
| EQUIV CKT (OHMS / PHASE)    |                         |        |        |         |
| R1                          | R2                      | X1     | X2     | Xm      |
| 0.6990                      | 0.5670                  | 1.7650 | 2.2600 | 38.1780 |

