

# PRODUCT INFORMATION PACKET



Model No: LM17195  
Catalog No: LM17195  
20 HP Special Voltage Motor, 3 phase, 3600 RPM, 575 V, 256TC Frame, TEFC  
Special Voltage Motors



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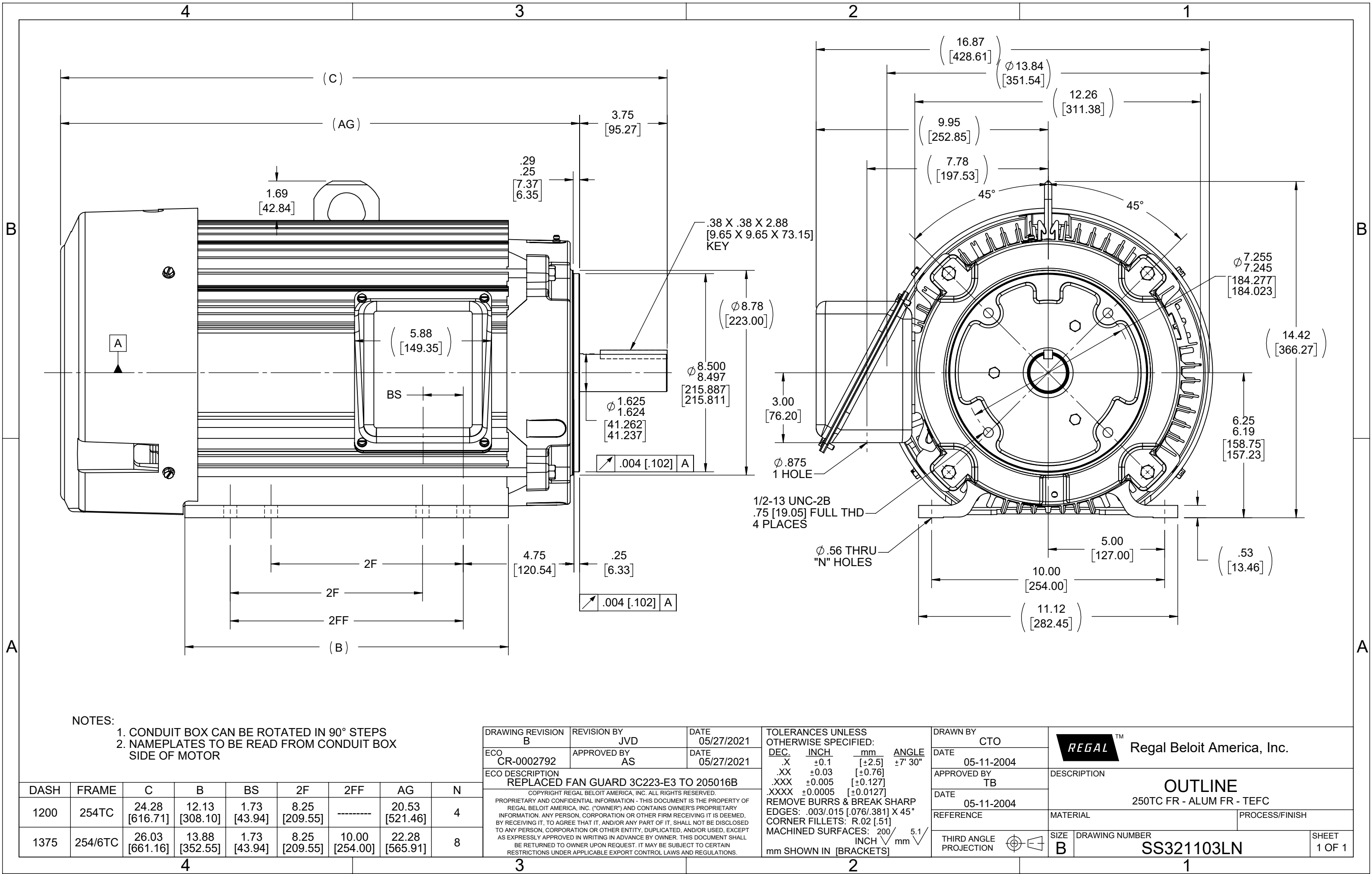
### Nameplate Specifications

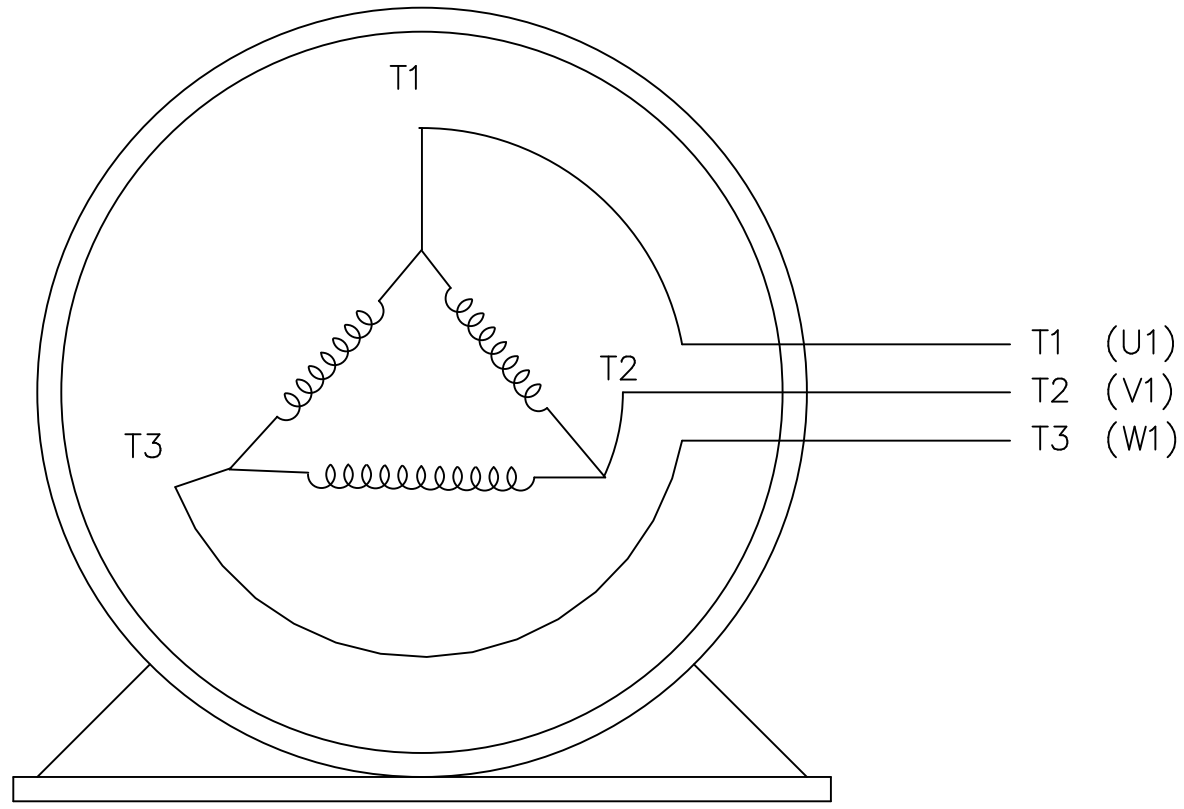
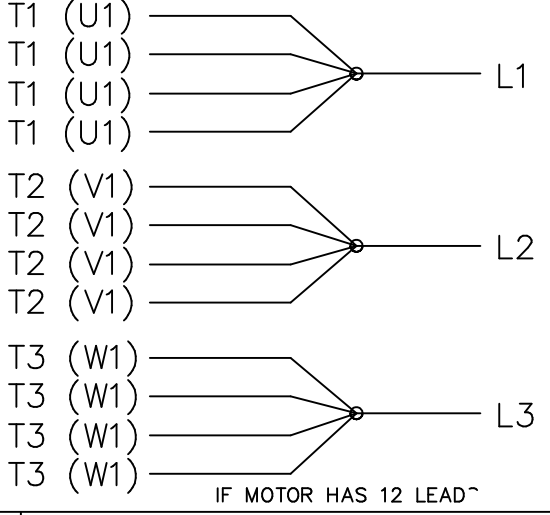
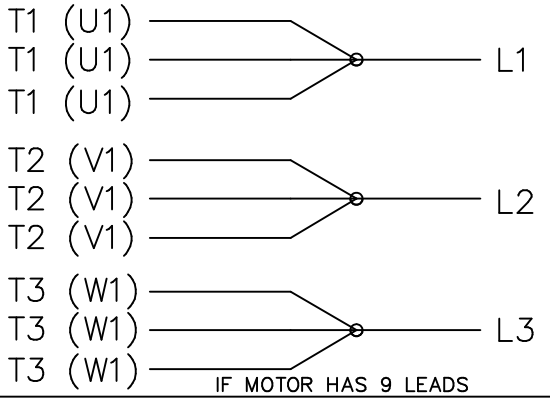
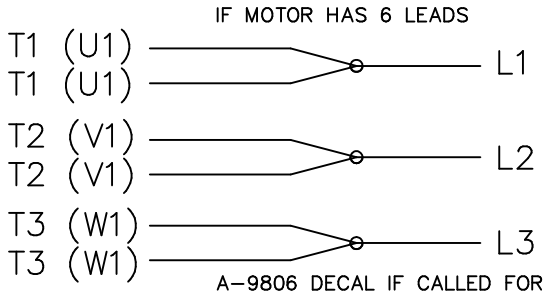
|                        |            |                            |                             |
|------------------------|------------|----------------------------|-----------------------------|
| Output HP              | 20 Hp      | Output KW                  | 14.9 kW                     |
| Frequency              | 60 Hz      | Voltage                    | 575 V                       |
| Current                | 19.2 A     | Speed                      | 3520 rpm                    |
| Service Factor         | 1.25       | Phase                      | 3                           |
| Efficiency             | 91 %       | Power Factor               | 87                          |
| Duty                   | Continuous | Insulation Class           | F                           |
| Design Code            | B          | KVA Code                   | G                           |
| Frame                  | 256TC      | Enclosure                  | Totally Enclosed Fan Cooled |
| Thermal Protection     | No         | Ambient Temperature        | 40 °C                       |
| Drive End Bearing Size | 6309       | 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 Inverter Rated | Starting Method       | Line Or Inverter |
| Poles                 | 2                            | Rotation              | Reversible       |
| Resistance Main       | .485 Ohms                    | Mounting              | Rigid Base       |
| Motor Orientation     | Horizontal                   | Drive End Bearing     | Ball             |
| Opp Drive End Bearing | Ball                         | Frame Material        | Aluminum         |
| Shaft Type            | T                            | Overall Length        | 25.75 in         |
| Frame Length          | 13.88 in                     | Shaft Diameter        | 1.625 in         |
| Shaft Extension       | 4 in                         | Assembly/Box Mounting | F1/F2 CAPABLE    |
| Connection Drawing    | EE7300U-LN                   | Outline Drawing       | SS321103LN-1375  |

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VIEW OF TERMINAL END

|  |              |           |                |                                |              |   |                     |      |             |      |    |      |
|--|--------------|-----------|----------------|--------------------------------|--------------|---|---------------------|------|-------------|------|----|------|
|  |              |           |                | TOLERANCES<br>UNLESS SPECIFIED |              |  | DRAWN KL 12-06-2000 |      |             |      |    |      |
|  |              |           |                | DEC.                           | INCHES       |   | CHK                 | DJK  | 12-06-2000  |      |    |      |
|  |              |           |                | .X                             | ±.1          |   | APPD                | DJK  | 12-06-2000  |      |    |      |
|  |              |           |                | .XX                            | ±.02         |   | SCALE               |      |             |      |    |      |
| 2  | ADDED TABLES | CN39272   | RJW 06-03-2005 | ML                             | .XXX ±.005   | TITLE EXTERNAL CONNECTION DIAGRAM<br>3Ø SINGLE VOLTAGE DELTA                          |                     |      | REF         |      |    |      |
| 1  | NEW DRAWING  | MU34873   | KL 12-06-2000  |                                | .XXXX ±.0005 | MAT'L.  |                     |      | FMF         |      |    |      |
| NO.  | REVISION     | BY & DATE | CHK            | ANG                            | ±7'30"       | FINISH  |                     |      | PREV        |      |    |      |
| THIS DRAWING IN DESIGN AND DETAIL IS OUR PROPERTY AND MUST NOT BE USED EXCEPT<br>IN CONNECTION WITH OUR WORK ALL RIGHTS OF DESIGN AND INVENTION ARE RESERVED<br>THIS IS AN ELECTRONICALLY GENERATED DOCUMENT – DO NOT SCALE THIS PRINT |              |           |                | RFP                            |              | CAD FILE EE7300U_LN   |                     | SIZE | DRAWING NO. | PAGE | OF | REV. |
|  |              |           |                | DIST LE                        |              |   |                     | A    | EE7300U-LN  |      |    |      |



1051 CHEYENNE AVE.  
GRAFTON, WI 53024  
PH. 262-277-8810

DATA VOLTS: 460

### CERTIFICATION DATA SHEET

CONN. DIAGRAM: A-EE7300U-LN

CAT #: LM17195

OUTLINE: B-SS321103LN-1375

WINDING: K2562213

R1 3

### TYPICAL MOTOR PERFORMANCE DATA

| HP | KW   | SYNC RPM | FL RPM | FRAME | ENCLOSURE | TYPE | KVA CODE | DESIGN |
|----|------|----------|--------|-------|-----------|------|----------|--------|
| 20 | 14.9 | 3600     | 3520   | 256TC | TEFC      | TFY  | G        | B      |

| PH | HZ | VOLTS | AMPS | START TYPE       | DUTY | INSL | S.F. | AMB | ELEV. |
|----|----|-------|------|------------------|------|------|------|-----|-------|
| 3  | 60 | 575   | 19.2 | LINE OR INVERTER | CONT | F    | 1.15 | 40  | 3300  |

| F.L. EFF | 91.0 | 3/4 LD EFF | 91.0 | 1/2 LD EFF | 90.2 | GTD EFF |      | ELECT. TYPE       |  |
|----------|------|------------|------|------------|------|---------|------|-------------------|--|
| F.L. PF  | 87.0 | 3/4 LD PF  | 84.0 | 1/2 LD PF  | 77.0 |         | 90.2 | SQ CAGE INV RATED |  |

| F.L. TORQUE | LR AMPS @ 460 V | L.R. TORQUE     | B.D. TORQUE     | F.L. RISE (° C) |
|-------------|-----------------|-----------------|-----------------|-----------------|
| 29.8 LB-FT  | 116             | 50.0 LB-FT 168% | 78.0 LB-FT 262% | 75              |

| PRESSURE @ 3 | SOUND  | POWER | ROTOR WK²   | MAX. LOAD WK² | SAFE STALL TIME | STARTS/HOUR | MOTOR WGT |
|--------------|--------|-------|-------------|---------------|-----------------|-------------|-----------|
| 72 dBA       | 81 dBA |       | 1.15 LB-FT² | 26 LB-FT²     | 20 SEC.         | 2           | 340 LB.   |

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

| DE BRACKET TYPE | ODE BRACKET TYPE | MOUNT TYPE | MOTOR ORIENTATION | SEVERE DUTY | HAZARDOUS LOCATION | DRIP COVER | SCREENS | PAINT     |
|-----------------|------------------|------------|-------------------|-------------|--------------------|------------|---------|-----------|
| C-FACE          | STANDARD         | RIGID      | HORIZONTAL        | NO          | NONE               | NO         | NONE    | WATTSaver |

| BEARINGS  | GREASE     | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT MATERIAL          | FRAME MATERIAL |
|-----------|------------|------------|------------|-------------|-------------------------|----------------|
| DE ODE    |            |            |            |             |                         |                |
| BALL BALL | POLYREX EM | T          | NONE       | NONE        | 1045 HOT ROLLED (C-204) | ALUMINUM       |
| 6309 6208 |            |            |            |             |                         |                |

| 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 |
|--------------|--------------|--------------|--------------|--------------|--------------------|-------|
| 0.51         | 0.344        | 1.797        | 1.686        | 54.093       | 0.150              | ODE   |

|                                 |               |   |
|---------------------------------|---------------|---|
| *<br>N<br>O<br>T<br>E<br>S<br>* |               | INVERTER TORQUE: VARIABLE 10:1<br>INV. HP SPEED RANGE: NONE |
|                                 |               |   |
|                                 |               |   |
|                                 |               |   |
|                                 |               |   |
|                                 | ENCODER: NONE |   |
|                                 | NONE          |   |
|                                 | NONE          | NONE PPR  |

|                         |                   |
|-------------------------|-------------------|
| DATE: 9/5/2018          | BRAKE: NONE       |
|                         | NONE NONE         |
|                         | FT-LB: NA         |
|                         | VOLTAGE: NONE HZ: |
| UL: V-INS, CONST UL REC |                   |

## Data Sheet

Date: 9/5/2018

LM17195



Data @ 575 V

## Motor Load Data

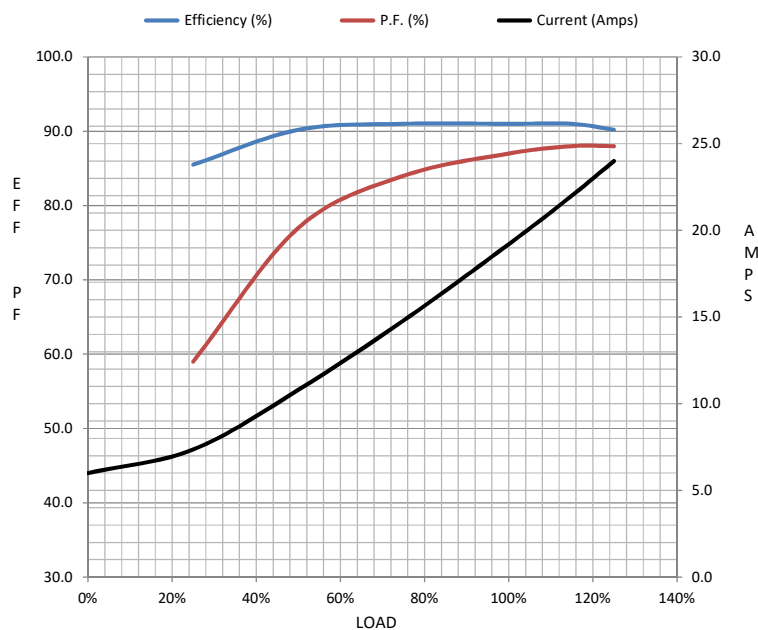
| Load           | 0%   | 25%  | 50%  | 75%  | 100% | 115%  | 125% | LR   |  |
|----------------|------|------|------|------|------|-------|------|------|--|
| Current (Amps) | 6.0  | 7.4  | 10.8 | 14.8 | 19.2 | 22.0  | 24.0 | 116  |  |
| Torque (ft-lb) | 0.00 | 7.5  | 14.8 | 22.2 | 29.8 | 34.5  | 37.5 | 50.0 |  |
| RPM            | 3600 | 3580 | 3560 | 3540 | 3520 | 3,510 | 3490 | 0    |  |
| Efficiency (%) |      | 85.5 | 90.2 | 91.0 | 91.0 | 91.0  | 90.2 |      |  |
| P.F. (%)       | 8.5  | 59.0 | 77.0 | 84.0 | 87.0 | 88.0  | 88.0 | 35.0 |  |

## Motor Speed Data

|                | LR   | Pull-Up | BD   | Rated | Idle |
|----------------|------|---------|------|-------|------|
| Speed (RPM)    | 0    | 1800    | 3200 | 3520  | 3600 |
| Current (Amps) | 116  | 104     | 80.0 | 19.2  | 6.0  |
| Torque (ft-lb) | 50.0 | 50.0    | 78.0 | 29.8  | 0.00 |

## Information Block

|                            |                   |        |        |         |
|----------------------------|-------------------|--------|--------|---------|
| HP                         | 20.0              |        |        |         |
| Sync. RPM                  | 3600              |        |        |         |
| Frame                      | 256               |        |        |         |
| Enclosure                  | TEFC              |        |        |         |
| Construction               | TFY               |        |        |         |
| Voltage                    | 575 V             |        |        |         |
| Frequency                  | 60 Hz             |        |        |         |
| Design                     | B                 |        |        |         |
| LR Code letter             | G                 |        |        |         |
| Service Factor             | 1.15              |        |        |         |
| Temp Rise @ FL             | 75 ° C            |        |        |         |
| Duty                       | CONT              |        |        |         |
| Ambient                    | 40 ° C            |        |        |         |
| Elevation                  | 1,000 feet        |        |        |         |
| Rotor/Shaft wk²            | 1.15 Lb-Ft²       |        |        |         |
| Ref Wdg                    | K2562213 R1       |        |        |         |
| Sound Pressure @ 1M        | 72 dBA            |        |        |         |
| VFD Rating                 | VARIABLE 10:1     |        |        |         |
| Outline Dwg                | B-SS321103LN-1375 |        |        |         |
| Conn. Diag                 | A-EE7300U-LN      |        |        |         |
| Additional Specifications: |                   |        |        |         |
| 0                          |                   |        |        |         |
| 0                          |                   |        |        |         |
| EQUIV CKT (OHMS / PHASE)   |                   |        |        |         |
| R1                         | R2                | X1     | X2     | Xm      |
| 0.5100                     | 0.3440            | 1.7970 | 1.6860 | 54.0930 |



## Speed - Torque Curve

