

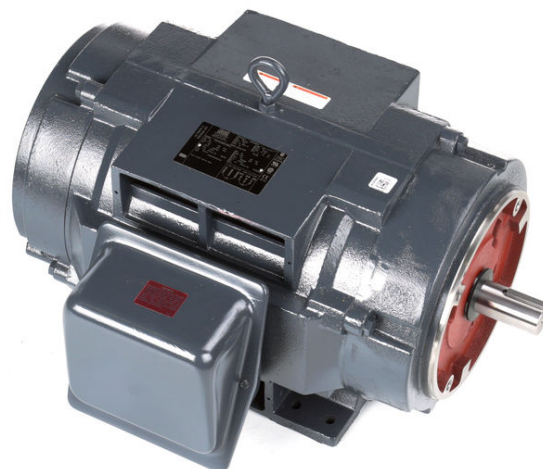
# PRODUCT INFORMATION PACKET



Model No: LM32785

Catalog No: LM32785

General Purpose Motor, 25 & 20 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 & 1500 RPM,  
284TSC Frame, DP



Regal and Leeson are trademarks of Regal Rexnord Corporation or one of its affiliated companies.

©2023 Regal Rexnord Corporation, All Rights Reserved. MC017097E



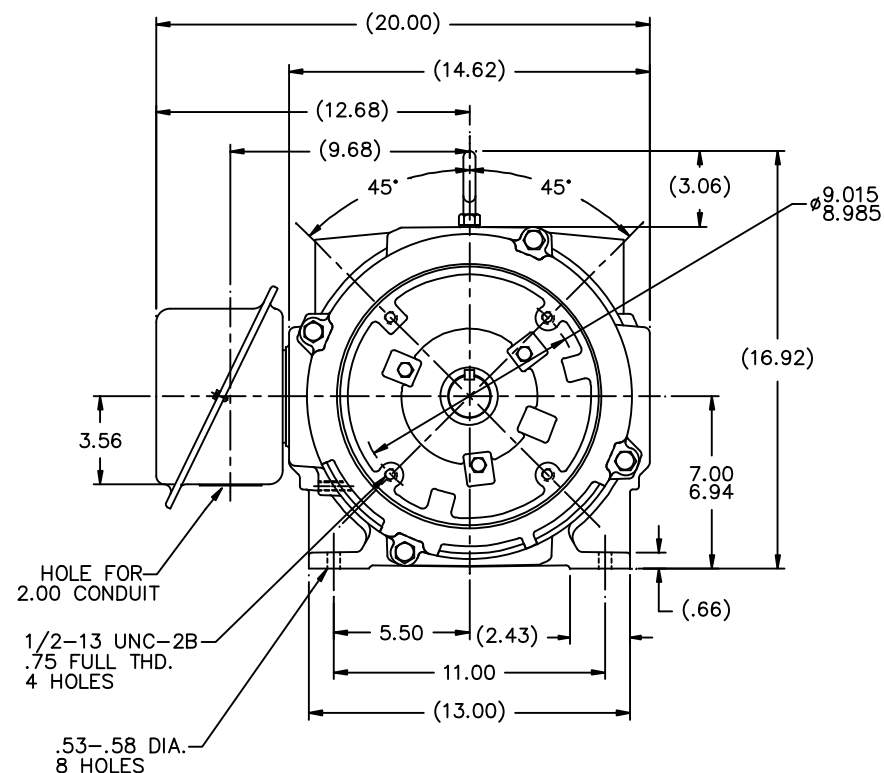
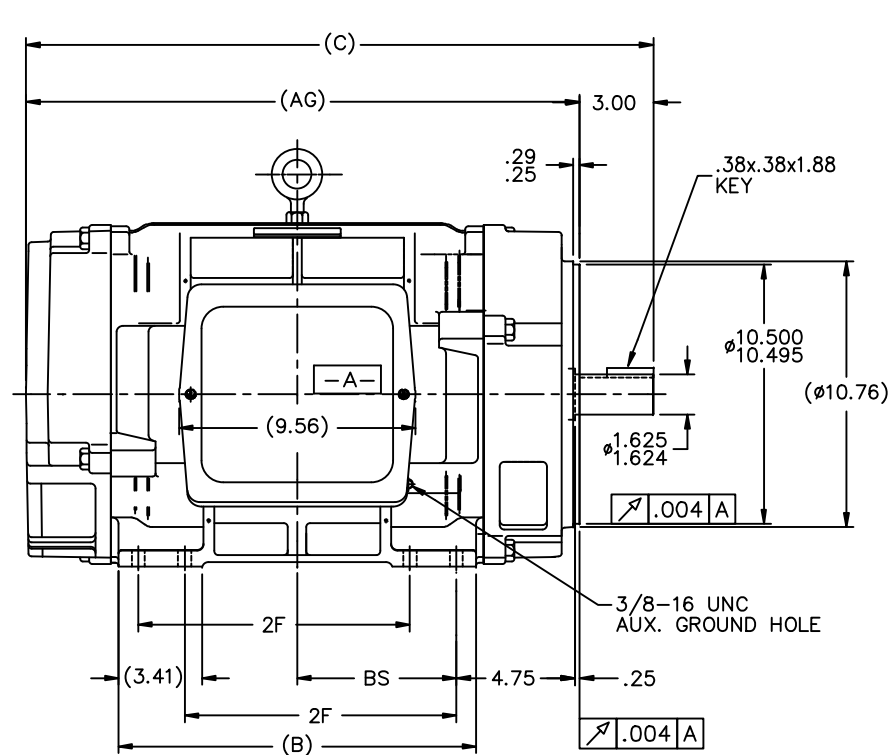


### Nameplate Specifications

|                        |                 |                            |                     |
|------------------------|-----------------|----------------------------|---------------------|
| Phase                  | 3               | Output HP                  | 25 & 20 Hp          |
| Output KW              | 18.7 & 14.9 kW  | Voltage                    | 230/460 & 190/380 V |
| Speed                  | 1775 & 1475 rpm | Service Factor             | 1.25 & 1.0          |
| Frame                  | 284TSC          | Enclosure                  | Drip Proof          |
| Thermal Protection     | No Protection   | Efficiency                 | 93.6 & 93 %         |
| Ambient Temperature    | 40 °C           | Frequency                  | 60 & 50 Hz          |
| Current                | 62/31 & 60/30 A | Power Factor               | 81.5                |
| Duty                   | Continuous      | Insulation Class           | F                   |
| Design Code            | B               | KVA Code                   | G                   |
| Drive End Bearing Size | 311             | Opp Drive End Bearing Size | 210                 |
| UL                     | Recognized      | CSA                        | Y                   |
| CE                     | Y               | IP Code                    | 12                  |
| Number of Speeds       | 1               |                            |                     |




### Technical Specifications

|                       |                             |                       |                     |
|-----------------------|-----------------------------|-----------------------|---------------------|
| Electrical Type       | Squirrel Cage Induction Run | Starting Method       | Wye Start Delta Run |
| Poles                 | 4                           | Rotation              | Reversible          |
| Resistance Main       | .279 Ohms                   | Mounting              | Rigid Base          |
| Motor Orientation     | Horizontal                  | Drive End Bearing     | Ball                |
| Opp Drive End Bearing | Ball                        | Frame Material        | Cast Iron           |
| Shaft Type            | TS                          | Overall Length        | 23.57 in            |
| Frame Length          | 13.25 in                    | Shaft Diameter        | 1.875 in            |
| Shaft Extension       | 4.62 in                     | Assembly/Box Mounting | F1/F2 CAPABLE       |
| Outline Drawing       | B-SS207877LN-1325           | Connection Drawing    | A-EE7358-LN         |



## NOTES:

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

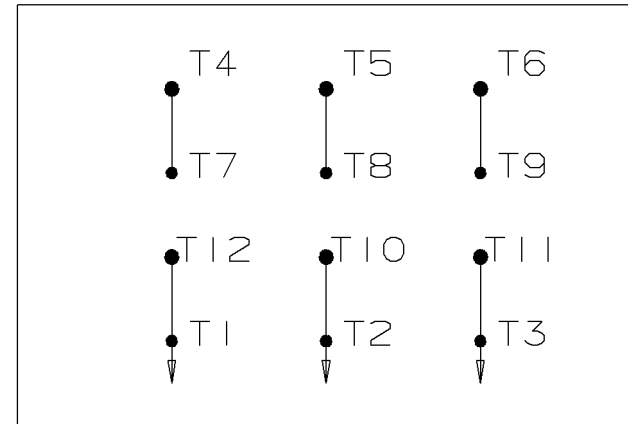
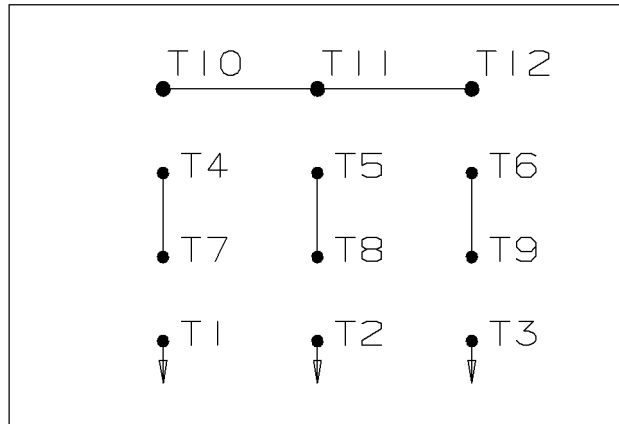
|   |  |       |       |                                |                 |   |                      |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |      |        |  |  |  |  |    |     |   |                                  |  |  |                |              |   |                      |  |   |   |  |  |              |                |                   |   |  |  |  |                |                 |                    |     |          |  |  |           |                |           |   |  |  |  |               |  |  |  |     |                                      |  |  |  |     |        |  |  |  |      |
|---|--|-------|-------|--------------------------------|-----------------|---|----------------------|--|--|--|--|--|--|--|--|--------------------------------|--|--|--|--|--|------|--------|--|--|--|--|----|-----|---|----------------------------------|--|--|----------------|--------------|---|----------------------|--|---|---|--|--|--------------|----------------|-------------------|---|--|--|--|----------------|-----------------|--------------------|-----|----------|--|--|-----------|----------------|-----------|---|--|--|--|---------------|--|--|--|-----|--------------------------------------|--|--|--|-----|--------|--|--|--|------|
| 3. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR. |  |       |       |                                |                 |   |                      | <table><tr><td></td><td></td><td></td><td></td><td colspan="2">TOLERANCES<br/>UNLESS SPECIFIED</td></tr><tr><td></td><td></td><td></td><td></td><td>DEC.</td><td>INCHES</td></tr><tr><td></td><td></td><td></td><td></td><td>.X</td><td>±.1</td></tr><tr><td>3</td><td colspan="3">2.00 CONDUIT WAS 1.50 ECN #25435</td><td>WGJ 08-16-2012</td><td>EMH .XX ±.02</td><td rowspan="4"></td><td colspan="2">DRAWN RWR 03/03/2004</td></tr><tr><td>2</td><td colspan="3">REVISED 'BA' DIMENSION TO BE 4.75 MU49925</td><td>MSG 1/5/2010</td><td>MJS .XXX ±.005</td><td>CHK ML 03/05/2004</td></tr><tr><td>1</td><td colspan="3">CHANGE D.E. BKT. FROM 12.5 TO 10.5 MU49925</td><td>RWR 03-10-2004</td><td>BW .XXXX ±.0005</td><td>APPD BW 03/05/2004</td></tr><tr><td>NO.</td><td colspan="3">REVISION</td><td>BY &amp; DATE</td><td>CHK ANG ±7°30"</td><td>SCALE 1=5</td></tr></table> |  |  |  |  |  |  |  | TOLERANCES<br>UNLESS SPECIFIED |  |  |  |  |  | DEC. | INCHES |  |  |  |  | .X | ±.1 | 3 | 2.00 CONDUIT WAS 1.50 ECN #25435 |  |  | WGJ 08-16-2012 | EMH .XX ±.02 |  | DRAWN RWR 03/03/2004 |  | 2 | REVISED 'BA' DIMENSION TO BE 4.75 MU49925 |  |  | MSG 1/5/2010 | MJS .XXX ±.005 | CHK ML 03/05/2004 | 1 | CHANGE D.E. BKT. FROM 12.5 TO 10.5 MU49925 |  |  | RWR 03-10-2004 | BW .XXXX ±.0005 | APPD BW 03/05/2004 | NO. | REVISION |  |  | BY & DATE | CHK ANG ±7°30" | SCALE 1=5 | <table><tr><td colspan="4">TITLE OUTLINE</td><td>REF</td></tr><tr><td colspan="4">280TSC FR. - TS - DR.PR. - CAST IRON</td><td>FMF</td></tr><tr><td colspan="4">FINISH</td><td>PREV</td></tr></table> |  |  |  | TITLE OUTLINE |  |  |  | REF | 280TSC FR. - TS - DR.PR. - CAST IRON |  |  |  | FMF | FINISH |  |  |  | PREV |
|   |  |       |       | TOLERANCES<br>UNLESS SPECIFIED |                 |   |                      |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |      |        |  |  |  |  |    |     |   |                                  |  |  |                |              |   |                      |  |   |   |  |  |              |                |                   |   |  |  |  |                |                 |                    |     |          |  |  |           |                |           |   |  |  |  |               |  |  |  |     |                                      |  |  |  |     |        |  |  |  |      |
|   |  |       |       | DEC.                           | INCHES          |   |                      |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |      |        |  |  |  |  |    |     |   |                                  |  |  |                |              |   |                      |  |   |   |  |  |              |                |                   |   |  |  |  |                |                 |                    |     |          |  |  |           |                |           |   |  |  |  |               |  |  |  |     |                                      |  |  |  |     |        |  |  |  |      |
|   |  |       |       | .X                             | ±.1             |   |                      |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |      |        |  |  |  |  |    |     |   |                                  |  |  |                |              |   |                      |  |   |   |  |  |              |                |                   |   |  |  |  |                |                 |                    |     |          |  |  |           |                |           |   |  |  |  |               |  |  |  |     |                                      |  |  |  |     |        |  |  |  |      |
| 3   | 2.00 CONDUIT WAS 1.50 ECN #25435           |       |       | WGJ 08-16-2012                 | EMH .XX ±.02    |  | DRAWN RWR 03/03/2004 |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |      |        |  |  |  |  |    |     |   |                                  |  |  |                |              |   |                      |  |   |   |  |  |              |                |                   |   |  |  |  |                |                 |                    |     |          |  |  |           |                |           |   |  |  |  |               |  |  |  |     |                                      |  |  |  |     |        |  |  |  |      |
| 2   | REVISED 'BA' DIMENSION TO BE 4.75 MU49925  |       |       | MSG 1/5/2010                   | MJS .XXX ±.005  |   | CHK ML 03/05/2004    |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |      |        |  |  |  |  |    |     |   |                                  |  |  |                |              |   |                      |  |   |   |  |  |              |                |                   |   |  |  |  |                |                 |                    |     |          |  |  |           |                |           |   |  |  |  |               |  |  |  |     |                                      |  |  |  |     |        |  |  |  |      |
| 1   | CHANGE D.E. BKT. FROM 12.5 TO 10.5 MU49925 |       |       | RWR 03-10-2004                 | BW .XXXX ±.0005 |   | APPD BW 03/05/2004   |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |      |        |  |  |  |  |    |     |   |                                  |  |  |                |              |   |                      |  |   |   |  |  |              |                |                   |   |  |  |  |                |                 |                    |     |          |  |  |           |                |           |   |  |  |  |               |  |  |  |     |                                      |  |  |  |     |        |  |  |  |      |
| NO.   | REVISION                                   |       |       | BY & DATE                      | CHK ANG ±7°30"  |   | SCALE 1=5            |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |      |        |  |  |  |  |    |     |   |                                  |  |  |                |              |   |                      |  |   |   |  |  |              |                |                   |   |  |  |  |                |                 |                    |     |          |  |  |           |                |           |   |  |  |  |               |  |  |  |     |                                      |  |  |  |     |        |  |  |  |      |
| TITLE OUTLINE   |  |       |       | REF                            |                 |   |                      |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |      |        |  |  |  |  |    |     |   |                                  |  |  |                |              |   |                      |  |   |   |  |  |              |                |                   |   |  |  |  |                |                 |                    |     |          |  |  |           |                |           |   |  |  |  |               |  |  |  |     |                                      |  |  |  |     |        |  |  |  |      |
| 280TSC FR. - TS - DR.PR. - CAST IRON                    |  |       |       | FMF                            |                 |   |                      |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |      |        |  |  |  |  |    |     |   |                                  |  |  |                |              |   |                      |  |   |   |  |  |              |                |                   |   |  |  |  |                |                 |                    |     |          |  |  |           |                |           |   |  |  |  |               |  |  |  |     |                                      |  |  |  |     |        |  |  |  |      |
| FINISH  |  |       |       | PREV                           |                 |   |                      |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |      |        |  |  |  |  |    |     |   |                                  |  |  |                |              |   |                      |  |   |   |  |  |              |                |                   |   |  |  |  |                |                 |                    |     |          |  |  |           |                |           |   |  |  |  |               |  |  |  |     |                                      |  |  |  |     |        |  |  |  |      |
| DASH  | FRAME                                      | B     | C     | 2F                             | BS              | MTG   | AG                   |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |      |        |  |  |  |  |    |     |   |                                  |  |  |                |              |   |                      |  |   |   |  |  |              |                |                   |   |  |  |  |                |                 |                    |     |          |  |  |           |                |           |   |  |  |  |               |  |  |  |     |                                      |  |  |  |     |        |  |  |  |      |
| 1325  | 284TSC                                     | 12.63 | 23.57 | 9.50                           | 5.50            |   | 20.57                |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |      |        |  |  |  |  |    |     |   |                                  |  |  |                |              |   |                      |  |   |   |  |  |              |                |                   |   |  |  |  |                |                 |                    |     |          |  |  |           |                |           |   |  |  |  |               |  |  |  |     |                                      |  |  |  |     |        |  |  |  |      |
| 1512  | 286TSC                                     | 14.50 | 25.44 | 11.00                          | 6.44            |   | 22.44                |  |  |  |  |  |  |  |  |                                |  |  |  |  |  |      |        |  |  |  |  |    |     |   |                                  |  |  |                |              |   |                      |  |   |   |  |  |              |                |                   |   |  |  |  |                |                 |                    |     |          |  |  |           |                |           |   |  |  |  |               |  |  |  |     |                                      |  |  |  |     |        |  |  |  |      |

|  |  |  |  |  |  |  |  |  |  |            |                     |        |                        |             |        |  |
|--|--|--|--|--|--|--|--|--|--|------------|---------------------|--------|------------------------|-------------|--------|--|
| 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 ss207877ln | SIZE B | DRAWING NO. SS207877LN | PAGE 1 OF 1 | REV. 3 |  |
|  |  |  |  |  |  |  |  |  |  | DIST WA-LB |                     |        |                        |             |        |  |

# WYE START

# HIGH VOLTAGE

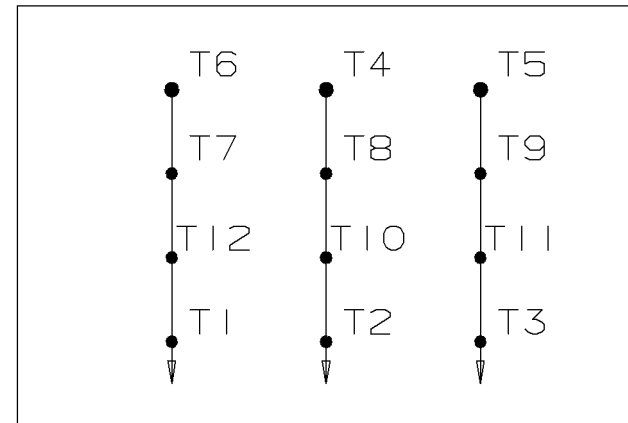
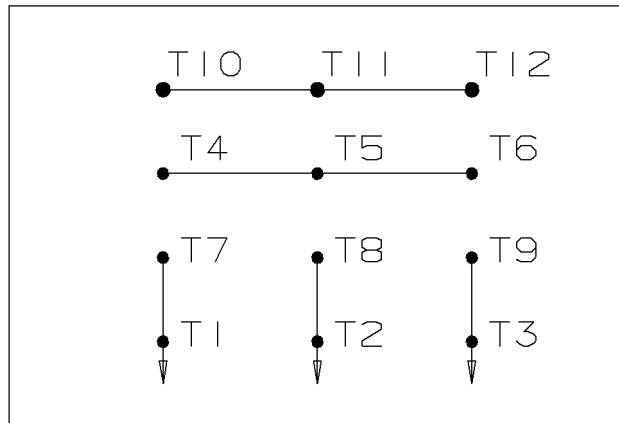
# DELTA RUN



# WYE START

# LOW VOLTAGE

# DELTA RUN



4/2 CKTY Δ

|     |      |        |  |  |           |               |                         |
|-----|------|--------|--|--|-----------|---------------|-------------------------|
|     |      |        |  | ✓<br>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES<br>TOL. ON XX± .02    XXX± .005    XXXX± .0005    ANGLES± 7°30" |           |               |                         |
|     |      |        |  | MAX. SURFACE ROUGHNESS<br>UNLESS OTHERWISE NOTED   |           | DRAWN BY DRS  | 12-07-1999              |
|     |      |        |  | FINISH   |           | CHKD BY ML    | 12-07-1999              |
|     |      |        |  | MATERIAL   |           | APPD BY TB    | 12-07-1999              |
| REV | DATE | CHANGE | NAME   | PART NAME CONNECTION DIAGRAM   |           |               | DRWG NO<br>A- EE7358-LN |
|     |      |        |  |  | PURCHASED | CADD FILE NO. | EE7358-LN               |



## CERTIFICATION DATA SHEET

2100 WASHINGTON ST.  
GRAFTON, WI  
PH. 262-277-8810

CONN. DIAGRAM: A-EE7358-LN

OUTLINE: B-SS207877LN-1325

CATALOG #: LM32785

WINDING #: K2844163 1

MOUNTING: F1/F2 CAPABLE

## TYPICAL MOTOR PERFORMANCE DATA

| HP    | kW        | SYNC. RPM | F.L. RPM  | FRAME  | ENCLOSURE | KVA CODE | DESIGN |
|-------|-----------|-----------|-----------|--------|-----------|----------|--------|
| 25&20 | 18.7&14.9 | 1800      | 1775&1475 | 284TSC | DP        | G        | B      |

| PH | Hz    | VOLTS           | AMPS        | START TYPE          | DUTY       | INSL | S.F.     | AMB°C |
|----|-------|-----------------|-------------|---------------------|------------|------|----------|-------|
| 3  | 60/50 | 230/460&190/380 | 62/31&60/30 | WYE START DELTA RUN | CONTINUOUS | F3   | 1.25/1.0 | 40    |

|                |         |               |      |               |    |          |                 |
|----------------|---------|---------------|------|---------------|----|----------|-----------------|
| FULL LOAD EFF: | 93.6&93 | 3/4 LOAD EFF: | 93.6 | 1/2 LOAD EFF: | 93 | GTD. EFF | ELEC. TYPE      |
| FULL LOAD PF:  | 81.5&81 | 3/4 LOAD PF:  | 76.5 | 1/2 LOAD PF:  | 66 | 92.4     | SQ CAGE IND RUN |

| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE     | B.D. TORQUE     | F.L. RISE°C |
|-------------|-------------------|-----------------|-----------------|-------------|
| 74 LB-FT    | 346 / 173         | 127 LB-FT 172 % | 180 LB-FT 243 % | 40          |

| SOUND PRESSURE @ 3 FT. | SOUND POWER | ROTOR WK^2  | MAX. WK^2   | SAFE STALL TIME | STARTS / HOUR | APPROX. MOTOR WGT |
|------------------------|-------------|-------------|-------------|-----------------|---------------|-------------------|
| 72 dBA                 | 82 dBA      | 4.2 LB-FT^2 | 150 LB-FT^2 | 20 SEC.         | 2             | 415 LBS.          |

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

| DE BRACKET TYPE | ODE BRACKET TYPE | MOUNT TYPE | ORIENTATION | SEVERE DUTY | HAZARDOUS LOCATION | DRIP COVER | SCREENS | PAINT          |
|-----------------|------------------|------------|-------------|-------------|--------------------|------------|---------|----------------|
| C-FACE          | STANDARD         | RIGID      | HORIZONTAL  | FALSE       | NONE               | FALSE      | NONE    | GRAY - LINCOLN |

| BEARINGS |      | GREASE     | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT MATERIAL          | FRAME MATERIAL |
|----------|------|------------|------------|------------|-------------|-------------------------|----------------|
| DE       | ODE  |            |            |            |             |                         |                |
| BALL     | BALL |            |            |            |             |                         |                |
| 311      | 210  | POLYREX EM | TS         | NONE       | NONE        | 1045 HOT ROLLED (C-204) | CAST IRON      |

| THERMO-PROTECTORS |            |          |          | THERMISTORS | CONTROL | SPACE HEATERS |
|-------------------|------------|----------|----------|-------------|---------|---------------|
| THERMOSTATS       | PROTECTORS | WDG RTDs | BRG RTDs |             |         |               |
| NONE              | NOT        | NONE     | NONE     | NONE        | FALSE   | NONE VOLTS    |

\*  
  
N  
  
O  
  
T  
  
E  
  
S  
  
\*

INVERTER TORQUE: NONE  
INV. HP SPEED RANGE: NONE

ENCODER: NONE  
NONE NONE  
NONE NONE PPR

BRAKE: NONE NONE  
NONE P/N NONE  
NONE NONE  
FT-LB V NONE Hz

## Data Sheet

Date: 1/24/2018

LM32785



Data @ 460 V

## Motor Load Data

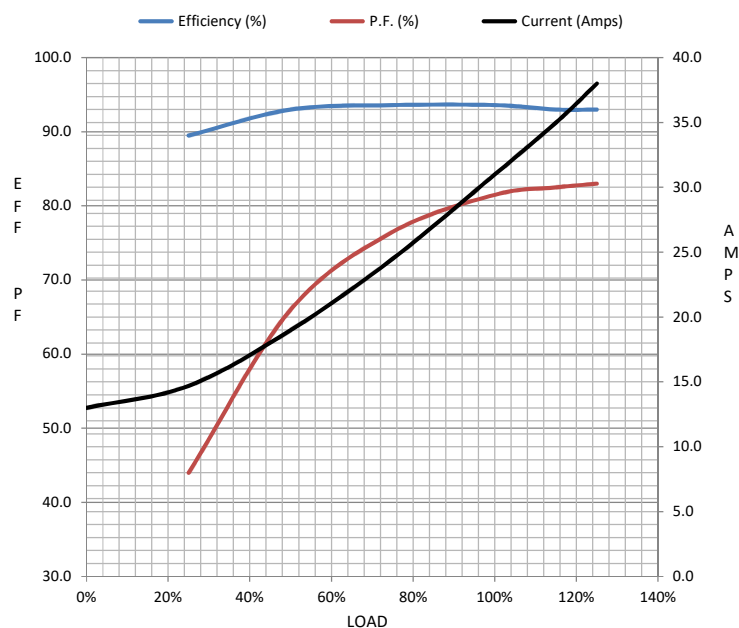
| Load           | 0%   | 25%  | 50%  | 75%  | 100% | 115%  | 125% | LR   |  |
|----------------|------|------|------|------|------|-------|------|------|--|
| Current (Amps) | 13.0 | 14.7 | 19.0 | 24.5 | 31.0 | 35.0  | 38.0 | 173  |  |
| Torque (ft-lb) | 0.00 | 18.5 | 37.0 | 55.5 | 74.0 | 85.5  | 93.0 | 127  |  |
| RPM            | 1800 | 1795 | 1788 | 1780 | 1775 | 1.770 | 1767 | 0    |  |
| Efficiency (%) |      | 89.5 | 93.0 | 93.6 | 93.6 | 93.0  | 93.0 |      |  |
| P.F. (%)       | 3.5  | 44.0 | 66.0 | 76.5 | 81.5 | 82.5  | 83.0 | 32.5 |  |

## Motor Speed Data

|                | LR  | Pull-Up | BD   | Rated | Idle |
|----------------|-----|---------|------|-------|------|
| Speed (RPM)    | 0   | 900     | 1680 | 1775  | 1800 |
| Current (Amps) | 173 | 156     | 107  | 31.0  | 13.0 |
| Torque (ft-lb) | 127 | 108     | 180  | 74.0  | 0.00 |

## Information Block

|                            |                   |        |        |         |
|----------------------------|-------------------|--------|--------|---------|
| HP                         | 25.0              |        |        |         |
| Sync. RPM                  | 1800              |        |        |         |
| Frame                      | 284               |        |        |         |
| Enclosure                  | DP                |        |        |         |
| Construction               | TDN               |        |        |         |
| Voltage                    | 230/460#190/380   | V      |        |         |
| Frequency                  | 60                | Hz     |        |         |
| Design                     | B                 |        |        |         |
| LR Code letter             | G                 |        |        |         |
| Service Factor             | 1.15              |        |        |         |
| Temp Rise @ FL             | 35                | ° C    |        |         |
| Duty                       | CONT              |        |        |         |
| Ambient                    | 40                | ° C    |        |         |
| Elevation                  | 1,000             | feet   |        |         |
| Rotor/Shaft wk²            | 4.2               | Lb-Ft² |        |         |
| Ref Wdg                    | K2844163          | NONE   |        |         |
| Sound Pressure @ 1M        | 72                | dBA    |        |         |
| VFD Rating                 | NONE              |        |        |         |
| Outline Dwg                | B-SS207877LN-1325 |        |        |         |
| Conn. Diag                 | A-EE7358-LN       |        |        |         |
| Additional Specifications: |                   |        |        |         |
| 0                          |                   |        |        |         |
| 0                          |                   |        |        |         |
| EQUIV CKT (OHMS / PHASE)   |                   |        |        |         |
| R1                         | R2                | X1     | X2     | Xm      |
| 0.1730                     | 0.1310            | 0.8580 | 1.0940 | 20.3400 |



## Speed - Torque Curve

