

PRODUCT INFORMATION PACKET



Model No: LM30094

Catalog No: LM30094

Elevator Duty Motor, 15 & 20 HP, 3 Ph, 60 & 60 Hz, 230/460 & 230/460 V, 3600 & 3600 RPM,
215T Frame, DP



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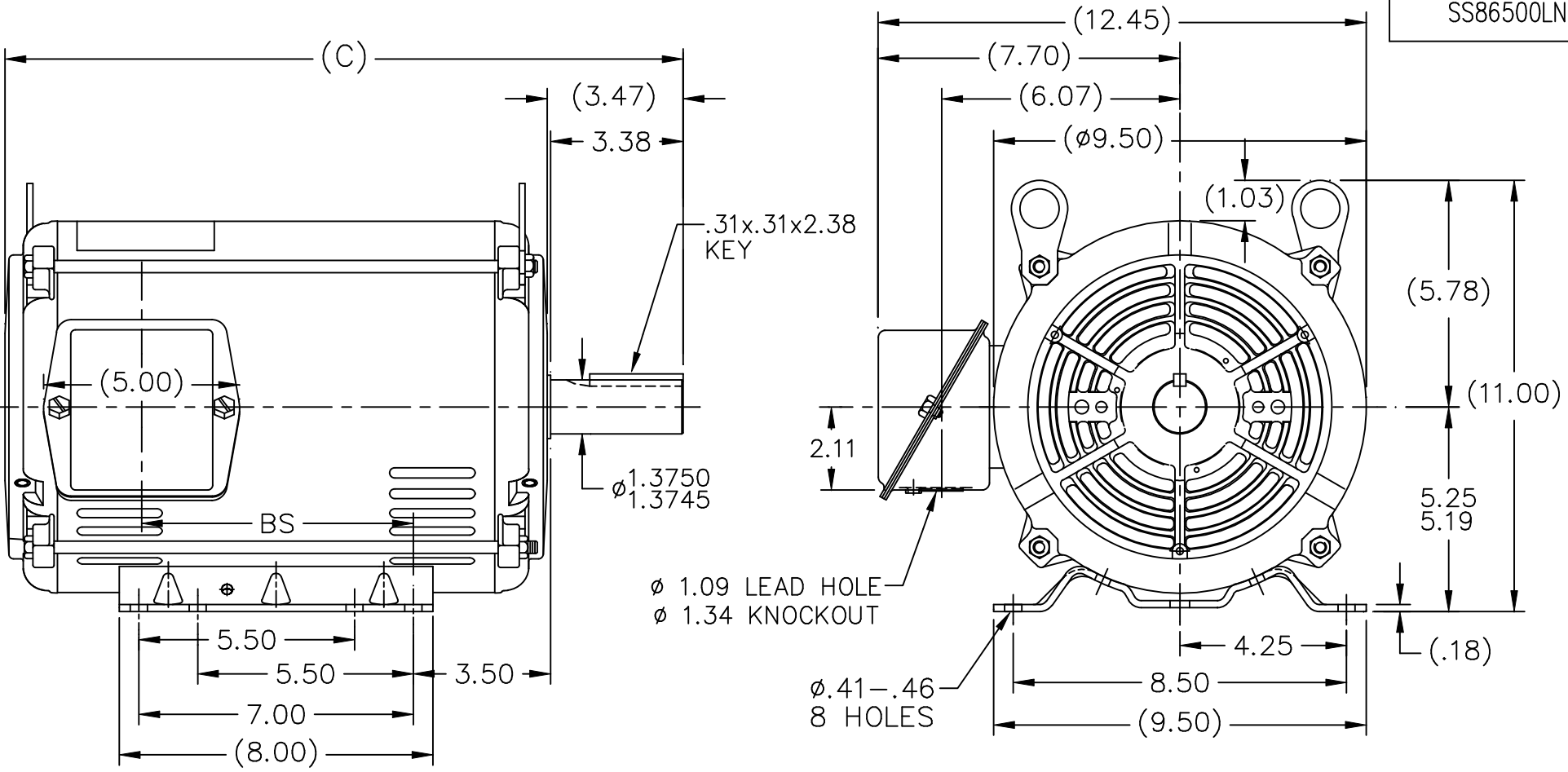
Nameplate Specifications

| | | | |
|------------------------|--------------------|----------------------------|---------------------|
| Phase | 3 | Output HP | 15 & 20 Hp |
| Output KW | 11.2 & 14.9 kW | Voltage | 230/460 & 230/460 V |
| Speed | 3510 & 3510 rpm | Service Factor | 1.15 & 1.0 |
| Frame | 215T | Enclosure | Drip Proof |
| Thermal Protection | No Protection | Efficiency | 90.2 & 88.5 % |
| Ambient Temperature | 40 °C | Frequency | 60 & 60 Hz |
| Current | 34/17 & 46/23 A | Power Factor | 91 |
| Duty | 120/80 Starts/Hour | Insulation Class | F |
| Design Code | INV | KVA Code | G |
| Drive End Bearing Size | 6307 | Opp Drive End Bearing Size | 6206 |
| UL | Recognized | CSA | Y |
| CE | Y | IP Code | 22 |
| Number of Speeds | 1 | | |

Technical Specifications


| | | | |
|-----------------------|-----------------------------|-----------------------|---------------------|
| Electrical Type | Squirrel Cage Induction Run | Starting Method | Wye Start Delta Run |
| Poles | 2 | Rotation | Reversible |
| Resistance Main | 0 Ohms | Mounting | Rigid Base |
| Motor Orientation | Horizontal | Drive End Bearing | Ball |
| Opp Drive End Bearing | Ball | Frame Material | Rolled Steel |
| Shaft Type | T | Overall Length | 18.54 in |
| Frame Length | 12.40 in | Shaft Diameter | 1.375 in |
| Shaft Extension | 3.38 in | Assembly/Box Mounting | F1/F2 CAPABLE |
| Connection Drawing | EE7358-LN | Outline Drawing | SS86500LN-1240 |

SS86500LN



| DASH | FR. | C | BS | MOUNTING |
|------|---------|-------|------|----------|
| 965 | 213T | 15.79 | 5.43 | |
| 1115 | 213/15T | 17.29 | 6.93 | |
| 1240 | 213/15T | 18.54 | 8.18 | F1 ONLY |

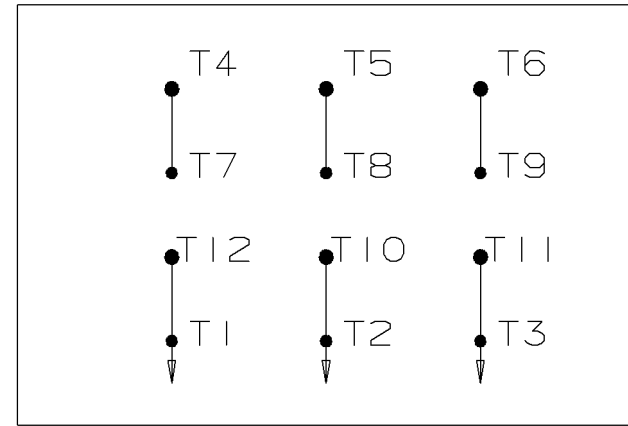
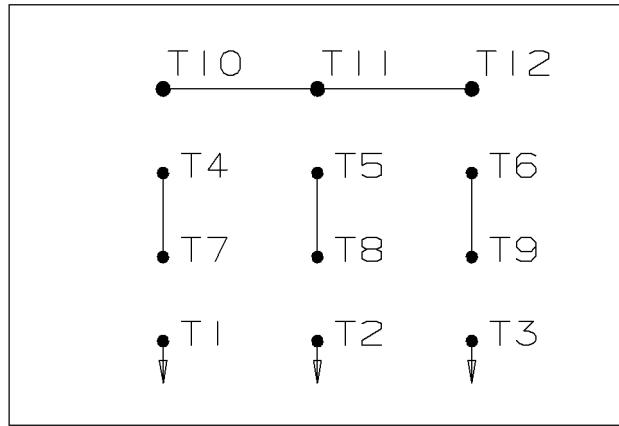
- NOTES:
1. NAMEPLATE TO BE READ FROM C'BOX SIDE OF MOTOR.
 2. BOX CAN BE MOUNTED IN 90° STEPS.
 3. BOX WILL BE AT OPPOSITE SIDES IN F2 MOUNTING.
 4. BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°. (EXCEPT AS NOTED.)

| NO. | | REVISION | BY & DATE | CHK | ANG | TOLERANCES UNLESS SPECIFIED |  | DRAWN TRB 07-14-1999 | | | | | |
|--|--|---|----------------|-----|-------|-----------------------------|---|----------------------|---------------|-----------|-------------|-------------|------|
| NO. | | REVISION | BY & DATE | CHK | ANG | FINISH | | SCALE | REV. | | | | |
| 5 | | REISSUE - REVISED BORDER TO LINCOLN LOGO | MSG 11-04-2004 | ML | DEC. | INCHES | TITLE OUTLINE 210T FRAME -BB -TS -DR.PR. MAT'L. FINISH | CHK | ML 07-20-1999 | | | | |
| 4 | | REMOVED DASH 965 FROM SERIES CN38252 | RWR 07-20-2004 | ML | .X | ±.1 | | APPD | GK 07-20-1999 | | | | |
| 3 | | UPDATED 'C' DIMS PER ACTUAL PARTS CN29200-320 | CAV 04-11-2000 | ML | .XX | ±.03 | | SCALE | 1=4 | | | | |
| 2 | | UPDATED 'C'BOX GEOMETRY CN28425 | DRS 01-25-2000 | ML | .XXX | ±.005 | | REF | | | | | |
| 1 | | NEW DRAWING | TRB 07-20-1999 | ML | .XXXX | ±.0005 | | FMF | | | | | |
| 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 | ss86500ln | SIZE | DRAWING NO. | PAGE 1 OF 1 | REV. |
| | | | | | | | DIST | LB | A | SS86500LN | | | 5 |

WYE START

HIGH VOLTAGE

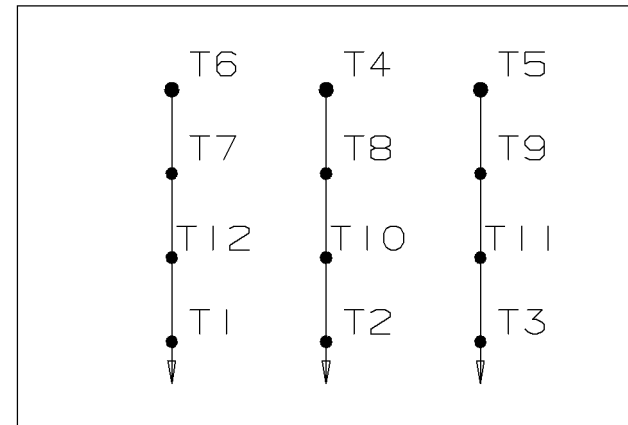
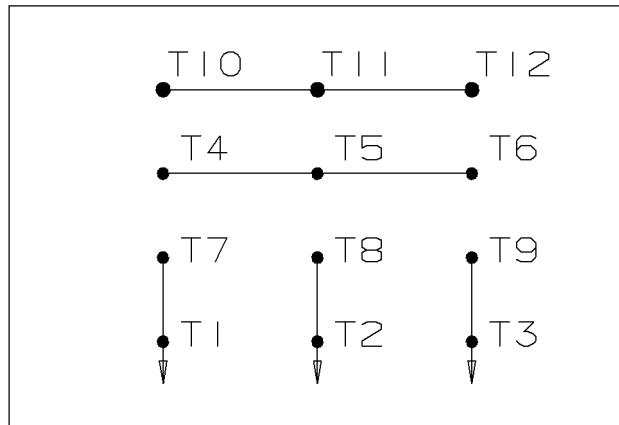
DELTA RUN



WYE START

LOW VOLTAGE

DELTA RUN



4/2 CKTY Δ

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

| | | |
|-----------|---------------|-----------|
| PURCHASED | CADD FILE NO. | EE7358-LN |
|-----------|---------------|-----------|



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

CERTIFICATION DATA SHEET

CONN. DIAGRAM: A-EE7358-LN

CATALOG #: LM30094

OUTLINE: A-SS86500LN-1240

WINDING #: K2152149 R5 10

MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

| HP | kW | SYNC. RPM | F.L. RPM | FRAME | ENCLOSURE | KVA CODE | DESIGN |
|-------|-----------|-----------|-----------|-------|-----------|----------|--------|
| 15&20 | 11.2&14.9 | 3600 | 3510&3510 | 215T | DP | G | INV |

| PH | Hz | VOLTS | AMPS | START TYPE | DUTY | INSL | S.F. | AMB°C |
|----|-------|-----------------|-------------|---------------------|--------------------|------|----------|-------|
| 3 | 60/60 | 230/460&230/460 | 34/17&46/23 | WYE START DELTA RUN | 120/80 STARTS/HOUR | F4 | 1.15/1.0 | 40 |

| | | | | | | | | |
|-----------------------|-----------|----------------------|------|----------------------|------|-----------------|--|-------------------|
| FULL LOAD EFF: | 90.2&88.5 | 3/4 LOAD EFF: | 91.7 | 1/2 LOAD EFF: | 91 | GTD. EFF | | ELEC. TYPE |
| FULL LOAD PF: | 91&91.5 | 3/4 LOAD PF: | 89.5 | 1/2 LOAD PF: | 84.5 | 88.5 | | SQ CAGE IND RUN |

| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE | B.D. TORQUE | F.L. RISE°C |
|-------------|-------------------|------------------|------------------|-------------|
| 22.5 LB-FT | 232 / 116 | 34.5 LB-FT 153 % | 65.5 LB-FT 291 % | 35 |

| SOUND PRESSURE @ 3 FT. | SOUND POWER | ROTOR WK^2 | MAX. WK^2 | SAFE STALL TIME | STARTS / HOUR | APPROX. MOTOR WGT |
|------------------------|-------------|-------------|------------|-----------------|---------------|-------------------|
| 75 dBA | 85 dBA | 0.6 LB-FT^2 | 18 LB-FT^2 | 15 SEC. | 2 | - LBS. |

***** SUPPLEMENTAL INFORMATION *****

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

| BEARINGS | | GREASE | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT MATERIAL | FRAME MATERIAL |
|----------|------|------------|------------|------------|-------------|-------------------|----------------|
| DE | ODE | | | | | | |
| BALL | BALL | POLYREX EM | T | NONE | NONE | AISI 1045 (C-240) | ROLLED STEEL |
| 6307 | 6206 | | | | | | |

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

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| | |
|-----------------------------|--|
| INVERTER TORQUE: | NONE |
| INV. HP SPEED RANGE: | NONE |
| ENCODER: | NONE NONE NONE NONE NONE PPR |
| BRAKE: | NONE NONE NONE P/N NONE NONE NONE NONE FT-LB NONE V NONE Hz |

Data Sheet

Date: 1/29/2018

LM30094



Data @ **460 V**

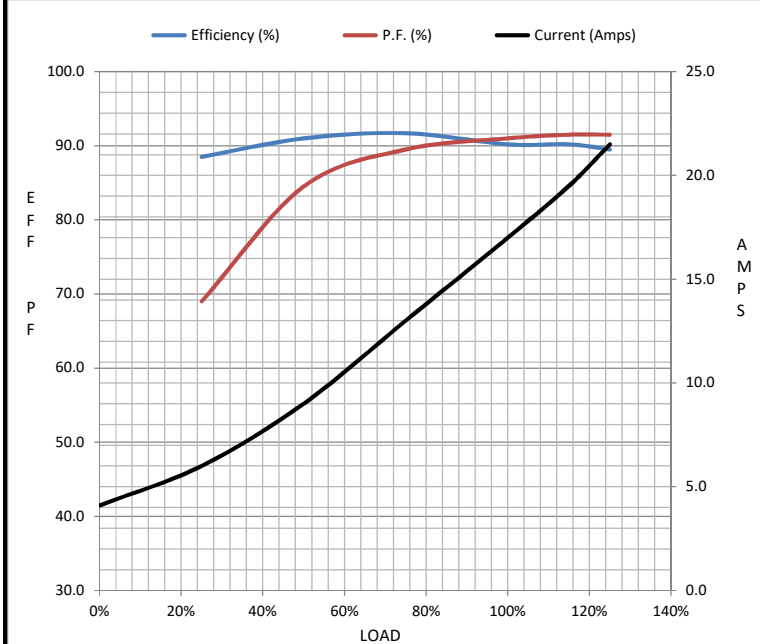
Motor Load Data

| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR |
|----------------|------|------|------|------|------|-------|------|------|
| Current (Amps) | 4.1 | 6.0 | 9.0 | 13.0 | 17.0 | 19.5 | 21.5 | 116 |
| Torque (ft-lb) | 0.00 | 5.5 | 11.0 | 16.7 | 22.5 | 26.0 | 28.5 | 34.5 |
| RPM | 3600 | 3580 | 3560 | 3535 | 3510 | 3,495 | 3485 | 0 |
| Efficiency (%) | | 88.5 | 91.0 | 91.7 | 90.2 | 90.2 | 89.5 | |
| P.F. (%) | 9.0 | 69.0 | 84.5 | 89.5 | 91.0 | 91.5 | 91.5 | 42.0 |

Motor Speed Data

| | LR | Pull-Up | BD | Rated | Idle |
|----------------|------|---------|------|-------|------|
| Speed (RPM) | 0 | 1200 | 3025 | 3510 | 3600 |
| Current (Amps) | 116 | 100 | 73.5 | 17.0 | 4.1 |
| Torque (ft-lb) | 34.5 | 31.0 | 65.5 | 22.5 | 0.00 |

| Information Block | | | | |
|-----------------------------|-------------------------|--------|--------|--------|
| HP | 15.0 | | | |
| Sync. RPM | 3600 | | | |
| Frame | 215 | | | |
| Enclosure | DP | | | |
| Construction | TDW | | | |
| Voltage | 230/460#230/460 V | | | |
| Frequency | 60 Hz | | | |
| Design | A | | | |
| LR Code letter | G | | | |
| Service Factor | 1.15 | | | |
| Temp Rise @ FL | 35 °C | | | |
| Duty | 60 MIN | | | |
| Ambient | 40 °C | | | |
| Elevation | 1,000 feet | | | |
| Rotor/Shaft wk ² | 0.60 Lb-Ft ² | | | |
| Ref Wdg | K2152149 R5 | | | |
| Sound Pressure @ 1M | 75 dBA | | | |
| VFD Rating | NONE | | | |
| Outline Dwg | A-SS86500LN-1240 | | | |
| Conn. Diag | A-EE7358-LN | | | |
| Additional Specifications: | | | | |
| 0 | | | | |
| 0 | | | | |
| EQUIV CKT (OHMS / PHASE) | | | | |
| R1 | R2 | X1 | X2 | Xm |
| 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |



Speed - Torque Curve

