

PRODUCT INFORMATION PACKET



Model No: LM29668
Catalog No: LM29668

Elevator Duty Motor, 40 & 30 HP, 3 Ph, 60 & 60 Hz, 200 & 200 V, 3600 & 3600 RPM, 160TZ Frame, OPEN



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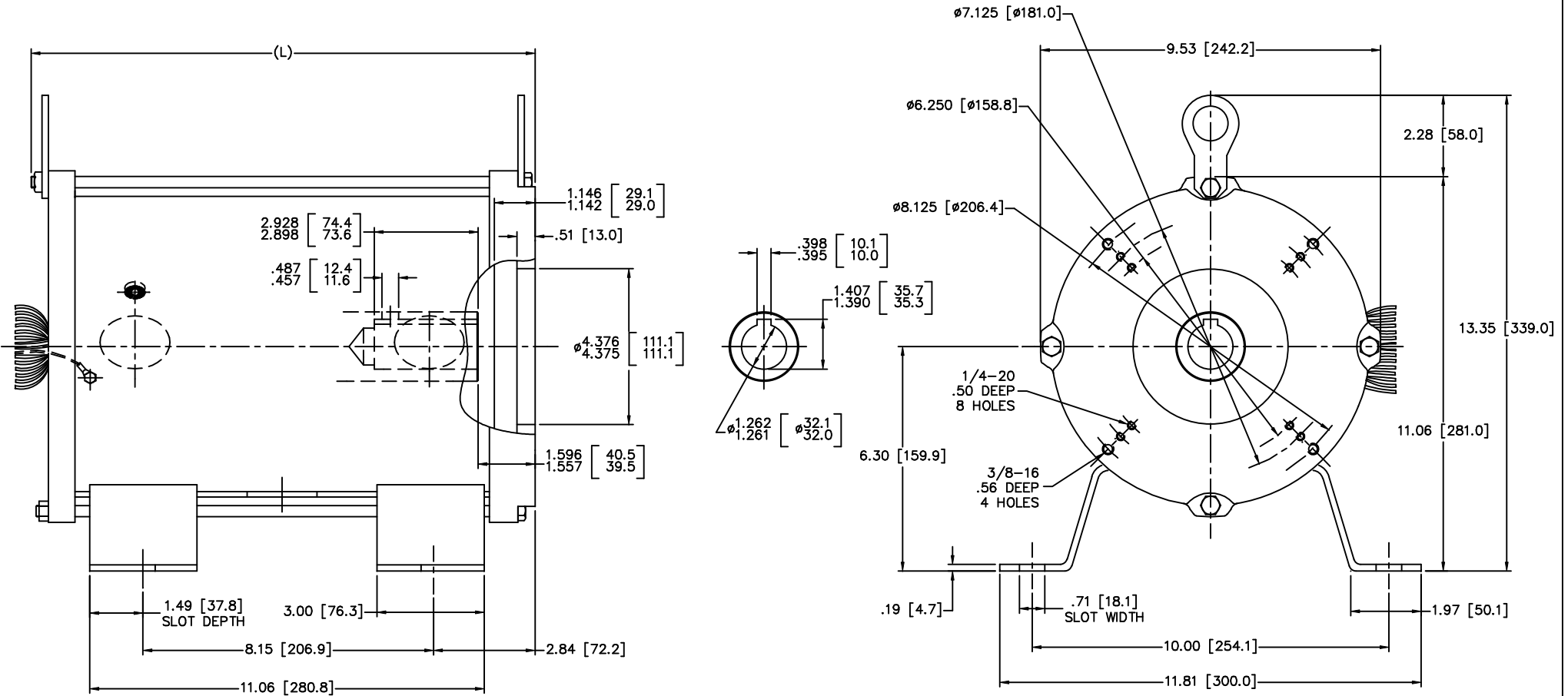


Nameplate Specifications

| | | | |
|------------------------|--------------------|----------------------------|---------------|
| Phase | 3 | Output HP | 40 & 30 Hp |
| Output KW | 30.0 & 22.4 kW | Voltage | 200 & 200 V |
| Speed | 3520 & 3540 rpm | Service Factor | 1.0 |
| Frame | 160TZ | Enclosure | Open Enclosed |
| Thermal Protection | Thermostat | Efficiency | 88.5 & 88.5 % |
| Ambient Temperature | 70 °C | Frequency | 60 & 60 Hz |
| Current | 110 & 85 A | Power Factor | 88.4 |
| Duty | 120/80 Starts/Hour | Insulation Class | F |
| Design Code | B | KVA Code | G |
| Drive End Bearing Size | 6307 | Opp Drive End Bearing Size | 6307 |
| UL | Recognized | CSA | Y |
| CE | N | IP Code | 10 |
| Number of Speeds | 1 | | |

Technical Specifications

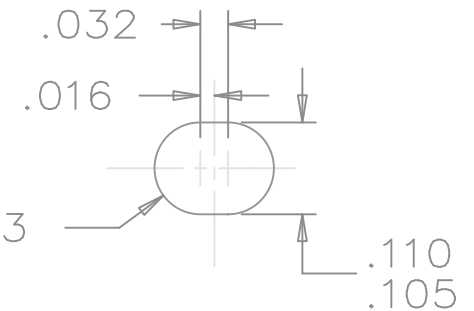
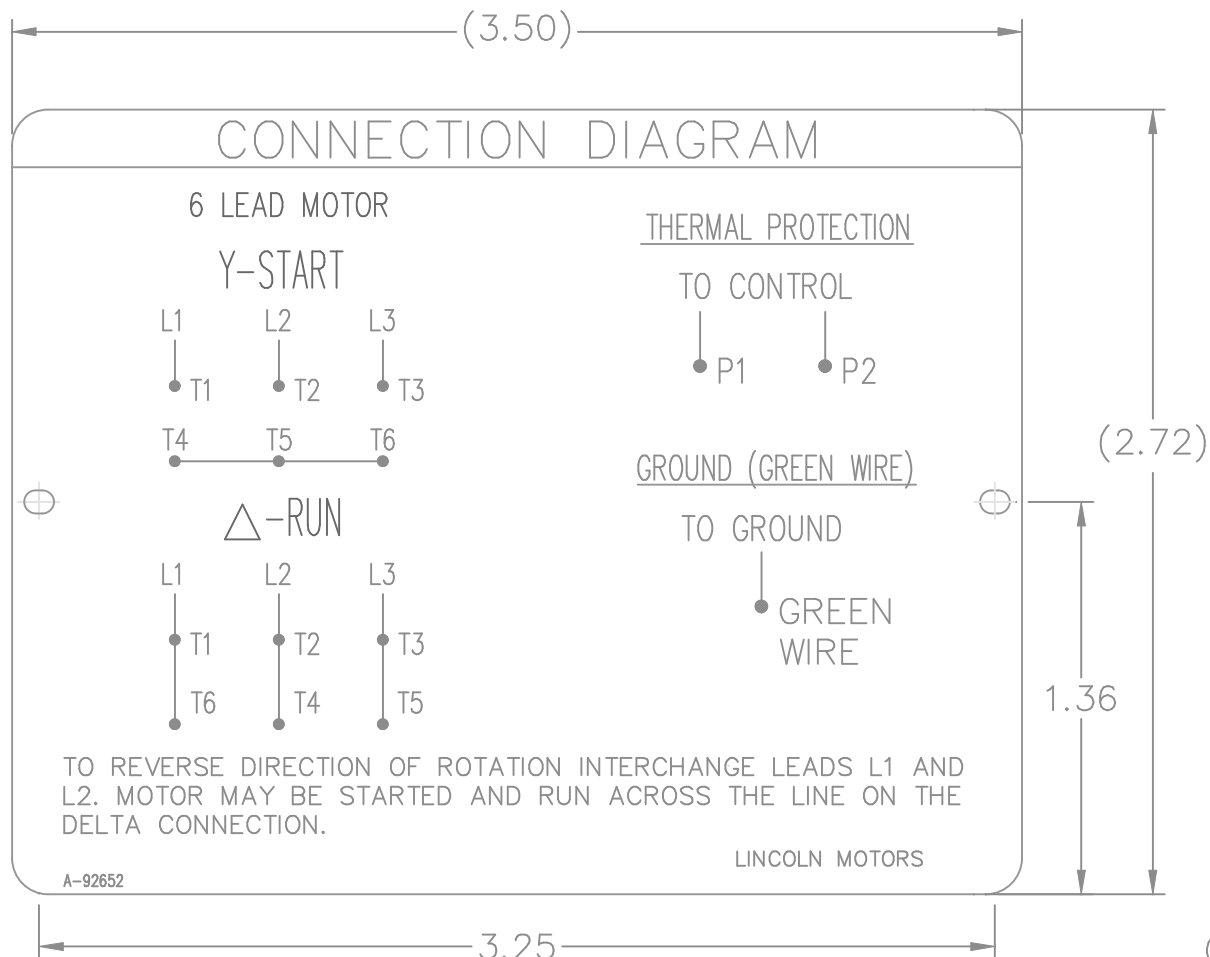
| | | | |
|-----------------------|-----------------------------|-----------------------|---------------------|
| Electrical Type | Squirrel Cage Induction Run | Starting Method | Wye Start Delta Run |
| Poles | 2 | Rotation | Reversible |
| Resistance Main | 383 Ohms | Mounting | Rigid Base |
| Motor Orientation | Horizontal | Drive End Bearing | Ball |
| Opp Drive End Bearing | Ball | Frame Material | Rolled Steel |
| Shaft Type | Single Special Extension | Overall Length | 14.53 in |
| Frame Length | 15.35 in | Shaft Diameter | 1.250 in |
| Shaft Extension | 2.92 in | Assembly/Box Mounting | F1/F2 CAPABLE |
| Outline Drawing | 0216000039 | Connection Drawing | A-92652 |



| TYPE | HP | L |
|----------|----|---------------|
| 160ZBS-2 | 15 | 14.53 [369.0] |
| 160ZBS-2 | 20 | |
| 160ZBS-2 | 25 | |
| 160ZBS-2 | 30 | |
| 160ZBS-2 | 40 | 17.87 [454.0] |
| 160ZBS-2 | 50 | |

(MAY NOT BE DRAWN TO SCALE)

| | | TOLERANCES UNLESS SPECIFIED | | Lincoln MOTOR | | DRAWN MSG 01-25-2007 | |
|--|------------------------------|-----------------------------|--------|---------------|---------------|----------------------|--------------------------|
| | | DEC. | INCHES | CHK | ML 01-25-2007 | APPD | GK 01-25-2007 |
| | | .X | ±.1 | | | | |
| | | .XX | ±.03 | | | | |
| | | .XXX | ±.005 | | | | |
| 1 | UPDATED TO CURRENT STANDARDS | DRS | | .XXXX | ±.0005 | | |
| NO. | REVISION | BY & DATE | CHK | ANG | ±7'30" | FINISH | PREV |
| | | | RFP | | | CAD FILE 0216000039 | |
| 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 | | | | | | SIZE | DRAWING NO. PAGE OF REV. |
| | | | | | | B | 0216000039 1 |



NOTES:

1. MATERIAL 304 STAINLESS STEEL
2. LETTERING AND ARTWORK BLACK
3. ALL DATA MUST BE HYDRAULIC OIL RESISTANT.

| | | | TOLERANCES UNLESS SPECIFIED | | | DRAWN CTO 02-18-2004 | | | | | |
|--|----------|-----------|-----------------------------|------------|----------|--------------------------------|--------------------|-------------|------|----|------|
| | | | DEC. | INCHES | | CHK | ML 02-18-2004 | | | | |
| | | | .X | ±.1 | | | APPD MS 02-18-2004 | | | | |
| | | | .XX | ±.02 | | TITLE CONNECTION DIAGRAM PLATE | | | | | |
| | | | .XXX | ±.005 | | SCALE 1.5=1 | | | | | |
| | | | .XXXX | ±.0005 | REF | | | | | | |
| NO. | REVISION | BY & DATE | CHK | ANG | ±7'30" | MAT'L. 304 STAINLESS STEEL | FMF | | | | |
| | | | | | | FINISH | 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 | 02-18-2004 | CAD FILE | 92652 | SIZE | DRAWING NO. | PAGE | OF | REV. |
| | | | DIST | WA | | | A | 92652 | | | |

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



DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: A-92652
 OUTLINE: 0216000039
 WINDING: 2152208

CAT #: LM29668

NONE 3

TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNC RPM | FL RPM | FRAME | ENCLOSURE | TYPE | KVA CODE | DESIGN |
|----|----|----------|--------|-------|-----------|------|----------|--------|
| 40 | 30 | 3600 | 3520 | 160M | OPEN | TDR | G | B |

| PH | HZ | VOLTS | AMPS | START TYPE | DUTY | INSL | S.F. | AMB | ELEV. |
|----|----|-------|------|--------------------|--------|------|------|-----|-------|
| 3 | 60 | 200 | 113 | VYE START DELTA RU | 30 MIN | F | 1.15 | 70 | 3300 |

| F.L. EFF | 89.5 | 3/4 LD EFF | 90.2 | 1/2 LD EFF | 90.2 | GTD EFF | 81.5 | ELECT. TYPE | SQ CAGE IND RUN |
|----------|------|------------|------|------------|------|---------|------|-------------|-----------------|
| F.L. PF | 85.5 | 3/4 LD PF | 80.5 | 1/2 LD PF | 70.0 | | | | |

| F.L. TORQUE | LR AMPS @ 460 V | L.R. TORQUE | B.D. TORQUE | F.L. RISE (°C) |
|-------------|-----------------|----------------|----------------|----------------|
| 60.0 LB-FT | 863 | 125 LB-FT 208% | 175 LB-FT 292% | 0 |

| PRESSURE @ 3 | POWER | ROTOR WK² | MAX. LOAD WK² | SAFE STALL TIME | STARTS/HOUR | MOTOR WGT |
|--------------|----------|-------------|---------------|-----------------|-------------|-----------|
| 999 dBA | 1008 dBA | 0.00 LB-FT² | 0 LB-FT² | 0 SEC. | 80 | 0 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 | GRAY - LINCOLN |

| BEARINGS | | GREASE | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT MATERIAL | FRAME MATERIAL |
|----------|------|------------|-------------|-------------------|-------------|-------------------|----------------|
| DE | ODE | | | | | | |
| BALL | BALL | POLYREX EM | SGL SPL EXT | ELEVATOR MOTOR SH | NONE | AISI 1045 (C-240) | ROLLED STEEL |
| NONE | NONE | | | | | | |

| THERMOSTATS | PROTECTORS | WDG RTD's | BRG RTD's | THERMISTORS | CONTROL | SPACE HEATERS |
|--------------|------------|-----------|-----------|-------------|---------|---------------|
| TSTATS (N/C) | 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 | 0 | 0 | 0 | 0 | 0.150 | ODE |

| | | |
|---------------------------------|---------------------------|--|
| * N O T E S * | INVERTER TORQUE: NONE | |
| | INV. HP SPEED RANGE: NONE | |
| | ENCODER: NONE | |
| | NONE | |
| | NONE NONE PPR | |

| | | |
|-------------------------|----------------|-----|
| DATE: 1/19/2018 | BRAKE: NONE | |
| | NONE NONE NONE | |
| | FT-LB: NA | HZ: |
| | VOLTAGE: NONE | |
| UL: V-INS, CONST UL REC | | |

Data Sheet

Date: 1/19/2018

LM29668



Data @ **200 V**

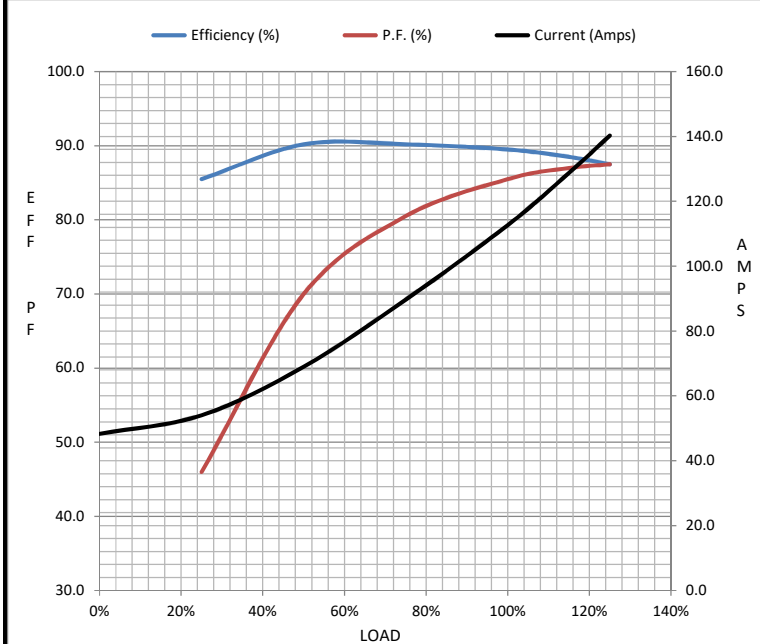
Motor Load Data

| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR |
|----------------|------|------|------|------|------|-------|------|------|
| Current (Amps) | 48.3 | 54.1 | 69.0 | 89.7 | 113 | 129 | 140 | 863 |
| Torque (ft-lb) | 0.00 | 14.5 | 29.5 | 44.5 | 60.0 | 69.0 | 75.0 | 125 |
| RPM | 3600 | 3580 | 3560 | 3540 | 3520 | 3,500 | 3495 | 0 |
| Efficiency (%) | | 85.5 | 90.2 | 90.2 | 89.5 | 88.5 | 87.5 | |
| P.F. (%) | 6.5 | 46.0 | 70.0 | 80.5 | 85.5 | 87.0 | 87.5 | 50.0 |

Motor Speed Data

| | LR | Pull-Up | BD | Rated | Idle |
|----------------|-----|---------|------|-------|------|
| Speed (RPM) | 0 | 1800 | 2950 | 3520 | 3600 |
| Current (Amps) | 863 | 782 | 575 | 113 | 48.3 |
| Torque (ft-lb) | 125 | 115 | 175 | 60.0 | 0.00 |

| Information Block | | | | |
|-----------------------------|-------------------------|--------|--------|--------|
| HP | 40.0 | | | |
| Sync. RPM | 3600 | | | |
| Frame | 160 | | | |
| Enclosure | OPEN | | | |
| Construction | TDR | | | |
| Voltage | 200 V | | | |
| Frequency | 60 Hz | | | |
| Design | A | | | |
| LR Code letter | G | | | |
| Service Factor | 1.15 | | | |
| Temp Rise @ FL | 0 °C | | | |
| Duty | 30 MIN | | | |
| Ambient | 40 °C | | | |
| Elevation | 1,000 feet | | | |
| Rotor/Shaft wk ² | 0.00 Lb-Ft ² | | | |
| Ref Wdg | 2152208 NONE | | | |
| Sound Pressure @ 1M | 999 dBA | | | |
| VFD Rating | NONE | | | |
| Outline Dwg | 0216000039 | | | |
| Conn. Diag | A-92652 | | | |
| 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

