

PRODUCT INFORMATION PACKET



Model No: 825076.00

Catalog No: 825076.00

Explosion Proof Motor, 15 & 10 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 3600 & 3000 RPM,
254TC Frame, EPFC



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

©2023 Regal Rexnord Corporation, All Rights Reserved. MC017097E



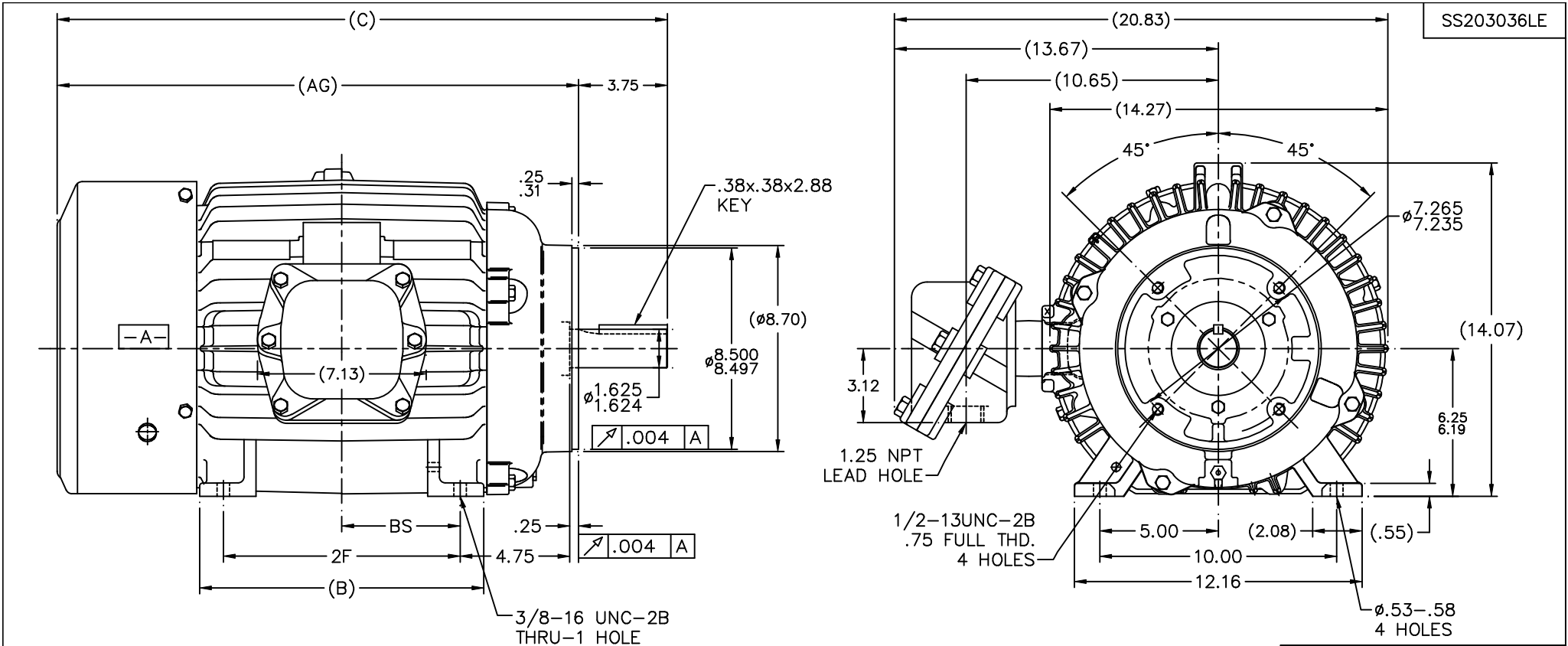


Nameplate Specifications

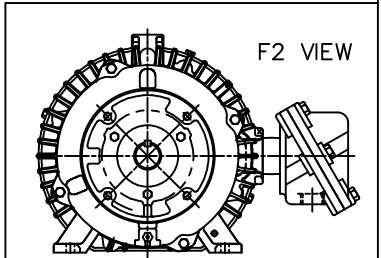
| | | | |
|------------------------|------------------------------------|----------------------------|---|
| Phase | 3 | Output HP | 15 & 10 Hp |
| Output KW | 11.2 & 7.5 kW | Voltage | 230/460 & 190/380 V |
| Speed | 3550 & 2955 rpm | Service Factor | 1.15 & 1.15 |
| Frame | 254TC | Enclosure | Explosion Proof Fan cooled |
| Thermal Protection | No Protection | Efficiency | 91.7 & 92 % |
| Ambient Temperature | 40 °C | Frequency | 60 & 50 Hz |
| Current | 35/17.5 & 29/14.5 A | Power Factor | 85 |
| Duty | Continuous | Insulation Class | F |
| Design Code | B | KVA Code | G |
| Drive End Bearing Size | 309 | Opp Drive End Bearing Size | 210 |
| UL | UL Listed And CSA Certified | CSA | Y |
| CE | N | IP Code | 54 |
| Number of Speeds | 1 | Hazardous Location | EXP PROOF CL I GR C&D CL II GR F&G T3B |

Technical Specifications

| | | | |
|-----------------------|-------------------------------------|-----------------------|-------------------------|
| Electrical Type | Squirrel Cage Inverter Rated | Starting Method | Line Or Inverter |
| Poles | 2 | Rotation | Reversible |
| Resistance Main | .603 Ohms | Mounting | Rigid Base |
| Motor Orientation | Horizontal | Drive End Bearing | Ball |
| Opp Drive End Bearing | Ball | Frame Material | Cast Iron |
| Shaft Type | T | Overall Length | 24.02 in |
| Frame Length | 10.50 in | Shaft Diameter | 1.625 in |
| Shaft Extension | 4 in | Assembly/Box Mounting | F1 ONLY |
| Connection Drawing | EE7308AD-LE | Outline Drawing | SS203036LE-1050 |



- NOTES:
 1. BOX CAN ONLY BE ROTATED CLOCKWISE UP TO 270° FROM ITS ORIGINAL POSITION.
 2. NAMEPLATE TO BE READ FROM CONDUIT BOX SIDE OF MOTOR.

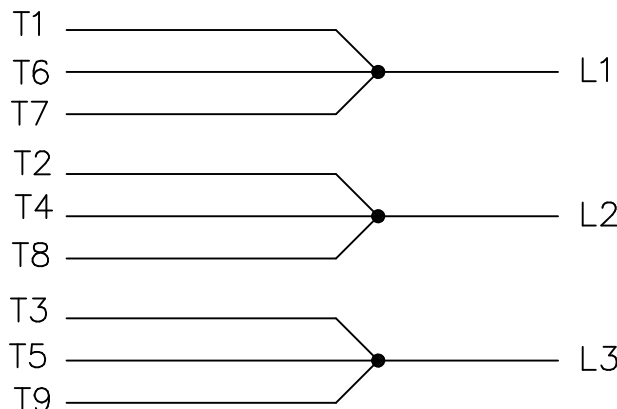


(B-SS203001)

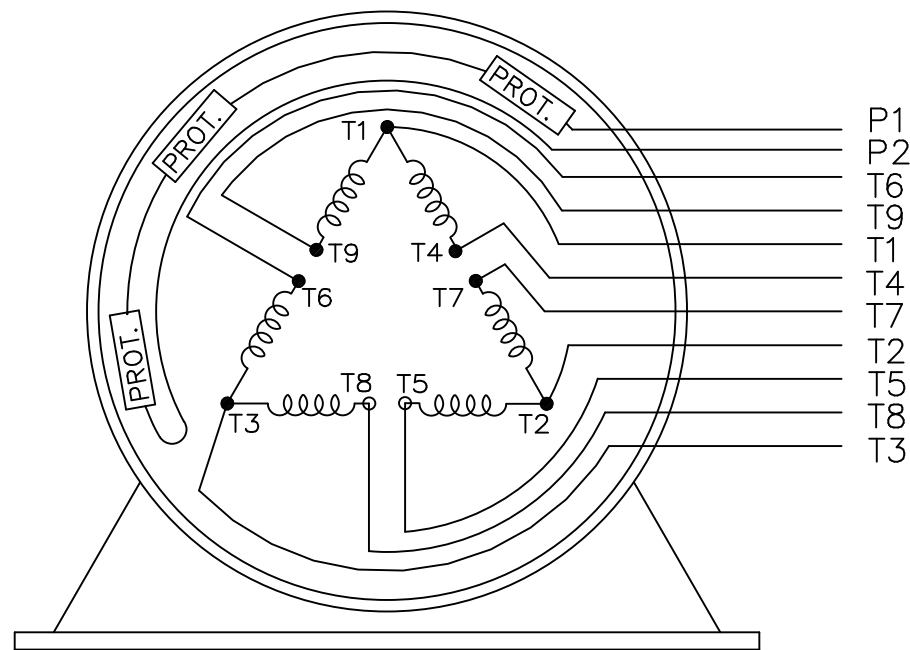
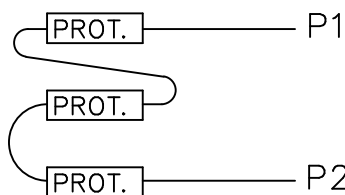
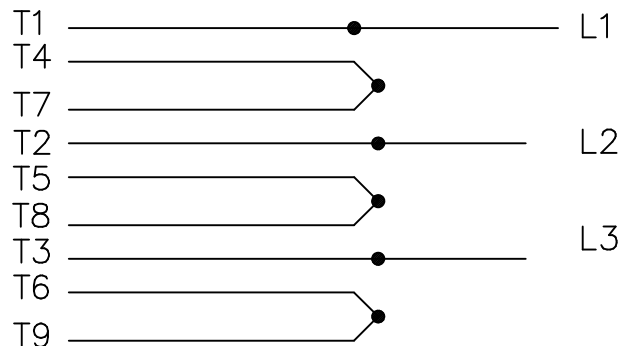
| DASH | FRAME | B | C | AG | 2F | BS |
|------|-------|-------|-------|-------|-------|------|
| 1050 | 254TC | 10.25 | 24.02 | 20.27 | 8.25 | 4.12 |
| 1225 | 256TC | 12.00 | 25.77 | 22.02 | 10.00 | 5.00 |

| | | TOLERANCES UNLESS SPECIFIED | | LEESON | | ELECTRIC MOTORS GEARMOTORS AND DRIVES | | DRAWN TJB 05-13-2002 | | |
|--|----------------------|-----------------------------|-----|-------------|--------|---------------------------------------|------|----------------------|---------------|------|
| NO. | REVISION | BY & DATE | CHK | ANG | FINISH | SCALE | REF | CHK | ML | |
| 1 | NEW DRAWING CN 34438 | TJB 05-15-2002 | TB | .XXX ±.0005 | MATL | 1=4 | | APPD | TB 05-15-2002 | |
| | | | RFP | ±7°30' | FINISH | | | | | |
| 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 | | | | | | CAD FILE ss203036LE | SIZE | DRAWING NO. | PAGE OF | REV. |
| | | | | | | | B | SS203036LE | 1 | 1 |

LOW VOLTAGE



HIGH VOLTAGE



WHEN MORE THAN ONE PROT. IS USED; PROT. ARE CONNECTED IN SERIES

| | | | | TOLERANCES UNLESS SPECIFIED | | LEESON | ELECTRIC MOTORS GEARMOTORS AND DRIVES | DRAWN NJS 05-15-2002 | | | | |
|--|---------------------------------------|-----------|----------------|-----------------------------|----------------------|--|---|----------------------|-------------|------------|----|------|
| | | | | DEC. | INCHES | | | CHK | ML | 05-20-2002 | | |
| | | | | .X | ±.1 | | | APPD | TB | 05-20-2002 | | |
| | | | | .XX | ±.02 | TITLE CONNECTION DIAGRAM 3Ø - WITH PROTECTORS | | SCALE | | | | |
| 2 | HIGH VOLT. SCHEMATIC WAS L1, L3, & L3 | CN 32724 | DRS 06-12-2004 | ML | .XXX ±.005 | | | REF | | | | |
| 1 | NEW DRAWING | CN 35132 | NJS 05-20-2002 | TB | .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 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 ee7308ad_le | | | SIZE | DRAWING NO. | PAGE | OF | REV. |
| | | | | DIST | WA-LB | | | A | EE7308AD-LE | | | 2 |



CERTIFICATION DATA SHEET

**1051 CHEYENNE AVE.
GRAFTON, WI 53024
PH. 262-377-8810**

CONN. DIAGRAM: A-EE7308AD-LE

CATALOG #: 825076.00

OUTLINE: B-SS203036LE-1050

MOUNTING: F1 ONLY

WINDING #: K256289 6

TYPICAL MOTOR PERFORMANCE DATA

| HP | kW | SYNC. RPM | F.L. RPM | FRAME | ENCLOSURE | KVA CODE | DESIGN |
|-------|-----------|-----------|-----------|-------|-----------|----------|--------|
| 15&10 | 11.2&7.50 | 3600 | 3550&2955 | 254TC | EPFC | G | B |

| PH | Hz | VOLTS | AMPS | START TYPE | DUTY | INSL | S.F. | AMB°C |
|----|-------|-----------------|-----------------|------------------|------------|------|-----------|-------|
| 3 | 60/50 | 230/460&190/380 | 35/17.5&29/14.5 | LINE OR INVERTER | CONTINUOUS | F3 | 1.15/1.15 | 40 |

| FULL LOAD EFF: | 91.7&92 | 3/4 LOAD EFF: | 91.7 | 1/2 LOAD EFF: | 90.2 | GTD. EFF | | ELEC. TYPE | |
|----------------|---------|---------------|------|---------------|------|----------|--|-------------------|--|
| FULL LOAD PF: | 85&85 | 3/4 LOAD PF: | 83.5 | 1/2 LOAD PF: | 75.5 | 91 | | SQ CAGE INV RATED | |

| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE | B.D. TORQUE | F.L. RISE°C |
|-------------|-------------------|----------------|----------------|-------------|
| 22.2 LB-FT | 232 / 116 | 41 LB-FT 185 % | 65 LB-FT 293 % | 50 |

| SOUND PRESSURE @ 3 FT. | SOUND POWER | ROTOR WK^2 | MAX. WK^2 | SAFE STALL TIME | STARTS / HOUR | APPROX. MOTOR WGT |
|------------------------|-------------|-------------|------------|-----------------|---------------|-------------------|
| 72 dBA | 82 dBA | 1.1 LB-FT^2 | 22 LB-FT^2 | 20 SEC. | 2 | 310 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 | PREMIUM SEVERE DUTY | EXP PROOF CL I GR C&D CL II GR F&G T3B | FALSE | NONE | BLUE - LEESON (ENAMEL) |

| 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) | CAST IRON |
| 309 | 210 | | | | | | |

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

*
N
O
T
E

| |
|--|
| INVERTER TORQUE: CONSTANT 10:1 |
| 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: 1/24/2018

825076.00



Data @ **460 V**

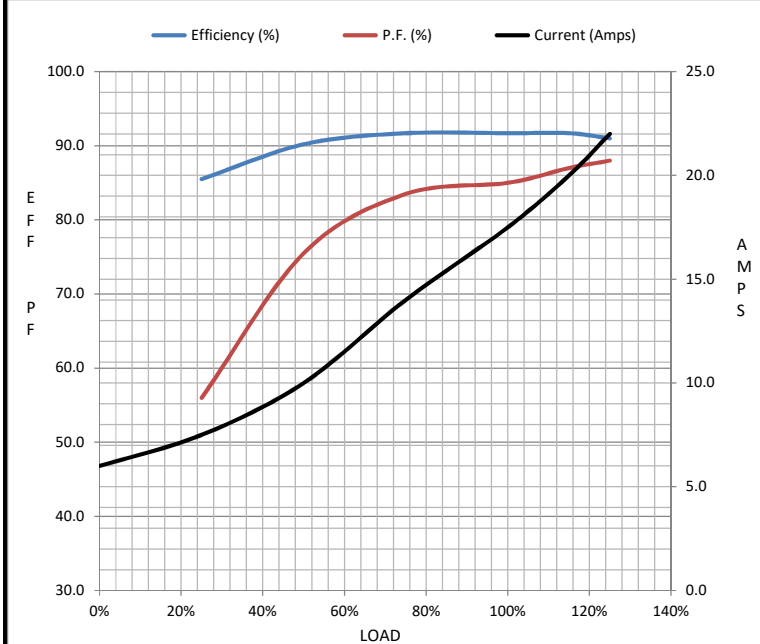
Motor Load Data

| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR |
|----------------|------|------|------|------|------|-------|------|------|
| Current (Amps) | 6.0 | 7.5 | 10.0 | 14.0 | 17.5 | 20.0 | 22.0 | 116 |
| Torque (ft-lb) | 0.00 | 5.5 | 11.0 | 16.5 | 22.2 | 25.0 | 28.0 | 41.0 |
| RPM | 3600 | 3585 | 3570 | 3560 | 3550 | 3,540 | 3525 | 0 |
| Efficiency (%) | | 85.5 | 90.2 | 91.7 | 91.7 | 91.7 | 91.0 | |
| P.F. (%) | 10.5 | 56.0 | 75.5 | 83.5 | 85.0 | 87.0 | 88.0 | 38.0 |

Motor Speed Data

| | LR | Pull-Up | BD | Rated | Idle |
|----------------|------|---------|------|-------|------|
| Speed (RPM) | 0 | 1800 | 3175 | 3550 | 3600 |
| Current (Amps) | 116 | 103 | 75.0 | 17.5 | 6.0 |
| Torque (ft-lb) | 41.0 | 37.0 | 65.0 | 22.2 | 0.00 |

| Information Block | | | | |
|-----------------------------|-------------------------|--------|--------|---------|
| HP | 15.0 | | | |
| Sync. RPM | 3600 | | | |
| Frame | 254 | | | |
| Enclosure | TEFC | | | |
| Construction | TFN | | | |
| Voltage | 230/460#190/380 V | | | |
| Frequency | 60 Hz | | | |
| Design | A | | | |
| LR Code letter | G | | | |
| Service Factor | 1.15 | | | |
| Temp Rise @ FL | 50 °C | | | |
| Duty | CONT | | | |
| Ambient | 40 °C | | | |
| Elevation | 1,000 feet | | | |
| Rotor/Shaft wk ² | 1.10 Lb-Ft ² | | | |
| Ref Wdg | K256289 NONE | | | |
| Sound Pressure @ 1M | 72 dBA | | | |
| VFD Rating | CONSTANT 10:1 | | | |
| Outline Dwg | B-SS203036LE-1050 | | | |
| Conn. Diag | A-EE7308AD-LE | | | |
| Additional Specifications: | | | | |
| 0 | | | | |
| 0 | | | | |
| EQUIV CKT (OHMS / PHASE) | | | | |
| R1 | R2 | X1 | X2 | Xm |
| 0.3870 | 0.2760 | 1.4040 | 1.2980 | 42.3360 |



Speed - Torque Curve

