# PRODUCT INFORMATION PACKET

Model No: 199772.00
Catalog No: 199772.00
Close-Coupled Pump Motor, 5 & 3 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 1800 & 1500 RPM, 184JP Frame, DP

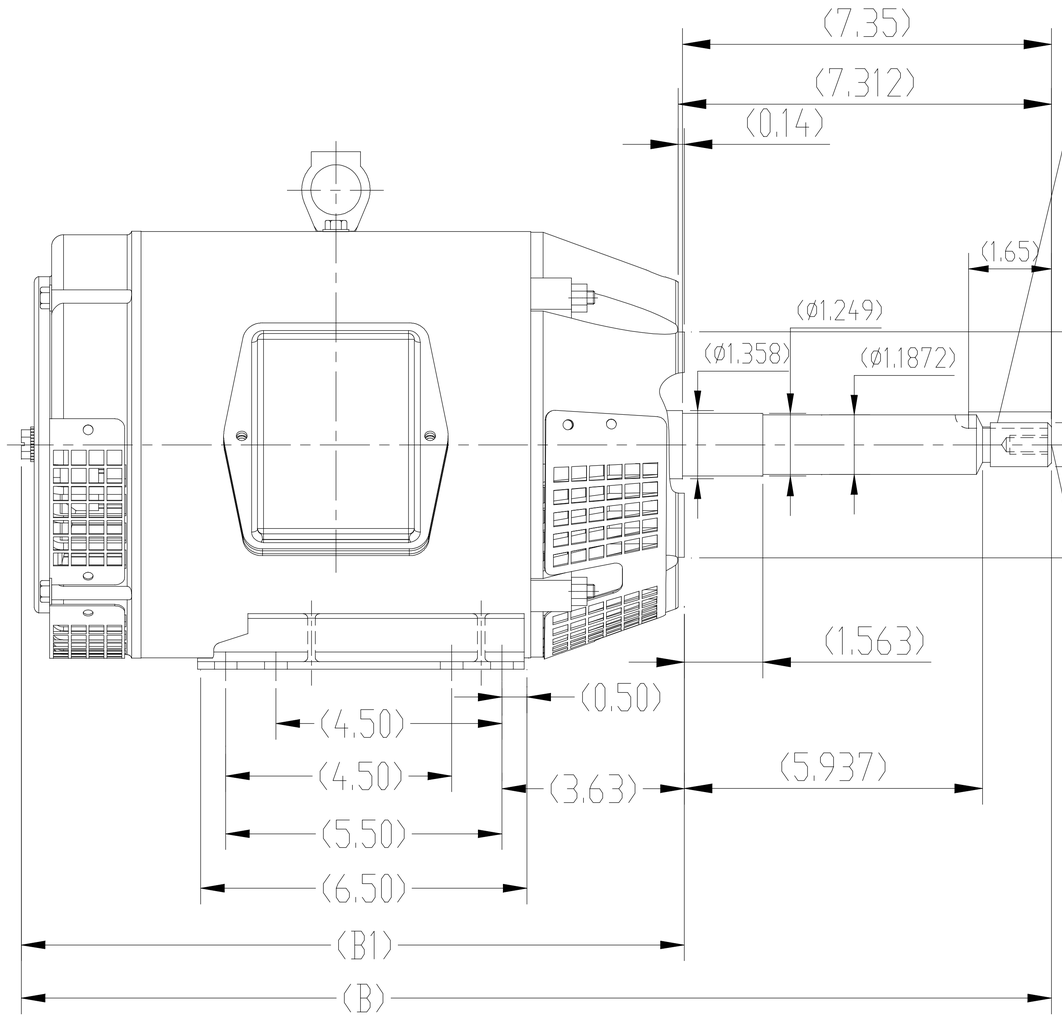
## Nameplate Specifications

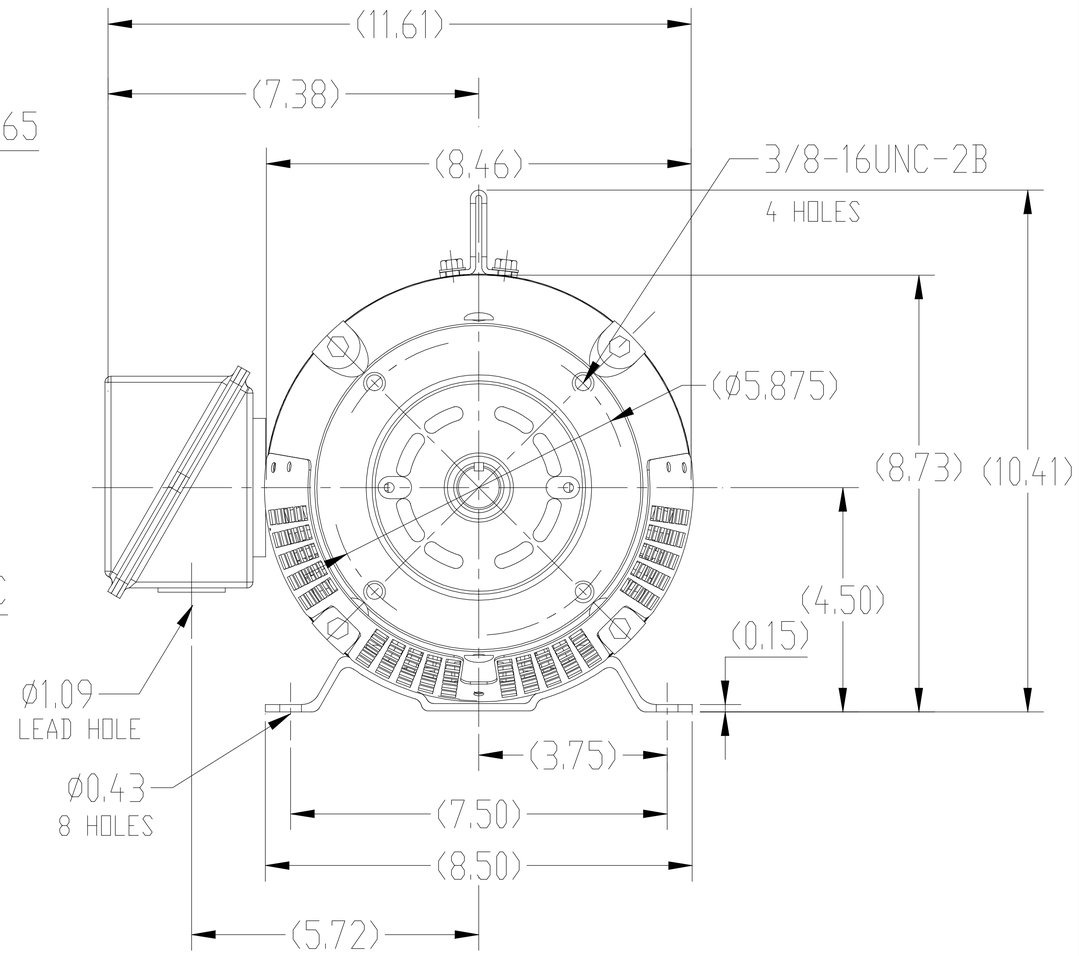
| | | | |
|---|---|---|---|
| Phase | 3 | Output HP | 5 & 3 Hp |
| Output KW | 3.7 & 2.2 kW | Voltage | 230/460 & 190/380 V |
| Speed | 1755 & 1468 rpm | Service Factor | 1.15 & 1.15 |
| Frame | 184JP | Enclosure | Drip Proof |
| Thermal Protection | No Protection | Efficiency | 89.5 & 89.5 % |
| Ambient Temperature | 40 °C | Frequency | 60 & 50 Hz |
| Current | 12.8/6.4 & 9.6/4.8 A | Power Factor | 82 |
| Duty | Continuous | Insulation Class | F |
| Design Code | B | KVA Code | K |
| Drive End Bearing Size | 6205 | Opp Drive End Bearing Size | 6205 |
| UL | Recognized | CSA | Y |
| IP Code | 22 | Number of Speeds | 1 |

## Technical Specifications

| | | | |
|---|---|---|---|
| Electrical Type | Squirrel Cage Inverter Rated | Starting Method | Line Or Inverter |
| Poles | 4 | Rotation | Reversible |
| Resistance Main | 2.25 Ohms | Mounting | Rigid Base |
| Drive End Bearing | Ball | Opp Drive End Bearing | Ball |
| Frame Material | Rolled Steel | Shaft Type | JP |
| Overall Length | 20.46 in | Frame Length | 7.75 in |
| Shaft Diameter | 0.875 in | Shaft Extension | 7.28 in |
| Assembly/Box Mounting | F1 ONLY | | |
| Outline Drawing | SS620859-184JP | Connection Drawing | EE7308_LE |

SS620859




| | | |
|---|---|---|
| 182JP | 12.09 | 19.44 |
| 184JP | 13.11 | 20.46 |
| FRAME | B1 | B |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | | TOLERANCES UNLESS SPECIFIED | | REGAL BELOIT REGAL-BELOIT CORPORATION | DRAWN WY 5-9-2017 |
| | | | | DEC. | INCHES | | CHK ZXW 5-9-2017 |
| | | | | .X | ±.1 | | APPD ZYH 5-9-2017 |
| | | | | .XX | ±.03 | TITLE OUTLINE | SCALE 1=4 |
| | | | | .XXX | ±.005 | ODP-182/184JP FR-ROLLED STEEL | REF |
| A | RELEASED FOR PRODUCTION ECO-0093138 | WGJ 09-06-17 | EMH | .XXXX | ±.0005 | MAT'L. | FMF Wuxi |
| NO. | REVISION | BY & DATE | CHK | ANG | ±1/2 | FINISH | PREV |

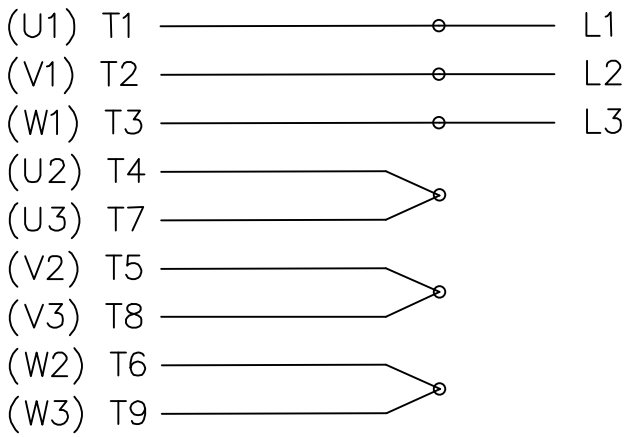


| RFP | CAD FILE SS620859 | SIZE | DRAWING NO. | REV. |
|---|---|---|---|---|
| DIST | | B | SS620859 | A |

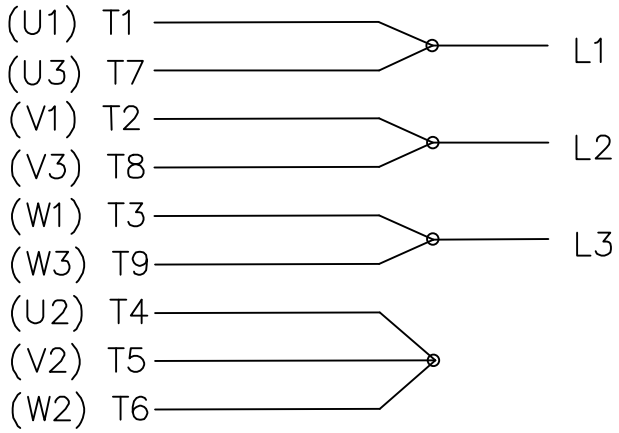
EE7308-LE

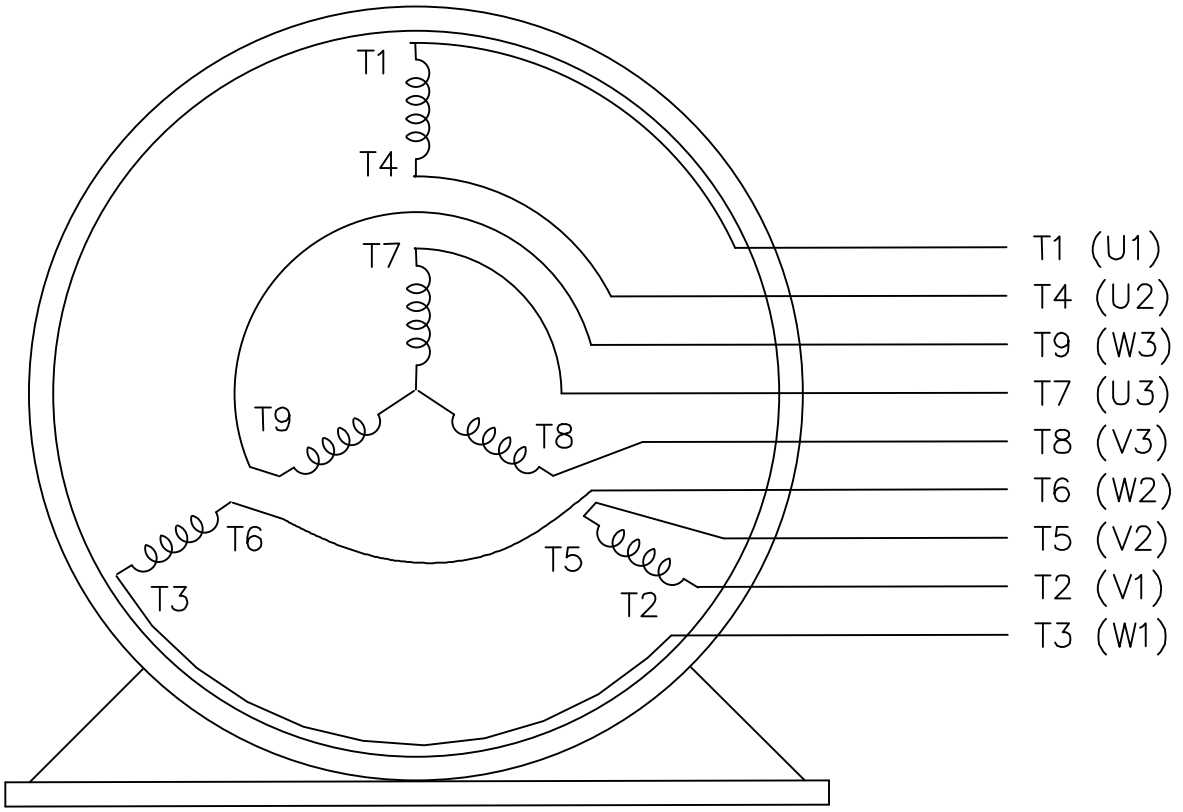
# THREE PHASE
# DUAL VOLTAGE MOTOR

## HIGH VOLTAGE




## LOW VOLTAGE




VIEW OF TERMINAL END

REF.
WINDING DIAGRAM

T8Y, T2Y, T2BL, T4BX, T2EC, T2G
T6BZ, T2B, T6BL, T4AV, T6B, T4B

| NO. | REVISION | BY & DATE | CHK |
|---|---|---|---|
| 2 | ADDED IEC NOTATIONS... (U1), (V1) ETC. (MU105786) | REP 01-11-2012 | DR |
| 1 | NEW DRAWING | HLB 05-03-2002 | ML |

TOLERANCES UNLESS SPECIFIED

| DEC. | INCHES |
|---|---|
| .X | ±.1 |
| .XX | ±.01 |
| .XXX | ±.005 |
| .XXXX | ±.0005 |
| ANG | ±1/2° |

LEESON ELECTRIC MOTORS GEARMOTORS AND DRIVES

TITLE CONNECTION DIAGRAM
3Ø – DUAL VOLTAGE MOTOR

MAT'L.

FINISH

RFP

DIST LB-WP

CAD FILE EE7308-LE

| DRAWN | HLB | 04-29-2002 |
|---|---|---|
| CHK | ML | 05-03-2002 |
| APPD | GK | 05-03-2002 |
| SCALE | | 1=1 |
| REF | | |
| FMF | | |
| PREV | | |

| SIZE | DRAWING NO. PAGE OF | REV. |
|---|---|---|
| A | EE7308-LE | 2 |

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

# CERTIFICATION DATA SHEET

**CATALOG #:** 199772.00

**CONN. DIAGRAM:** EE7308_LE

**OUTLINE:** SS620859 **MOUNTING:** F1 ONLY

**WINDING #:** CHT18440008 1

## TYPICAL MOTOR PERFORMANCE DATA

| HP | kW | SYNC. RPM | F.L. RPM | FRAME | ENCLOSURE | KVA CODE | DESIGN |
|---|---|---|---|---|---|---|---|
| 5&3 | 3.70&2.24 | 1800 | 1755&1468 | 184JP | DP | K | B |

| PH | Hz | VOLTS | AMPS | START TYPE | DUTY | INSL | S.F. | AMB°C |
|---|---|---|---|---|---|---|---|---|
| 3 | 60/50 | 230/460&190/380 | 12.8/6.4&9.6/4.8 | LINE OR INVERTER | CONTINUOUS | F7 | 1.15/1.15 | 40 |

| FULL LOAD EFF: | 89.5&89.5 | 3/4 LOAD EFF: | 90.2 | 1/2 LOAD EFF: | 89.5 | GTD. EFF | ELEC. TYPE |
|---|---|---|---|---|---|---|---|
| FULL LOAD PF: | 82&78 | 3/4 LOAD PF: | 77 | 1/2 LOAD PF: | 66 | 88.5 | SQ CAGE INV RATED |

| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE | B.D. TORQUE | F.L. RISE°C |
|---|---|---|---|---|
| 15.1 LB-FT | 92 / 46 | 39 LB-FT 258 % | 52 LB-FT 344 % | 50 |

| SOUND PRESSURE @ 3 FT. | SOUND POWER | ROTOR WK^2 | MAX. WK^2 | SAFE STALL TIME | STARTS / HOUR | APPROX. MOTOR WGT |
|---|---|---|---|---|---|---|
| 67 dBA | 77 dBA | 0.5 LB-FT^2 | 30 LB-FT^2 | 20 SEC. | 2 | 110 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 | RODENT | BLUE - LEESON (ENAMEL) |

| BEARINGS | | GREASE | SHAFT TYPE | SPECIAL DE | SPECIAL ODE | SHAFT MATERIAL | FRAME MATERIAL |
|---|---|---|---|---|---|---|---|
| DE | ODE | | | | | | |
| BALL | BALL | POLYREX EM | JP | NONE | NONE | 1045 HOT ROLLED (C-204) | ROLLED STEEL |
| NONE | NONE | | | | | | |

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

**NOTES**

*

**INVERTER TORQUE:** VARIABLE 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:** 1/22/2018

199772.00

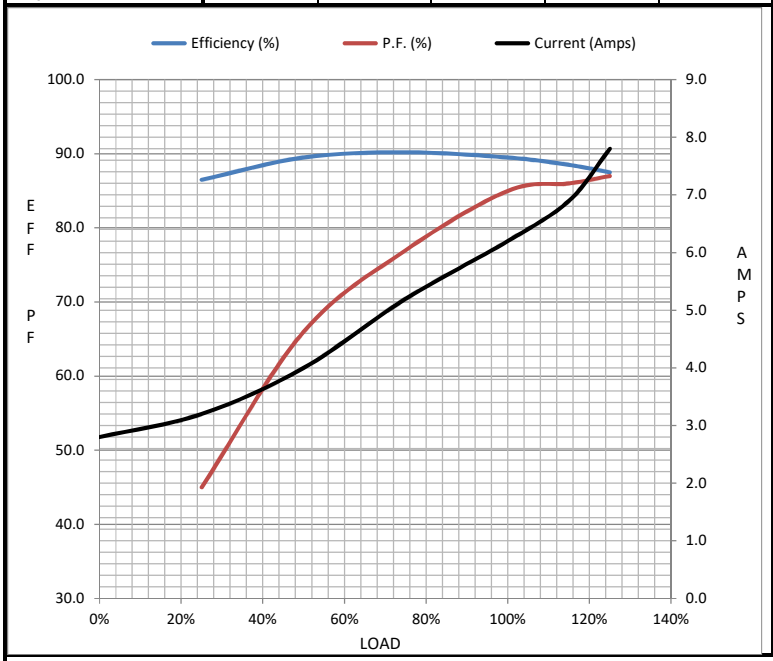
Data @ 460 V

## Motor Load Data

| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR | |
|---|---|---|---|---|---|---|---|---|---|
| Current (Amps) | 2.80 | 3.2 | 4.0 | 5.2 | 6.2 | 6.9 | 7.8 | 46.0 | |
| Torque (ft-lb) | 0.00 | 3.7 | 7.4 | 11.2 | 15.1 | 17.4 | 19.0 | 39.0 | |
| RPM | 1800 | 1790 | 1780 | 1755 | 1740 | 1,732 | 1725 | 0 | |
| Efficiency (%) | | 86.5 | 89.5 | 90.2 | 89.5 | 88.5 | 87.5 | | |
| P.F. (%) | 6.0 | 45.0 | 66.0 | 77.0 | 85.0 | 86.0 | 87.0 | 46.0 | |

## Motor Speed Data

| | LR | Pull-Up | BD | Rated | Idle |
|---|---|---|---|---|---|
| Speed (RPM) | 0 | 750 | 1450 | 1740 | 1800 |
| Current (Amps) | 46.0 | 53.0 | 32.0 | 6.2 | 2.80 |
| Torque (ft-lb) | 39.0 | 38.0 | 52.0 | 15.1 | 0.00 |




## Information Block

| | | |
|---|---|---|
| HP | 5.0 | |
| Sync. RPM | 1800 | |
| Frame | 184 | |
| Enclosure | DP | |
| Construction | TDB | |
| Voltage | 230/460#190/380 | V |
| Frequency | 60 | Hz |
| Design | B | |
| LR Code letter | J | |
| Service Factor | 1.15 | |
| Temp Rise @ FL | 50 | ° C |
| Duty | CONT | |
| Ambient | 40 | ° C |
| Elevation | 1,000 | feet |
| Rotor/Shaft wk² | 0.50 | Lb-Ft² |
| Ref Wdg | CHT18440008 NONE | |
| Sound Pressure @ 1M | 67 | dBA |
| VFD Rating | VARIABLE 10:1 | |
| Outline Dwg | SS620562 | |
| Conn. Diag | EE7308_LE | |

Additional Specifications:

0

0

EQUIV CKT (OHMS / PHASE)

| R1 | R2 | X1 | X2 | Xm |
|---|---|---|---|---|
| 1.3040 | 1.5310 | 3.9410 | 4.1160 | 108.5810 |

## Speed -Torque Curve