# PRODUCT INFORMATION PACKET

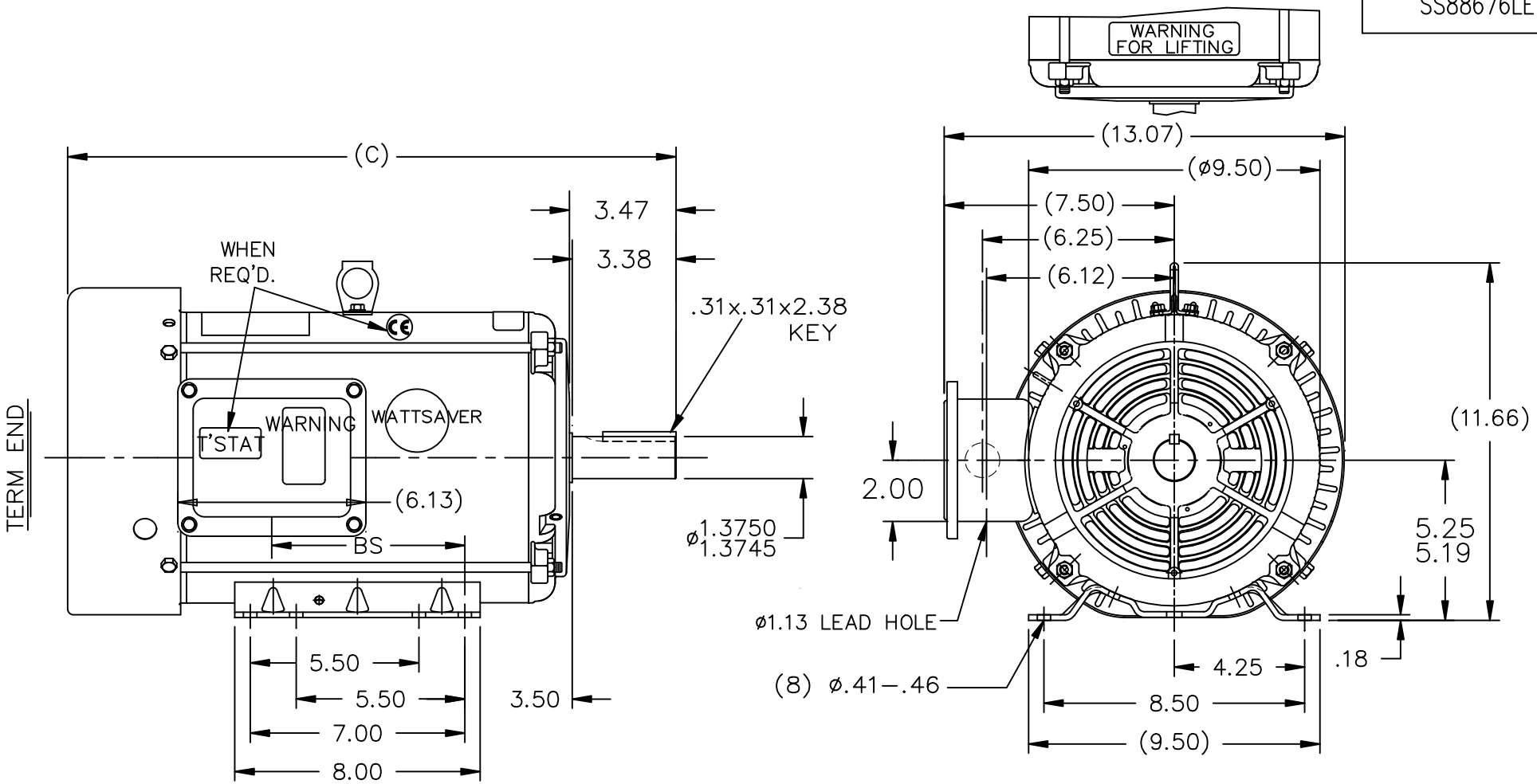
Model No: 140756.00
Catalog No: 140756.00
WATTSAVER® General Purpose Motor, 7.50 & 5 HP, 3 Ph, 60 & 50 Hz, 230/460 & 190/380 V, 3600 & 3000 RPM, 213T Frame, TEFC

## Nameplate Specifications

| | | | |
|---|---|---|---|
| Phase | 3 | Output HP | 7.50 & 5 Hp |
| Output KW | 5.6 & 3.7 kW | Voltage | 230/460 & 190/380 V |
| Speed | 3540 & 2955 rpm | Service Factor | 1.15 & 1.15 |
| Frame | 213T | Enclosure | Totally Enclosed Fan Cooled |
| Thermal Protection | No Protection | Efficiency | 90.2 & 89.5 % |
| Ambient Temperature | 40 °C | Frequency | 60 & 50 Hz |
| Current | 17.8/8.9 & 15/7.5 A | Power Factor | 87 |
| Duty | Continuous | Insulation Class | F |
| Design Code | B | KVA Code | H |
| Drive End Bearing Size | 307 | Opp Drive End Bearing Size | 206 |
| UL | Recognized | CSA | Y |
| CE | Y | IP Code | 43 |
| Number of Speeds | 1 | | |

## Technical Specifications

| | | | |
|---|---|---|---|
| Electrical Type | Squirrel Cage Induction Run | Starting Method | Across The Line |
| Poles | 2 | Rotation | Reversible |
| Resistance Main | 1.163 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 | 19.84 in |
| Frame Length | 11.15 in | Shaft Diameter | 1.375 in |
| Shaft Extension | 3.38 in | Assembly/Box Mounting | F1/F2 CAPABLE |
| Connection Drawing | EE7308T-LE | Outline Drawing | SS88676LE-1115 |




| DASH | FR. | C | | BS | MOUNTING |
|---|---|---|---|---|---|
| 965 | 213T | 18.34 | | 4.80 | |
| 1115 | 213/15T | 19.84 | | 6.30 | |
| 1240 | 213/15T | 21.09 | | 7.55 | F1 ONLY |

NOTES:
1. NAMEPLATE TO BE READ FROM C'BOX SIDE OF MOTOR.
2. BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180° (EXCEPT AS NOTED.)
3. DASH 965 TO BE READ FROM OPPOSITE SHAFT END

| NO. | REVISION | BY & DATE | CHK |
|---|---|---|---|
| 3 | ADDED NOTE 3 & REMOVED GROMMET CN 31848, 31881 | DRS 10-21-2002 | ML |
| 2 | REMOVED "BOX CAN BE MOUNTED IN 90 DEG | RJM 08-20-2002 | JPL |
| | STEPS" FROM NOTES. CN29200-2517 | | |
| 1 | NEW DRAWING | HLB 07-19-2002 | TB |

| TOLERANCES UNLESS SPECIFIED | |
|---|---|
| DEC. | INCHES |
| .X | ±.1 |
| .XX | ±.03 |
| .XXX | ±.005 |
| .XXXX | ±.0005 |
| ANG | ±1/2° |

LEESON ELECTRIC MOTORS GEARMOTORS AND DRIVES

TITLE OUTLINE
210 FR. – BB – TS – TEFC – R/S

MAT'L.

FINISH

CAD FILE ss88676le

RFP

DIST LB-LE

| | |
|---|---|
| DRAWN | HLB 07-16-2002 |
| CHK | DRS 07-18-2002 |
| APPD | TB 07-19-2002 |
| SCALE | 1=5 |
| REF | |
| FMF | |
| PREV | |

| SIZE | DRAWING NO. PAGE OF | REV. |
|---|---|---|
| A | SS88676LE | 3 |



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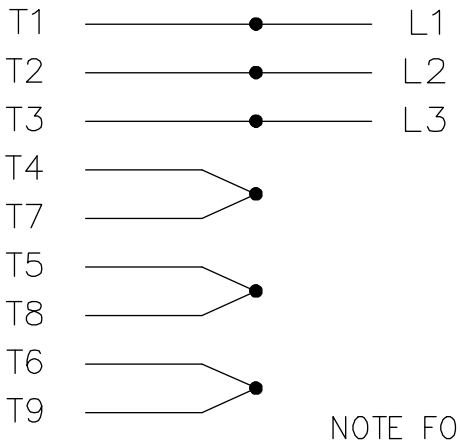
EE7308T-LE

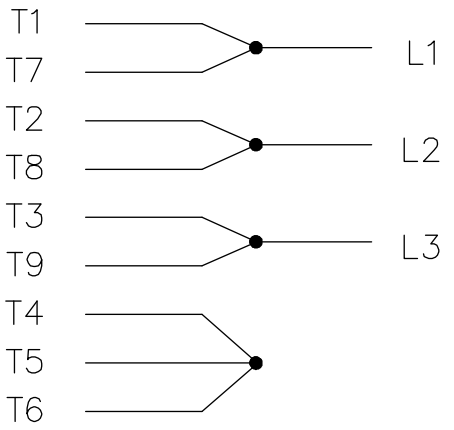
# THREE PHASE DUAL VOLTAGE MOTOR

## HIGH VOLTAGE

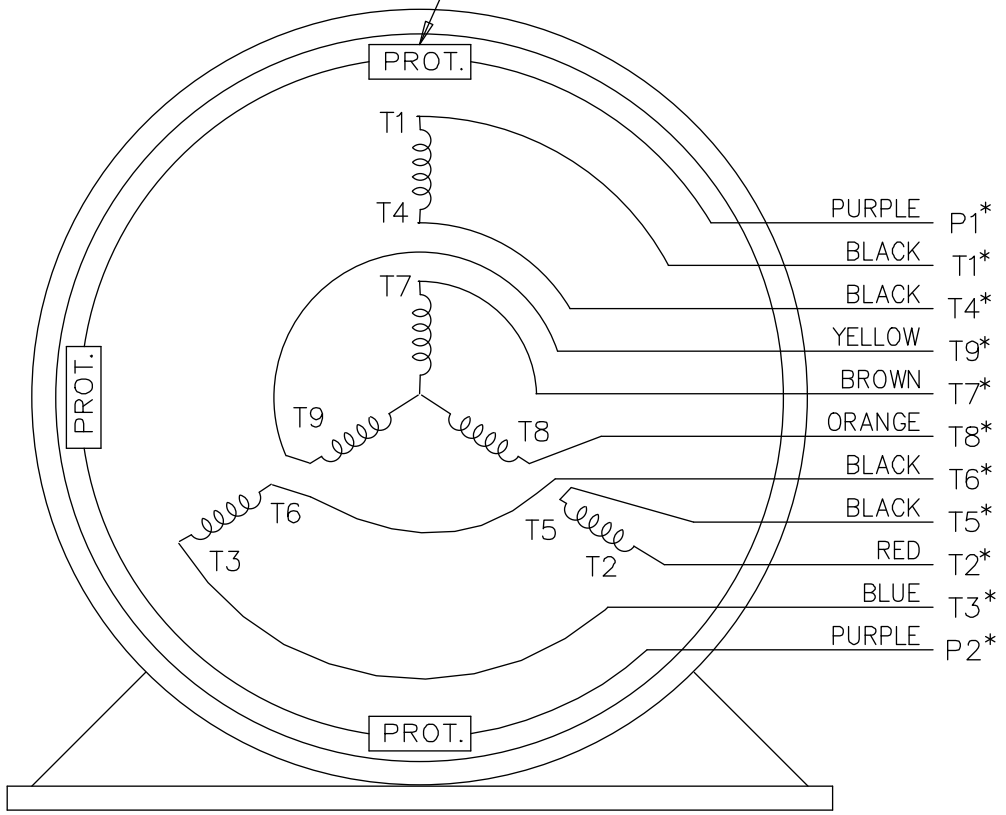



NOTE FOR FACTORY USE ONLY:
TO SURGE TEST FOR COMMON CONNECT:
HIGH VOLT: CONNECT P1 TO T1
THEN P2 TO L1
LOW VOLT: CONNECT P1 TO T1 & T7,
THEN P2 TO L1

## LOW VOLTAGE




THREMO-PROTECTORS CONNECTED IN SERIES.




VIEW OF TERMINAL END

* USE LEADS AS PER PLANT STANDARD IRRWSPECTIVE OF THEIR COLOUR.

| NO. | REVISION | BY & DATE | CHK |
|---|---|---|---|
| 05 | ADDED * NOTE PER ECN # 26921 | UD 01-30-2013 | JD |
| 04 | ADDED COLORS TO "T & P" LEADS CN 40494 | MSG 08-08-2006 | ML |
| 03 | RE-ISSUE | NJS 04-21-2004 | JET |
| 02 | REDRAWN | TAT 04-20-2004 | ML |
| 01 | NEW DRAWING CN 34708 | TJB 05-08-2002 | ML |

TOLERANCES UNLESS SPECIFIED

| DEC. | INCHES |
|---|---|
| .X | ±.1 |
| .XX | ±.02 |
| .XXX | ±.005 |
| .XXXX | ±.0005 |
| ANG | ±7'30" |

LEESON ELECTRIC MOTORS GEARMOTORS AND DRIVES

TITLE CONNECTION DIAGRAM
3 PHASE – DUAL VOLTAGE MOTOR

MAT'L.

FINISH

RFP

DIST LB-WP-LE

CAD FILE EE7308T_LE

| | |
|---|---|
| DRAWN | TJB 05-07-2002 |
| CHK | ML 05-08-2002 |
| APPD | TB 05-08-2002 |
| SCALE | 1=1 |
| REF | |
| FMF | |
| PREV | |

| SIZE | DRAWING NO. PAGE OF | REV. |
|---|---|---|
| A | EE7308T-LE | 05 |

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

# CERTIFICATION DATA SHEET

**CATALOG #:** 140756.00

**CONN. DIAGRAM:** A-EE7308T-LE
**OUTLINE:** A-SS88676LE-1115
**WINDING #:** K213269 1

**MOUNTING:** F1/F2 CAPABLE

## TYPICAL MOTOR PERFORMANCE DATA

| HP | kW | SYNC. RPM | F.L. RPM | FRAME | ENCLOSURE | KVA CODE | DESIGN |
|---|---|---|---|---|---|---|---|
| 7 1/2&5 | 5.60&3.70 | 3600 | 3540&2955 | 213T | TEFC | H | B |

| PH | Hz | VOLTS | AMPS | START TYPE | DUTY | INSL | S.F. | AMB°C |
|---|---|---|---|---|---|---|---|---|
| 3 | 60/50 | 230/460&190/380 | 17.8/8.9&15/7.5 | ACROSS THE LINE | CONTINUOUS | F4 | 1.15/1.15 | 40 |

| FULL LOAD EFF: | 90.2&89.5 | 3/4 LOAD EFF: | 89.5 | 1/2 LOAD EFF: | 86.5 | GTD. EFF | ELEC. TYPE |
|---|---|---|---|---|---|---|---|
| FULL LOAD PF: | 87&83 | 3/4 LOAD PF: | 83 | 1/2 LOAD PF: | 74.5 | 89.5 | SQ CAGE IND RUN |

| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE | B.D. TORQUE | F.L. RISE°C |
|---|---|---|---|---|
| 11.1 LB-FT | 127 / 63.5 | 24 LB-FT 216 % | 38 LB-FT 342 % | 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 | 0.55 LB-FT^2 | 12 LB-FT^2 | 20 SEC. | 2 | 165 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 | GREEN - LEESON WATTSAVER |

| 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 |
| 307 | 206 | | | | | | |

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

*** NOTES ***

**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 NONE V NONE Hz

# Data Sheet

**Date:** 1/23/2018

LEESON

140756.00

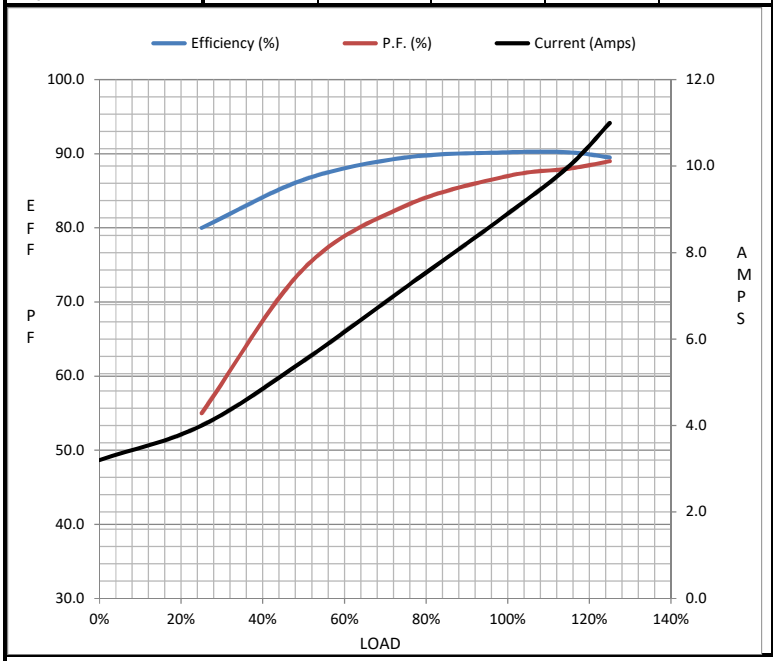
Data @ 460 V

## Motor Load Data

| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR | |
|---|---|---|---|---|---|---|---|---|---|
| Current (Amps) | 3.2 | 4.0 | 5.5 | 7.2 | 8.9 | 10.0 | 11.0 | 63.5 | |
| Torque (ft-lb) | 0.00 | 2.50 | 5.5 | 8.5 | 11.1 | 12.5 | 14.0 | 24.0 | |
| RPM | 3600 | 3585 | 3575 | 3560 | 3540 | 3,535 | 3530 | 0 | |
| Efficiency (%) | | 80.0 | 86.5 | 89.5 | 90.2 | 90.2 | 89.5 | | |
| P.F. (%) | 12.0 | 55.0 | 74.5 | 83.0 | 87.0 | 88.0 | 89.0 | 40.0 | |

## Motor Speed Data

| | LR | Pull-Up | BD | Rated | Idle |
|---|---|---|---|---|---|
| Speed (RPM) | 0 | 1800 | 3250 | 3540 | 3600 |
| Current (Amps) | 63.5 | 57.0 | 40.0 | 8.9 | 3.2 |
| Torque (ft-lb) | 24.0 | 22.0 | 38.0 | 11.1 | 0.00 |




## Information Block

| | | |
|---|---|---|
| HP | 7.5 | |
| Sync. RPM | 3600 | |
| Frame | 213 | |
| Enclosure | TEFC | |
| Construction | TFN | |
| Voltage | 230/460#190/380 | V |
| Frequency | 60 | Hz |
| Design | A | |
| LR Code letter | H | |
| Service Factor | 1.15 | |
| Temp Rise @ FL | 40 | ° C |
| Duty | CONT | |
| Ambient | 40 | ° C |
| Elevation | 1,000 | feet |
| Rotor/Shaft wk² | 0.55 | Lb-Ft² |
| Ref Wdg | K213269 NONE | |
| Sound Pressure @ 1M | 72 | dBA |
| VFD Rating | NONE | |
| Outline Dwg | A-SS88676LE-1115 | |
| Conn. Diag | A-EE7308T-LE | |
| Additional Specifications: | | |
| 0 | | |
| 0 | | |

EQUIV CKT (OHMS / PHASE)

| R1 | R2 | X1 | X2 | Xm |
|---|---|---|---|---|
| 0.6880 | 0.4690 | 2.2980 | 2.3930 | 80.8920 |

## Speed -Torque Curve