

PRODUCT INFORMATION PACKET

Model No: LM06121

Catalog No: LM06121

Encoder Motors, TENV, 3 HP, 3 Ph, 60 Hz, 230/460 V, 1178 RPM, 215TC Frame



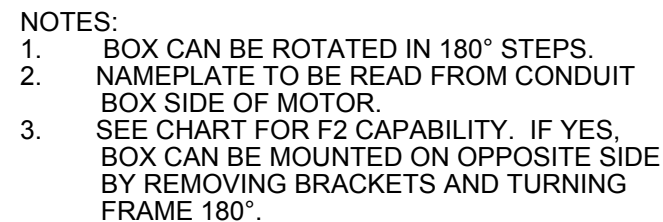
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Nameplate Specifications

| | | | |
|------------------------|---------------|----------------------------|---------------------------------|
| Output HP | 3 Hp | Output KW | 2.2 kW |
| Frequency | 60 Hz | Voltage | 230/460 V |
| Current | 12.2/6.1 A | Speed | 1178 rpm |
| Service Factor | 1 | Phase | 3 |
| Efficiency | 82.5 % | Power Factor | 55 |
| Duty | Continuous | Insulation Class | F |
| Design Code | INV | KVA Code | S |
| Frame | 215TC | Enclosure | Totally Enclosed Non Ventilated |
| Thermal Protection | No Protection | Ambient Temperature | 40 °C |
| Drive End Bearing Size | 6309 | Opp Drive End Bearing Size | 6206 |
| UL | Recognized | CSA | Y |
| CE | Y | IP Code | 43 |
| Number of Speeds | 1 | | |


Technical Specifications

| | | | |
|-----------------------|-----------------------------|-----------------------|---------------|
| Electrical Type | Squirrel Cage Inverter Duty | Starting Method | Inverter Only |
| Poles | 6 | Rotation | Reversible |
| Resistance Main | 1.7 Ohms | Mounting | Rigid Base |
| Motor Orientation | Horizontal | Drive End Bearing | Ball |
| Opp Drive End Bearing | Ball | Frame Material | Aluminum |
| Shaft Type | T | Overall Length | 20.54 in |
| Frame Length | 10.25 in | Shaft Diameter | 1.375 in |
| Shaft Extension | 3.38 in | Assembly/Box Mounting | F1/F2 CAPABLE |
| Inverter Load | CONSTANT 2000:1 | | |
| Outline Drawing | B-SS330203LN-1025 | Connection Drawing | A-EE7308T-LN |

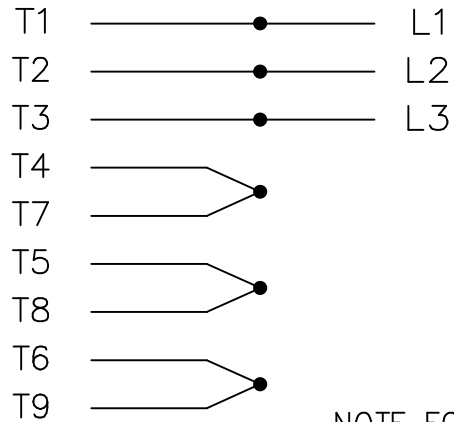


| | | |
|---|--------------------|--------------------|
| DRAWING REVISION C | REVISION BY JWO | DATE 04-30-2014 |
| ECO ECO-0047490 | APPROVED BY EH | DATE 04-30-2014 |
| ECO DESCRIPTION CHANGE BS DIMENSION | | |
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| | |
|---------------------------|---|
| DRAWN BY | TDB |
| DATE | 06-25-2013 |
| APPROVED BY | MH |
| DATE | 06-27-2013 |
| REFERENCE | |
| THIRD ANGLE PROJECTION |  |

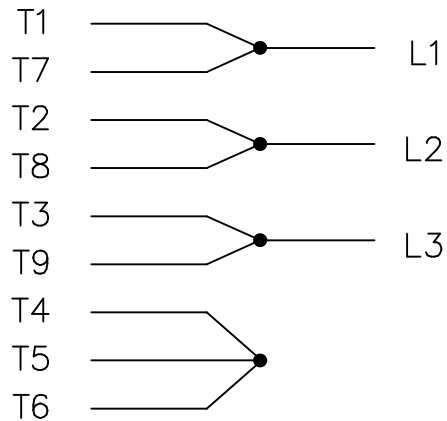
| | |
|---|--|
|  Regal Beloit America, Inc. | |
| DESCRIPTION <div style="text-align: center;"> <h1>OUTLINE</h1> <p>210 FR. - TENV - DBL. C' FACE</p> </div> | |
| MATERIAL | PROCESS/FINISH |
| SIZE B | DRAWING NUMBER <div style="text-align: center;"> <h1>SS330203LN</h1> </div> |
| SHEET <div style="text-align: right;"> <h1>1 OF 1</h1> </div> | |

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

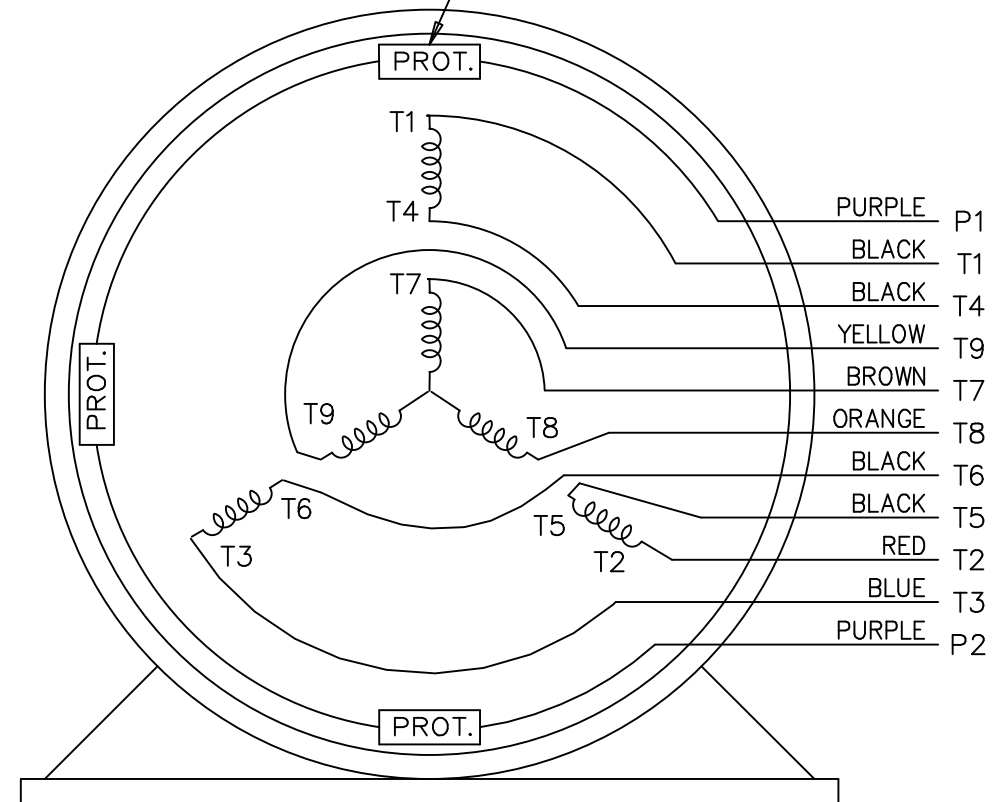
LOW VOLTAGE




THREE PHASE DUAL VOLTAGE MOTOR

EE7308T-LN

THREMO-PROTECTORS
CONNECTED IN SERIES.



VIEW OF TERMINAL END

| | | | | | | | | | | | | | |
|--|-------------------------------|----------|----------------|--------------------------------|--------|---|--|-----|------------|-------------|------|----|------|
| | | | | TOLERANCES UNLESS SPECIFIED | |  | DRAWN BJK 07-16-2002 | | | | | | |
| | | | | DEC. | INCHES | | CHK | DRS | 07-18-2002 | | | | |
| | | | | .X | ±.1 | | APPD | GK | 07-18-2002 | | | | |
| | | | | .XX | ±.02 | | SCALE 1=1 | | | | | | |
| 2 | ADDED COLORS TO "T & P" LEADS | CN 40494 | MSG 08-08-2006 | ML | .XXX | ±.005 | TITLE CONNECTION DIAGRAM 3 PHASE – DUAL VOLTAGE MOTOR | | | | REF | | |
| 1 | NEW DRAWING | | BJK 07-18-2002 | DRS | .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 ee7308t_ln | | | SIZE | DRAWING NO. | PAGE | OF | REV. |
| | | | | DIST LB | | | | | A | EE7308T-LN | | | 2 |



CERTIFICATION DATA SHEET

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

CONN. DIAGRAM: A-EE7308T-LN

OUTLINE: B-SS330203LN-1025

CATALOG #: LM06121

WINDING #: K2156126 R3 6

MOUNTING: F1/F2 CAPABLE

TYPICAL MOTOR PERFORMANCE DATA

| HP | kW | SYNC. RPM | F.L. RPM | FRAME | ENCLOSURE | KVA CODE | DESIGN |
|----|------|-----------|----------|-------|-----------|----------|--------|
| 3 | 2.24 | 1200 | 1178 | 215TC | TENV | S | INV |

| PH | Hz | VOLTS | AMPS | START TYPE | DUTY | INSL | S.F. | AMB°C |
|----|----|---------|----------|---------------|------------|------|------|-------|
| 3 | 60 | 230/460 | 12.2/6.1 | INVERTER ONLY | CONTINUOUS | F3 | 1.0 | 40 |

| | | | | | | | |
|----------------|------|---------------|------|---------------|------|----------|------------------|
| FULL LOAD EFF: | 82.5 | 3/4 LOAD EFF: | 78.5 | 1/2 LOAD EFF: | 75.5 | GTD. EFF | ELEC. TYPE |
| FULL LOAD PF: | 55 | 3/4 LOAD PF: | 47.5 | 1/2 LOAD PF: | 36 | 80 | SQ CAGE INV DUTY |

| F.L. TORQUE | LOCKED ROTOR AMPS | L.R. TORQUE | B.D. TORQUE | F.L. RISE°C |
|-------------|-------------------|------------------|----------------|-------------|
| 13.4 LB-FT | 125 / 62.5 | 69.5 LB-FT 519 % | 87 LB-FT 649 % | 0 |

| SOUND PRESSURE @ 3 FT. | SOUND POWER | ROTOR WK^2 | MAX. WK^2 | SAFE STALL TIME | STARTS / HOUR | APPROX. MOTOR WGT |
|------------------------|-------------|--------------|-----------|-----------------|---------------|-------------------|
| 60 dBA | 70 dBA | 0.95 LB-FT^2 | - LB-FT^2 | - SEC. | - | 155 LBS. |

*** SUPPLEMENTAL INFORMATION ***

| DE BRACKET TYPE | ODE BRACKET TYPE | MOUNT TYPE | ORIENTATION | SEVERE DUTY | HAZARDOUS LOCATION | DRIP COVER | SCREENS | PAINT |
|-----------------|------------------|------------|-------------|-------------|--------------------|------------|---------|----------------|
| C-FACE | ENCODER | RIGID | HORIZONTAL | FALSE | NONE | FALSE | NONE | GRAY - LINCOLN |

| 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) | ALUMINUM |
| 6309 | 6206 | | | | | | |

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

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INVERTER TORQUE: CONSTANT 2000:1
INV. HP SPEED RANGE: NONE

ENCODER: PROVISIONS ONLY
DYNAPAR HS35
NONE NONE PPR

BRAKE: NONE NONE
NONE P/N NONE
NONE NONE
FT-LB NONE V NONE Hz

Data Sheet

Date: 1/18/2018

LM06121



Data @ 460 V

Motor Load Data

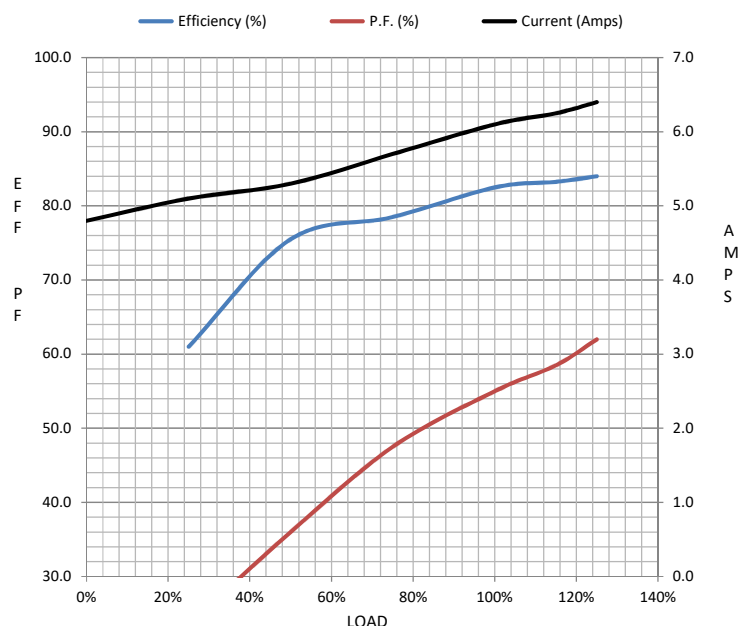
| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR | |
|----------------|------|------|------|------|------|-------|------|------|--|
| Current (Amps) | 4.8 | 5.1 | 5.3 | 5.7 | 6.1 | 6.3 | 6.4 | 62.5 | |
| Torque (ft-lb) | 0.00 | 3.3 | 6.6 | 10.0 | 13.4 | 15.2 | 17.0 | 69.5 | |
| RPM | 1200 | 1194 | 1188 | 1184 | 1178 | 1,176 | 1172 | 0 | |
| Efficiency (%) | | 61.0 | 75.5 | 78.5 | 82.5 | 83.3 | 84.0 | | |
| P.F. (%) | 9.0 | 23.5 | 36.0 | 47.5 | 55.0 | 58.5 | 62.0 | 47.0 | |

Motor Speed Data

| | LR | Pull-Up | BD | Rated | Idle |
|----------------|------|---------|------|-------|------|
| Speed (RPM) | 0 | 589 | 950 | 1178 | 1200 |
| Current (Amps) | 62.5 | 56.3 | 40.0 | 6.1 | 4.8 |
| Torque (ft-lb) | 69.5 | 59.1 | 87.0 | 13.4 | 0.00 |

Information Block

| | | | | |
|----------------------------|-------------------|--------|--------|---------|
| HP | 3.0 | | | |
| Sync. RPM | 1200 | | | |
| Frame | 215 | | | |
| Enclosure | TENV | | | |
| Construction | TTL | | | |
| Voltage | 230/460 V | | | |
| Frequency | 60 Hz | | | |
| Design | A | | | |
| LR Code letter | S | | | |
| Service Factor | 1.15 | | | |
| Temp Rise @ FL | 0 °C | | | |
| Duty | CONT | | | |
| Ambient | 40 °C | | | |
| Elevation | 1,000 feet | | | |
| Rotor/Shaft wk² | 0.95 Lb-Ft² | | | |
| Ref Wdg | K2156126 R3 | | | |
| Sound Pressure @ 1M | 60 dBA | | | |
| VFD Rating | CONSTANT 2000:1 | | | |
| Outline Dwg | B-SS330203LN-1025 | | | |
| Conn. Diag | A-EE7308T-LN | | | |
| Additional Specifications: | | | | |
| 0 | | | | |
| 0 | | | | |
| EQUIV CKT (OHMS / PHASE) | | | | |
| R1 | R2 | X1 | X2 | Xm |
| 1.1350 | 1.2490 | 3.7080 | 2.5730 | 51.5570 |



Speed - Torque Curve

