

PRODUCT INFORMATION PACKET



Model No: LM34117
Catalog No: LM34117
5 HP Special Voltage Motor, 3 phase, 900 RPM, 575 V, 254T Frame, TEFC
Special Voltage Motors



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Nameplate Specifications

| | | | |
|------------------------|------------|----------------------------|-----------------------------|
| Output HP | 5 Hp | Output KW | 3.7 kW |
| Frequency | 60 Hz | Voltage | 575 V |
| Current | 6.0 A | Speed | 875 rpm |
| Service Factor | 1.15 | Phase | 3 |
| Efficiency | 88.5 % | Power Factor | 71 |
| Duty | Continuous | Insulation Class | F |
| Design Code | B | KVA Code | F |
| Frame | 254T | Enclosure | Totally Enclosed Fan Cooled |
| Thermal Protection | No | Ambient Temperature | 40 °C |
| Drive End Bearing Size | 6309 | Opp Drive End Bearing Size | 6208 |
| 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 | 8 | Rotation | Reversible |
| Resistance Main | 1.16 Ohms | Mounting | Rigid Base |
| Motor Orientation | Horizontal | Drive End Bearing | Ball |
| Opp Drive End Bearing | Ball | Frame Material | Aluminum |
| Shaft Type | T | Overall Length | 23.51 in |
| Frame Length | 12.00 in | Shaft Diameter | 1.625 in |
| Shaft Extension | 4 in | Assembly/Box Mounting | F1/F2 CAPABLE |
| Connection Drawing | EE7300 | Outline Drawing | SS321100-1200 |

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THREE PHASE - SINGLE VOLTAGE MOTOR - CONDUIT BOX @ 'A'

TO REVERSE ROTATION:
INTERCHANGE ANY TWO
LINE LEAD CONNECTIONS.

TERMINAL BLOCK WHEN SPECIFIED



IF MOTOR HAS 6 LEADS



A-9806 DECAL

OPTIONAL CORD CONNECTION



VIEW OF TERMINAL END

| | | |
|---|--------------------|--------------------|
| DRAWING REVISION AB | REVISION BY JJB | DATE 06-27-2017 |
| ECO ECO-0125361 | APPROVED BY TB | DATE 06-27-2017 |
| ECO DESCRIPTION UPDATED TO CURRENT STANDARDS | | |
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| |
|---------------------------|
| DRAWN BY DA |
| DATE 03-26-1993 |
| APPROVED BY TB |
| DATE 03-26-1993 |
| REFERENCE |
| THIRD ANGLE PROJECTION |



Regal Beloit America, Inc.

DESCRIPTION
CONNECTION DIAGRAM
EXTERNAL - SINGLE VOLTAGE - 3Ø MOTOR

MATERIAL PROCESS/FINISH

| | | |
|-----------|--------------------------|-----------------|
| SIZE A | DRAWING NUMBER EE7300 | SHEET 1 OF 1 |
|-----------|--------------------------|-----------------|



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

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: A-EE7300

CAT #: LM34117

OUTLINE: B-SS321100-1200

WINDING: K254826

R6 5

TYPICAL MOTOR PERFORMANCE DATA

| HP | KW | SYNC RPM | FL RPM | FRAME | ENCLOSURE | TYPE | KVA CODE | DESIGN |
|----|-----|----------|--------|-------|-----------|------|----------|--------|
| 5 | 3.7 | 900 | 875 | 254T | TEFC | TFY | F | B |

| PH | HZ | VOLTS | AMPS | START TYPE | DUTY | INSL | S.F. | AMB | ELEV. |
|----|----|-------|------|-----------------|------|------|------|-----|-------|
| 3 | 60 | 575 | 6 | ACROSS THE LINE | CONT | F | 1.15 | 40 | 3300 |

| F.L. EFF | 88.5 | 3/4 LD EFF | 88.0 | 1/2 LD EFF | 86.5 | GTD EFF | 86.5 | ELECT. TYPE | SQ CAGE IND RUN |
|----------|------|------------|------|------------|------|---------|------|-------------|-----------------|
| F.L. PF | 71.0 | 3/4 LD PF | 64.5 | 1/2 LD PF | 52.5 | | | | |

| F.L. TORQUE | LR AMPS @ 460 V | L.R. TORQUE | B.D. TORQUE | F.L. RISE (°C) |
|-------------|-----------------|-----------------|-----------------|----------------|
| 30.0 LB-FT | 25.6 | 42.0 LB-FT 140% | 66.0 LB-FT 220% | 40 |

| PRESSURE @ 3 | POWER | ROTOR WK² | MAX. LOAD WK² | SAFE STALL TIME | STARTS/HOUR | MOTOR WGT |
|--------------|--------|-------------|---------------|-----------------|-------------|-----------|
| 54 dBA | 63 dBA | 2.50 LB-FT² | 0 LB-FT² | 20 SEC. | 0 | 350 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 | T | NONE | NONE | 1045 HOT ROLLED (C-204) | ALUMINUM |
| 6309 6208 | | | | | | |

| THERMOSTATS | PROTECTORS | WDG RTD's | BRG RTD's | THERMISTORS | CONTROL | SPACE HEATERS |
|-------------|------------|-----------|-----------|-------------|---------|---------------|
| NONE | 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 |
|--------------|--------------|--------------|--------------|--------------|--------------------|-------|
| 2.157 | 1.917 | 7.766 | 9.585 | 92.3 | 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 |
| | FT-LB: NA | |
| | VOLTAGE: NONE | HZ: |
| | UL: V-INS, CONST UL REC | |

Data Sheet

Date: 1/19/2018

LM34117



Data @ 575 V

Motor Load Data

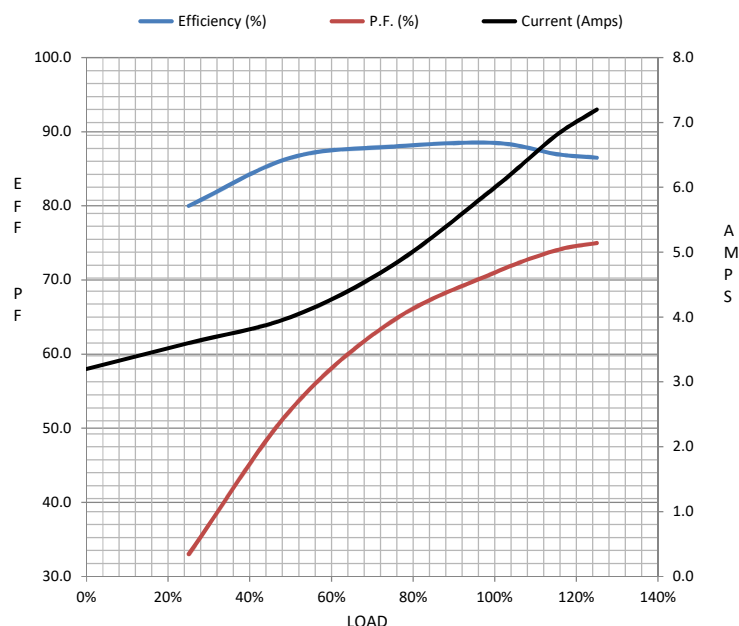
| Load | 0% | 25% | 50% | 75% | 100% | 115% | 125% | LR | |
|----------------|------|------|------|------|------|------|------|------|--|
| Current (Amps) | 3.2 | 3.6 | 4.0 | 4.8 | 6.0 | 6.8 | 7.2 | 25.6 | |
| Torque (ft-lb) | 0.00 | 7.5 | 15.0 | 22.5 | 30.0 | 35.0 | 38.0 | 42.0 | |
| RPM | 900 | 895 | 885 | 880 | 875 | 870 | 865 | 0 | |
| Efficiency (%) | | 80.0 | 86.5 | 88.0 | 88.5 | 87.0 | 86.5 | | |
| P.F. (%) | 6.5 | 33.0 | 52.5 | 64.5 | 71.0 | 74.0 | 75.0 | 36.0 | |

Motor Speed Data

| | LR | Pull-Up | BD | Rated | Idle |
|----------------|------|---------|------|-------|------|
| Speed (RPM) | 0 | 450 | 780 | 875 | 900 |
| Current (Amps) | 25.6 | 23.2 | 16.0 | 6.0 | 3.2 |
| Torque (ft-lb) | 42.0 | 38.0 | 66.0 | 30.0 | 0.00 |

Information Block

| | | | | |
|----------------------------|-----------------|--------|--------|---------|
| HP | 5.0 | | | |
| Sync. RPM | 900 | | | |
| Frame | 254 | | | |
| Enclosure | TEFC | | | |
| Construction | TFY | | | |
| Voltage | 575 V | | | |
| Frequency | 60 Hz | | | |
| Design | B | | | |
| LR Code letter | F | | | |
| Service Factor | 1.15 | | | |
| Temp Rise @ FL | 40 °C | | | |
| Duty | CONT | | | |
| Ambient | 40 °C | | | |
| Elevation | 1,000 feet | | | |
| Rotor/Shaft wk² | 2.50 Lb-Ft² | | | |
| Ref Wdg | K254826 R6 | | | |
| Sound Pressure @ 1M | 54 dBA | | | |
| VFD Rating | NONE | | | |
| Outline Dwg | B-SS321100-1200 | | | |
| Conn. Diag | A-EE7300 | | | |
| Additional Specifications: | | | | |
| 0 | | | | |
| 0 | | | | |
| EQUIV CKT (OHMS / PHASE) | | | | |
| R1 | R2 | X1 | X2 | Xm |
| 2.1570 | 1.9170 | 7.7660 | 9.5850 | 92.3000 |



Speed - Torque Curve

