

BALDOR® • RELIANCE 

Product Information Packet

EM3311T-G

7.5HP,1770RPM,3PH,60HZ,213T,3734M,OPSB,F

| Part Detail | | | | | | | |
|-------------|--------|-------------|------------|-------------|--------|---------------|------------|
| Revision: | U | Status: | PRD/A | Change #: | | Proprietary: | No |
| Type: | AC | Elec. Spec: | 37WGS520 | CD Diagram: | CD0005 | Mfg Plant: | |
| Mech. Spec: | 37J839 | Layout: | 37LYJ839 | Poles: | 04 | Created Date: | 09-07-2010 |
| Base: | RG | Eff. Date: | 07-09-2018 | Leads: | 9#14 | | |

| Specs | | | |
|---------------------------------|-------------------------|--------------------------------|-----------------------|
| Catalog Number: | EM3311T-G | Heater Indicator: | No Heater |
| Enclosure: | OPSB | Insulation Class: | H |
| Frame: | 213T | Inverter Code: | Inverter Ready |
| Frame Material: | Steel | KVA Code: | J |
| Output @ Frequency: | 7.500 HP @ 60 HZ | Lifting Lugs: | Standard Lifting Lugs |
| Synchronous Speed @ Frequency: | 1800 RPM @ 60 HZ | Locked Bearing Indicator: | Locked Bearing |
| Voltage @ Frequency: | 460.0 V @ 60 HZ | Motor Lead Quantity/Wire Size: | 9 @ 14 AWG |
| | 230.0 V @ 60 HZ | Motor Lead Exit: | Ko Box |
| XP Class and Group: | None | Motor Lead Termination: | Flying Leads |
| XP Division: | Not Applicable | Motor Type: | 3734M |
| Agency Approvals: | UR | Mounting Arrangement: | F1 |
| | CSA EEV | Power Factor: | 79 |
| | CSA | Product Family: | General Purpose |
| Auxillary Box: | No Auxillary Box | Pulley End Bearing Type: | Ball |
| Auxillary Box Lead Termination: | None | Pulley Face Code: | Standard |
| Base Indicator: | Rigid | Pulley Shaft Indicator: | Standard |
| Bearing Grease Type: | Polyrex EM (-20F +300F) | Rodent Screen: | None |
| Blower: | None | Shaft Extension Location: | Pulley End |

| | | | |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
| Current @ Voltage: | 19.400 A @ 230.0 V | Shaft Ground Indicator: | Shaft Grounding |
| | 20.400 A @ 208.0 V | Shaft Rotation: | Reversible |
| | 9.700 A @ 460.0 V | Shaft Slinger Indicator: | No Slinger |
| Design Code: | A | Speed Code: | Single Speed |
| Drip Cover: | No Drip Cover | Motor Standards: | NEMA |
| Duty Rating: | CONT | Starting Method: | Direct on line |
| Electrically Isolated Bearing: | Not Electrically Isolated | Thermal Device - Bearing: | None |
| Feedback Device: | NO FEEDBACK | Thermal Device - Winding: | None |
| Front Face Code: | Standard | Vibration Sensor Indicator: | No Vibration Sensor |
| Front Shaft Indicator: | None | Winding Thermal 1: | None |
| | | Winding Thermal 2: | None |

| | | | | | | | | | | |
|----------------------------------|--------------|--|--|-------------|------|-----------------------|----|--|--------------|------|
| Nameplate NP3553L | | | | | | | | | | |
| CAT.NO. | EM3311T-G | | | | | | | | | |
| SPEC | 37J839S520G1 | | | | | | | | | |
| HP | 7.5 | | | | | | | | | |
| VOLTS | 230/460 | | | | | | | | | |
| AMPS | 19.4/9.7 | | | | | | | | | |
| RPM | 1770 | | | | | | | | | |
| FRAME | 213T | | | | | HZ | 60 | | PH | 3 |
| SF | 1.15 | | | CODE | J | DES | A | | CLASS | H |
| NEMA NOM. EFF | 91 | | | PF | 79 | | | | | |
| RATING | 40C AMB-CONT | | | | | | | | | |
| CC | 010A | | | | | USABLE AT 208V | | | | 20.4 |
| ENCL | OPSB | | | SER | | | | | | |
| DE | 6307 | | | ODE | 6206 | | | | | |
| VPWM INVERTER READY | | | | | | | | | | |
| CT30-60(2:1) VT3-60(20:1) | | | | | | | | | | |

| Parts List | | |
|-------------|--|----------|
| Part Number | Description | Quantity |
| SA202657 | SA 37J839S520G1 | 1.000 EA |
| RA189934 | RA 37J839S520G1 | 1.000 EA |
| HA6361A01 | LIFTING LUG FOR 37, 39 & 40 FRAME ZINC | 2.000 EA |
| 37CB3006 | 37 CB CASTING W/1.38 LEAD HOLE @ 6:00 | 1.000 EA |
| 51XW2520A10 | .25-20 X .62, TAPTITE II, HEX WSHR SLTD | 2.000 EA |
| 11XW1032G06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 EA |
| 37EP3203A00 | MASTER,ODE,206 BRG,GREASER | 1.000 EA |
| HW4500A01 | 1641B(ALEMITE)400 UNIV, GREASE FITT | 1.000 EA |
| HW5100A06 | W2420-025 WVY WSHR (WB) | 1.000 EA |
| 37EP3204B00 | MASTER,DE,307 BRG,GREASER,LOCKED BEARING | 1.000 EA |
| 10XN2520A28 | 1/4-20X 1 3/4 HEX HD | 4.000 EA |
| HW1001A25 | LOCKWASHER 1/4, ZINC PLT .493 OD, .255 I | 4.000 EA |
| HW4500A01 | 1641B(ALEMITE)400 UNIV, GREASE FITT | 1.000 EA |
| XY3118A12 | 5/16-18 HEX NUT DIRECTIONAL SERRATION | 4.000 EA |
| 37CB4516 | LIPPED LID FOR 37 FRAME NEC KOBX | 1.000 EA |
| 51XW0832A07 | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 4.000 EA |
| HW2501F21 | KEY, 5/16 SQ X 2.375 | 1.000 EA |
| HA7000A02 | KEY RETAINER RING, 1 1/8 DIA, 1 3/8 DIA | 1.000 EA |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS | 2.000 EA |
| LB1115N | LABEL,LIFTING DEVICE (ON ROLLS) | 1.000 EA |
| LB1459 | AEGIS SGR LABEL "AEGISLBL-100" | 1.000 EA |
| MJ1000A02 | GREASE, POLYREX EM EXXON (USe 4824-15A) | 0.050 LB |
| HA3104A39 | THRUBOLT-5/16-18 X 12.250 | 4.000 EA |
| 37AD2001A01 | BAFFLE PLATE, PLASTIC 0.63" WIDTH | 2.000 EA |

| Parts List (continued) | | |
|-------------------------------|--|-----------------|
| Part Number | Description | Quantity |
| MG1000Y03 | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20, | 0.028 GA |
| LC0005E01 | CONN.DIA./WARNING LABEL (LC0005/LB1119N) | 1.000 EA |
| NP3553L | ALUM SUPER-E VPWM INVERTER READY UL CSA- | 1.000 EA |
| 36PA1001 | PKG GRP, PRINT PK1017A06 | 1.000 EA |
| MN416A01 | TAG-INSTAL-MAINT no wire (1200/bx) 5/18 | 1.000 EA |
| LB1350 | BAR CODE LABEL FOR YORK | 1.000 EA |
| FE-0000001 | ZRTG FE ASSEMBLY | 1.000 EA |
| PE-0000001 | ZRTG PE ASSEMBLY | 1.000 EA |

AC Induction Motor Performance Data

Record # 52783 - Typical performance - not guaranteed values

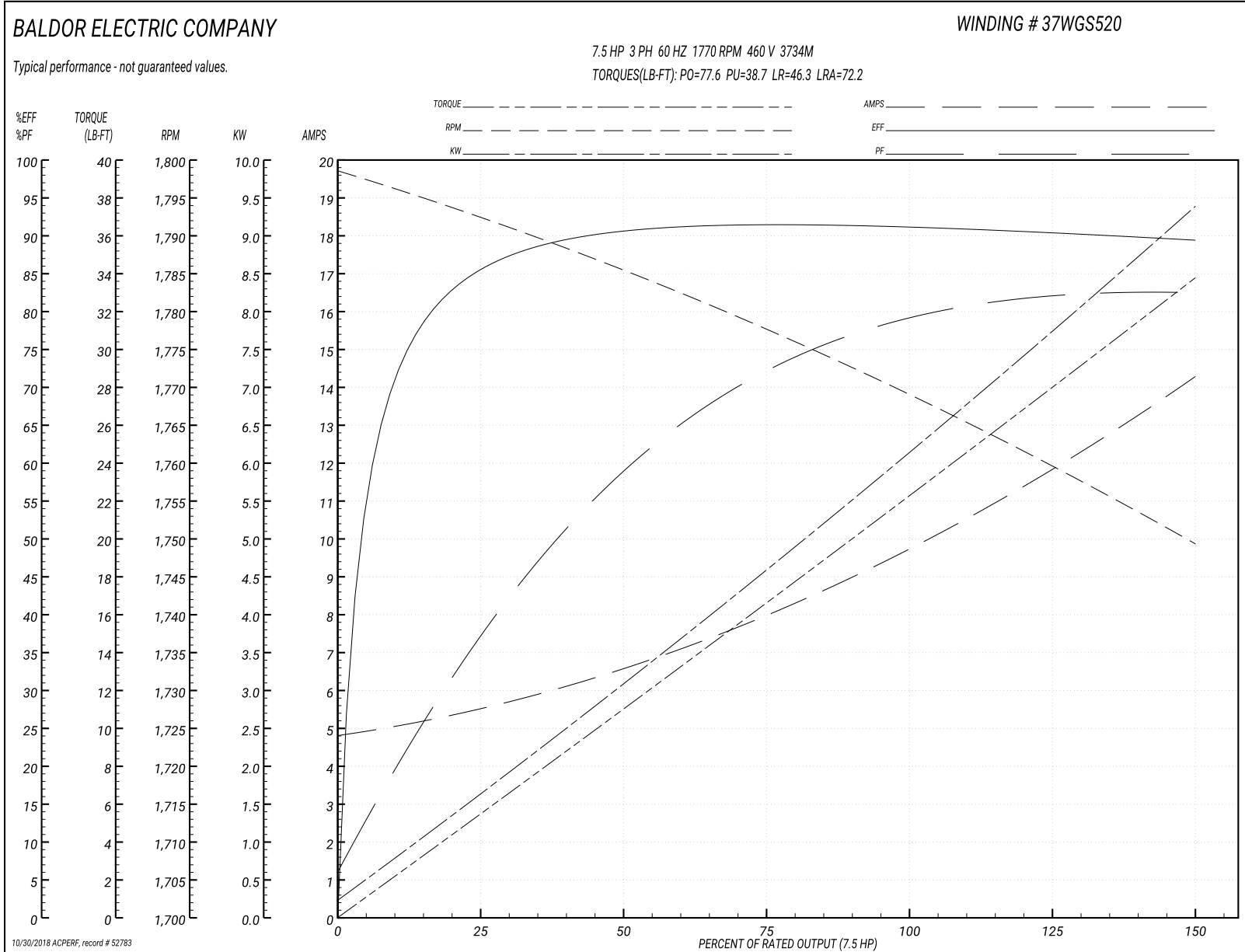
| | | |
|-------------------------------|--------------------|------------------------|
| Winding: 37WGS520-R013 | Type: 3734M | Enclosure: OPSB |
|-------------------------------|--------------------|------------------------|

| Nameplate Data | | | | 460 V, 60 Hz: High Voltage Connection | |
|-----------------------|--------------|--------------|----|--|--------------------------|
| Rated Output (HP) | 7.5 | | | Full Load Torque | 22.4 LB-FT |
| Volts | 230/460 | | | Start Configuration | direct on line |
| Full Load Amps | 19.4/9.7 | | | Breakdown Torque | 77.6 LB-FT |
| R.P.M. | 1770 | | | Pull-up Torque | 38.7 LB-FT |
| Hz | 60 | Phase | 3 | Locked-rotor Torque | 46.3 LB-FT |
| NEMA Design Code | A | KVA Code | J | Starting Current | 72.2 A |
| Service Factor (S.F.) | 1.15 | | | No-load Current | 4.94 A |
| NEMA Nom. Eff. | 91 | Power Factor | 79 | Line-line Res. @ 25°C | 1.53 Ω |
| Rating - Duty | 40C AMB-CONT | | | Temp. Rise @ Rated Load | 37°C |
| S.F. Amps | | | | Temp. Rise @ S.F. Load | 45°C |
| | | | | Locked-rotor Power Factor | 39.2 |
| | | | | Rotor inertia | 0.836 LB-FT ² |

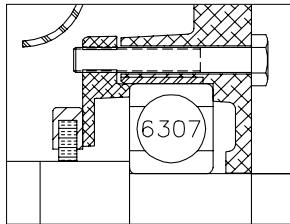
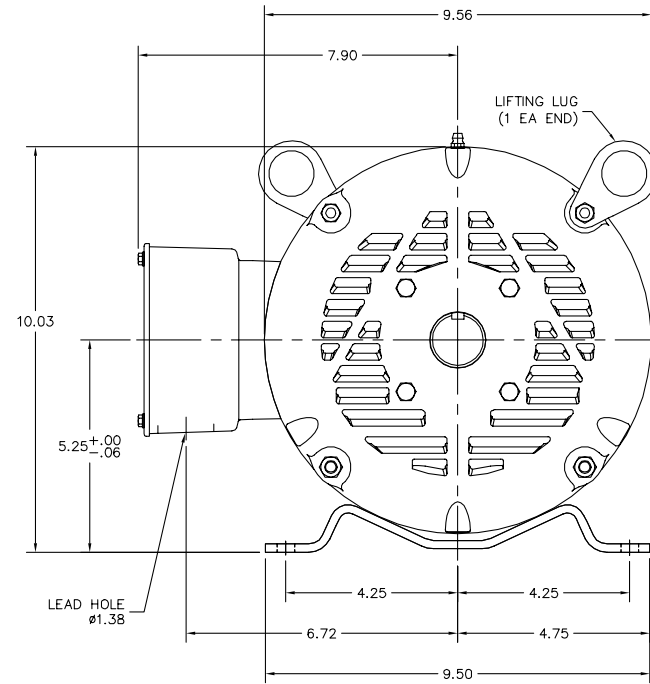
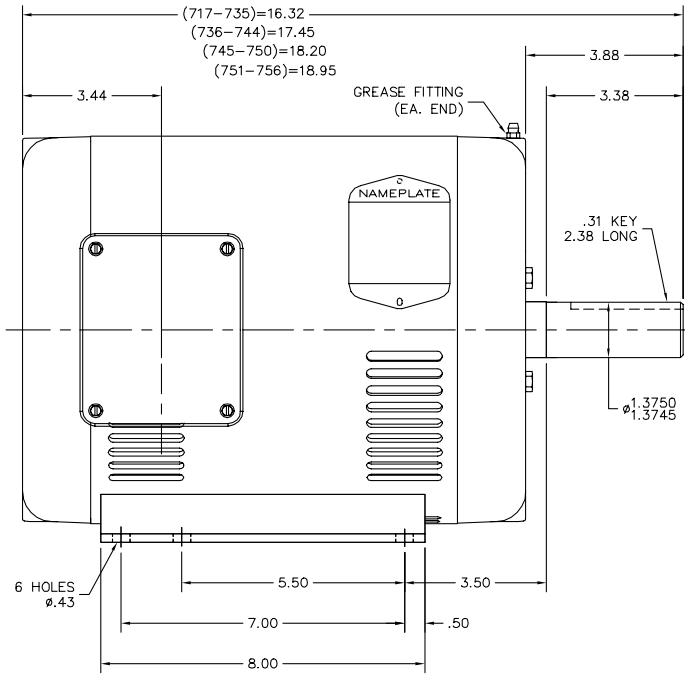
Load Characteristics 460 V, 60 Hz, 7.5 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor | 38 | 60 | 72 | 78 | 82 | 83 | 81 |
| Efficiency | 85.1 | 90.4 | 91.6 | 91.3 | 90.5 | 89.4 | 90.7 |
| Speed | 1792 | 1785 | 1778 | 1769 | 1760 | 1749 | 1766 |
| Line amperes | 5.35 | 6.5 | 8.01 | 9.89 | 11.9 | 14.2 | 11 |

Performance Graph at 460V, 60Hz, 7.5HP Typical performance - Not guaranteed values



37LYJ839



PU END DETAIL

CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT BALDOR'S PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION.

| | | |
|----------------------|------------------------------|-------------------|
| REV. DESC: NEW | VERSION: 00 | TDR: 000000553350 |
| REV. LTR: - | REVISED: 01:15:32 08/26/2010 | BY: ENWINBO |
| FILE: \AAA\00174\569 | | |
| MTL: - | | |

BALDOR

HOR 213-5T OPSB M, AEGIS INT SHAFT GND

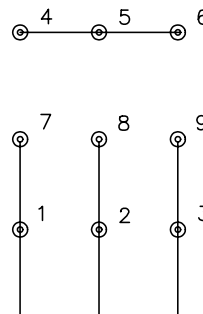
SH 1 of 1

37LYJ839

CD0005



LOW VOLTAGE
(2Y)



LINE

HIGH VOLTAGE
(1Y)



LINE

NOTES:

1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

REV. DESC: REVISE TO SHOW OPTIONAL COLORS

REV. LTR: E BY: JLP

REVISED: 01/19/99 10:15

TDR: 0171435

90000

FILE: AAA00005140

MDL: -

MTL: -

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005