

BALDOR® • RELIANCE 

Product Information Packet

M1224T

5/2.2HP, 1725/1140RPM, 3PH, 60HZ, 215T, 3735M

| Part Detail | | | | | | | |
|-------------|--------|-------------|------------|-------------|--------|---------------|----|
| Revision: | Z | Status: | PRD/A | Change #: | | Proprietary: | No |
| Type: | AC | Elec. Spec: | 37WG023 | CD Diagram: | CD0013 | Mfg Plant: | |
| Mech. Spec: | 37B001 | Layout: | 37LYB001 | Poles: | 04/06 | Created Date: | |
| Base: | RG | Eff. Date: | 02-27-2017 | Leads: | 6#14 | | |

| Specs | | | |
|---------------------------------|-------------------------|--------------------------------|-----------------------|
| Catalog Number: | M1224T | Insulation Class: | F |
| Enclosure: | OPEN | Inverter Code: | Not Inverter |
| Frame: | 215T | KVA Code: | J |
| Frame Material: | Steel | Lifting Lugs: | Standard Lifting Lugs |
| Output @ Frequency: | 5.000 HP @ 60 HZ | Locked Bearing Indicator: | No Locked Bearing |
| | 2.200 HP @ 60 HZ | Motor Lead Quantity/Wire Size: | 6 @ 14 AWG |
| Synchronous Speed @ Frequency: | 1200 RPM @ 60 HZ | Motor Lead Exit: | Ko Box |
| Voltage @ Frequency: | 460.0 V @ 60 HZ | Motor Lead Termination: | Flying Leads |
| XP Class and Group: | None | Motor Type: | 3735M |
| XP Division: | Not Applicable | Mounting Arrangement: | F1 |
| Agency Approvals: | UR | Product Family: | General Purpose |
| | CSA | Pulley End Bearing Type: | Ball |
| Auxillary Box: | No Auxillary Box | Pulley Face Code: | Standard |
| Auxillary Box Lead Termination: | None | Pulley Shaft Indicator: | Standard |
| Base Indicator: | Rigid | Rodent Screen: | None |
| Bearing Grease Type: | Polyrex EM (-20F +300F) | Shaft Extension Location: | Pulley End |
| Blower: | None | Shaft Ground Indicator: | No Shaft Grounding |
| Current @ Voltage: | 6.400 A @ 460.0 V | Shaft Rotation: | Reversible |

| | | | |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
| Design Code: | B | Shaft Slinger Indicator: | No Slinger |
| Drip Cover: | No Drip Cover | Speed Code: | 2S-2W-VT |
| Duty Rating: | CONT | Motor Standards: | NEMA |
| Electrically Isolated Bearing: | Not Electrically Isolated | Starting Method: | Direct on line |
| Feedback Device: | NO FEEDBACK | Thermal Device - Bearing: | NONE (OLD) |
| Front Face Code: | Standard | Thermal Device - Winding: | None |
| Front Shaft Indicator: | None | Vibration Sensor Indicator: | No Vibration Sensor |
| Heater Indicator: | No Heater | Winding Thermal 1: | None |
| | | Winding Thermal 2: | None |

| | | | | | | | | | | |
|--------------------------|--------------|--|--|-------------|------------|------------|---|--|-----------------------|---|
| Nameplate NP1256L | | | | | | | | | | |
| CAT.NO. | M1224T | | | | | | | | | |
| SPEC. | 37B01W23 | | | | | | | | | |
| HP | 5/2.2 | | | | | | | | | |
| VOLTS | 460 | | | | | | | | | |
| AMP | 6.4/3.5 | | | | | | | | | |
| RPM | 1725/1140 | | | | | | | | | |
| FRAME | 215T | | | | HZ | 60 | | | PH | 3 |
| SER.F. | 1.15 | | | CODE | J | DES | B | | CLASS | F |
| NEMA-NOM-EFF | | | | PF | | | | | | |
| RATING | 40C AMB-CONT | | | | | | | | | |
| CC | | | | | | | | | USABLE AT 208V | |
| DE | 6307 | | | | ODE | 6206 | | | | |
| ENCL | OPEN | | | SN | | | | | | |

| Parts List | | |
|-------------|--|----------|
| Part Number | Description | Quantity |
| SA030351 | SA 37B01W23 | 1.000 EA |
| RA026392 | RA 37B01W23 | 1.000 EA |
| HW3200A01 | 3/8-16X3/4 I-BLT WELDED F/S | 1.000 EA |
| 37CB3006 | 37 CB CASTING W/1.38 LEAD HOLE @ 6:00 | 1.000 EA |
| 51XW2520A12 | .25-20 X .75, 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 |
| 37EP3204D00 | MASTER,DE,307 BRG,GREASER | 1.000 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 |
| MJ1000A02 | GREASE, POLYREX EM EXXON (USe 4824-15A) | 0.050 LB |
| MG1000G27 | MED CHARCOAL METALLIC GREY 400-0096 | 0.028 GA |
| HA3104A14 | THRUBOLT- 5/16-18 X12.125(OHIO) | 4.000 EA |
| LB1119N | WARNING LABEL | 1.000 EA |
| LC0013 | CONNECTION LABEL | 1.000 EA |
| NP1256L | ALUM UL CSA CC INDUSTRIAL MOTOR A60 | 1.000 EA |

| Parts List (continued) | | |
|-------------------------------|---|-----------------|
| Part Number | Description | Quantity |
| 36PA1001 | PKG GRP, PRINT PK1017A06 | 1.000 EA |
| MN416A01 | TAG-INSTAL-MAINT no wire (1200/bx) 5/18 | 1.000 EA |
| PE-0000001 | ZRTG PE ASSEMBLY | 1.000 EA |
| FE-0000001 | ZRTG FE ASSEMBLY | 1.000 EA |

| Accessories | | |
|--------------------|--------------------|-------------------|
| Part Number | Description | Multiplier |
| 37-1404 | C FACE KIT | A8 |

AC Induction Motor Performance Data

Record # 37310 - Typical performance - not guaranteed values

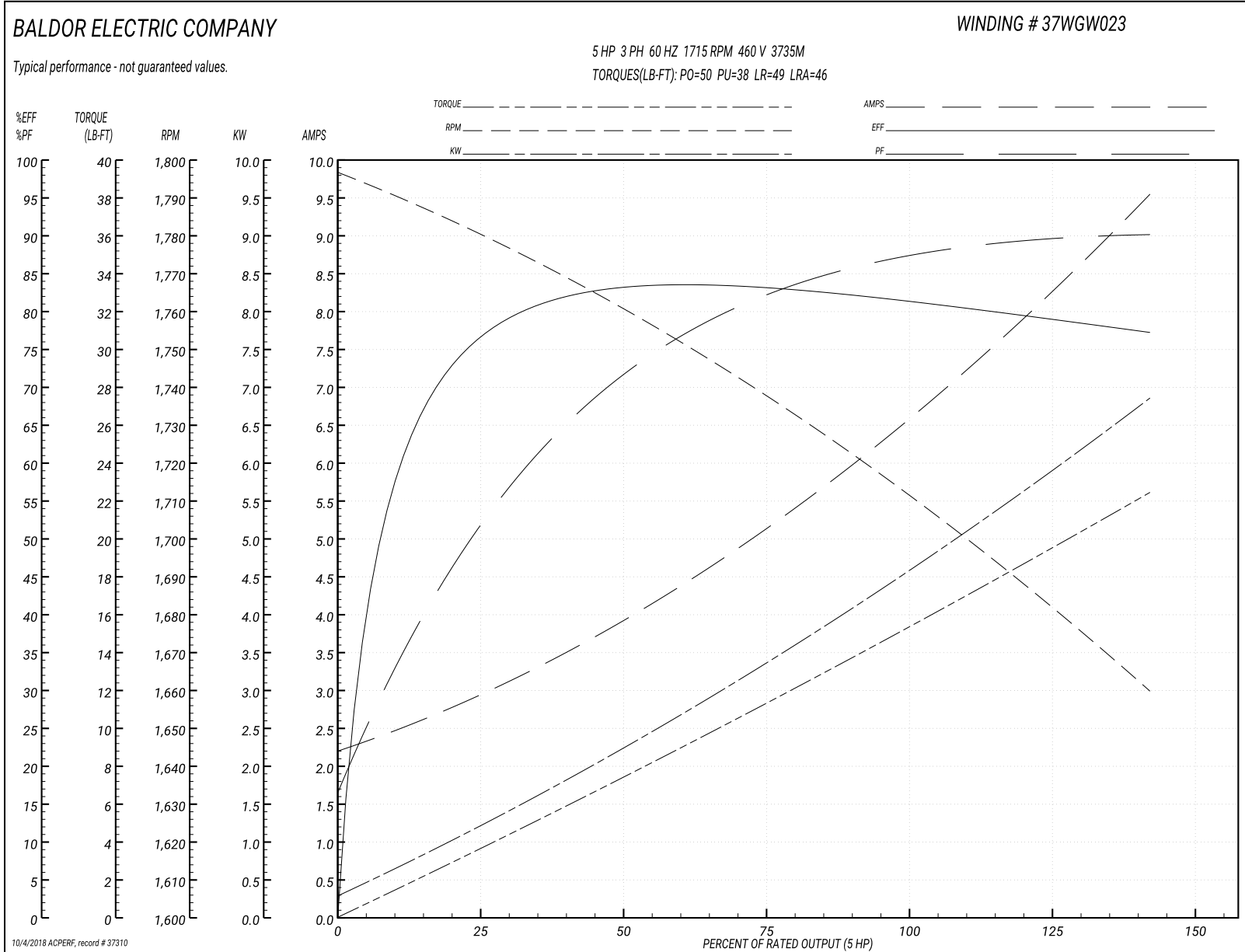
| | | |
|-------------------------------|--------------------|------------------------|
| Winding: 37WGW023-R002 | Type: 3735M | Enclosure: OPEN |
|-------------------------------|--------------------|------------------------|

| Nameplate Data | | | | 460 V, 60 Hz: High Speed Connection | |
|-----------------------|--------------|--------------|---|--|----------------|
| Rated Output (HP) | 5/2.2 | | | Full Load Torque | 15 LB-FT |
| Volts | 460 | | | Start Configuration | direct on line |
| Full Load Amps | 6.4/3.5 | | | Breakdown Torque | 50 LB-FT |
| R.P.M. | 1725/1140 | | | Pull-up Torque | 38 LB-FT |
| Hz | 60 | Phase | 3 | Locked-rotor Torque | 49 LB-FT |
| NEMA Design Code | B | KVA Code | J | Starting Current | 46 A |
| Service Factor (S.F.) | 1.15 | | | No-load Current | 2.3 A |
| NEMA Nom. Eff. | 0 | Power Factor | 0 | Line-line Res. @ 25°C | 4.21 Ω |
| Rating - Duty | 40C AMB-CONT | | | Temp. Rise @ Rated Load | 57°C |
| S.F. Amps | | | | Temp. Rise @ S.F. Load | 70°C |

Load Characteristics 460 V, 60 Hz, 5 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor | 56 | 73 | 81 | 86 | 88 | 91 | 87 |
| Efficiency | 76.3 | 82.4 | 83.2 | 81.6 | 80 | 76.9 | 80.6 |
| Speed | 1779 | 1759 | 1738 | 1715 | 1689 | 1658 | 1699 |
| Line amperes | 2.8 | 3.9 | 5.2 | 6.5 | 8 | 9.5 | 7.4 |

Performance Graph at 460V, 60Hz, 5.0HP Typical performance - Not guaranteed values



AC Induction Motor Performance Data

Record # 37311 - Typical performance - not guaranteed values

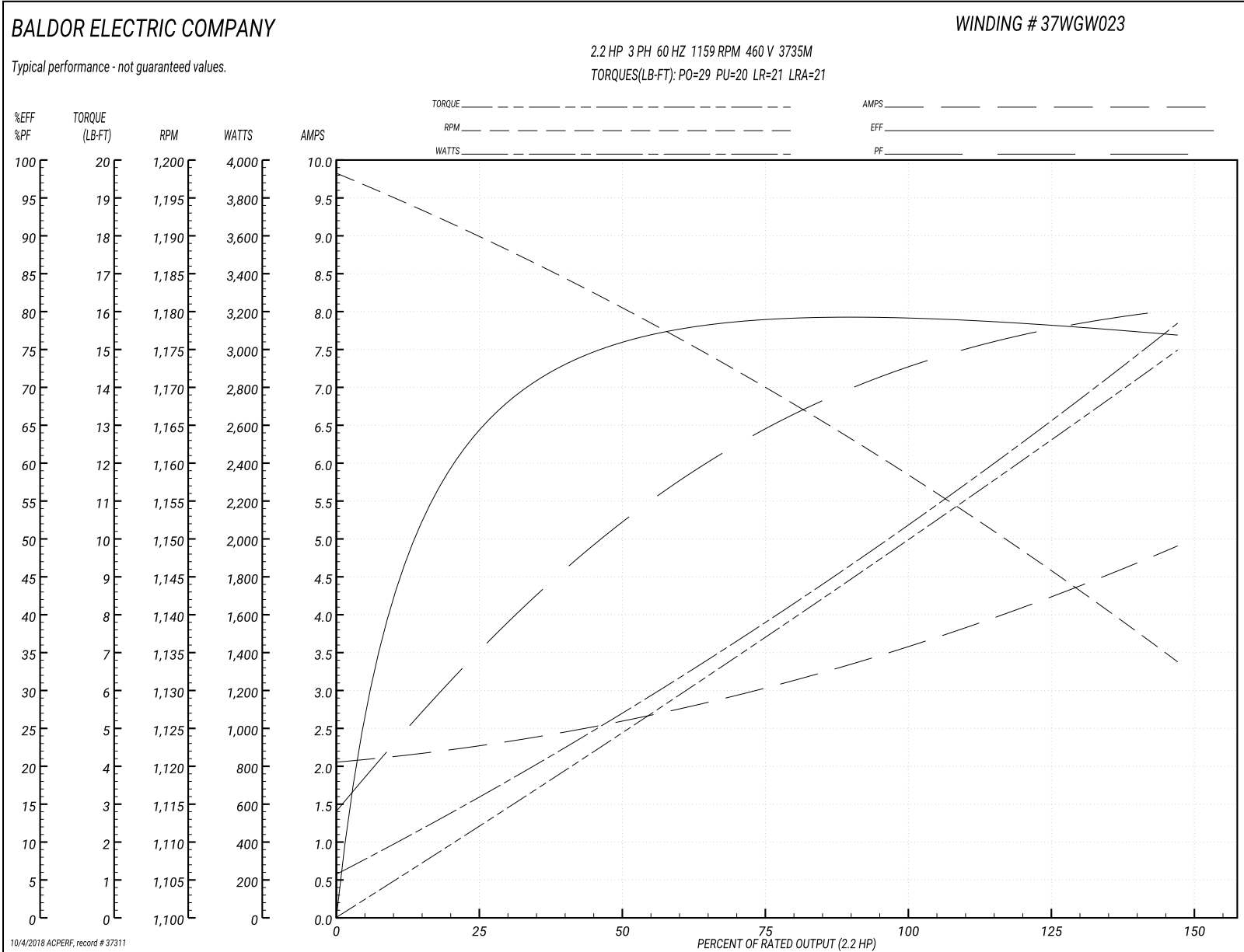
| | | |
|-------------------------------|--------------------|------------------------|
| Winding: 37WGW023-R002 | Type: 3735M | Enclosure: OPEN |
|-------------------------------|--------------------|------------------------|

| Nameplate Data | | | | 460 V, 60 Hz: Low Speed Connection | |
|-----------------------|--------------|--------------|---|---------------------------------------|----------------|
| Rated Output (HP) | 5/2.2 | | | Full Load Torque | 10 LB-FT |
| Volts | 460 | | | Start Configuration | direct on line |
| Full Load Amps | 6.4/3.5 | | | Breakdown Torque | 29 LB-FT |
| R.P.M. | 1725/1140 | | | Pull-up Torque | 20 LB-FT |
| Hz | 60 | Phase | 3 | Locked-rotor Torque | 21 LB-FT |
| NEMA Design Code | B | KVA Code | J | Starting Current | 21 A |
| Service Factor (S.F.) | 1.15 | | | No-load Current | 2.1 A |
| NEMA Nom. Eff. | 0 | Power Factor | 0 | Line-line Res. @ 25°C | 8.36 Ω |
| Rating - Duty | 40C AMB-CONT | | | Temp. Rise @ Rated Load | 33°C |
| S.F. Amps | | | | Temp. Rise @ S.F. Load | 39°C |

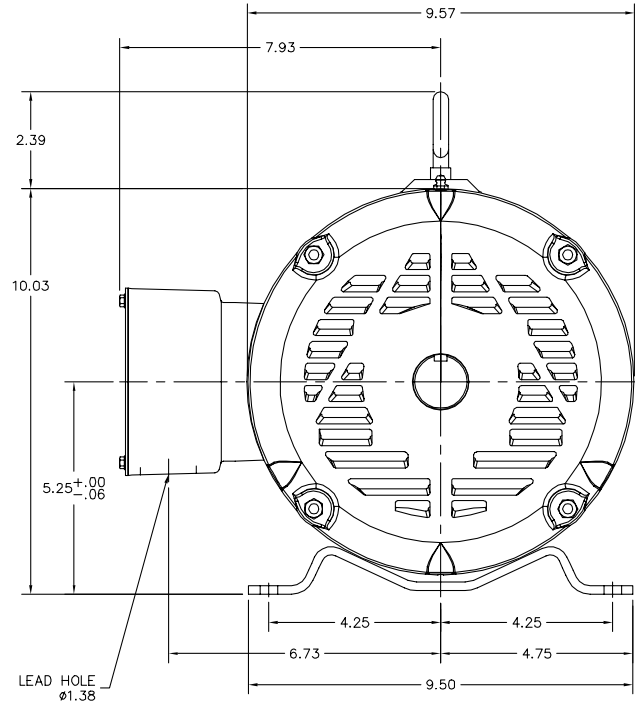
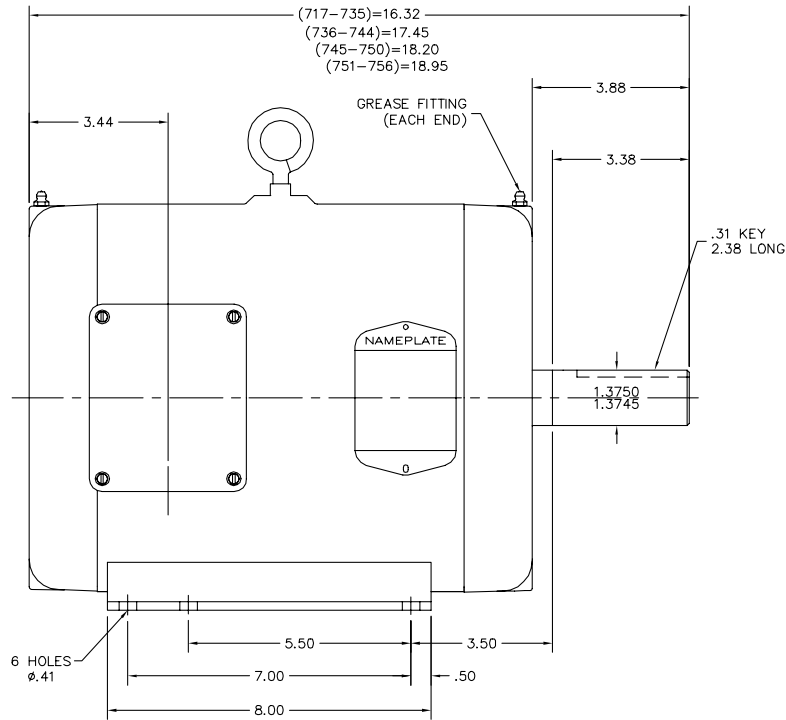
Load Characteristics 460 V, 60 Hz, 2.2 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor | 37 | 53 | 64 | 73 | 78 | 81 | 76 |
| Efficiency | 65.9 | 76.2 | 78.6 | 79.1 | 78.5 | 76.8 | 78.7 |
| Speed | 1189 | 1179 | 1170 | 1159 | 1147 | 1133 | 1152 |
| Line amperes | 2.2 | 2.6 | 3.1 | 3.6 | 4.2 | 4.9 | 3.96 |

Performance Graph at 460V, 60Hz, 2.2HP Typical performance - Not guaranteed values



37LYB001



37LYB001

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

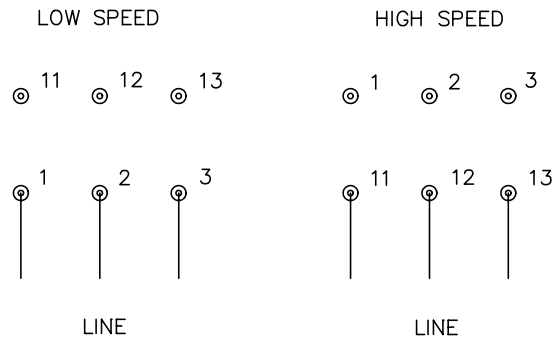
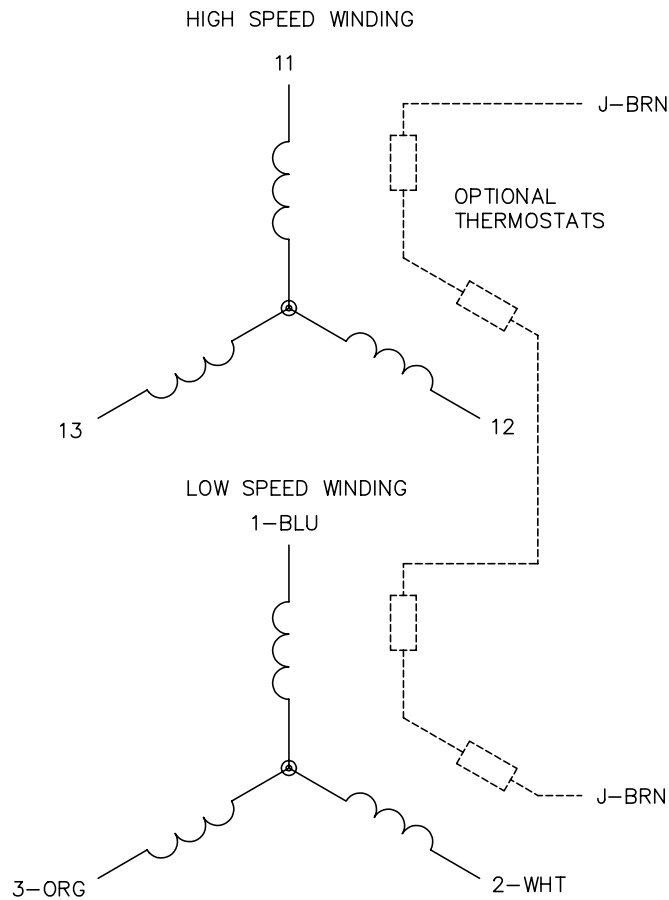
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| FILE: \AAA\00002\757 | | |
| MTL: - | | |

BALDOR

STANDARD HORZ NEMA 213T-215T OPEN 37M

SH 1 of 1

CD0013



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 VARY.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

| | | | |
|---|---------|------------------------|--------------|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS | | | |
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| Ω10003 | | FILE: AAA00005143 | MDL: - |
| | | MTL: - | |

BALDOR ELECTRIC Co.

3PH, SV, 6 LEADS, 2-SPEED 2-WINDING

CD0013