

BALDOR® • RELIANCE 

Product Information Packet

M1759T

7.5/1.9HP, 1740/870RPM, 3PH, 60HZ, 215T, 3744

| Part Detail | | | | | | | |
|-------------|--------|-------------|------------|-------------|--------|---------------|------------|
| Revision: | A | Status: | PRD/A | Change #: | | Proprietary: | No |
| Type: | AC | Elec. Spec: | 37WGS198 | CD Diagram: | CD0032 | Mfg Plant: | |
| Mech. Spec: | 37T397 | Layout: | 37LYT397 | Poles: | 04/08 | Created Date: | 06-11-2019 |
| Base: | RG | Eff. Date: | 07-18-2019 | Leads: | 6#14 | | |

| Specs | | | |
|---------------------------------|-------------------------|--------------------------------|-----------------------|
| Catalog Number: | M1759T | Insulation Class: | F |
| Enclosure: | TEFC | Inverter Code: | Not Inverter |
| Frame: | 215T | KVA Code: | K |
| Frame Material: | Steel | Lifting Lugs: | Standard Lifting Lugs |
| Output @ Frequency: | 7.500 HP @ 60 HZ | Locked Bearing Indicator: | No Locked Bearing |
| | 1.900 HP @ 60 HZ | Motor Lead Quantity/Wire Size: | 6 @ 14 AWG |
| Synchronous Speed @ Frequency: | 1800 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: | 3744M |
| 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: | 9.300 A @ 460.0 V | Shaft Rotation: | Reversible |

| | | | |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
| Design Code: | A | Shaft Slinger Indicator: | No Slinger |
| Drip Cover: | No Drip Cover | Speed Code: | 2S-1W-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 |
| 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. | M1759T | | | | | | | | | |
| SPEC. | 37T397S198 | | | | | | | | | |
| HP | 7.5/1.9 | | | | | | | | | |
| VOLTS | 460 | | | | | | | | | |
| AMP | 9.3/3.4 | | | | | | | | | |
| RPM | 1740/870 | | | | | | | | | |
| FRAME | 215T | | | | HZ | 60 | | | PH | 3 |
| SER.F. | 1.15 | | CODE | K | DES | A | | CLASS | F | |
| NEMA-NOM-EFF | | | PF | | | | | | | |
| RATING | 40C AMB-CONT | | | | | | | | | |
| CC | | | | | | | | | USABLE AT 208V | |
| DE | 6307 | | | | ODE | 6206 | | | | |
| ENCL | TEFC | | SN | | | | | | | |

| Parts List | | |
|-------------|--|----------|
| Part Number | Description | Quantity |
| SA370537 | SA 37T397S198 | 1.000 EA |
| RA360196 | RA 37T397S198 | 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 |
| 37GS1000SP | GASKET, CONDUIT BOX STD., .06 THICK LEXI | 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 |
| 37EP3101A01 | FR ENDPLATE, FOR ROUTING PURPOSES | 1.000 EA |
| HW4500A01 | 1641B(ALEMITE)400 UNIV, GREASE FITT | 1.000 EA |
| HW5100A06 | W2420-025 WVY WSHR (WB) | 1.000 EA |
| 37PE3100A01 | PUEP ASSEMBLY - ROUTING PUPROSES | 1.000 EA |
| HW4500A01 | 1641B(ALEMITE)400 UNIV, GREASE FITT | 1.000 EA |
| XY3118A12 | 5/16-18 HEX NUT DIRECTIONAL SERRATION | 4.000 EA |
| 51XB1214A20 | 12-14X1.25 HXWSSLD SERTYB | 1.000 EA |
| 07FH4007SP | PRIMED | 1.000 EA |
| 51XW1032A06 | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S | 3.000 EA |
| 37CB4516 | LIPPED LID FOR 37 FRAME NEC KOBX | 1.000 EA |
| 37GS1008 | 37 GS FOR CB LID - LEXIDE | 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 |
| LB1115N | LABEL,LIFTING DEVICE (ON ROLLS) | 1.000 EA |
| 85XU0407S04 | 4X1/4 U DRIVE PIN STAINLESS | 2.000 EA |
| MJ1000A02 | GREASE, MOBIL POLYREX EM - 124047 | 0.050 LB |

| Parts List (continued) | | |
|-------------------------------|---|-----------------|
| Part Number | Description | Quantity |
| 37FN3002A01SP | EXFN, PLASTIC, 9.00 OD, 1.155 ID | 1.000 EA |
| MG1000G27 | MED CHARCOAL METALLIC GREY 400-0096 | 0.028 GA |
| HA3104A17 | 5/16-18X13.250 T-BLT/OHIO | 4.000 EA |
| LB1119N | WARNING LABEL | 1.000 EA |
| LC0032 | CONNECTION LABEL | 1.000 EA |
| NP1256L | ALUM UL CSA CC INDUSTRIAL MOTOR A60 | 1.000 EA |
| G0PA1000 | PKG GRP, PRINT PK1026A06 | 1.000 EA |
| MN416A01 | TAG-INSTAL-MAINT no wire (1200/bx) 3/19 | 1.000 EA |

| Accessories | | |
|--------------------|--------------------|-------------------|
| Part Number | Description | Multiplier |
| 37-3301 | C FACE KIT | P1 |

AC Induction Motor Performance Data

Record # 22857 - Typical performance - not guaranteed values

| | | |
|-------------------------------|--------------------|------------------------|
| Winding: 37WGS198-R001 | Type: 3744M | Enclosure: TEFC |
|-------------------------------|--------------------|------------------------|

| Nameplate Data | | | | 460 V, 60 Hz: High Speed Connection | |
|-----------------------|--------------|--------------|---|--|----------------|
| Rated Output (HP) | 7.5/1.9 | | | Full Load Torque | 22.3 LB-FT |
| Volts | 460 | | | Start Configuration | direct on line |
| Full Load Amps | 9.3/3.4 | | | Breakdown Torque | 79.1 LB-FT |
| R.P.M. | 1740/870 | | | Pull-up Torque | 34.8 LB-FT |
| Hz | 60 | Phase | 3 | Locked-rotor Torque | 43.5 LB-FT |
| NEMA Design Code | A | KVA Code | K | Starting Current | 92.6 A |
| Service Factor (S.F.) | 1.15 | | | No-load Current | 3.32 A |
| NEMA Nom. Eff. | 0 | Power Factor | 0 | Line-line Res. @ 25°C | 1.63 Ω |
| Rating - Duty | 40C AMB-CONT | | | Temp. Rise @ Rated Load | 60°C |
| S.F. Amps | | | | Temp. Rise @ S.F. Load | 71°C |

Load Characteristics 460 V, 60 Hz, 7.5 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor | 55 | 75 | 84 | 88 | 89 | 91 | 89 |
| Efficiency | 80.2 | 86.3 | 87 | 87 | 85.9 | 84.5 | 86.3 |
| Speed | 1790 | 1781 | 1770 | 1760 | 1749 | 1736 | 1753 |
| Line amperes | 3.96 | 5.39 | 7.14 | 9.16 | 11.4 | 13.8 | 10.5 |

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

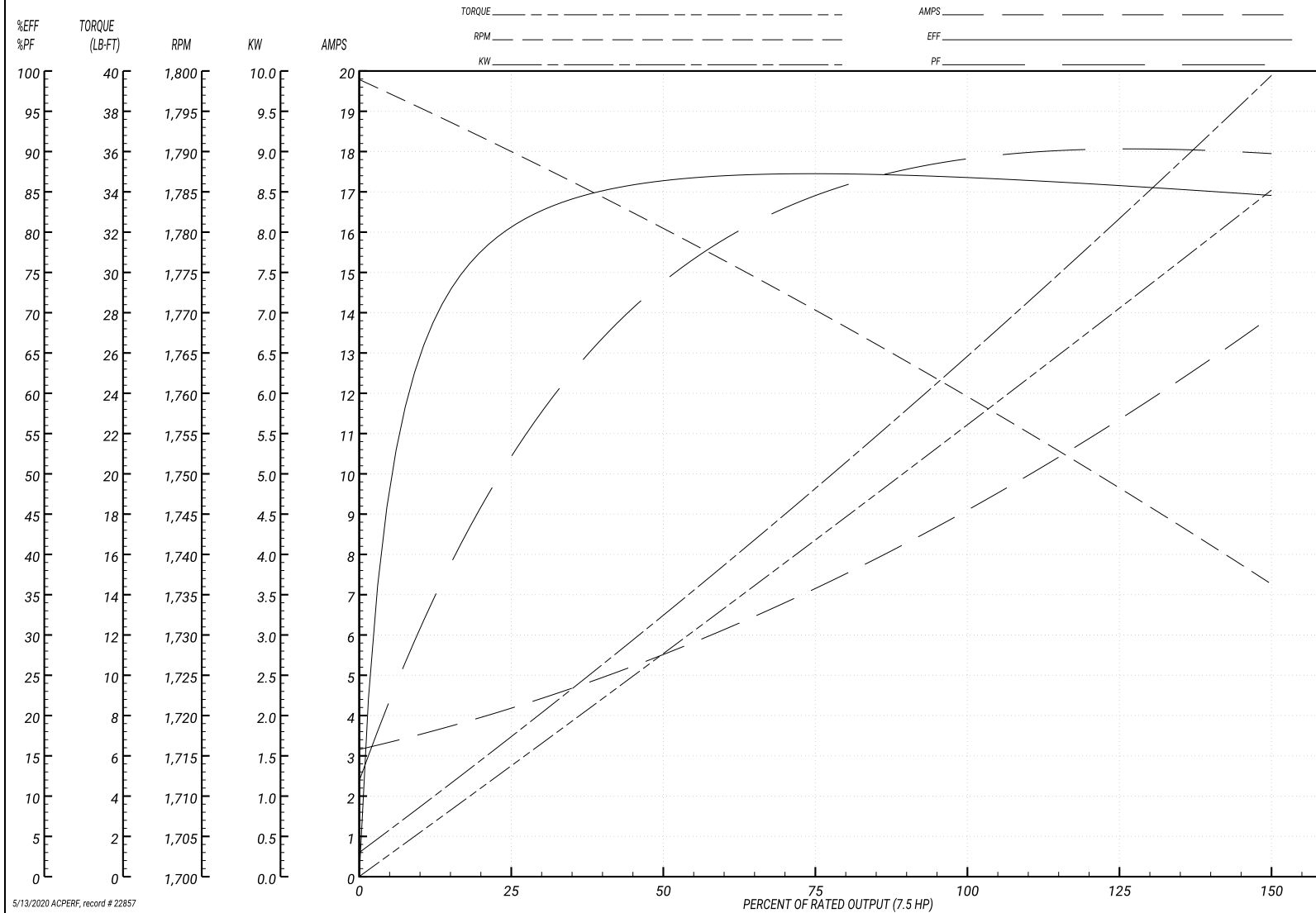
ABB Motors and Mechanical Inc.

WINDING # 37WGS198

Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 1760 RPM 460 V 3744M

TORQUES(LB-FT): PO=79.1 PU=34.8 LR=43.5 LRA=92.6



5/13/2020 ACPERF, record # 22857

AC Induction Motor Performance Data

Record # 22858 - Typical performance - not guaranteed values

| | | |
|-------------------------------|--------------------|------------------------|
| Winding: 37WGS198-R001 | Type: 3744M | Enclosure: TEFC |
|-------------------------------|--------------------|------------------------|

| Nameplate Data | | | | 460 V, 60 Hz: Low Speed Connection | |
|-----------------------|--------------|--------------|---|---------------------------------------|----------------|
| Rated Output (HP) | 7.5/1.9 | | | Full Load Torque | 11.5 LB-FT |
| Volts | 460 | | | Start Configuration | direct on line |
| Full Load Amps | 9.3/3.4 | | | Breakdown Torque | 36.6 LB-FT |
| R.P.M. | 1740/870 | | | Pull-up Torque | 14.9 LB-FT |
| Hz | 60 | Phase | 3 | Locked-rotor Torque | 17.6 LB-FT |
| NEMA Design Code | A | KVA Code | K | Starting Current | 16.9 A |
| Service Factor (S.F.) | 1.15 | | | No-load Current | 2.15 A |
| NEMA Nom. Eff. | 0 | Power Factor | 0 | Line-line Res. @ 25°C | 6.66 Ω |
| Rating - Duty | 40C AMB-CONT | | | Temp. Rise @ Rated Load | 42°C |
| S.F. Amps | | | | Temp. Rise @ S.F. Load | 48°C |

Load Characteristics 460 V, 60 Hz, 1.9 HP

| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor | 30 | 45 | 57 | 64 | 69 | 72 | 67 |
| Efficiency | 70.7 | 78.8 | 81.6 | 81.3 | 80.1 | 78.2 | 80.6 |
| Speed | 899 | 886 | 880 | 872 | 861 | 848 | 865 |
| Line amperes | 2.26 | 2.54 | 2.93 | 3.41 | 4.03 | 4.79 | 3.78 |

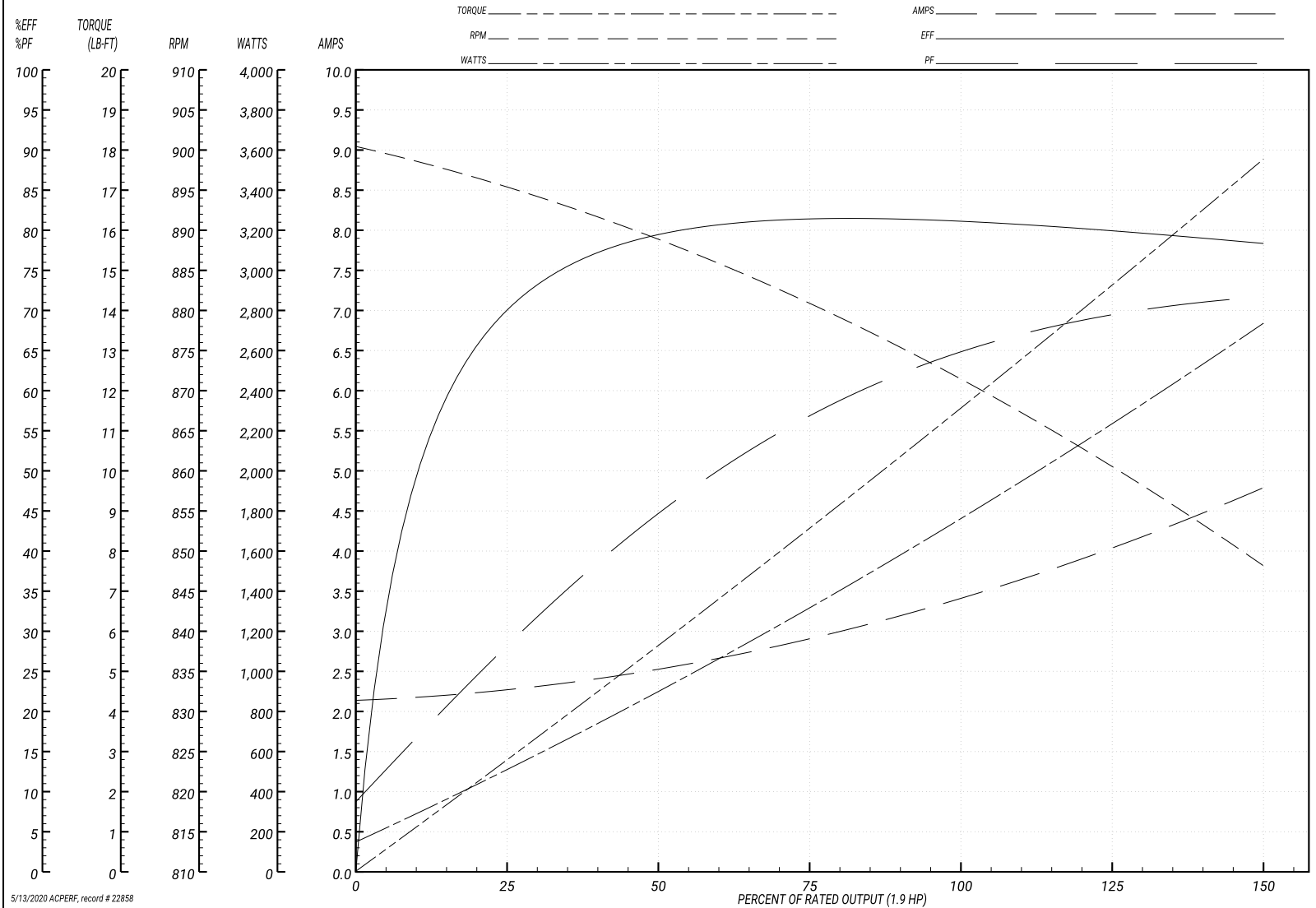
Performance Graph at 460V, 60Hz, 1.9HP Typical performance - Not guaranteed values

ABB Motors and Mechanical Inc.

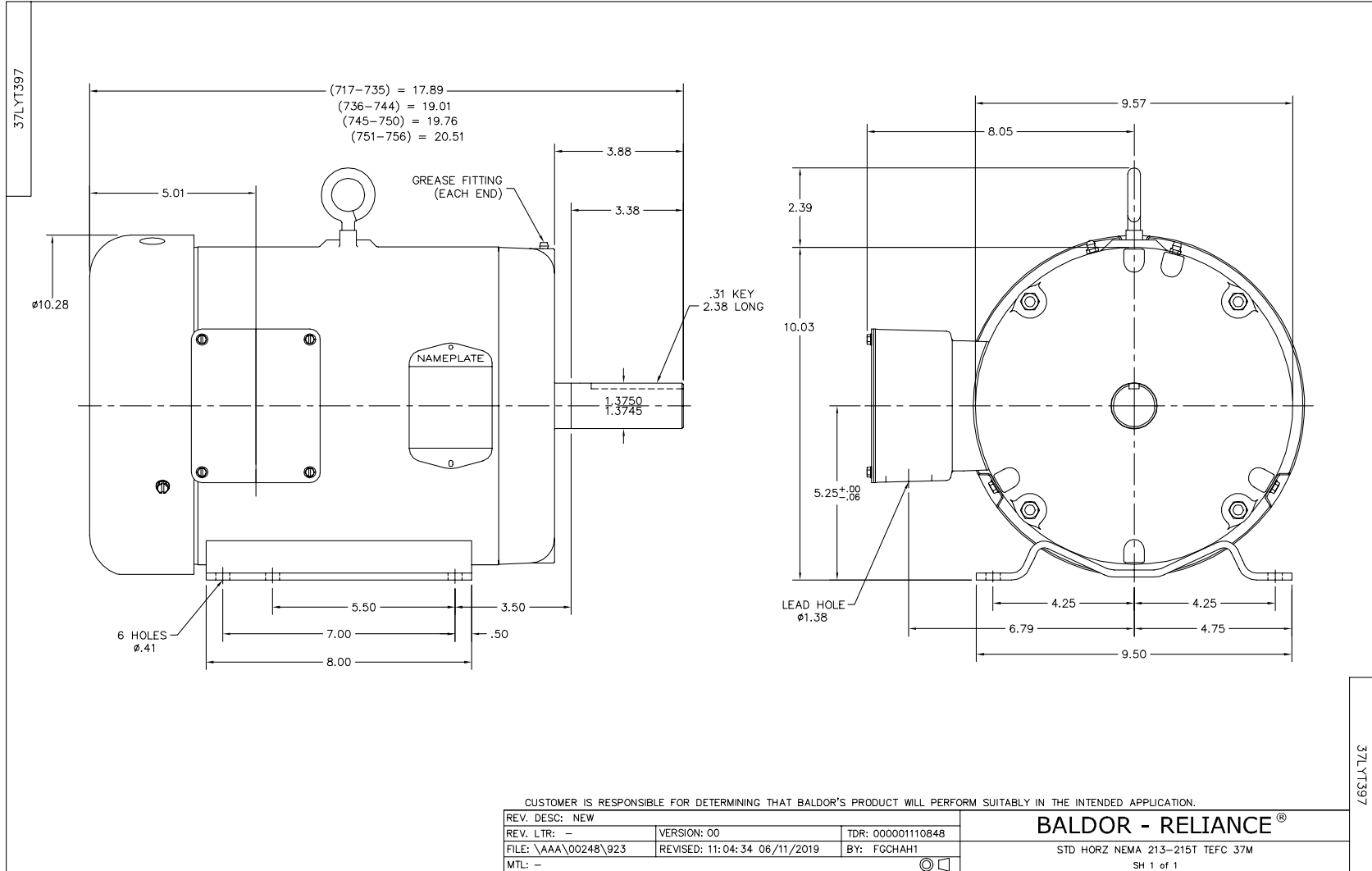
WINDING # 37WGS198

Typical performance - not guaranteed values.

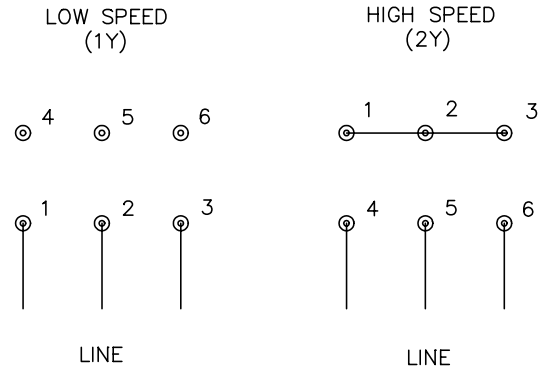
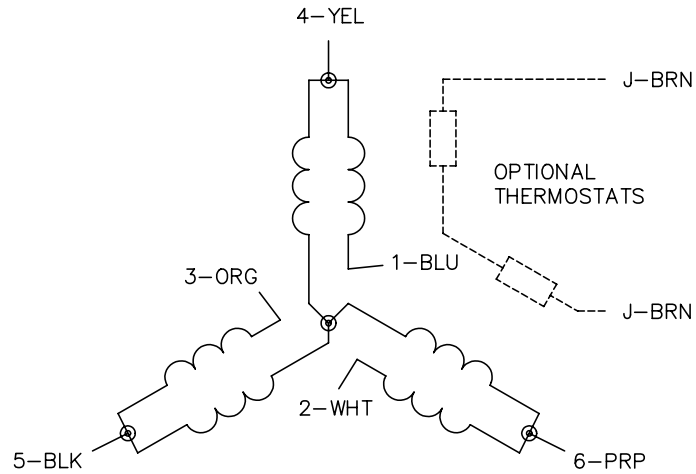
1.9 HP 3 PH 60 HZ 872 RPM 460 V 3744M
 TORQUES(LB-FT): PO=36.6 PU=14.9 LR=17.6 LRA=16.9



5/13/2020 ACPERF, record # 22858



CD0032



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: 01/22/99 8:27 | TDR: 0171435 |
| CD0032 | | FILE: AAA00005145 | MDL: - |
| | | MTL: - | |

BALDOR ELECTRIC Co.

3PH, SV, 6 LEADS, 2-SPEED 1-WINDING VARIABLE TORQUE

CD0032