

BALDOR® • **RELIANCE**

Product Information Packet

CM3538

.5HP, 1725RPM, 3PH, 60HZ, 56C, 3416M, TEFC, F1

| Part Detail | | | | | | | |
|-------------|--------|-------------|------------|-------------|--------|---------------|----|
| Revision: | T | Status: | PRD/A | Change #: | | Proprietary: | No |
| Type: | AC | Elec. Spec: | 34WG0872 | CD Diagram: | CD0005 | Mfg Plant: | |
| Mech. Spec: | 34A062 | Layout: | 34LYA062 | Poles: | 04 | Created Date: | |
| Base: | RG | Eff. Date: | 05-31-2016 | Leads: | 9#18 | | |

| Specs | | | |
|---------------------------------|-------------------------|--------------------------------|-----------------|
| Catalog Number: | CM3538 | Heater Indicator: | No Heater |
| Enclosure: | TEFC | Insulation Class: | B |
| Frame: | 56C | Inverter Code: | Not Inverter |
| Frame Material: | Steel | KVA Code: | L |
| Output @ Frequency: | .500 HP @ 60 HZ | Lifting Lugs: | No 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 @ 18 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: | 3416M |
| Agency Approvals: | UR | Mounting Arrangement: | F1 |
| | CSA | Power Factor: | 63 |
| Auxillary Box: | No Auxillary Box | Product Family: | General Purpose |
| Auxillary Box Lead Termination: | None | Pulley End Bearing Type: | Ball |
| Base Indicator: | Rigid | Pulley Face Code: | C-Face |
| Bearing Grease Type: | Polyrex EM (-20F +300F) | Pulley Shaft Indicator: | Standard |
| Blower: | None | Rodent Screen: | None |
| Current @ Voltage: | 1.000 A @ 460.0 V | Shaft Extension Location: | Pulley End |

| | | | |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
| | 2.000 A @ 230.0 V | Shaft Ground Indicator: | No Shaft Grounding |
| | 2.500 A @ 208.0 V | Shaft Rotation: | Reversible |
| Design Code: | B | Shaft Slinger Indicator: | No Slinger |
| Drip Cover: | No Drip Cover | Speed Code: | Single Speed |
| 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 |

| Nameplate NP1256L | | | | | | | | | | |
|-------------------|--------------|--|------|----|-----|------|--|----------------|-----|---|
| CAT.NO. | CM3538 | | | | | | | | | |
| SPEC. | 34A62-872 | | | | | | | | | |
| HP | .5 | | | | | | | | | |
| VOLTS | 230/460 | | | | | | | | | |
| AMP | 2/1 | | | | | | | | | |
| RPM | 1725 | | | | | | | | | |
| FRAME | 56C | | | | HZ | 60 | | | PH | 3 |
| SER.F. | 1.25 | | CODE | L | DES | B | | CLASS | B | |
| NEMA-NOM-EFF | 74 | | PF | 63 | | | | | | |
| RATING | 40C AMB-CONT | | | | | | | | | |
| CC | | | | | | | | USABLE AT 208V | 2.5 | |
| DE | 6203 | | | | ODE | 6203 | | | | |
| ENCL | TEFC | | SN | | | | | | | |
| | SFA 2.4/1.2 | | | | | | | | | |

AC Induction Motor Performance Data
Record # 6598 - Typical performance - not guaranteed values

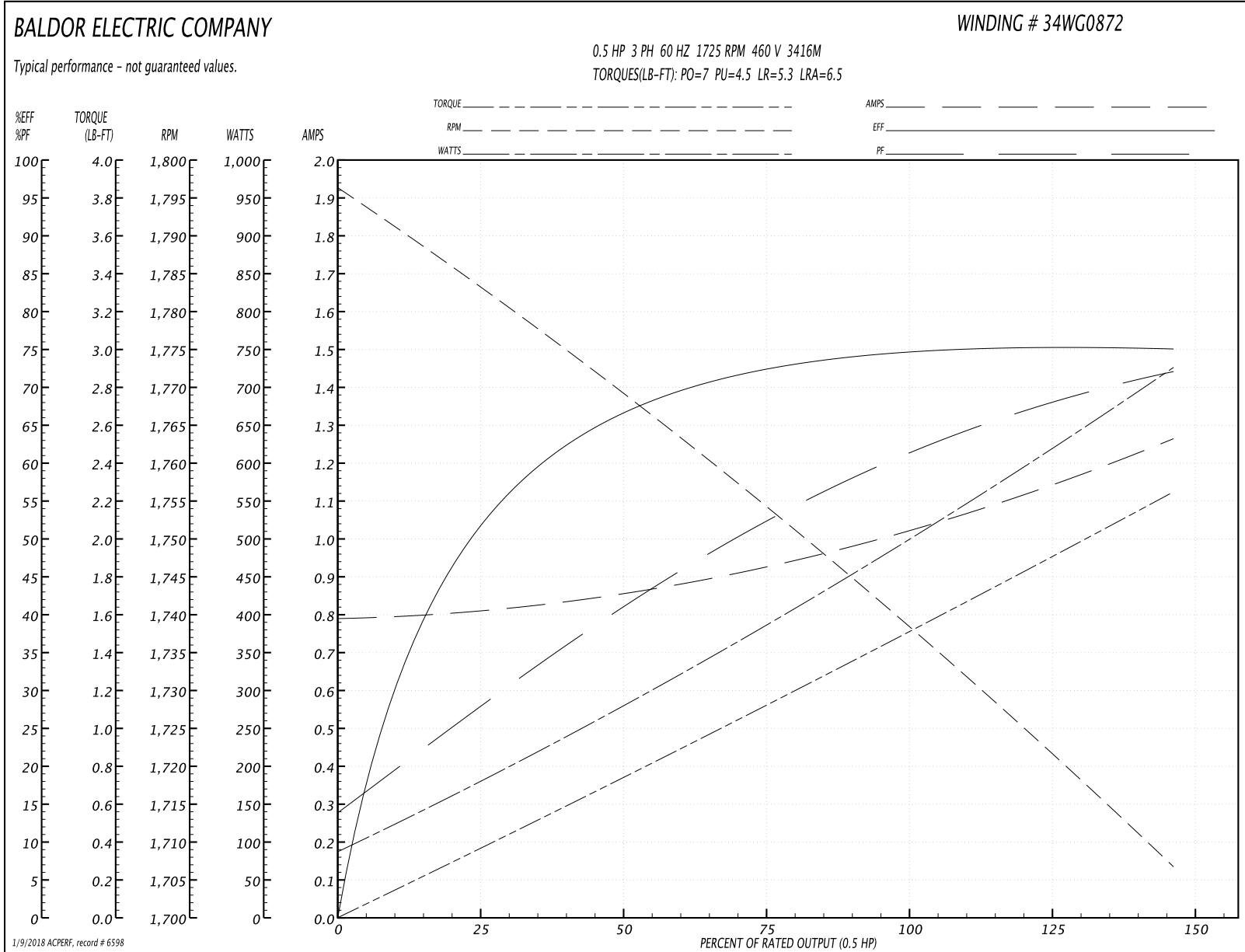
| | | |
|-------------------------------|--------------------|------------------------|
| Winding: 34WG0872-R001 | Type: 3416M | Enclosure: TEFC |
|-------------------------------|--------------------|------------------------|

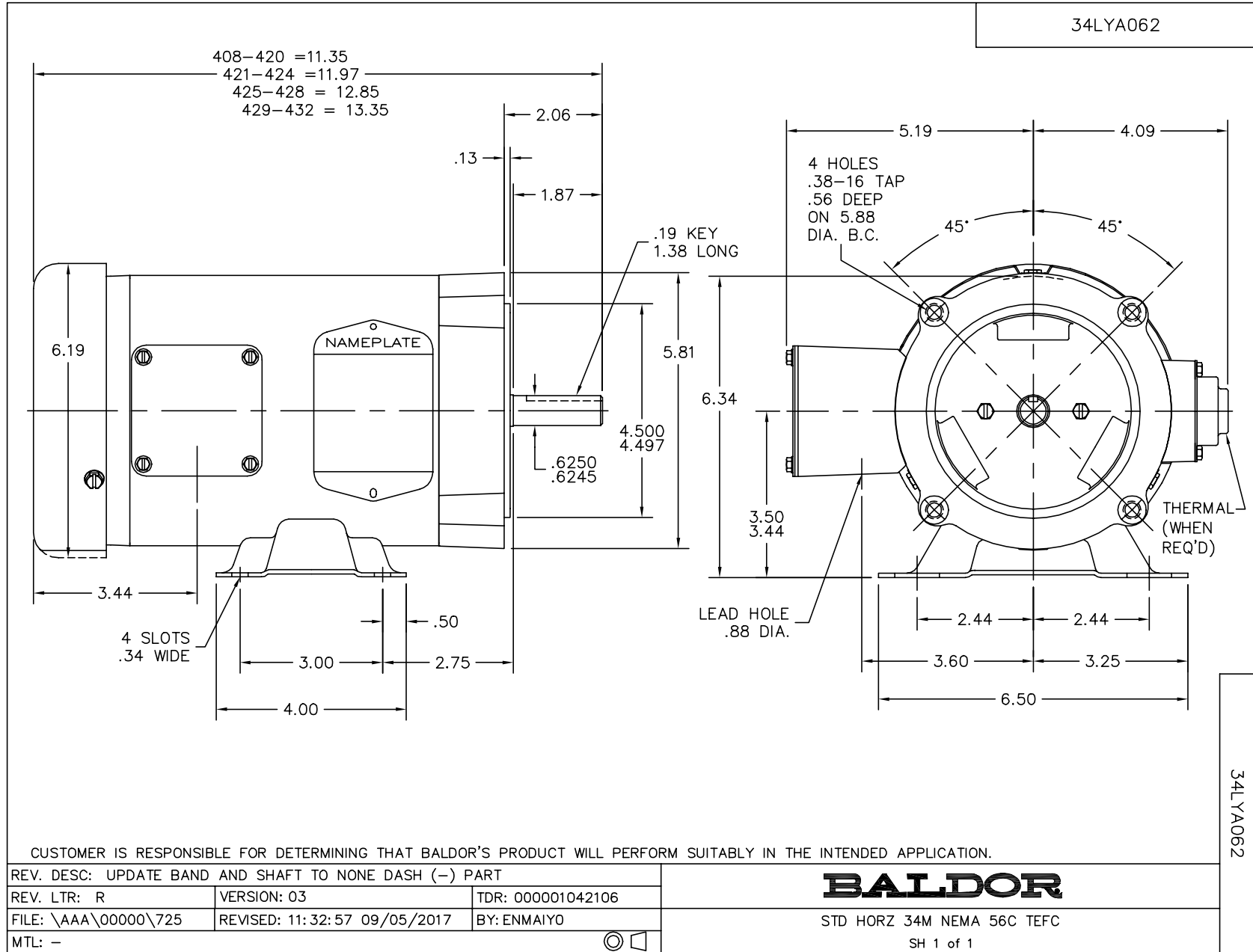
| Nameplate Data | | | | 460 V, 60 Hz: High Voltage Connection | |
|-----------------------|--------------|--------------|----|--|---------------------------|
| Rated Output (HP) | .5 | | | Full Load Torque | 1.5 LB-FT |
| Volts | 230/460 | | | Start Configuration | direct on line |
| Full Load Amps | 2/1 | | | Breakdown Torque | 7 LB-FT |
| R.P.M. | 1725 | | | Pull-up Torque | 4.5 LB-FT |
| Hz | 60 | Phase | 3 | Locked-rotor Torque | 5.3 LB-FT |
| NEMA Design Code | B | KVA Code | L | Starting Current | 6.5 A |
| Service Factor (S.F.) | 1.25 | | | No-load Current | 0.8 A |
| NEMA Nom. Eff. | 74 | Power Factor | 63 | Line-line Res. @ 25°C | 32 Ω |
| Rating - Duty | 40C AMB-CONT | | | Temp. Rise @ Rated Load | 65°C |
| S.F. Amps | 2.4/1.2 | | | Temp. Rise @ S.F. Load | 77°C |
| | | | | Locked-rotor Power Factor | 66 |
| | | | | Rotor inertia | 0.0381 LB-FT ² |

Load Characteristics 460 V, 60 Hz, 0.5 HP

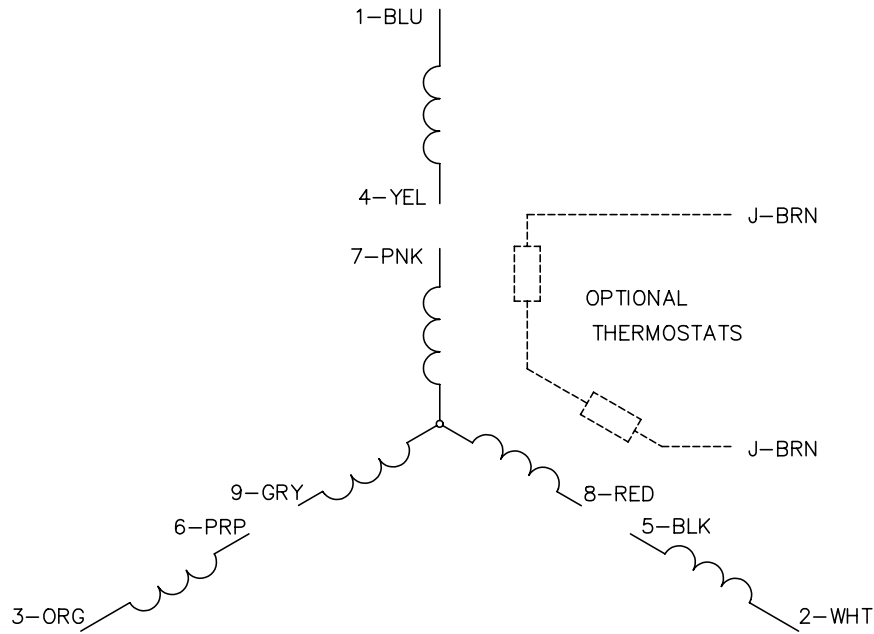
| % of Rated Load | 25 | 50 | 75 | 100 | 125 | 150 | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor | 30 | 43 | 55 | 63 | 69 | 75 | 0 |
| Efficiency | 53.2 | 66.4 | 72.5 | 74.6 | 75.3 | 75.1 | 0 |
| Speed | 1782 | 1769 | 1754 | 1739 | 1724 | 1706 | 0 |
| Line amperes | 0.8 | 0.85 | 0.92 | 1.03 | 1.15 | 1.25 | 1.15 |

Performance Graph at 460V, 60Hz, 0.5HP Typical performance - Not guaranteed values





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 |
| 900000 | | FILE: AAA00005140 | MDL: - |
| | | MTL: - | |

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005