

**BALDOR® • RELIANCE** 

**Product Information Packet**

**CM3537**

**.5HP,3420RPM,3PH,60HZ,56C,3410M,TEFC,F1**

| Part Detail |        |             |            |             |        |               |            |
|-------------|--------|-------------|------------|-------------|--------|---------------|------------|
| Revision:   | -      | Status:     | PRD/A      | Change #:   |        | Proprietary:  | No         |
| Type:       | AC     | Elec. Spec: | 34WGR708   | CD Diagram: | CD0005 | Mfg Plant:    |            |
| Mech. Spec: | 34A062 | Layout:     | 34LYA062   | Poles:      | 02     | Created Date: | 02-08-2021 |
| Base:       | RG     | Eff. Date:  | 02-16-2021 | Leads:      | 9#18   |               |            |

| Specs                           |                         |                                |                    |
|---------------------------------|-------------------------|--------------------------------|--------------------|
| Catalog Number:                 | CM3537                  | Insulation Class:              | B                  |
| Enclosure:                      | TEFC                    | Inverter Code:                 | Not Inverter       |
| Frame:                          | 56C                     | KVA Code:                      | J                  |
| Frame Material:                 | Steel                   | Lifting Lugs:                  | No Lifting Lugs    |
| Output @ Frequency:             | .500 HP @ 60 HZ         | Locked Bearing Indicator:      | Locked Bearing     |
| Synchronous Speed @ Frequency:  | 3600 RPM @ 60 HZ        | Motor Lead Quantity/Wire Size: | 9 @ 18 AWG         |
| Voltage @ Frequency:            | 460.0 V @ 60 HZ         | Motor Lead Exit:               | Ko Box             |
|                                 | 230.0 V @ 60 HZ         | Motor Lead Termination:        | Flying Leads       |
| XP Class and Group:             | None                    | Motor Type:                    | 3410M              |
| XP Division:                    | Not Applicable          | Mounting Arrangement:          | F1                 |
| Agency Approvals:               | CSA                     | Power Factor:                  | 80                 |
|                                 | UR                      | Product Family:                | General Purpose    |
| Auxillary Box:                  | No Auxillary Box        | Pulley End Bearing Type:       | Ball               |
| Auxillary Box Lead Termination: | None                    | Pulley Face Code:              | C-Face             |
| 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:              | .800 A @ 460.0 V        | Shaft Ground Indicator:        | No Shaft Grounding |

|                                       |                           |                                    |                     |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
|                                       | 1.540 A @ 208.0 V         | <b>Shaft Rotation:</b>             | Reversible          |
|                                       | 1.600 A @ 230.0 V         | <b>Shaft Slinger Indicator:</b>    | No Slinger          |
| <b>Design Code:</b>                   | B                         | <b>Speed Code:</b>                 | Single Speed        |
| <b>Drip Cover:</b>                    | No Drip Cover             | <b>Motor Standards:</b>            | NEMA                |
| <b>Duty Rating:</b>                   | CONT                      | <b>Starting Method:</b>            | Direct on line      |
| <b>Electrically Isolated Bearing:</b> | Not Electrically Isolated | <b>Thermal Device - Bearing:</b>   | None                |
| <b>Feedback Device:</b>               | NO FEEDBACK               | <b>Thermal Device - Winding:</b>   | None                |
| <b>Front Face Code:</b>               | Standard                  | <b>Vibration Sensor Indicator:</b> | No Vibration Sensor |
| <b>Front Shaft Indicator:</b>         | None                      | <b>Winding Thermal 1:</b>          | None                |
| <b>Heater Indicator:</b>              | No Heater                 | <b>Winding Thermal 2:</b>          | None                |

| Nameplate NP1256L |              |  |  |  |  |      |      |                |       |   |
|-------------------|--------------|--|--|--|--|------|------|----------------|-------|---|
| CAT.NO.           | CM3537       |  |  |  |  |      |      |                |       |   |
| SPEC.             | 34A062R708   |  |  |  |  |      |      |                |       |   |
| HP                | .5           |  |  |  |  |      |      |                |       |   |
| VOLTS             | 230/460      |  |  |  |  |      |      |                |       |   |
| AMP               | 1.6/.8       |  |  |  |  |      |      |                |       |   |
| RPM               | 3420         |  |  |  |  |      |      |                |       |   |
| FRAME             | 56C          |  |  |  |  | HZ   | 60   |                | PH    | 3 |
| SER.F.            | 1.25         |  |  |  |  | CODE | J    |                | DES   | B |
| NEMA-NOM-EFF      | 72           |  |  |  |  | PF   | 80   |                | CLASS | B |
| RATING            | 40C AMB-CONT |  |  |  |  |      |      |                |       |   |
| CC                |              |  |  |  |  |      |      | USABLE AT 208V | 1.54  |   |
| DE                | 6203         |  |  |  |  | ODE  | 6203 |                |       |   |
| ENCL              | TEFC         |  |  |  |  | SN   |      |                |       |   |
|                   | SFA 1.9/0.95 |  |  |  |  |      |      |                |       |   |

| Parts List    |  |          |
|---------------|--|----------|
| Part Number   | Description                              | Quantity |
| SA390565      | SA 34A062R708                            | 1.000 EA |
| RA381017      | RA 34A062R708                            | 1.000 EA |
| NS2512A01     | INSULATOR, CONDUIT BOX X                 | 1.000 EA |
| 34CB3002A     | CB CAST W/.88 DIA HOLE                   | 1.000 EA |
| 34GS1029A01   | GASKET, CONDUIT BOX                      | 1.000 EA |
| 51XB1016A07   | 10-16 X 7/16 HXWSSLD SERTYB              | 2.000 EA |
| 11XW1032G06   | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 EA |
| 34EP3102A01SP | FR ENDPLATE, MACH                        | 1.000 EA |
| HW5100A03     | WAVY WASHER (W1543-017)                  | 1.000 EA |
| 34EP3300A24SP | PU ENDPLATE, MACH                        | 1.000 EA |
| 51XN1032A20   | 10-32 X 1 1/4 HX WS SL SR                | 2.000 EA |
| 34FN3002A01SP | EXTERNAL FAN, PLASTIC, .637/.639 HUB W/  | 1.000 EA |
| 34FH4002A01SP | IEC FH NO GREASER PRIMED                 | 1.000 EA |
| 51XW1032A06   | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S | 3.000 EA |
| 34CB4517      | CB LID 4 MTG HOLES .22 DIA STAMPED, FOR  | 1.000 EA |
| 34GS1031A01   | GASKET, FLAT CONDUIT BOX LID (LEXIDE)    | 1.000 EA |
| 51XW0832A07   | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 4.000 EA |
| MG1000G27     | MED CHARCOAL METALLIC GREY 400-0096      | 0.014 GA |
| 85XU0407S04   | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 EA |
| HA3100A12     | THRUBOLT 10-32 X 7.375                   | 4.000 EA |
| HW2501D13     | KEY, 3/16 SQ X 1.375                     | 1.000 EA |
| HA7000A04     | KEY RETAINER 0.625 DIA SHAFTS            | 1.000 EA |
| MN416A01      | TAG-INSTAL-MAINT no wire (2100/bx) 4/22  | 1.000 EA |
| LC0005E01     | CONN.DIA./WARNING LABEL (LC0005/LB1119N) | 1.000 EA |

| <b>Parts List (continued)</b> |                                     |                 |
|-------------------------------|-------------------------------------|-----------------|
| <b>Part Number</b>            | <b>Description</b>                  | <b>Quantity</b> |
| NP1256L                       | ALUM UL CSA CC INDUSTRIAL MOTOR A60 | 1.000 EA        |
| 35PA1066                      | PKG GRP, PRINT PK1001A01            | 1.000 EA        |

**AC Induction Motor Performance Data**

Record # 85597

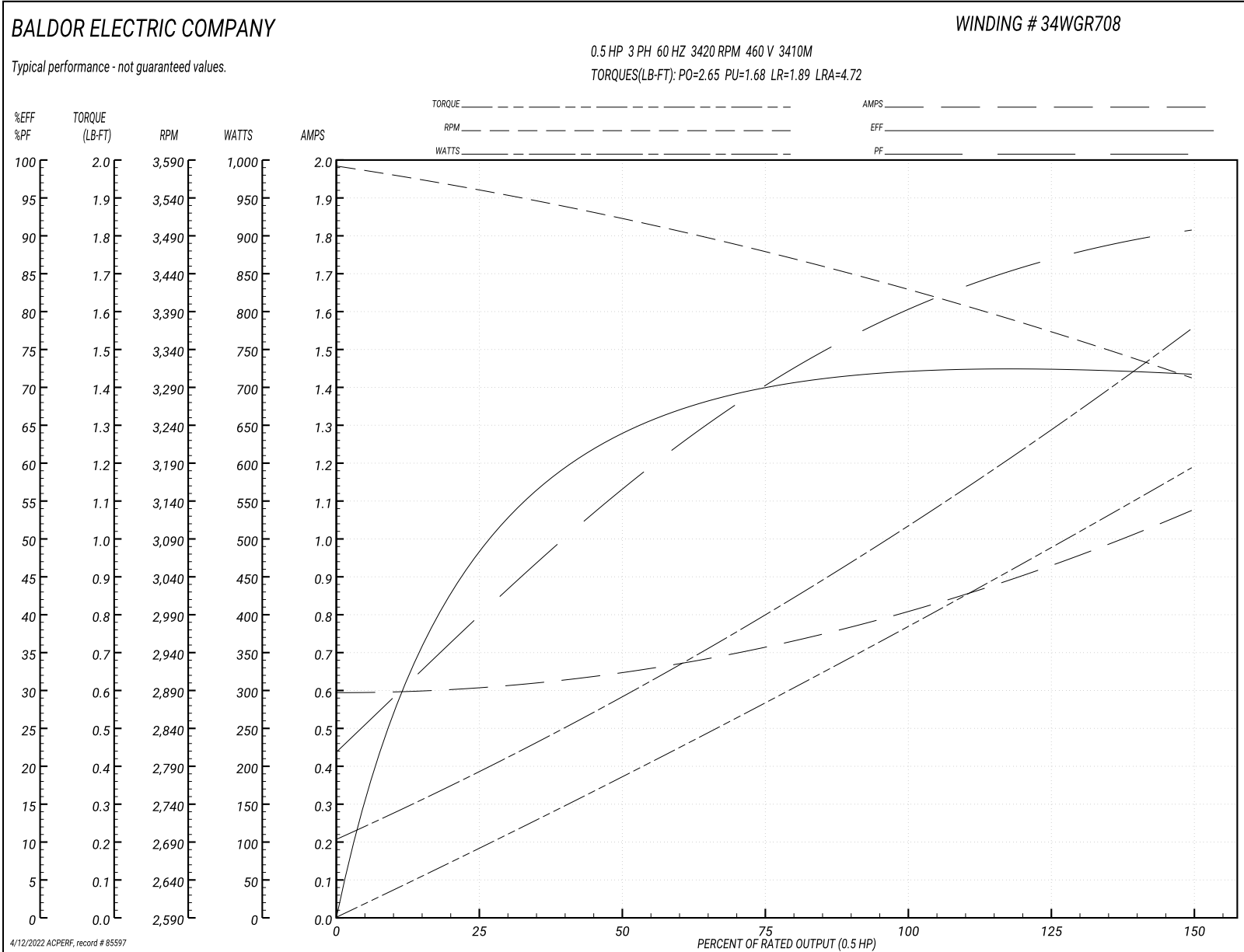
Preliminary Data Sheet

| Winding: 34WGR708-R001 |                 | Type: 3410M                                      | Enclosure: TEFC           |
|------------------------|-----------------|--|---------------------------|
| <b>Nameplate Data</b>  |                 | <b>460 V, 60 Hz:<br/>High Voltage Connection</b> |                           |
| Rated Output (HP)      | .5              | Full Load Torque                                 | 0.77 LB-FT                |
| Volts                  | 230/460         | Start Configuration                              | direct on line            |
| Full Load Amps         | 1.6/0.8         | Breakdown Torque                                 | 2.65 LB-FT                |
| R.P.M.                 | 3420            | Pull-up Torque                                   | 1.68 LB-FT                |
| Hz                     | 60 Phase        | Locked-rotor Torque                              | 1.89 LB-FT                |
| NEMA Design Code       | B KVA Code      | Starting Current                                 | 4.72 A                    |
| Service Factor (S.F.)  | 1.25            | No-load Current                                  | 0.59 A                    |
| NEMA Nom. Eff.         | 72 Power Factor | Line-line Res. @ 25°C                            | 50.7 Ω                    |
| Rating - Duty          | 40C AMB-CONT    | Temp. Rise @ Rated Load                          | 53°C                      |
| S.F. Amps              | 1.9/.0.95       | Temp. Rise @ S.F. Load                           | 70°C                      |
|                        |                 | Locked-rotor Power Factor                        | 76.8                      |
|                        |                 | Rotor inertia                                    | 0.0093 lb-ft <sup>2</sup> |

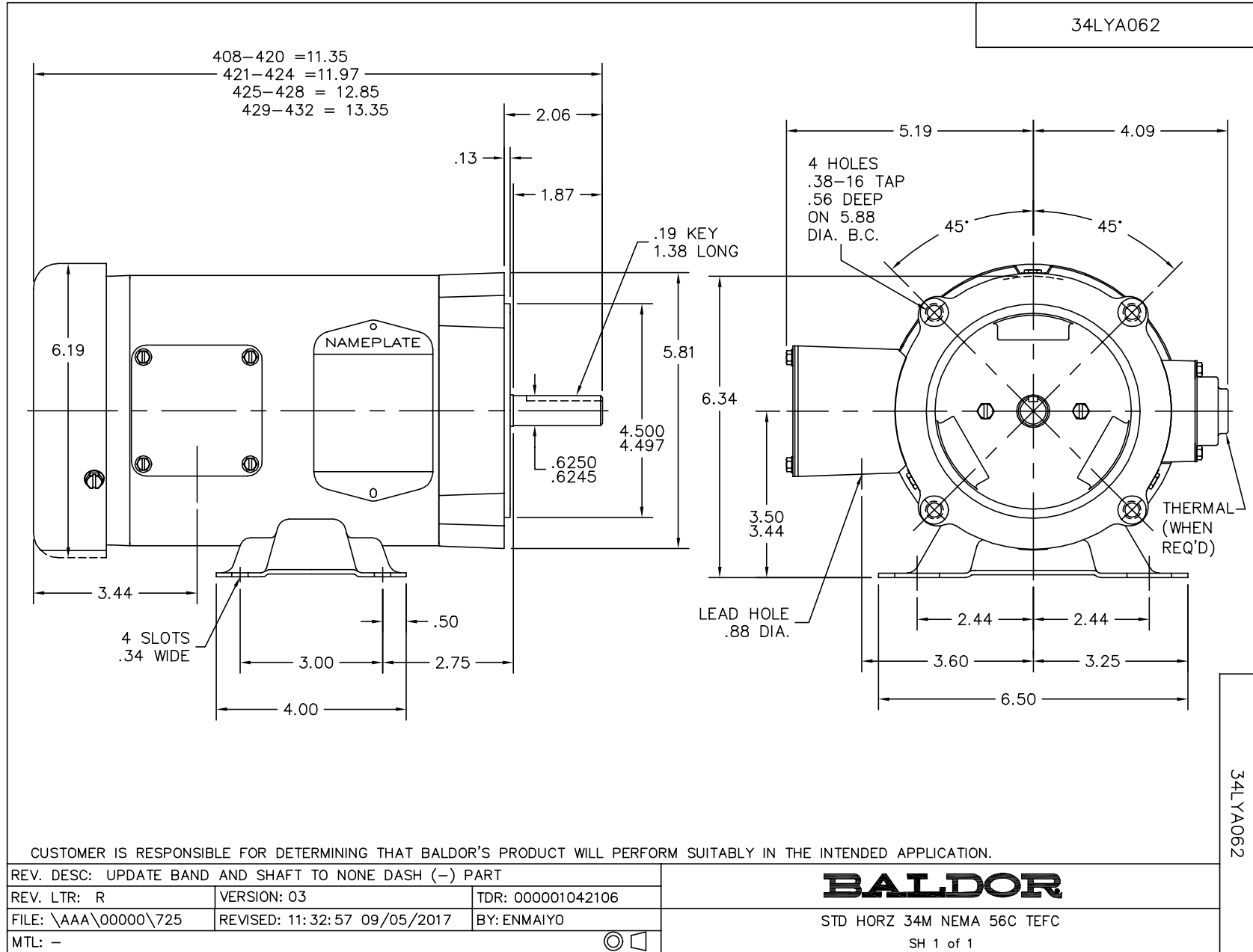
**Load Characteristics 460 V, 60 Hz, 0.5 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 41   | 57   | 71   | 80   | 87   | 91   | 87   |
| Efficiency      | 52.3 | 65.9 | 71.6 | 72.6 | 73.4 | 71.8 | 73.4 |
| Speed           | 3550 | 3511 | 3469 | 3420 | 3365 | 3300 | 3365 |
| Line amperes    | 0.61 | 0.65 | 0.72 | 0.8  | 0.93 | 1.08 | 0.93 |

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







CD0005

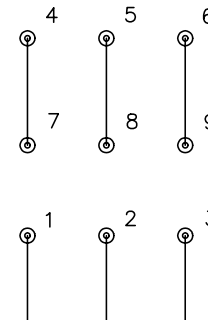


LOW VOLTAGE  
(2Y)



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

90000

FILE: AAA00005140

MDL: -

MTL: -

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS

CD0005