

**BALDOR® • RELIANCE** 

**Product Information Packet**

**CEL11303**

**.5HP,3450RPM,1PH,60HZ,56C,3413LC,OPEN,F1**

| Part Detail |        |             |            |             |        |               |            |
|-------------|--------|-------------|------------|-------------|--------|---------------|------------|
| Revision:   | D      | Status:     | PRD/A      | Change #:   |        | Proprietary:  | No         |
| Type:       | AC     | Elec. Spec: | 34WGR142   | CD Diagram: | CD0055 | Mfg Plant:    |            |
| Mech. Spec: | 34F867 | Layout:     | 34LYF867   | Poles:      | 02     | Created Date: | 09-25-2014 |
| Base:       | RG     | Eff. Date:  | 08-24-2018 | Leads:      | 6#18   |               |            |

| Specs                           |                         |                                |                    |
|---------------------------------|-------------------------|--------------------------------|--------------------|
| Catalog Number:                 | CEL11303                | Inverter Code:                 | Not Inverter       |
| Enclosure:                      | OPEN                    | KVA Code:                      | L                  |
| Frame:                          | 56C                     | Lifting Lugs:                  | No Lifting Lugs    |
| Frame Material:                 | Steel                   | Locked Bearing Indicator:      | Locked Bearing     |
| Output @ Frequency:             | .500 HP @ 60 HZ         | Motor Lead Quantity/Wire Size: | 6 @ 18 AWG         |
| Synchronous Speed @ Frequency:  | 3600 RPM @ 60 HZ        | Motor Lead Exit:               | Ko Box             |
| Voltage @ Frequency:            | 115.0 V @ 60 HZ         | Motor Lead Termination:        | Flying Leads       |
|                                 | 230.0 V @ 60 HZ         | Motor Type:                    | 3413LC             |
| XP Class and Group:             | None                    | Mounting Arrangement:          | F1                 |
| XP Division:                    | Not Applicable          | Power Factor:                  | 91                 |
| Agency Approvals:               | UR                      | Product Family:                | General Purpose    |
|                                 | CSA                     | Pulley End Bearing Type:       | Ball               |
| Auxillary Box:                  | No Auxillary Box        | Pulley Face Code:              | C-Face             |
| Auxillary Box Lead Termination: | None                    | Pulley Shaft Indicator:        | Standard           |
| Base Indicator:                 | Rigid                   | Rodent Screen:                 | None               |
| Bearing Grease Type:            | Polyrex EM (-20F +300F) | RoHS Status:                   | ROHS COMPLIANT     |
| Blower:                         | None                    | Shaft Extension Location:      | Pulley End         |
| Current @ Voltage:              | 2.500 A @ 230.0 V       | Shaft Ground Indicator:        | No Shaft Grounding |

|                                       |                           |                                    |                     |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
|                                       | 4.900 A @ 115.0 V         | <b>Shaft Rotation:</b>             | Reversible          |
| <b>Design Code:</b>                   | N                         | <b>Shaft Slinger Indicator:</b>    | No Slinger          |
| <b>Drip Cover:</b>                    | No Drip Cover             | <b>Speed Code:</b>                 | Single Speed        |
| <b>Duty Rating:</b>                   | CONT                      | <b>Motor Standards:</b>            | NEMA                |
| <b>Electrically Isolated Bearing:</b> | Not Electrically Isolated | <b>Starting Method:</b>            | Direct on line      |
| <b>Feedback Device:</b>               | NO FEEDBACK               | <b>Thermal Device - Bearing:</b>   | None                |
| <b>Front Face Code:</b>               | Standard                  | <b>Thermal Device - Winding:</b>   | None                |
| <b>Front Shaft Indicator:</b>         | None                      | <b>Vibration Sensor Indicator:</b> | No Vibration Sensor |
| <b>Heater Indicator:</b>              | No Heater                 | <b>Winding Thermal 1:</b>          | None                |
| <b>Insulation Class:</b>              | B                         | <b>Winding Thermal 2:</b>          | None                |

| Nameplate NP3155L |              |  |      |    |     |      |  |    |                |   |
|-------------------|--------------|--|------|----|-----|------|--|----|----------------|---|
| CAT.NO.           | CEL11303     |  |      |    |     |      |  |    |                |   |
| SPEC.             | 34F867R142G1 |  |      |    |     |      |  |    |                |   |
| HP                | .5           |  |      |    |     |      |  |    |                |   |
| VOLTS             | 115/230      |  |      |    |     |      |  |    |                |   |
| AMP               | 4.9/2.5      |  |      |    |     |      |  |    |                |   |
| RPM               | 3450         |  |      |    |     |      |  |    |                |   |
| FRAME             | 56C          |  |      |    | HZ  | 60   |  |    | PH             | 1 |
| SER.F.            | 1.25         |  | CODE | L  | DES | N    |  | CL | B              |   |
| F.L. AVG. EFF.    | 72.4         |  | PF   | 91 |     |      |  |    |                |   |
| RATING            | 40C AMB-CONT |  |      |    |     |      |  |    |                |   |
| CC                |              |  |      |    |     |      |  |    | USABLE AT 208V |   |
| DE                | 6203         |  |      |    | ODE | 6203 |  |    |                |   |
| ENCL              | OPEN         |  | SN   |    |     |      |  |    |                |   |
|                   | SFA 5.8/2.9  |  |      |    |     |      |  |    |                |   |

| Parts List    |  |          |
|---------------|--|----------|
| Part Number   | Description                              | Quantity |
| SA287675      | SA 34F867R142G1                          | 1.000 EA |
| RA273883      | RA 34F867R142G1                          | 1.000 EA |
| OC3025F11     | CYL OIL CAP 25MFD/370V                   | 1.000 EA |
| EC1400A03     | ELEC CAP, 400-480 MFD, 125V, 1.81D X 3.  | 1.000 EA |
| NS2512A01     | INSULATOR, CONDUIT BOX X                 | 1.000 EA |
| 34CB3002A     | CB CAST W/.88 DIA HOLE                   | 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 |
| 51XW0832A07   | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 2.000 EA |
| SP1006A01     | TERM. BOARD, MODE 35 SW X H-23655        | 1.000 EA |
| 34EP3210A01SP | FR ENDPLATE, MACH                        | 1.000 EA |
| HW5100A03     | WAVY WASHER (W1543-017)                  | 1.000 EA |
| 34CB3801      | CAPACITOR BOX, DIE CAST                  | 1.000 EA |
| 51XB1214A08   | 12-14 X 1/2HX WS SL SR TYBX              | 2.000 EA |
| 34GS5003A01   | FOAM SLEEVE, ID = 2 1/16" X 4 3/8"       | 1.000 EA |
| 51XN1032A20   | 10-32 X 1 1/4 HX WS SL SR                | 2.000 EA |
| 34EP3401A01SP | PU ENDPLATE, MACH                        | 1.000 EA |
| 34AD2000      | BAFFLE PLATE, STAMPED                    | 1.000 EA |
| 60XW0632A06   | 6-32 X 3/8 TORX HEAD SCREW TAPTITE II    | 4.000 EA |
| 34CB4517      | CB LID 4 MTG HOLES .22 DIA STAMPED, FOR  | 1.000 EA |
| 51XW0832A07   | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 4.000 EA |
| HW2501D13     | KEY, 3/16 SQ X 1.375                     | 1.000 EA |
| HA7000A04     | KEY RETAINER 0.625 DIA SHAFTS            | 1.000 EA |
| 85XU0407S04   | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 EA |

| <b>Parts List (continued)</b> |  |                 |
|-------------------------------|--|-----------------|
| <b>Part Number</b>            | <b>Description</b>                       | <b>Quantity</b> |
| MG1000Y03                     | MUNSELL 2.53Y 6.70/ 4.60, GLOSS 20,      | 0.014 GA        |
| HA3100A28                     | THRUBOLT 10-32 X 8.187                   | 4.000 EA        |
| SP5051B11                     | MODEL 34/35 TYPE LC STATIONARY SWITCH    | 1.000 EA        |
| LC0001A01                     | CONN LABEL / WARNING LABEL (LC0001 / LB1 | 1.000 EA        |
| MN416A01                      | TAG-INSTAL-MAINT no wire (1200/bx) 3/19  | 1.000 EA        |
| NP3155L                       | ALUM SUPER-E UL CSA CC "SEMS"            | 1.000 EA        |
| 35PA1000                      | PKG GRP, PRINT PK1008A06                 | 1.000 EA        |

**AC Induction Motor Performance Data**

Record # 47426 - Typical performance - not guaranteed values

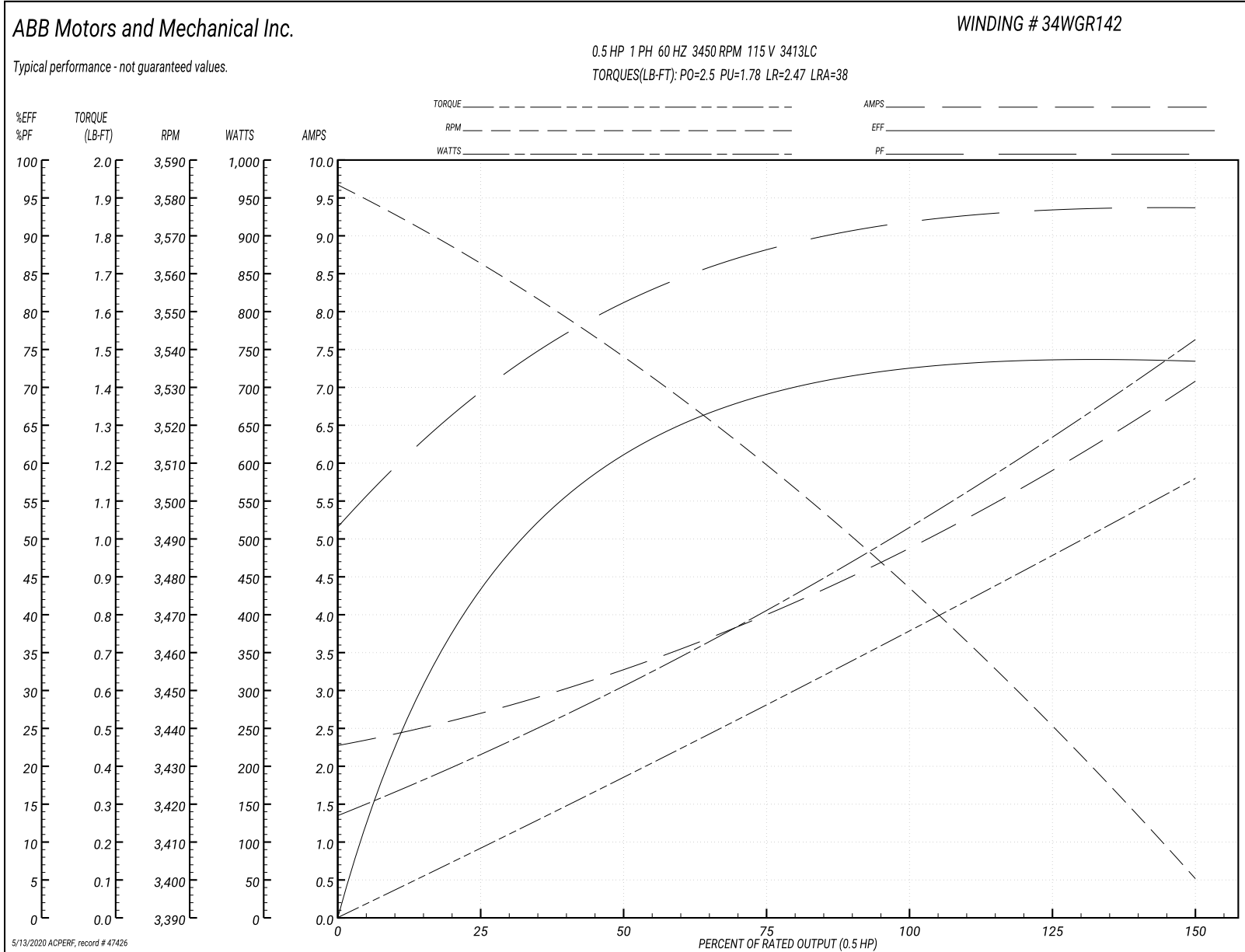
|                               |                     |                        |
|-------------------------------|---------------------|------------------------|
| <b>Winding:</b> 34WGR142-R002 | <b>Type:</b> 3413LC | <b>Enclosure:</b> OPEN |
|-------------------------------|---------------------|------------------------|

| Nameplate Data        |              |              |    | 115 V, 60 Hz:<br>Low Voltage Connection |                                |
|-----------------------|--------------|--------------|----|---|--------------------------------|
| Rated Output (HP)     | .5           |              |    | Full Load Torque                        | 0.755 LB-FT                    |
| Volts                 | 115/230      |              |    | Start Configuration                     | direct on line                 |
| Full Load Amps        | 4.9/2.5      |              |    | Breakdown Torque                        | 2.5 LB-FT                      |
| R.P.M.                | 3450         |              |    | Pull-up Torque                          | 1.78 LB-FT                     |
| Hz                    | 60           | Phase        | 1  | Locked-rotor Torque                     | 2.47 LB-FT                     |
| NEMA Design Code      | N            | KVA Code     | L  | Starting Current                        | 38 A                           |
| Service Factor (S.F.) | 1.25         |              |    | No-load Current                         | 2.28 A                         |
| NEMA Nom. Eff.        | 72.4         | Power Factor | 91 | Line-line Res. @ 25°C                   | 1.1337 Ω A Ph<br>4.8491 Ω B Ph |
| Rating - Duty         | 40C AMB-CONT |              |    | Temp. Rise @ Rated Load                 | 21°C                           |
| S.F. Amps             | 5.8/2.9      |              |    | Temp. Rise @ S.F. Load                  | 27°C                           |

Load Characteristics 115 V, 60 Hz, 0.5 HP

| % of Rated Load | 25     | 50   | 75     | 100    | 125    | 150    | S.F. |
|-----------------|--------|------|--------|--------|--------|--------|------|
| Power Factor    | 70     | 82   | 88     | 91     | 93     | 94     | 93   |
| Efficiency      | 42.8   | 59.4 | 69.9   | 73.5   | 73     | 73.2   | 73   |
| Speed           | 3561.5 | 3535 | 3512.3 | 3480.9 | 3435.5 | 3401.6 | 3436 |
| Line amperes    | 2.67   | 3.33 | 3.96   | 4.83   | 6      | 7.05   | 6    |

Performance Graph at 115V, 60Hz, 0.5HP Typical performance - Not guaranteed values



**AC Induction Motor Performance Data**

Record # 49399 - Typical performance - not guaranteed values

|                               |                     |                        |
|-------------------------------|---------------------|------------------------|
| <b>Winding:</b> 34WGR142-R002 | <b>Type:</b> 3413LC | <b>Enclosure:</b> OPEN |
|-------------------------------|---------------------|------------------------|

| Nameplate Data        |              |              |    | 230 V, 60 Hz:<br>High Voltage Connection |                            |
|-----------------------|--------------|--------------|----|--|----------------------------|
| Rated Output (HP)     | .5           |              |    | Full Load Torque                         | 0.755 LB-FT                |
| Volts                 | 115/230      |              |    | Start Configuration                      | direct on line             |
| Full Load Amps        | 4.9/2.5      |              |    | Breakdown Torque                         | 2.5 LB-FT                  |
| R.P.M.                | 3450         |              |    | Pull-up Torque                           | 1.52 LB-FT                 |
| Hz                    | 60           | Phase        | 1  | Locked-rotor Torque                      | 2.11 LB-FT                 |
| NEMA Design Code      | N            | KVA Code     | L  | Starting Current                         | 18.66 A                    |
| Service Factor (S.F.) | 1.25         |              |    | No-load Current                          | 1.15 A                     |
| NEMA Nom. Eff.        | 72.4         | Power Factor | 91 | Line-line Res. @ 25°C                    | 4.36 Ω A Ph<br>4.65 Ω B Ph |
| Rating - Duty         | 40C AMB-CONT |              |    | Temp. Rise @ Rated Load                  | 21°C                       |
| S.F. Amps             | 5.8/2.9      |              |    | Temp. Rise @ S.F. Load                   | 25°C                       |
|                       |              |              |    | Rotor inertia                            | 0.0121 LB-FT <sup>2</sup>  |

Load Characteristics 230 V, 60 Hz, 0.5 HP

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 71   | 83   | 88   | 92   | 93   | 94   | 93   |
| Efficiency      | 42.3 | 58.9 | 69.5 | 73.2 | 72.8 | 73.3 | 72.8 |
| Speed           | 3562 | 3535 | 3512 | 3481 | 3436 | 3402 | 3436 |
| Line amperes    | 1.34 | 1.67 | 1.99 | 2.42 | 3.01 | 3.53 | 3.01 |

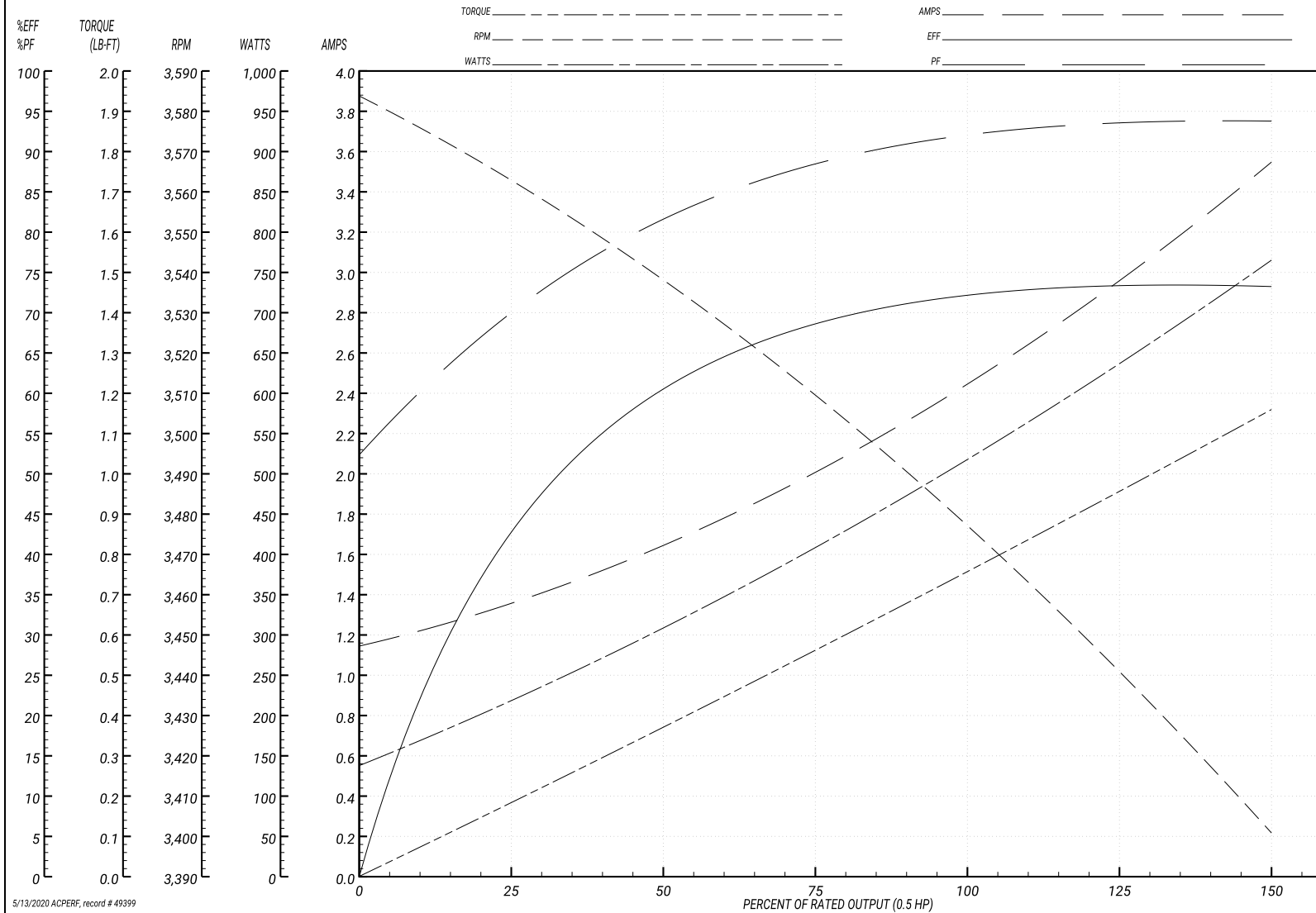
Performance Graph at 230V, 60Hz, 0.5HP Typical performance - Not guaranteed values

ABB Motors and Mechanical Inc.

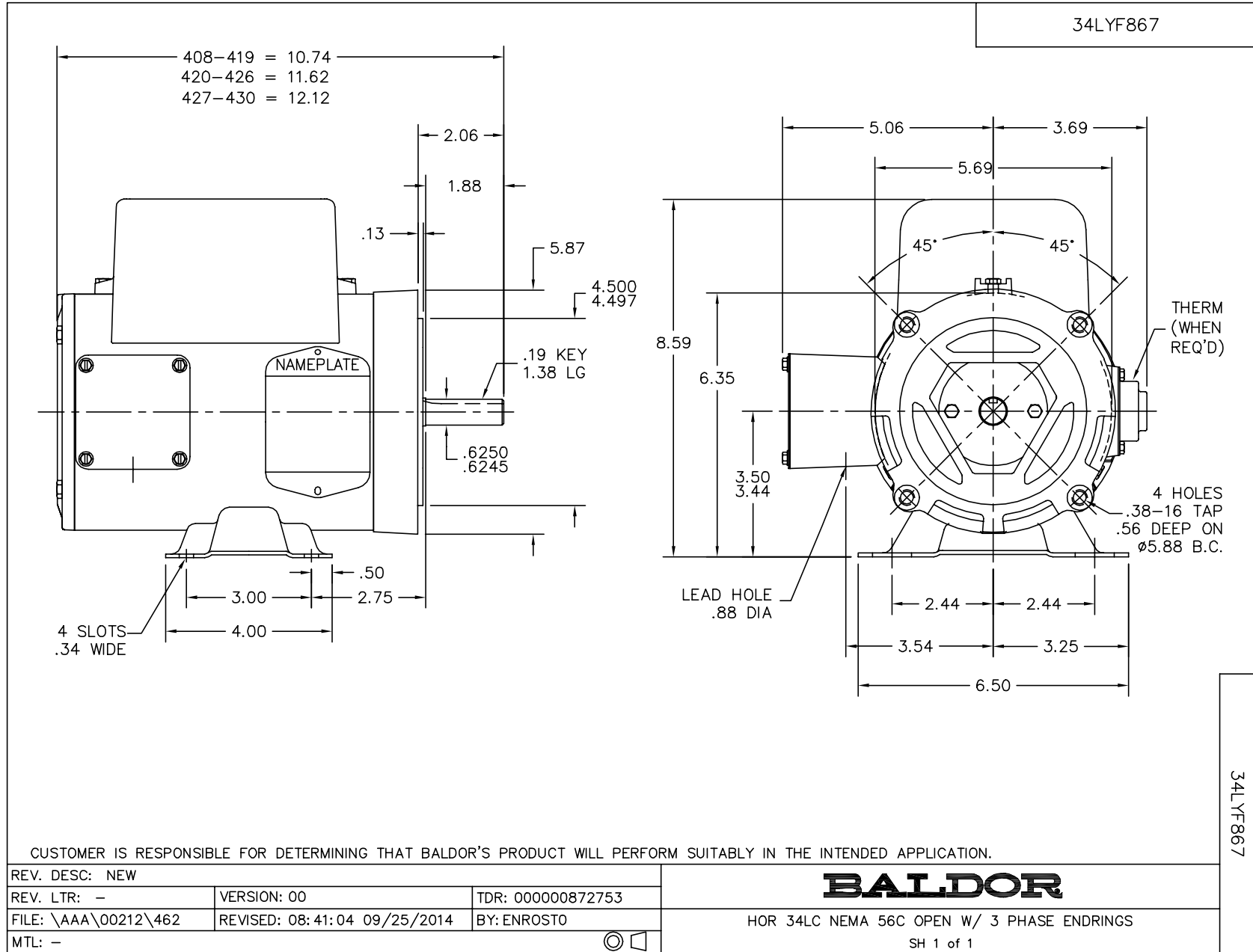
WINDING # 34WGR142

Typical performance - not guaranteed values.

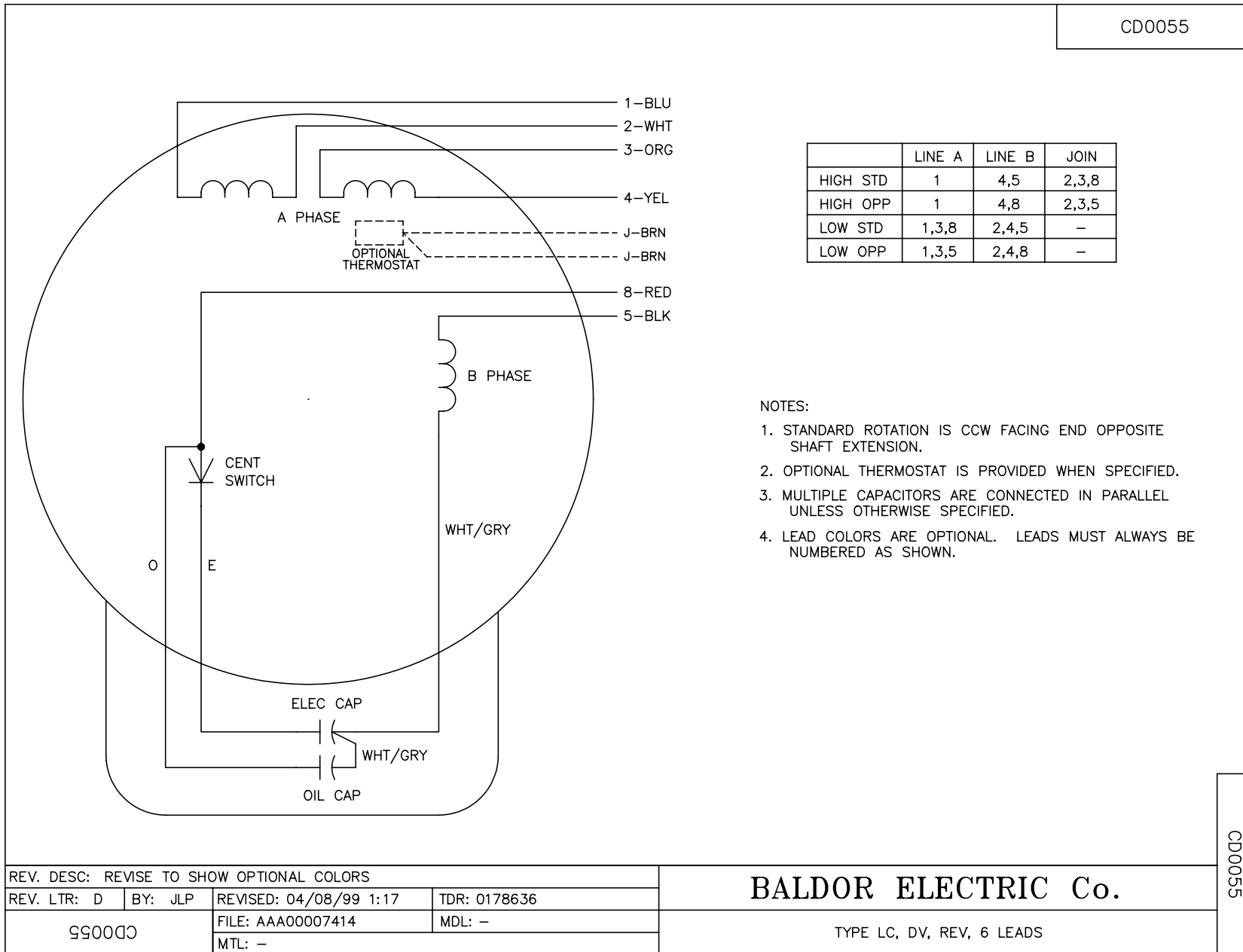
0.5 HP 1 PH 60 HZ 3450 RPM 230 V 3413LC  
 TORQUES(LB-FT): PO=2.5 PU=1.52 LR=2.11 LRA=18.66



5/13/2020 ACPERF, record # 49399



CD0055



|          | LINE A | LINE B | JOIN  |
|----------|--------|--------|-------|
| HIGH STD | 1      | 4,5    | 2,3,8 |
| HIGH OPP | 1      | 4,8    | 2,3,5 |
| LOW STD  | 1,3,8  | 2,4,5  | -     |
| LOW OPP  | 1,3,5  | 2,4,8  | -     |

NOTES:

1. STANDARD ROTATION IS CCW FACING END OPPOSITE SHAFT EXTENSION.
2. OPTIONAL THERMOSTAT IS PROVIDED WHEN SPECIFIED.
3. MULTIPLE CAPACITORS ARE CONNECTED IN PARALLEL UNLESS OTHERWISE SPECIFIED.
4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

|   |         |                        |              |
|---|---------|------------------------|--------------|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS |         |                        |              |
| REV. LTR: D                               | BY: JLP | REVISED: 04/08/99 1:17 | TDR: 0178636 |
| 99000                                     |         | FILE: AAA00007414      | MDL: -       |
|   |         | MTL: -                 |              |

**BALDOR ELECTRIC Co.**

TYPE LC, DV, REV, 6 LEADS

CD0055