

**BALDOR • RELIANCE**

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# Customer information packet

## M3542

.75HP, 1725RPM, 3PH, 60HZ, 56, 3420M, TEFC, F1

Class - None

Division - Not Applicable

## Specifications

|                                |   |
|--------------------------------|---|
| Enclosure                      | TEFC  |
| Frame                          | 56  |
| Frame Material                 | Steel   |
| Frequency                      | 60.00 Hz  |
| Haz Area Class and Group       | None  |
| Haz Area Division              | Not Applicable  |
| Motor Letter Type              | Three Phase   |
| Output @ Frequency             | .750 HP @ 60 HZ   |
| Phase                          | 3   |
| Synchronous Speed @ Frequency  | 1800 RPM @ 60 HZ  |
| Voltage @ Frequency            | 460.0 V @ 60 HZ<br>230.0 V @ 60 HZ<br>208.0 V @ 60 HZ       |
| Agency Approvals               | CSA<br>UR   |
| Ambient Temperature            | 40 °C   |
| Auxillary Box                  | No Auxillary Box  |
| Auxillary Box Lead Termination | None  |
| Base Indicator                 | Rigid   |
| Bearing Grease Type            | Polyrex EM (-20F +300F)                                     |
| Blower                         | None  |
| Current @ Voltage              | 3.200 A @ 208.0 V<br>3.000 A @ 230.0 V<br>1.500 A @ 460.0 V |
| Design Code                    | B   |
| Drip Cover                     | No Drip Cover   |
| Duty Rating                    | CONT  |
| Efficiency @ 100% Load         | 75.5 %  |
| Electrically Isolated Bearing  | Not Electrically Isolated                                   |
| Feedback Device                | NO FEEDBACK   |
| Front Shaft Indicator          | None  |
| Heater Indicator               | No Heater   |

## Part detail

|              |            |
|--------------|------------|
| Revision     | F          |
| Type         | AC         |
| Mech. spec.  | 34A061     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 34WGR707   |
| Layout       | 34LYA061   |
| Eff. date    | 12-30-2024 |
| CD Diagram   | CD0005     |
| Poles        | 04         |
| Leads        | 9#18       |
| Proprietary  | False      |
| Created date | 11-19-2020 |

|                               |                     |
|-------------------------------|---------------------|
| High Voltage Full Load Amps   | 1.5 a               |
| Insulation Class              | B                   |
| Inverter Code                 | Not Inverter        |
| KVA Code                      | M                   |
| Lifting Lugs                  | No Lifting Lugs     |
| Locked Bearing Indicator      | No Locked Bearing   |
| Motor Lead Quantity/Wire Size | 9 @ 18 AWG          |
| Motor Lead Termination        | Flying Leads        |
| Motor Standards               | NEMA                |
| Motor Type                    | 3420M               |
| Mounting Arrangement          | F1                  |
| Number of Poles               | 4                   |
| Overall Length                | 11.35 IN            |
| Power Factor                  | 64                  |
| Product Family                | General Purpose     |
| Pulley End Bearing Type       | Ball                |
| Pulley Face Code              | Standard            |
| Pulley Shaft Indicator        | Standard            |
| Rodent Screen                 | None                |
| RoHS Status                   | ROHS COMPLIANT      |
| Service Factor                | 1.25                |
| Shaft Diameter                | 0.625 IN            |
| Shaft Ground Indicator        | No Shaft Grounding  |
| Shaft Rotation                | Reversible          |
| Shaft Slinger Indicator       | No Slinger          |
| Speed                         | 1725 rpm            |
| Speed Code                    | Single Speed        |
| Starting Method               | Direct on line      |
| Thermal Device - Bearing      | None                |
| Thermal Device - Winding      | None                |
| Vibration Sensor Indicator    | No Vibration Sensor |
| Winding Thermal 1             | None                |
| Winding Thermal 2             | None                |

**Nameplate**

| <b>NP1256L</b>      |                 |             |            |            |   |              |   |  |  |
|---------------------|-----------------|-------------|------------|------------|---|--------------|---|--|--|
| <b>CAT.NO.</b>      | M3542           |             |            |            |   |              |   |  |  |
| <b>SPEC.</b>        | 34A061R707      |             |            |            |   |              |   |  |  |
| <b>HP</b>           | .75             |             |            |            |   |              |   |  |  |
| <b>VOLTS</b>        | 208-230/460     |             |            |            |   |              |   |  |  |
| <b>AMP</b>          | 3.2-3/1.5       |             |            |            |   |              |   |  |  |
| <b>RPM</b>          | 1725            |             |            |            |   |              |   |  |  |
| <b>FRAME</b>        | 56              |             | <b>HZ</b>  | 60         |   | <b>PH</b>    | 3 |  |  |
| <b>SER.F.</b>       | 1.25            | <b>CODE</b> | M          | <b>DES</b> | B | <b>CLASS</b> | B |  |  |
| <b>NEMA-NOM-EFF</b> | 75.5            | <b>PF</b>   | 64         |            |   |              |   |  |  |
| <b>RATING</b>       | 40C AMB-CONT    |             |            |            |   |              |   |  |  |
| <b>CC</b>           |                 |             |            |            |   |              |   |  |  |
| <b>DE</b>           | 6203            |             | <b>ODE</b> | 6203       |   |              |   |  |  |
| <b>ENCL</b>         | TEFC            | <b>SN</b>   |            |            |   |              |   |  |  |
|                     | SFA 3.6-3.4/1.7 |             |            |            |   |              |   |  |  |

**Accessories**

| <b>Part number</b> | <b>Description</b> | <b>Multiplier</b> |
|--------------------|--------------------|-------------------|
| 34-171             | C FACE KIT         | A8                |

**AC Induction Motor Performance Data**

Record # 85439

Preliminary Data Sheet

|                               |                        |                            |  |                           |  |
|-------------------------------|------------------------|----------------------------|--|---------------------------|--|
| <b>Winding:</b> 34WGR707-R001 |                        | <b>Type:</b> 3420M         |  | <b>Enclosure:</b> TEFC    |  |
| <b>Nameplate Data</b>         |                        |                            | <b>460 V, 60 Hz:<br/>High Voltage Connection</b> |                           |  |
| <b>Rated Output (HP)</b>      | 0.75                   | <b>Full Load Torque</b>    | 2.27 LB-FT                                       |                           |  |
| <b>Volts</b>                  | 208-230/460            | <b>Start Configuration</b> | direct on line                                   |                           |  |
| <b>Full Load Amps</b>         | 3.2-3.0/1.5            | <b>Breakdown Torque</b>    | 9.9 LB-FT  |                           |  |
| <b>R.P.M.</b>                 | 1725                   | <b>Pull-up Torque</b>      | 7.1 LB-FT  |                           |  |
| <b>Hz</b>                     | 60 <b>Phase</b>        | 3                          | <b>Locked-rotor Torque</b>                       | 9.2 LB-FT                 |  |
| <b>NEMA Design Code</b>       | <b>B KVA Code</b>      | M                          | <b>Starting Current</b>                          | 9.8 A                     |  |
| <b>Service Factor (S.F.)</b>  | 1.25                   |                            | <b>No-load Current</b>                           | 1.08 A                    |  |
| <b>NEMA Nom. Eff.</b>         | <b>77 Power Factor</b> | 61                         | <b>Line-line Res. @ 25°C</b>                     | 21 Ω                      |  |
| <b>Rating - Duty</b>          | 40C-AMB CONT           |                            | <b>Temp. Rise @ Rated Load</b>                   | 69°C                      |  |
| <b>S.F. Amps</b>              | 3.6-3.4/1.7            |                            | <b>Temp. Rise @ S.F. Load</b>                    | 83°C                      |  |
|                               |                        |                            | <b>Locked-rotor Power Factor</b>                 | 59.2                      |  |
|                               |                        |                            | <b>Rotor inertia</b>                             | 0.0476 LB-FT <sup>2</sup> |  |

**Load Characteristics 460 V, 60 Hz, 0.75 HP**

| <b>% of Rated Load</b> | <b>25</b> | <b>50</b> | <b>75</b> | <b>100</b> | <b>125</b> | <b>150</b> | <b>S.F.</b> |
|------------------------|-----------|-----------|-----------|------------|------------|------------|-------------|
| <b>Power Factor</b>    | 29        | 44        | 56        | 66         | 73         | 79         | 73          |
| <b>Efficiency</b>      | 54.7      | 68.4      | 73.5      | 75.2       | 75.8       | 74.9       | 76.5        |
| <b>Speed</b>           | 1780      | 1763      | 1745      | 1726       | 1723       | 1700       | 1723        |
| <b>Line amperes</b>    | 1.09      | 1.15      | 1.26      | 1.4        | 1.58       | 1.79       | 1.58        |

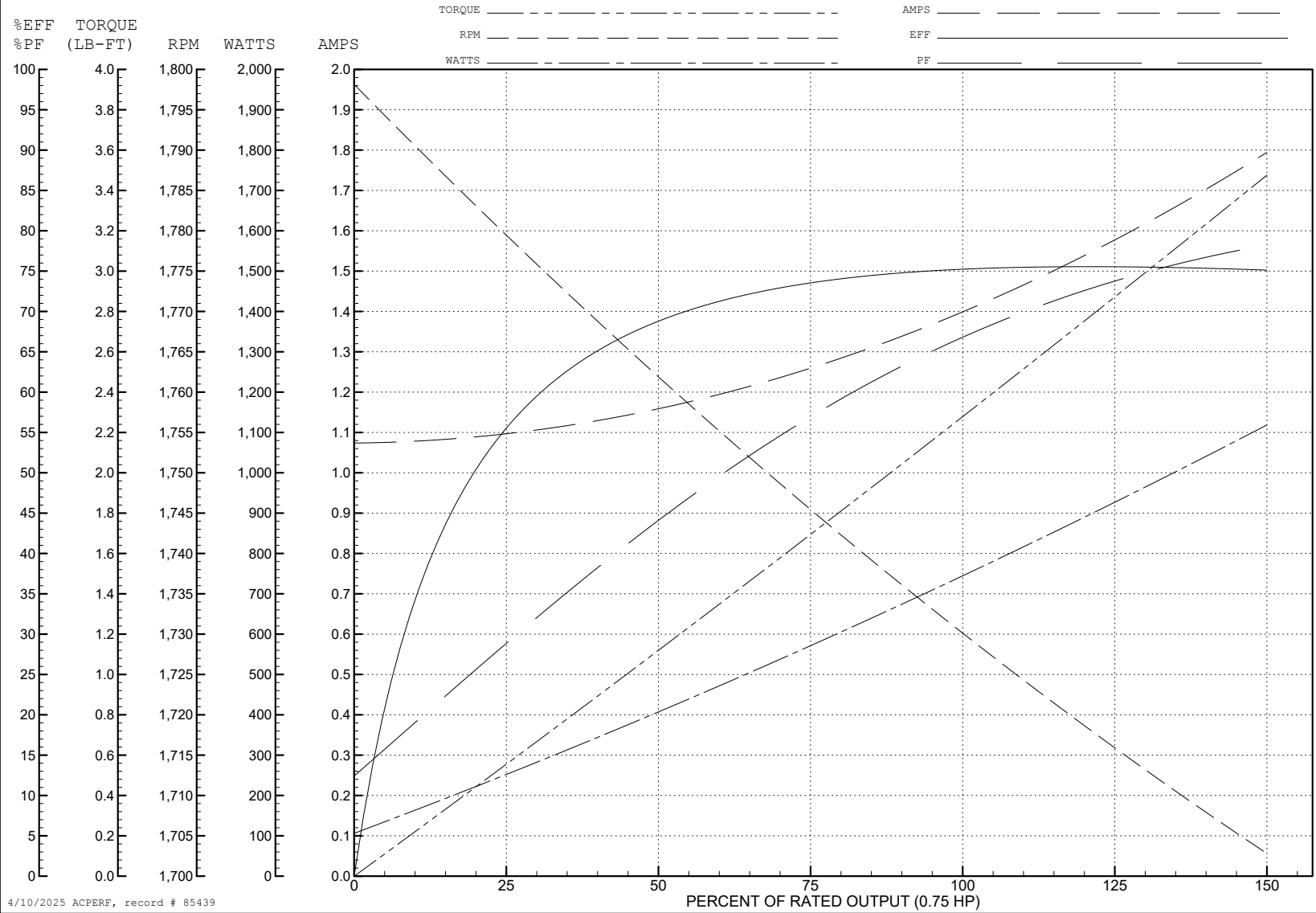
ABB Motors and Mechanical Inc.

WINDING # 34WGR707

Typical performance - not guaranteed values.

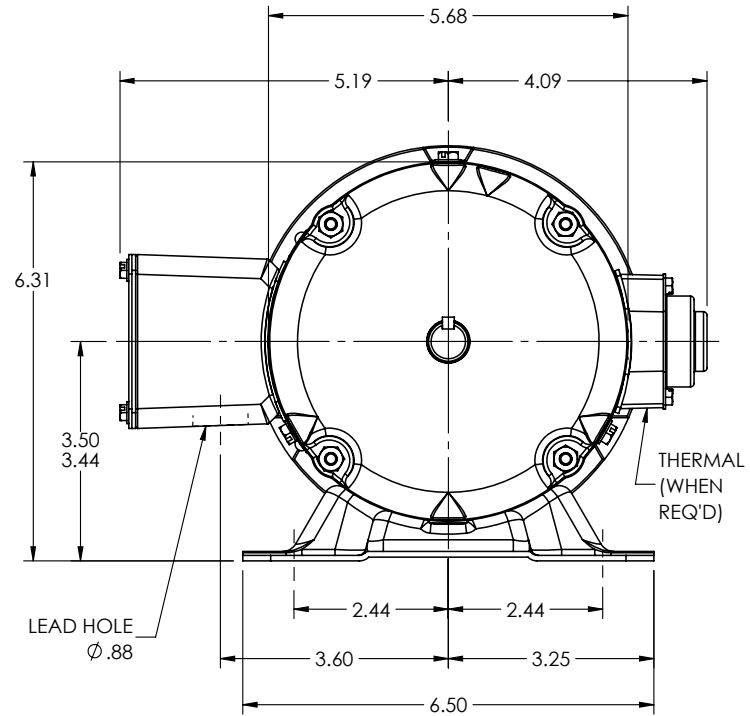
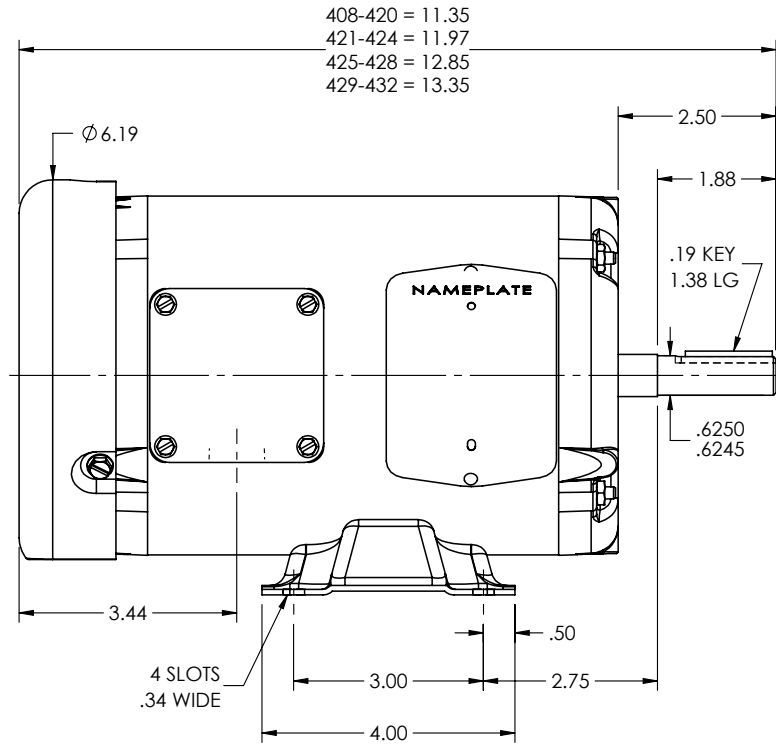
0.75 HP 3 PH 60 HZ 1725 RPM 460 V 3420M

TORQUES (LB-FT): PO=9.9 PU=7.1 LR=9.2 LRA=9.8



4/10/2025 ACPERF, record # 85439

34LYA061



CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION

REV. DESC: CLEAN UP DIMENSIONING

REV: N    VERSION: 06    REVISED: 02:32:44 11/26/2024    TDR: 000001245356

34LYA061

MODEL NO. 34LYA061  
BY: ENJEFD0

REF: -

**BALDOR - RELIANCE®**

STD HORZ 34M NEMA 56 TEFC

34LYA061

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.

CD0005

|   |         |                         |              |
|---|---------|-------------------------|--------------|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS |         |                         |              |
| REV. LTR: E                               | BY: JLP | REVISED: 01/19/99 10:15 | TDR: 0171435 |
| S00000                                    |         | FILE: AAA00005140       | MDL: -       |
|   |         | MTL: -                  |              |

**BALDOR ELECTRIC Co.**

3PH, DV, 9 LEADS