

**BALDOR • RELIANCE**

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# Customer information packet

## VM3541

.75HP, 3450RPM, 3PH, 60HZ, 56C, 3413M, TEFC, F1

Class - None

Division - Not Applicable

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8/15/2024 12:22:23 AM

## Specifications

|                                |   |
|--------------------------------|---|
| Enclosure                      | TEFC  |
| Frame                          | 56C   |
| 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  | 3600 RPM @ 60 HZ  |
| Voltage @ Frequency            | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ                          |
| Agency Approvals               | UR<br>CSA   |
| Ambient Temperature            | 40 °C   |
| Auxillary Box                  | No Auxillary Box  |
| Auxillary Box Lead Termination | None  |
| Base Indicator                 | No Mounting   |
| Bearing Grease Type            | Polyrex EM (-20F +300F)                                     |
| Blower                         | None  |
| Current @ Voltage              | 1.300 A @ 460.0 V<br>2.600 A @ 230.0 V<br>3.100 A @ 208.0 V |
| Design Code                    | B   |
| Drip Cover                     | No Drip Cover   |
| Duty Rating                    | CONT  |
| Efficiency @ 100% Load         | 74.0 %  |
| Electrically Isolated Bearing  | Not Electrically Isolated                                   |
| Feedback Device                | NO FEEDBACK   |
| Front Face Code                | Standard  |
| Front Shaft Indicator          | None  |
| Heater Indicator               | No Heater   |

## Part detail

|              |            |
|--------------|------------|
| Revision     | V          |
| Type         | AC         |
| Mech. spec.  | 34A063     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 34WG0255   |
| Layout       | 34LYA063   |
| Eff. date    | 02-08-2024 |
| CD Diagram   | CD0005     |
| Poles        | 02         |
| Leads        | 9#18       |
| Proprietary  | False      |
| Created date | 01-01-0001 |

|                               |                     |
|-------------------------------|---------------------|
| High Voltage Full Load Amps   | 1.3 a               |
| Insulation Class              | B                   |
| Inverter Code                 | Not Inverter        |
| KVA Code                      | K                   |
| Lifting Lugs                  | No Lifting Lugs     |
| Locked Bearing Indicator      | Locked Bearing      |
| Motor Lead Exit               | Ko Box              |
| Motor Lead Quantity/Wire Size | 9 @ 18 AWG          |
| Motor Lead Termination        | Flying Leads        |
| Motor Standards               | NEMA                |
| Motor Type                    | 3413M               |
| Mounting Arrangement          | F1                  |
| Number of Poles               | 2                   |
| Overall Length                | 11.35 IN            |
| Power Factor                  | 73                  |
| Product Family                | General Purpose     |
| Pulley End Bearing Type       | Ball                |
| Pulley Face Code              | C-Face              |
| Pulley Shaft Indicator        | Standard            |
| Rodent Screen                 | None                |
| RoHS Status                   | ROHS COMPLIANT      |
| Service Factor                | 1.25                |
| Shaft Diameter                | 0.625 IN            |
| Shaft Extension Location      | Pulley End          |
| Shaft Ground Indicator        | No Shaft Grounding  |
| Shaft Rotation                | Reversible          |
| Shaft Slinger Indicator       | No Slinger          |
| Speed                         | 3450 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**

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**Nameplate**

| <b>NP1256L</b>      |              |             |            |            |   |              |   |  |  |
|---------------------|--------------|-------------|------------|------------|---|--------------|---|--|--|
| <b>CAT.NO.</b>      | VM3541       |             |            |            |   |              |   |  |  |
| <b>SPEC.</b>        | 34A63-255    |             |            |            |   |              |   |  |  |
| <b>HP</b>           | .75          |             |            |            |   |              |   |  |  |
| <b>VOLTS</b>        | 230/460      |             |            |            |   |              |   |  |  |
| <b>AMP</b>          | 2.6/1.3      |             |            |            |   |              |   |  |  |
| <b>RPM</b>          | 3450         |             |            |            |   |              |   |  |  |
| <b>FRAME</b>        | 56C          |             | <b>HZ</b>  | 60         |   | <b>PH</b>    | 3 |  |  |
| <b>SER.F.</b>       | 1.25         | <b>CODE</b> | K          | <b>DES</b> | B | <b>CLASS</b> | B |  |  |
| <b>NEMA-NOM-EFF</b> | 74           | <b>PF</b>   | 73         |            |   |              |   |  |  |
| <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 3/1.5    |             |            |            |   |              |   |  |  |

**AC Induction Motor Performance Data**

Record # 6564

Typical performance - not guaranteed values

| <b>Winding: 34WG0255-R001</b> |                        | <b>Type: 3413M</b> |  | <b>Enclosure: TEFC</b> |  |
|-------------------------------|------------------------|--------------------|--|------------------------|--|
| <b>Nameplate Data</b>         |                        |                    | <b>460 V, 60 Hz:<br/>High Voltage Connection</b> |                        |  |
| <b>Rated Output (HP)</b>      | .75                    |                    | <b>Full Load Torque</b>                          | 1.2 LB-FT              |  |
| <b>Volts</b>                  | 230/460                |                    | <b>Start Configuration</b>                       | direct on line         |  |
| <b>Full Load Amps</b>         | 2.6/1.3                |                    | <b>Breakdown Torque</b>                          | 4.8 LB-FT              |  |
| <b>R.P.M.</b>                 | 3450                   |                    | <b>Pull-up Torque</b>                            | 3.5 LB-FT              |  |
| <b>Hz</b>                     | <b>60 Phase</b>        | 3                  | <b>Locked-rotor Torque</b>                       | 3.9 LB-FT              |  |
| <b>NEMA Design Code</b>       | <b>B KVA Code</b>      | K                  | <b>Starting Current</b>                          | 7.6 A                  |  |
| <b>Service Factor (S.F.)</b>  | 1.25                   |                    | <b>No-load Current</b>                           | 0.85 A                 |  |
| <b>NEMA Nom. Eff.</b>         | <b>74 Power Factor</b> | 73                 | <b>Line-line Res. @ 25°C</b>                     | 24.6 Ω                 |  |
| <b>Rating - Duty</b>          | 40C AMB-CONT           |                    | <b>Temp. Rise @ Rated Load</b>                   | 64°C                   |  |
| <b>S.F. Amps</b>              | 3/1.5                  |                    | <b>Temp. Rise @ S.F. Load</b>                    | 84°C                   |  |

**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>    | 39        | 58        | 67        | 78         | 82         | 84         | 82          |
| <b>Efficiency</b>      | 57.7      | 70.6      | 73.6      | 75.1       | 74.7       | 74         | 74.7        |
| <b>Speed</b>           | 3553      | 3518      | 3481      | 3440       | 3395       | 3344       | 3395        |
| <b>Line amperes</b>    | 0.95      | 1.02      | 1.12      | 1.33       | 1.5        | 1.62       | 1.5         |

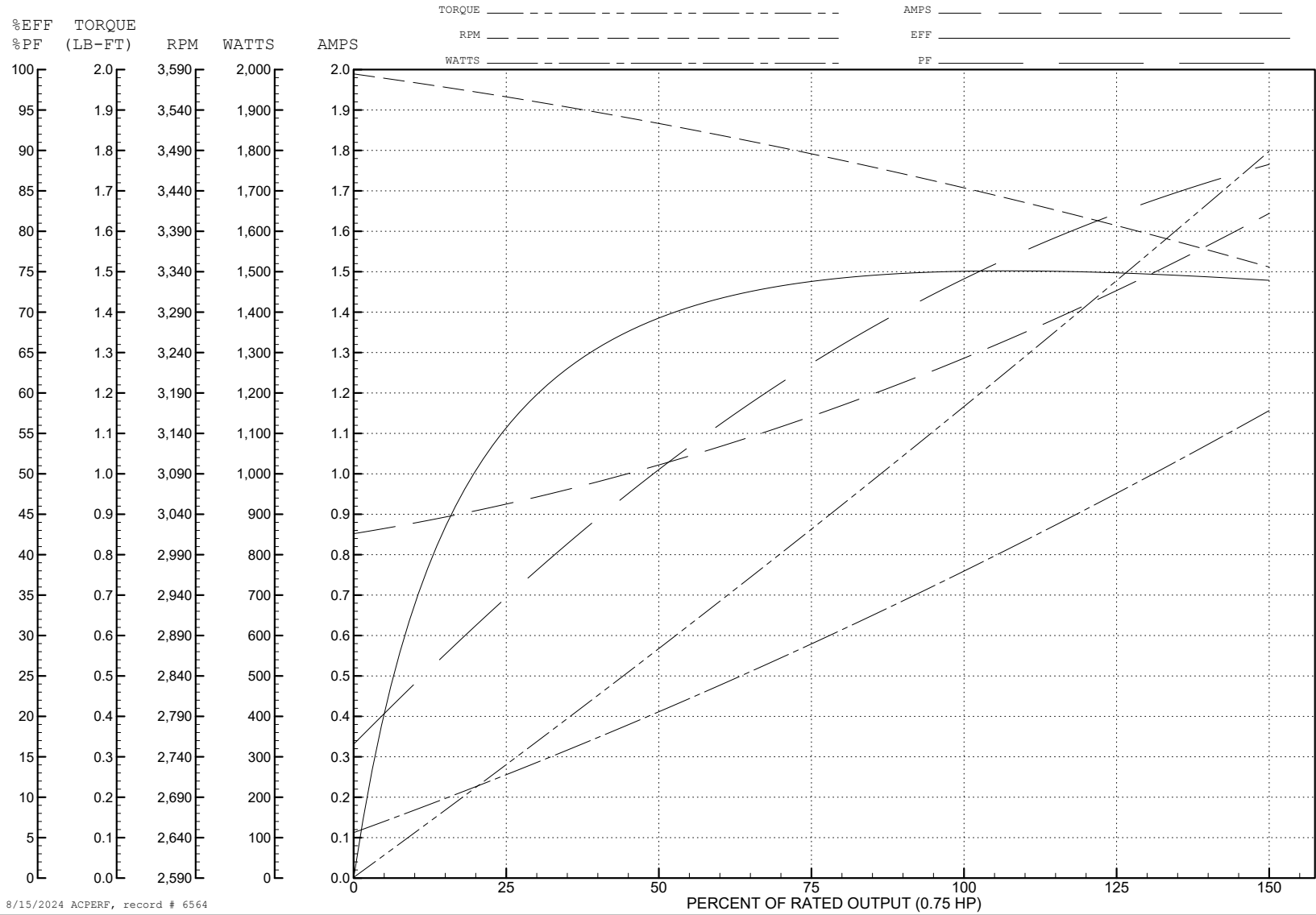
ABB Motors and Mechanical Inc.

WINDING # 34WG0255

Typical performance - not guaranteed values.

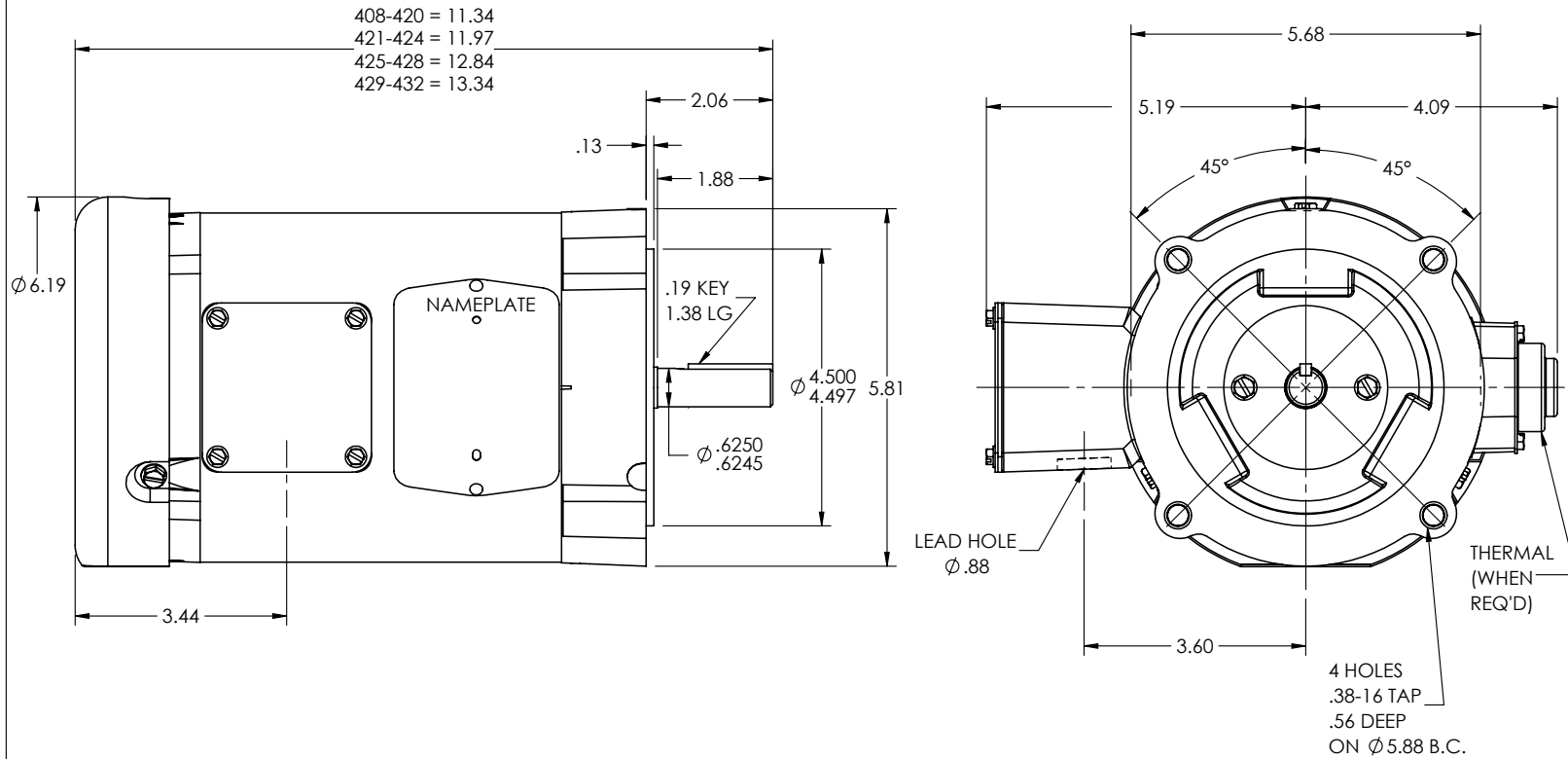
0.75 HP 3 PH 60 HZ 3450 RPM 460 V 3413M

TORQUES (LB-FT): PO=4.8 PU=3.5 LR=3.9 LRA=7.6



8/15/2024 ACPERF, record # 6564

34LYA063



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

|                               |             |                              |                   |
|-------------------------------|-------------|------------------------------|-------------------|
| REV. DESC: LOAD TO SOLIDWORKS |             |                              |                   |
| REV: N                        | VERSION: 04 | REVISED: 01:33:59 09/21/2022 | TDR: 000001194274 |
| 34LYA063                      |             | MODEL NO. 34LYA063           | REF: -            |
|                               |             | BY: ENFRAJ0                  |                   |

**BALDOR - RELIANCE®**

STD VERT 34M NEMA 56C TEFC

34LYA063



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