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# Customer information packet

## NM3538

.5HP, 1725RPM, 3PH, 60HZ, 56, 3420M, TENV, F1

Class - None

Division - Not Applicable

## Specifications

|                                |  |
|--------------------------------|--|
| Enclosure                      | TENV   |
| Frame                          | 56   |
| Frame Material                 | Steel  |
| Frequency                      | 60.00 Hz   |
| Motor Letter Type              | Three Phase  |
| Output @ Frequency             | .500 HP @ 60 HZ  |
| Phase                          | 3  |
| Synchronous Speed @ Frequency  | 1800 RPM @ 60 HZ   |
| Voltage @ Frequency            | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ                         |
| XP Class and Group             | None   |
| XP Division                    | Not Applicable   |
| 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              | .900 A @ 460.0 V<br>1.800 A @ 230.0 V<br>2.100 A @ 208.0 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 Face Code                | Standard   |
| Front Shaft Indicator          | None   |
| Heater Indicator               | No Heater  |

## Part detail

|              |            |
|--------------|------------|
| Revision     | P          |
| Type         | AC         |
| Mech. spec.  | 34A076     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 34WG0097   |
| Layout       | 34LYA076   |
| Eff. date    | 02-15-2018 |
| CD Diagram   | CD0005     |
| Poles        | 04         |
| Leads        | 9#18       |
| Proprietary  | False      |
| Created date | 01-01-0001 |

|                               |                     |
|-------------------------------|---------------------|
| High Voltage Full Load Amps   | 0.9 a               |
| Insulation Class              | F                   |
| Inverter Code                 | Not Inverter        |
| KVA Code                      | K                   |
| Lifting Lugs                  | No Lifting Lugs     |
| Locked Bearing Indicator      | No 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                    | 3420M               |
| Mounting Arrangement          | F1                  |
| Number of Poles               | 4                   |
| Overall Length                | 10.88 IN            |
| Power Factor                  | 69                  |
| Product Family                | General Purpose     |
| Pulley End Bearing Type       | Ball                |
| Pulley Face Code              | Standard            |
| Pulley Shaft Indicator        | Standard            |
| Rodent Screen                 | None                |
| 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                         | 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 |

**Nameplate**

| <b>NP1256L</b>      |                       |             |      |            |   |              |   |     |  |
|---------------------|-----------------------|-------------|------|------------|---|--------------|---|-----|--|
| <b>CAT.NO.</b>      | NM3538                |             |      |            |   |              |   |     |  |
| <b>SPEC.</b>        | 34A76-97G1            |             |      |            |   |              |   |     |  |
| <b>HP</b>           | .5                    |             |      |            |   |              |   |     |  |
| <b>VOLTS</b>        | 230/460               |             |      |            |   |              |   |     |  |
| <b>AMP</b>          | 1.8/.9                |             |      |            |   |              |   |     |  |
| <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> | K    | <b>DES</b> | B | <b>CLASS</b> | F |     |  |
| <b>NEMA-NOM-EFF</b> | 75.5                  | <b>PF</b>   | 69   |            |   |              |   |     |  |
| <b>RATING</b>       | 40C AMB-CONT          |             |      |            |   |              |   |     |  |
| <b>CC</b>           | <b>USABLE AT 208V</b> |             |      |            |   |              |   | 2.1 |  |
| <b>DE</b>           | 6203                  | <b>ODE</b>  | 6203 |            |   |              |   |     |  |
| <b>ENCL</b>         | TENV                  | <b>SN</b>   |      |            |   |              |   |     |  |
|                     | SFA 2/1               |             |      |            |   |              |   |     |  |

**Accessories**

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

**AC Induction Motor Performance Data**

Record # 6543

Typical performance - not guaranteed values

| <b>Winding:</b> 34WG0097-R003 |                          | <b>Type:</b> 3420M             |  | <b>Enclosure:</b> TENV |  |
|-------------------------------|--------------------------|--------------------------------|--|------------------------|--|
| <b>Nameplate Data</b>         |                          |                                | <b>460 V, 60 Hz:<br/>High Voltage Connection</b> |                        |  |
| <b>Rated Output (HP)</b>      | .5                       | <b>Full Load Torque</b>        | 1.5 LB-FT  |                        |  |
| <b>Volts</b>                  | 230/460                  | <b>Start Configuration</b>     | direct on line                                   |                        |  |
| <b>Full Load Amps</b>         | 1.8/.9                   | <b>Breakdown Torque</b>        | 6.8 LB-FT  |                        |  |
| <b>R.P.M.</b>                 | 1725                     | <b>Pull-up Torque</b>          | 4.6 LB-FT  |                        |  |
| <b>Hz</b>                     | 60 <b>Phase</b>          | 3                              | <b>Locked-rotor Torque</b>                       | 5.8 LB-FT              |  |
| <b>NEMA Design Code</b>       | <b>B KVA Code</b>        | K                              | <b>Starting Current</b>                          | 7 A                    |  |
| <b>Service Factor (S.F.)</b>  | 1.25                     | <b>No-load Current</b>         | 0.54 A   |                        |  |
| <b>NEMA Nom. Eff.</b>         | 75.5 <b>Power Factor</b> | 69                             | <b>Line-line Res. @ 25°C</b>                     | 27.56 Ω                |  |
| <b>Rating - Duty</b>          | 40C AMB-CONT             | <b>Temp. Rise @ Rated Load</b> | 57°C   |                        |  |
| <b>S.F. Amps</b>              | 2/1                      | <b>Temp. Rise @ S.F. Load</b>  | 80°C   |                        |  |

**Load Characteristics 460 V, 60 Hz, 0.5 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>    | 38        | 53        | 65        | 71         | 75         | 81         | 75          |
| <b>Efficiency</b>      | 55        | 69        | 74        | 78         | 75.5       | 74.4       | 75.5        |
| <b>Speed</b>           | 1787      | 1774      | 1760      | 1749       | 1728       | 1717       | 1728        |
| <b>Line amperes</b>    | 0.6       | 0.65      | 0.74      | 0.84       | 1          | 1.1        | 1           |

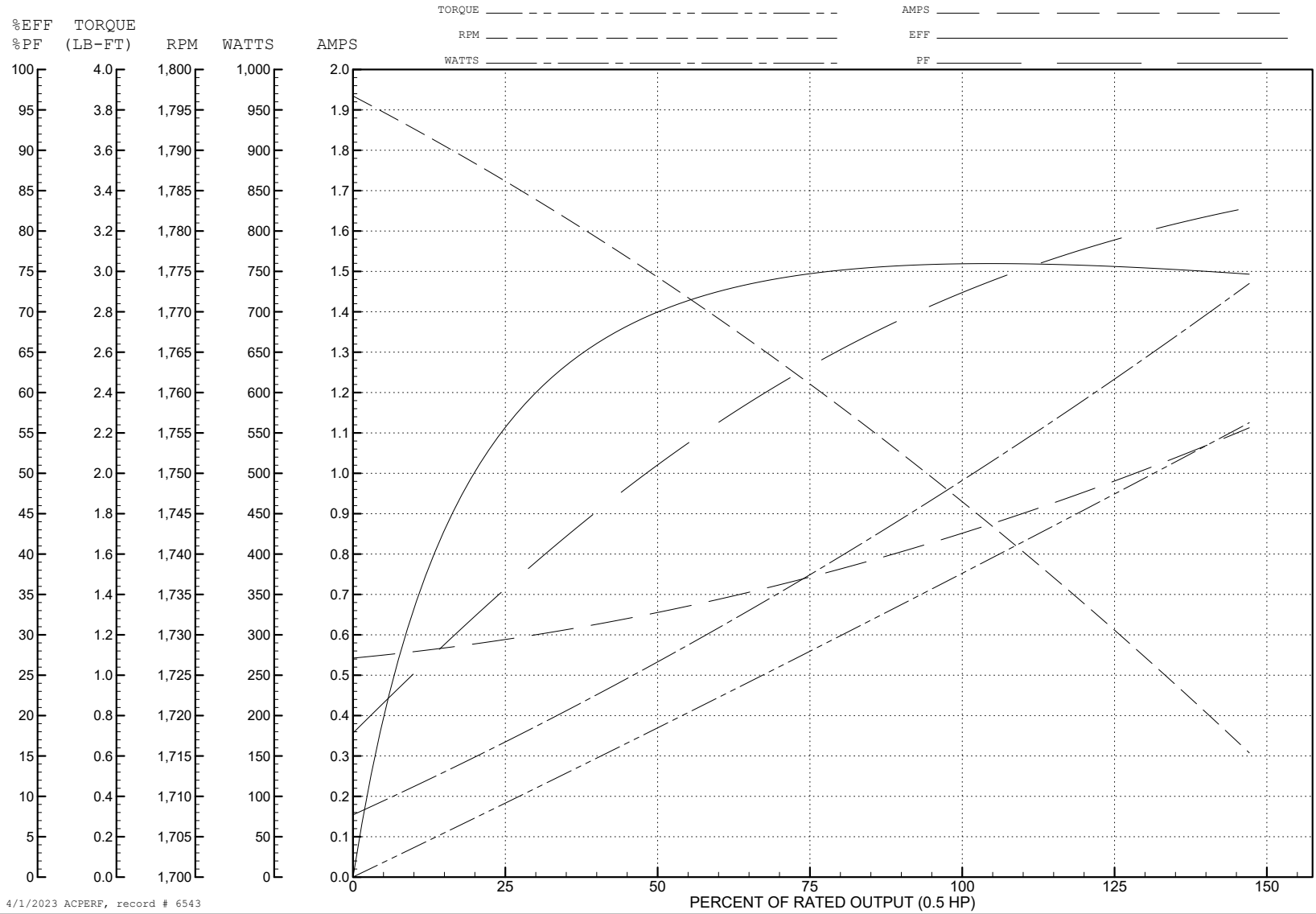
ABB Motors and Mechanical Inc.

WINDING # 34WG0097

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

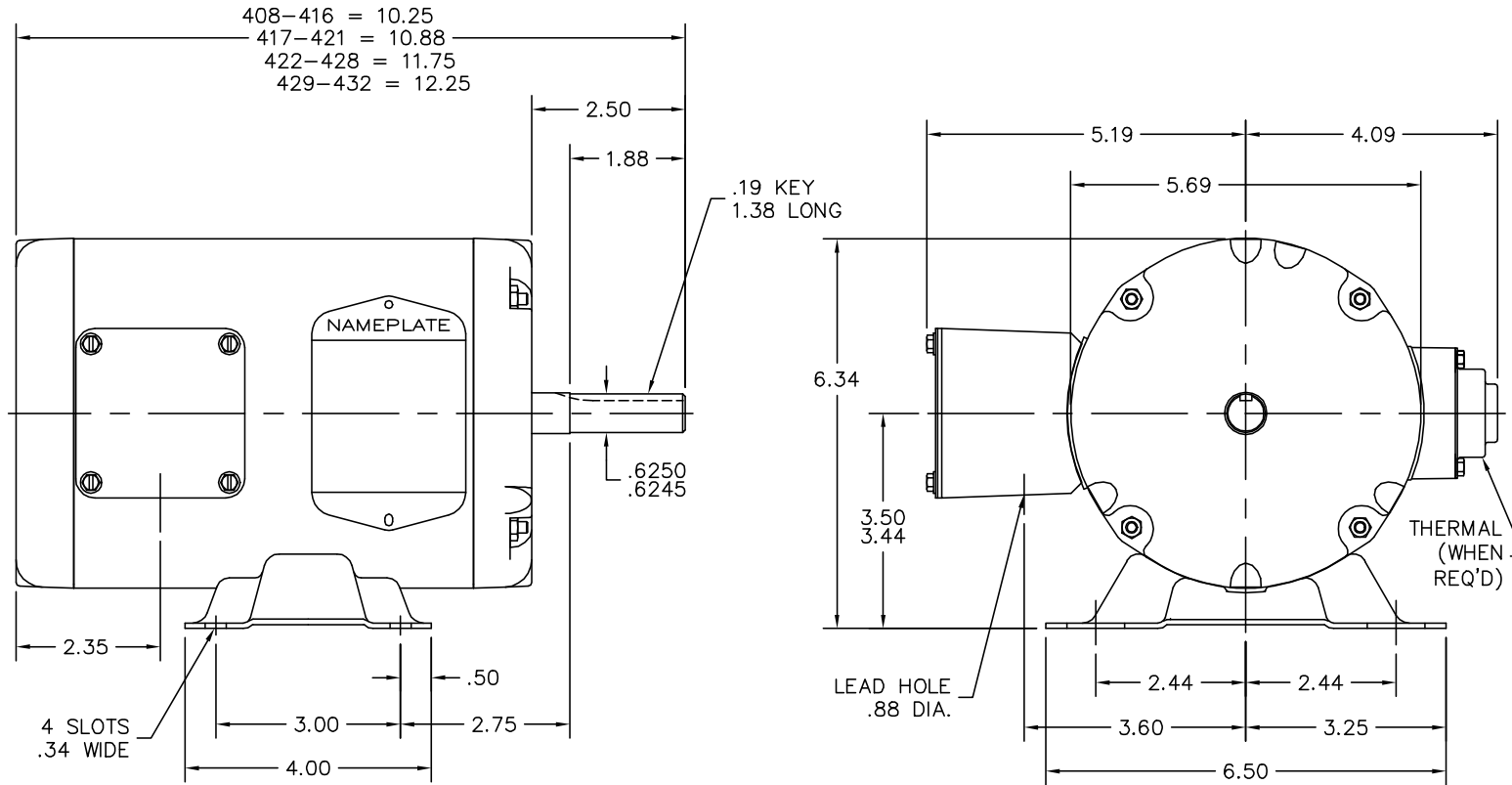
Typical performance - not guaranteed values.

TORQUES (LB-FT): PO=6.8 PU=4.6 LR=5.8 LRA=7



4/1/2023 ACPERP, record # 6543

34LYA076



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

|  |                                |                   |
|--|--------------------------------|-------------------|
| REV. DESC: REVISE 4 HOLES TO READ 4 SLOTS (PER BASE DWG) |                                |                   |
| REV. LTR: F  | VERSION: 04                    | TDR: 000001131303 |
| FILE: \AAA\00026\165                                     | REVISED: 02: 25: 31 01/30/2020 | BY: ENELLGO       |
| MTL: -   | ©                              |                   |

**BALDOR - RELIANCE®**

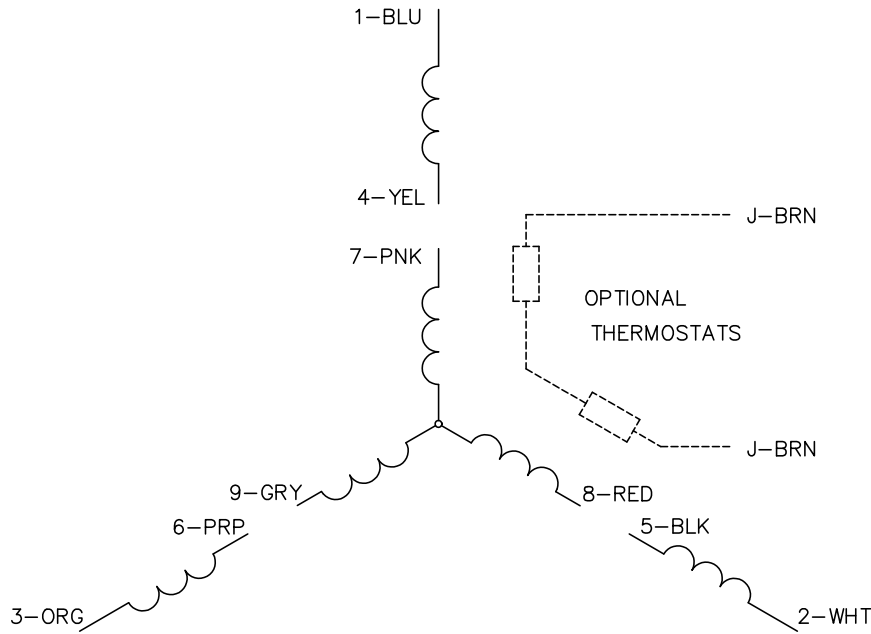
STD HORZ MODEL 34M NEMA 56 TENV/TEAO

SH 1 of 1

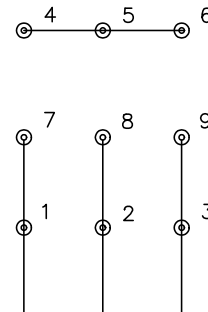
34LYA076



CD0005

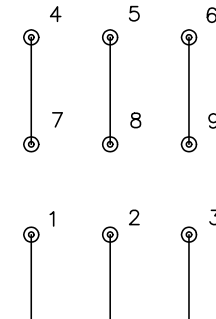


LOW VOLTAGE  
(2Y)



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