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# Customer information packet

## VM3534

.33HP, 1730RPM, 3PH, 60HZ, 56C, 3413M, TEFC, F1

Class - None

Division - Not Applicable

## 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             | .330 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                         |
| Agency Approvals               | CSA<br>UR                                                  |
| Ambient Temperature            | 40 °C                                                      |
| Auxiliary Box                  | NO AUXILLARY BOX                                           |
| Auxiliary Box Lead Termination | None                                                       |
| Base Indicator                 | No Mounting                                                |
| Bearing Grease Type            | Polyrex EM (-20F +300F)                                    |
| Blower                         | None                                                       |
| Current @ Voltage              | .700 A @ 460.0 V<br>1.300 A @ 208.0 V<br>1.400 A @ 230.0 V |
| Design Code                    | B                                                          |
| Drip Cover                     | No Drip Cover                                              |
| Duty Rating                    | CONT                                                       |
| Efficiency @ 100% Load         | 68.0 %                                                     |
| Electrically Isolated Bearing  | Not Electrically Isolated                                  |
| Feedback Device                | NO FEEDBACK                                                |
| Front Shaft Indicator          | None                                                       |
| Heater Indicator               | No Heater                                                  |
| High Voltage Full Load Amps    | 0.7 a                                                      |

## Part detail

|              |            |
|--------------|------------|
| Revision     | E          |
| Type         | AC         |
| Mech. spec.  | 34A063     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 34WGR709   |
| Layout       | 34LYA063   |
| Eff. date    | 02-10-2025 |
| CD Diagram   | CD0005     |
| Poles        | 04         |
| Leads        | 9#18       |
| Proprietary  | False      |
| Created date | 11-20-2020 |

|                               |                     |
|-------------------------------|---------------------|
| Insulation Class              | B                   |
| Inverter Code                 | Not Inverter        |
| KVA Code                      | L                   |
| Lifting Lugs                  | No Lifting Lugs     |
| Locked Bearing Indicator      | Locked Bearing      |
| 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               | 4                   |
| Overall Length                | 11.35 IN            |
| Power Factor                  | 66                  |
| 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                | 1.35                |
| Shaft Diameter                | 0.625 IN            |
| Shaft Ground Indicator        | No Shaft Grounding  |
| Shaft Rotation                | Reversible          |
| Shaft Slinger Indicator       | No Slinger          |
| Speed                         | 1730 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

| NP1256L      |              |      |     |      |   |  |       |   |  |  |
|--------------|--------------|------|-----|------|---|--|-------|---|--|--|
| CAT.NO.      | VM3534       |      |     |      |   |  |       |   |  |  |
| SPEC.        | 34A063R709   |      |     |      |   |  |       |   |  |  |
| HP           | .33          |      |     |      |   |  |       |   |  |  |
| VOLTS        | 230/460      |      |     |      |   |  |       |   |  |  |
| AMP          | 1.4/.7       |      |     |      |   |  |       |   |  |  |
| RPM          | 1730         |      |     |      |   |  |       |   |  |  |
| FRAME        | 56C          |      | HZ  | 60   |   |  | PH    | 3 |  |  |
| SER.F.       | 1.35         | CODE | L   | DES  | B |  | CLASS | B |  |  |
| NEMA-NOM-EFF | 68           | PF   | 66  |      |   |  |       |   |  |  |
| RATING       | 40C AMB-CONT |      |     |      |   |  |       |   |  |  |
| CC           |              |      |     |      |   |  |       |   |  |  |
| DE           | 6203         |      | ODE | 6203 |   |  |       |   |  |  |
| ENCL         | TEFC         | SN   |     |      |   |  |       |   |  |  |
|              | SFA 1.6/.8   |      |     |      |   |  |       |   |  |  |

## AC Induction Motor Performance Data

Record # 85527

Preliminary Data Sheet

| Winding: 34WGR709-R001 |    |              | Type: 3413M  |                                          | Enclosure: TEFC       |                |        |
|------------------------|----|--------------|--------------|------------------------------------------|-----------------------|----------------|--------|
| Nameplate Data         |    |              |              | 460 V, 60 Hz:<br>High Voltage Connection |                       |                |        |
| Rated Output (HP)      |    | .33          |              | Full Load Torque                         |                       | 1 LB-FT        |        |
| Volts                  |    | 230/460      |              | Start Configuration                      |                       | direct on line |        |
| Full Load Amps         |    | 1.4/0.7      |              | Breakdown Torque                         |                       | 3.5 LB-FT      |        |
| R.P.M.                 |    | 1725         |              | Pull-up Torque                           |                       | 2.13 LB-FT     |        |
| Hz                     | 60 | Phase        | 3            | Locked-rotor Torque                      |                       | 2.72 LB-FT     |        |
| NEMA Design Code       |    | B            | KVA Code     | L                                        | Starting Current      |                | 3.93 A |
| Service Factor (S.F.)  |    | 1.35         |              | No-load Current                          |                       | 0.6 A          |        |
| NEMA Nom. Eff.         |    | 67           | Power Factor | 66                                       | Line-line Res. @ 25°C |                | 70.9 Ω |
| Rating - Duty          |    | 40C AMB-CONT |              | Temp. Rise @ Rated Load                  |                       | 51°C           |        |
| S.F. Amps              |    | 1.6/0.8      |              | Temp. Rise @ S.F. Load                   |                       | 67°C           |        |
|                        |    |              |              | Locked-rotor Power Factor                |                       | 82             |        |
|                        |    |              |              | Rotor inertia                            |                       | 0.031 lb-ft²   |        |

## Load Characteristics 460 V, 60 Hz, 0.33 HP

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 33   | 46   | 57   | 67   | 69   | 81   | 77   |
| Efficiency      | 38.6 | 55.6 | 63.2 | 67.3 | 68.7 | 67.2 | 68.7 |
| Speed           | 1779 | 1764 | 1749 | 1731 | 1712 | 1691 | 1697 |
| Line amperes    | 0.6  | 0.62 | 0.65 | 0.7  | 0.76 | 0.85 | 0.81 |

ABB Motors and Mechanical Inc.

WINDING # 34WGR709

Typical performance - not guaranteed values.

0.33 HP 3 PH 60 HZ 1725 RPM 460 V 3413M

TORQUES (LB-FT): PO=3.5 PU=2.13 LR=2.72 LRA=3.93





