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# Customer information packet

## SPM3539

.5HP, 1140RPM, 3PH, 60HZ, 56H, 3436M, TEFC, F1

Class - None

Division - Not Applicable

## Specifications

|                                |                                        |
|--------------------------------|----------------------------------------|
| Enclosure                      | TEFC                                   |
| Frame                          | 56H                                    |
| 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             | .500 HP @ 60 HZ                        |
| Phase                          | 3                                      |
| Synchronous Speed @ Frequency  | 1200 RPM @ 60 HZ                       |
| Voltage @ Frequency            | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ     |
| Agency Approvals               | C UR US<br>WEEE                        |
| Ambient Temperature            | 40 °C                                  |
| Auxiliary Box                  | NO AUXILLARY BOX                       |
| Auxiliary Box Lead Termination | None                                   |
| Base Indicator                 | Rigid                                  |
| Bearing Grease Type            | Polyrex EM (-20F +300F)                |
| Blower                         | None                                   |
| Current @ Voltage              | 2.000 A @ 230.0 V<br>1.000 A @ 460.0 V |
| Design Code                    | B                                      |
| Drip Cover                     | No Drip Cover                          |
| Duty Rating                    | CONT                                   |
| Efficiency @ 100% Load         | 78.5 %                                 |
| Electrically Isolated Bearing  | Not Electrically Isolated              |
| Feedback Device                | NO FEEDBACK                            |
| Front Shaft Indicator          | None                                   |
| Heater Indicator               | No Heater                              |
| High Voltage Full Load Amps    | 1.0 a                                  |
| Insulation Class               | F                                      |

## Part detail

|              |            |
|--------------|------------|
| Revision     | C          |
| Type         | AC         |
| Mech. spec.  | 34T120     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 34WGR776   |
| Layout       | 34LYT120   |
| Eff. date    | 02-27-2025 |
| CD Diagram   | CD0005     |
| Poles        | 06         |
| Leads        | 9#18       |
| Proprietary  | False      |
| Created date | 09-12-2023 |

|                               |                     |
|-------------------------------|---------------------|
| Inverter Code                 | Not Inverter        |
| KVA Code                      | K                   |
| 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                    | 3436M               |
| Mounting Arrangement          | F1                  |
| Number of Poles               | 6                   |
| Overall Length                | 13.72 IN            |
| Power Factor                  | 61                  |
| 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 Ground Indicator        | No Shaft Grounding  |
| Shaft Rotation                | Reversible          |
| Shaft Slinger Indicator       | No Slinger          |
| Speed                         | 1140 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

| NP4558A02LL |              |        |         |      |               |      |       |    |      |  |  |  |
|-------------|--------------|--------|---------|------|---------------|------|-------|----|------|--|--|--|
| CAT #       | SPM3539      |        |         | WGT  | 40            | LBS  |       |    |      |  |  |  |
| SER #       |              |        |         |      | ENCL          | TEFC |       |    |      |  |  |  |
| SPEC        | 34T120R776   |        |         |      | CC            |      | IP    | 54 |      |  |  |  |
| HP          | .5           |        |         |      | NEMA NOM. EFF |      |       |    | 78.5 |  |  |  |
| VOLTS       | 230/460      |        |         |      | PF            | 61   |       |    |      |  |  |  |
| AMPS        | 2/1          |        |         |      |               |      |       |    |      |  |  |  |
| RATING      | 40C AMB-CONT |        |         |      |               |      |       |    |      |  |  |  |
| RPM         | 1140         |        |         |      | PH            | 3    | DES   | B  |      |  |  |  |
| FRAME       | 56H          | HZ     | 60      | CODE |               | K    | CLASS | F  |      |  |  |  |
| SER.F.      | 1.25         | SF AMP | 2.2/1.1 |      |               |      |       |    |      |  |  |  |
| DE          | 6203         |        | ODE     | 6203 |               |      |       |    |      |  |  |  |
| GREASE      | POLYREX EM   |        |         |      |               |      |       |    |      |  |  |  |
|             |              |        |         |      |               |      |       |    |      |  |  |  |
|             |              |        |         |      |               |      |       |    |      |  |  |  |
|             |              |        |         |      |               |      |       |    |      |  |  |  |
|             |              |        |         |      |               |      |       |    |      |  |  |  |
|             |              |        |         |      |               |      |       |    |      |  |  |  |
|             |              |        |         |      |               |      |       |    |      |  |  |  |
|             |              |        |         |      |               |      |       |    |      |  |  |  |
|             |              |        |         |      |               | QR   |       |    |      |  |  |  |
| YR          |              |        |         |      |               |      |       |    |      |  |  |  |

## AC Induction Motor Performance Data

Record # 100838

Preliminary Data Sheet

| Winding: 34WGR776-R002 |    |              | Type: 3436M  |                                          | Enclosure: TEFC       |                |        |
|------------------------|----|--------------|--------------|------------------------------------------|-----------------------|----------------|--------|
| Nameplate Data         |    |              |              | 460 V, 60 Hz:<br>High Voltage Connection |                       |                |        |
| Rated Output (HP)      |    | .5           |              | Full Load Torque                         |                       | 2.38 LB-FT     |        |
| Volts                  |    | 230/460      |              | Start Configuration                      |                       | direct on line |        |
| Full Load Amps         |    | 2/1          |              | Breakdown Torque                         |                       | 8.4 LB-FT      |        |
| R.P.M.                 |    | 1140         |              | Pull-up Torque                           |                       | 5.4 LB-FT      |        |
| Hz                     | 60 | Phase        | 3            | Locked-rotor Torque                      |                       | 6.5 LB-FT      |        |
| NEMA Design Code       |    | B            | KVA Code     | K                                        | Starting Current      |                | 5.4 A  |
| Service Factor (S.F.)  |    | 1.25         |              | No-load Current                          |                       | 0.73 A         |        |
| NEMA Nom. Eff.         |    | 78.5         | Power Factor | 61                                       | Line-line Res. @ 25°C |                | 25.8 Ω |
| Rating - Duty          |    | 40C AMB-CONT |              | Temp. Rise @ Rated Load                  |                       | 40°C           |        |
| S.F. Amps              |    | 2.2/1.1      |              | Temp. Rise @ S.F. Load                   |                       | 67°C           |        |
|                        |    |              |              | Locked-rotor Power Factor                |                       | 53             |        |
|                        |    |              |              | Rotor inertia                            |                       | 0.0855 lb-ft²  |        |

## Load Characteristics 460 V, 60 Hz, 0.5 HP

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 24   | 39   | 52   | 61   | 69   | 74   | 69   |
| Efficiency      | 67   | 77   | 79.2 | 78.5 | 76.5 | 73.4 | 76.5 |
| Speed           | 1185 | 1171 | 1156 | 1137 | 1117 | 1091 | 1117 |
| Line amperes    | 0.75 | 0.8  | 0.89 | 1    | 1.13 | 1.3  | 1.13 |

ABB Motors and Mechanical Inc.

WINDING # 34WGR776

Typical performance - not guaranteed values.

0.5 HP 3 PH 60 HZ 1140 RPM 460 V 3436M

TORQUES (LB-FT): PO=8.4 PU=5.4 LR=6.5 LRA=5.4





