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# Customer information packet

## SPM3545

1HP, 3450RPM, 3PH, 60HZ, 56H, 3516M, TEFC, F1, N

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             | 1.000 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               | CURUSEEV<br>NEMA PREMIUM<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              | 1.300 A @ 460.0 V<br>2.600 A @ 230.0 V |
| Design Code                    | B                                      |
| Drip Cover                     | No Drip Cover                          |
| Duty Rating                    | CONT                                   |
| Efficiency @ 100% Load         | 82.5 %                                 |
| Electrically Isolated Bearing  | Not Electrically Isolated              |
| Feedback Device                | NO FEEDBACK                            |
| Front Shaft Indicator          | None                                   |
| Heater Indicator               | No Heater                              |
| High Voltage Full Load Amps    | 1.3 a                                  |

## Part detail

|              |            |
|--------------|------------|
| Revision     | D          |
| Type         | AC         |
| Mech. spec.  | 35E6271    |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 35WGR933   |
| Layout       | 35LYE6271  |
| Eff. date    | 11-19-2025 |
| CD Diagram   | CD0005     |
| Poles        | 02         |
| Leads        | 9#18       |
| Proprietary  | False      |
| Created date | 09-08-2023 |

|                               |                     |
|-------------------------------|---------------------|
| Insulation Class              | F                   |
| Inverter Code                 | Inverter Duty       |
| KVA Code                      | L                   |
| Lifting Lugs                  | No Lifting Lugs     |
| Locked Bearing Indicator      | No Locked Bearing   |
| Max Speed                     | 5400 rpm            |
| Motor Lead Quantity/Wire Size | 9 @ 18 AWG          |
| Motor Lead Termination        | Flying Leads        |
| Motor Standards               | NEMA                |
| Motor Type                    | 3516M               |
| Mounting Arrangement          | F1                  |
| Number of Poles               | 2                   |
| Overall Length                | 12.91 IN            |
| Power Factor                  | 88                  |
| 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                         | 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                |



## AC Induction Motor Performance Data

Record # 100854

Typical performance - not guaranteed values

| Winding: 35WGR933-R007 |    |         | Type: 3516M                              |                     | Enclosure: TEFC         |           |        |
|------------------------|----|---------|------------------------------------------|---------------------|-------------------------|-----------|--------|
| Nameplate Data         |    |         | 460 V, 60 Hz:<br>High Voltage Connection |                     |                         |           |        |
| Rated Output (HP)      |    | 1       | Full Load Torque                         |                     | 1.5 LB-FT               |           |        |
| Volts                  |    | 230/460 | Start Configuration                      |                     | direct on line          |           |        |
| Full Load Amps         |    | 2.6/1.3 | Breakdown Torque                         |                     | 7.5 LB-FT               |           |        |
| R.P.M.                 |    | 3450    | Pull-up Torque                           |                     | 4.2 LB-FT               |           |        |
| Hz                     | 60 | Phase   | 3                                        | Locked-rotor Torque |                         | 5.6 LB-FT |        |
| NEMA Design Code       |    | B       | KVA Code                                 | L                   | Starting Current        |           | 12.4 A |
| Service Factor (S.F.)  |    | 1.25    | No-load Current                          |                     | 0.63 A                  |           |        |
| NEMA Nom. Eff.         |    | 82.5    | Power Factor                             | 88                  | Line-line Res. @ 25°C   |           | 15.2 Ω |
| Rating - Duty          |    | 40C     | AMB-CONT                                 |                     | Temp. Rise @ Rated Load |           | 32°C   |
| S.F. Amps              |    | 3.2/1.6 | Temp. Rise @ S.F. Load                   |                     | 40°C                    |           |        |
|                        |    |         | Locked-rotor Power Factor                |                     | 56.1                    |           |        |
|                        |    |         | Rotor inertia                            |                     | 0.0443 lb-ft²           |           |        |

## Load Characteristics 460 V, 60 Hz, 1 HP

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 48   | 69   | 81   | 86   | 88   | 90   | 88   |
| Efficiency      | 71.5 | 80.5 | 83.4 | 83.6 | 82.9 | 81.3 | 82.9 |
| Speed           | 3560 | 3529 | 3494 | 3462 | 3423 | 3378 | 3423 |
| Line amperes    | 0.7  | 0.85 | 1.04 | 1.28 | 1.58 | 1.86 | 1.58 |

ABB Motors and Mechanical Inc.

WINDING # 35WGR933

Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 3450 RPM 460 V 3516M

TORQUES (LB-FT): PO=7.5 PU=4.2 LR=5.6 LRA=12.4





