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# Customer information packet

## VSSWDM3538

.5HP, 1775RPM, 3PH, 60HZ, 56C, 3514M, TENV, F1

Class - None

Division - Not Applicable

## Specifications

|                                |                                        |
|--------------------------------|----------------------------------------|
| Enclosure                      | TENV                                   |
| Frame                          | 56C                                    |
| Frame Material                 | Stainless 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  | 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              | 2.020 A @ 230.0 V<br>1.010 A @ 460.0 V |
| Design Code                    | B                                      |
| Drip Cover                     | No Drip Cover                          |
| Duty Rating                    | CONT                                   |
| Efficiency @ 100% Load         | 81.5 %                                 |
| 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     | B          |
| Type         | AC         |
| Mech. spec.  | 35V824     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 35WGG069   |
| Layout       | 35LYV824   |
| Eff. date    | 02-25-2025 |
| CD Diagram   | CD0005     |
| Poles        | 04         |
| Leads        | 9#18       |
| Proprietary  | False      |
| Created date | 09-15-2023 |

|                               |                               |
|-------------------------------|-------------------------------|
| Inverter Code                 | Inverter Duty                 |
| KVA Code                      | N                             |
| 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                    | 3514M                         |
| Mounting Arrangement          | F1                            |
| Number of Poles               | 4                             |
| Overall Length                | 11.08 IN                      |
| Power Factor                  | 63                            |
| Product Family                | Wash Down All Stainless Steel |
| Pulley End Bearing Type       | Ball                          |
| Pulley Face Code              | C-Face                        |
| 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                         | 1775 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

## NP1951A01

|              |               |      |  |     |     |      |       |    |   |   |
|--------------|---------------|------|--|-----|-----|------|-------|----|---|---|
| CAT.NO.      | VSSWDM3538    |      |  |     |     |      |       |    |   |   |
| SPEC.        | 35V824G069G3  |      |  |     |     |      |       |    |   |   |
| HP           | .5            |      |  |     |     |      |       |    |   |   |
| VOLTS        | 230/460       |      |  |     |     |      |       |    |   |   |
| AMP          | 2.02/1.01     |      |  |     |     |      |       |    |   |   |
| RPM          | 1775          |      |  |     |     |      |       |    |   |   |
| FRAME        | 56C           |      |  | HZ  |     | 60   |       | PH |   | 3 |
| SER.F.       | 1.25          | CODE |  | N   | DES | B    | CLASS |    | F |   |
| NEMA-NOM-EFF | 81.5          |      |  | PF  |     | 63   |       |    |   |   |
| RATING       | 40C AMB-CONT  |      |  |     |     |      |       |    |   |   |
| CC           |               |      |  |     |     |      |       |    |   |   |
| DE           | 6205          |      |  | ODE |     | 6203 |       |    |   |   |
| ENCL         | TENV          | SN   |  |     |     |      |       |    |   |   |
|              | SFA 2.2/1.1   |      |  |     |     |      |       |    |   |   |
|              | 20:1CT 20:1VT |      |  |     |     |      |       |    |   |   |
|              |               |      |  |     |     |      |       |    |   |   |

**AC Induction Motor Performance Data**

Record # 100503

Typical performance - not guaranteed values

| Winding: 35WGG069-R077 |    |           | Type: 3514M                              |                     | Enclosure: TENV         |           |        |
|------------------------|----|-----------|------------------------------------------|---------------------|-------------------------|-----------|--------|
| Nameplate Data         |    |           | 460 V, 60 Hz:<br>High Voltage Connection |                     |                         |           |        |
| Rated Output (HP)      |    | .5        | Full Load Torque                         |                     | 1.48 LB-FT              |           |        |
| Volts                  |    | 230/460   | Start Configuration                      |                     | direct on line          |           |        |
| Full Load Amps         |    | 2.02/1.01 | Breakdown Torque                         |                     | 8 LB-FT                 |           |        |
| R.P.M.                 |    | 1775      | Pull-up Torque                           |                     | 4.4 LB-FT               |           |        |
| Hz                     | 60 | Phase     | 3                                        | Locked-rotor Torque |                         | 5.1 LB-FT |        |
| NEMA Design Code       |    | B         | KVA Code                                 | N                   | Starting Current        |           | 8.4 A  |
| Service Factor (S.F.)  |    | 1.25      | No-load Current                          |                     | 0.85 A                  |           |        |
| NEMA Nom. Eff.         |    | 81.5      | Power Factor                             | 63                  | Line-line Res. @ 25°C   |           | 30.3 Ω |
| Rating - Duty          |    | 40C       | AMB-CONT                                 |                     | Temp. Rise @ Rated Load |           | 44°C   |
| S.F. Amps              |    | 2.2/1.1   | Temp. Rise @ S.F. Load                   |                     | 51°C                    |           |        |
|                        |    |           | Locked-rotor Power Factor                |                     | 66.8                    |           |        |
|                        |    |           | Rotor inertia                            |                     | 0.101 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   | 37   | 48   | 58   | 65   | 71   | 65   |
| Efficiency      | 58.9 | 72.5 | 78.4 | 80.5 | 81.6 | 81.5 | 81.6 |
| Speed           | 1793 | 1788 | 1782 | 1776 | 1771 | 1763 | 1771 |
| Line amperes    | 0.85 | 0.89 | 0.94 | 1.01 | 1.11 | 1.21 | 1.11 |

ABB Motors and Mechanical Inc.

WINDING # 35WGG069

Typical performance - not guaranteed values.

0.5 HP 3 PH 60 HZ 1775 RPM 460 V 3514M

TORQUES (LB-FT) : PO=8 PU=4.4 LR=5.1 LRA=8.4





