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# Customer information packet

## CFSWDM3538-E

.5HP, 1770RPM, 3PH, 60HZ, 56C, 3512M, 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            | 460.0 V @ 60 HZ<br>230.0 V @ 60 HZ<br>208.0 V @ 60 HZ      |
| Agency Approvals               | CSA<br>UR                                                  |
| Ambient Temperature            | 40 °C                                                      |
| Auxiliary Box                  | NO AUXILLARY BOX                                           |
| Auxiliary Box Lead Termination | None                                                       |
| Base Indicator                 | Rigid                                                      |
| Bearing Grease Type            | Polyrex EM (-20F +300F)                                    |
| Blower                         | None                                                       |
| Current @ Voltage              | 1.900 A @ 208.0 V<br>1.800 A @ 230.0 V<br>.900 A @ 460.0 V |
| Design Code                    | B                                                          |
| Drip Cover                     | No Drip Cover                                              |
| Duty Rating                    | CONT                                                       |
| Efficiency @ 100% Load         | 80.0 %                                                     |
| Electrically Isolated Bearing  | Not Electrically Isolated                                  |
| Feedback Device                | NO FEEDBACK                                                |
| Front Shaft Indicator          | None                                                       |
| Heater Indicator               | No Heater                                                  |

## Part detail

|              |            |
|--------------|------------|
| Revision     | E          |
| Type         | AC         |
| Mech. spec.  | 35E4735    |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 35WGZ944   |
| Layout       | 35LYE4735  |
| Eff. date    | 12-06-2024 |
| CD Diagram   | CD0005     |
| Poles        | 04         |
| Leads        | 9#18       |
| Proprietary  | False      |
| Created date | 11-23-2021 |

|                               |                            |
|-------------------------------|----------------------------|
| High Voltage Full Load Amps   | 0.9 a                      |
| Insulation Class              | H                          |
| Inverter Code                 | Not Inverter               |
| KVA Code                      | M                          |
| Lifting Lugs                  | No Lifting Lugs            |
| Locked Bearing Indicator      | Locked Bearing             |
| Motor Finish                  | UNPAINTED                  |
| Motor Lead Quantity/Wire Size | 9 @ 18 AWG                 |
| Motor Lead Termination        | Flying Leads               |
| Motor Standards               | NEMA                       |
| Motor Type                    | 3512M                      |
| Mounting Arrangement          | F1                         |
| Number of Poles               | 4                          |
| Overall Length                | 11.78 IN                   |
| Power Factor                  | 65                         |
| Product Family                | WD All SD Non-Encapsulated |
| Pulley End Bearing Type       | Sealed Bearing             |
| Pulley Face Code              | C-Face                     |
| Pulley Shaft Indicator        | Standard                   |
| Rodent Screen                 | None                       |
| Service Factor                | 1.15                       |
| Shaft Diameter                | 0.625 IN                   |
| Shaft Ground Indicator        | No Shaft Grounding         |
| Shaft Rotation                | Reversible                 |
| Shaft Slinger Indicator       | No Slinger                 |
| Speed                         | 1770 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

[illegible]

**AC Induction Motor Performance Data**

Record # 91508

Typical performance - not guaranteed values

| Winding: 35WGZ944-R002 |    |              | Type: 3512M                              |                           | Enclosure: TENV       |               |        |
|------------------------|----|--------------|------------------------------------------|---------------------------|-----------------------|---------------|--------|
| Nameplate Data         |    |              | 460 V, 60 Hz:<br>High Voltage Connection |                           |                       |               |        |
| Rated Output (HP)      |    | .5           | Full Load Torque                         |                           | 1.49 LB-FT            |               |        |
| Volts                  |    | 208-230/460  | Start Configuration                      |                           | direct on line        |               |        |
| Full Load Amps         |    | 1.9-1.8/.9   | Breakdown Torque                         |                           | 6.28 LB-FT            |               |        |
| R.P.M.                 |    | 1770         | Pull-up Torque                           |                           | 3.26 LB-FT            |               |        |
| Hz                     | 60 | Phase        | 3                                        | Locked-rotor Torque       |                       | 4.04 LB-FT    |        |
| NEMA Design Code       |    | B            | KVA Code                                 | M                         | Starting Current      |               | 6.71 A |
| Service Factor (S.F.)  |    | 1.15         |                                          | No-load Current           |                       | 0.792 A       |        |
| NEMA Nom. Eff.         |    | 80           | Power Factor                             | 65                        | Line-line Res. @ 25°C |               | 43.2 Ω |
| Rating - Duty          |    | 40C AMB-CONT |                                          | Temp. Rise @ Rated Load   |                       | 58°C          |        |
| S.F. Amps              |    | 2.1-1.9/0.95 |                                          | Temp. Rise @ S.F. Load    |                       | 64°C          |        |
|                        |    |              |                                          | Locked-rotor Power Factor |                       | 70.7767       |        |
|                        |    |              |                                          | Rotor inertia             |                       | 0.0866 lb-ft² |        |

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

| % of Rated Load | 25    | 50    | 75    | 100   | 125  | 150  | S.F. |
|-----------------|-------|-------|-------|-------|------|------|------|
| Power Factor    | 27    | 41    | 52    | 62    | 69   | 75   | 66   |
| Efficiency      | 56.5  | 70.7  | 76.5  | 78.9  | 80   | 80   | 79.6 |
| Speed           | 1792  | 1786  | 1779  | 1771  | 1763 | 1755 | 1766 |
| Line amperes    | 0.795 | 0.827 | 0.889 | 0.966 | 1.06 | 1.18 | 1.02 |

ABB Motors and Mechanical Inc.

WINDING # 35WGZ944

Typical performance - not guaranteed values.

0.5 HP 3 PH 60 HZ 1770 RPM 460 V 3512M

TORQUES (LB-FT): PO=6.28 PU=3.26 LR=4.04 LRA=6.71





