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# Customer information packet

## VFSWDM3709T-E

7.5HP, 3500RPM, 3PH, 60HZ, 213TC, 3734M, TEFC

Class - None

Division - Not Applicable

## Specifications

|                                |                                                               |
|--------------------------------|---------------------------------------------------------------|
| Enclosure                      | TEFC                                                          |
| Frame                          | 213TC                                                         |
| 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             | 7.500 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               | CSA<br>CSA EEV<br>NEMA PREMIUM<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              | 8.300 A @ 460.0 V<br>19.900 A @ 208.0 V<br>16.800 A @ 230.0 V |
| Design Code                    | A                                                             |
| Drip Cover                     | No Drip Cover                                                 |
| Duty Rating                    | CONT                                                          |
| Efficiency @ 100% Load         | 91.0 %                                                        |
| Electrically Isolated Bearing  | Not Electrically Isolated                                     |
| Feedback Device                | NO FEEDBACK                                                   |
| Front Shaft Indicator          | None                                                          |

## Part detail

|              |            |
|--------------|------------|
| Revision     | M          |
| Type         | AC         |
| Mech. spec.  | 37Q227     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 37WGS136   |
| Layout       | 37LYQ227   |
| Eff. date    | 09-22-2023 |
| CD Diagram   | CD0005     |
| Poles        | 02         |
| Leads        | 9#14       |
| Proprietary  | False      |
| Created date | 07-10-2017 |

|                               |                        |
|-------------------------------|------------------------|
| Heater Indicator              | No Heater              |
| High Voltage Full Load Amps   | 8.3 a                  |
| Insulation Class              | H                      |
| Inverter Code                 | Inverter Ready         |
| KVA Code                      | K                      |
| Lifting Lugs                  | Standard Lifting Lugs  |
| Locked Bearing Indicator      | Locked Bearing         |
| Motor Lead Quantity/Wire Size | 9 @ 14 AWG             |
| Motor Lead Termination        | Flying Leads           |
| Motor Standards               | NEMA                   |
| Motor Type                    | 3734M                  |
| Mounting Arrangement          | F1                     |
| Number of Poles               | 2                      |
| Overall Length                | 19.49 IN               |
| Power Factor                  | 93                     |
| Product Family                | WD All SS Encapsulated |
| Pulley End Bearing Type       | Sealed Bearing         |
| Pulley Face Code              | C-Face                 |
| Pulley Shaft Indicator        | Standard               |
| Rodent Screen                 | None                   |
| RoHS Status                   | ROHS COMPLIANT         |
| Service Factor                | 1.15                   |
| Shaft Diameter                | 1.375 IN               |
| Shaft Ground Indicator        | No Shaft Grounding     |
| Shaft Rotation                | Reversible             |
| Shaft Slinger Indicator       | No Slinger             |
| Speed                         | 3500 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 # 57387

Typical performance - not guaranteed values

| Winding: 37WGS136-R005 |    |              |              | Type: 3734M                              |                       | Enclosure: TEFC |         |
|------------------------|----|--------------|--------------|------------------------------------------|-----------------------|-----------------|---------|
| Nameplate Data         |    |              |              | 460 V, 60 Hz:<br>High Voltage Connection |                       |                 |         |
| Rated Output (HP)      |    | 7.5          |              | Full Load Torque                         |                       | 11.5 LB-FT      |         |
| Volts                  |    | 230/460      |              | Start Configuration                      |                       | direct on line  |         |
| Full Load Amps         |    | 16.8/8.3     |              | Breakdown Torque                         |                       | 66.3 LB-FT      |         |
| R.P.M.                 |    | 3500         |              | Pull-up Torque                           |                       | 25.8 LB-FT      |         |
| Hz                     | 60 | Phase        | 3            | Locked-rotor Torque                      |                       | 36.7 LB-FT      |         |
| NEMA Design Code       |    | A            | KVA Code     | K                                        | Starting Current      |                 | 86.2 A  |
| Service Factor (S.F.)  |    | 1.15         |              | No-load Current                          |                       | 3.25 A          |         |
| NEMA Nom. Eff.         |    | 91           | Power Factor | 93                                       | Line-line Res. @ 25°C |                 | 0.913 Ω |
| Rating - Duty          |    | 40C AMB-CONT |              | Temp. Rise @ Rated Load                  |                       | 47°C            |         |
| S.F. Amps              |    |              |              | Temp. Rise @ S.F. Load                   |                       | 56°C            |         |
|                        |    |              |              | Locked-rotor Power Factor                |                       | 32.4            |         |
|                        |    |              |              | Rotor inertia                            |                       | 0.311 LB-FT2    |         |

**Load Characteristics 460 V, 60 Hz, 7.5 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 62   | 85   | 89   | 94   | 95   | 100  | 95   |
| Efficiency      | 84.7 | 90.9 | 92.1 | 92   | 91.4 | 90.7 | 91.6 |
| Speed           | 3584 | 3564 | 3541 | 3520 | 3498 | 3481 | 3508 |
| Line amperes    | 3.54 | 4.72 | 6.63 | 8.32 | 10.3 | 11.8 | 9.5  |

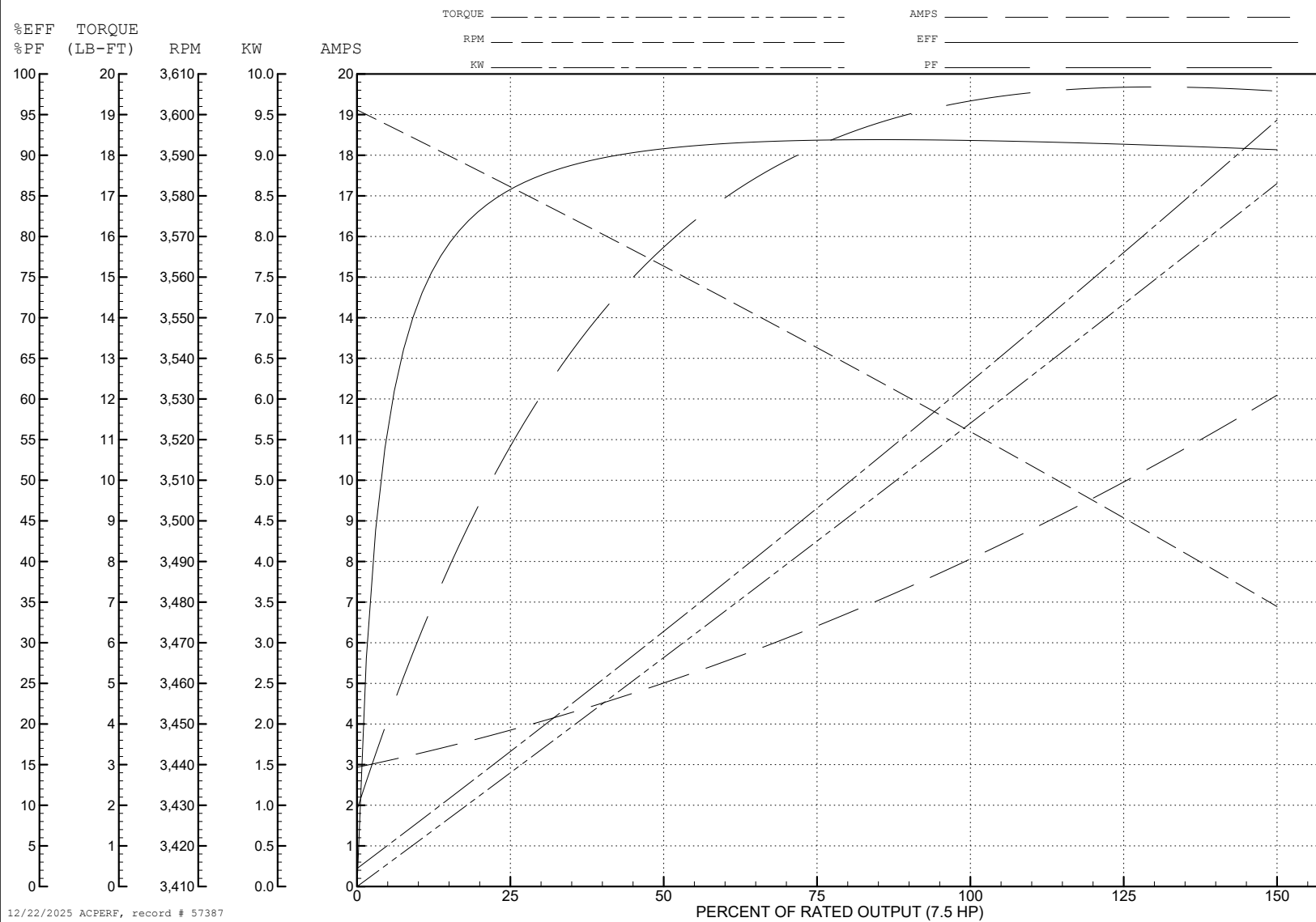
ABB Motors and Mechanical Inc.

WINDING # 37WGS136

Typical performance - not guaranteed values.

7.5 HP 3 PH 60 HZ 3500 RPM 460 V 3734M

TORQUES (LB-FT): PO=66.3 PU=25.8 LR=36.7 LRA=86.2



12/22/2025 ACPERF, record # 57387

