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# Customer information packet

## VFSWDM3538-5E

.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            | 575.0 V @ 60 HZ                                         |
| Agency Approvals               | CSA<br>WEEE<br>NEMA_PREMIUM<br>NEMA PREMIUM<br>CURUSEEV |
| 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              | .770 A @ 575.0 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                                               |
| High Voltage Full Load Amps    | 0.8 a                                                   |

## Part detail

|              |            |
|--------------|------------|
| Revision     | B          |
| Type         | AC         |
| Mech. spec.  | 35E4656    |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 35WGZ951   |
| Layout       | 35LYE4656  |
| Eff. date    | 08-14-2023 |
| CD Diagram   | CD0006     |
| Poles        | 04         |
| Leads        | 3#18       |
| Proprietary  | False      |
| Created date | 03-11-2022 |

|                               |                        |
|-------------------------------|------------------------|
| Insulation Class              | H                      |
| Inverter Code                 | Inverter Duty          |
| KVA Code                      | M                      |
| Lifting Lugs                  | No Lifting Lugs        |
| Locked Bearing Indicator      | Locked Bearing         |
| Max Speed                     | 2700 rpm               |
| Motor Finish                  | UNPAINTED              |
| Motor Lead Quantity/Wire Size | 3 @ 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                  | 62                     |
| Product Family                | WD All SS 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 # 91703

Typical performance - not guaranteed values

| Winding: 35WGZ951-R001 |    |              |              | Type: 3512M                           |                       | Enclosure: TENV |        |
|------------------------|----|--------------|--------------|---------------------------------------|-----------------------|-----------------|--------|
| Nameplate Data         |    |              |              | 575 V, 60 Hz:<br>Single Voltage Motor |                       |                 |        |
| Rated Output (HP)      |    | .5           |              | Full Load Torque                      |                       | 1.49 LB-FT      |        |
| Volts                  |    | 575          |              | Start Configuration                   |                       | direct on line  |        |
| Full Load Amps         |    | .77          |              | Breakdown Torque                      |                       | 6.26 LB-FT      |        |
| R.P.M.                 |    | 1770         |              | Pull-up Torque                        |                       | 3.25 LB-FT      |        |
| Hz                     | 60 | Phase        | 3            | Locked-rotor Torque                   |                       | 4.02 LB-FT      |        |
| NEMA Design Code       |    | B            | KVA Code     | M                                     | Starting Current      |                 | 5.36 A |
| Service Factor (S.F.)  |    | 1.15         |              | No-load Current                       |                       | 0.636 A         |        |
| NEMA Nom. Eff.         |    | 80           | Power Factor | 62                                    | Line-line Res. @ 25°C |                 | 68 Ω   |
| Rating - Duty          |    | 40C AMB-CONT |              | Temp. Rise @ Rated Load               |                       | 29°C            |        |
| S.F. Amps              |    | .83          |              | Temp. Rise @ S.F. Load                |                       | 33°C            |        |
|                        |    |              |              | Locked-rotor Power Factor             |                       | 71.0377         |        |
|                        |    |              |              | Rotor inertia                         |                       | 0.0866 lb-ft²   |        |

**Load Characteristics 575 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      | 56.2  | 70.6  | 76.3  | 78.9  | 79.9 | 79.8  | 79.5 |
| Speed           | 1792  | 1786  | 1779  | 1771  | 1763 | 1755  | 1766 |
| Line amperes    | 0.638 | 0.664 | 0.713 | 0.774 | 0.85 | 0.946 | 0.82 |

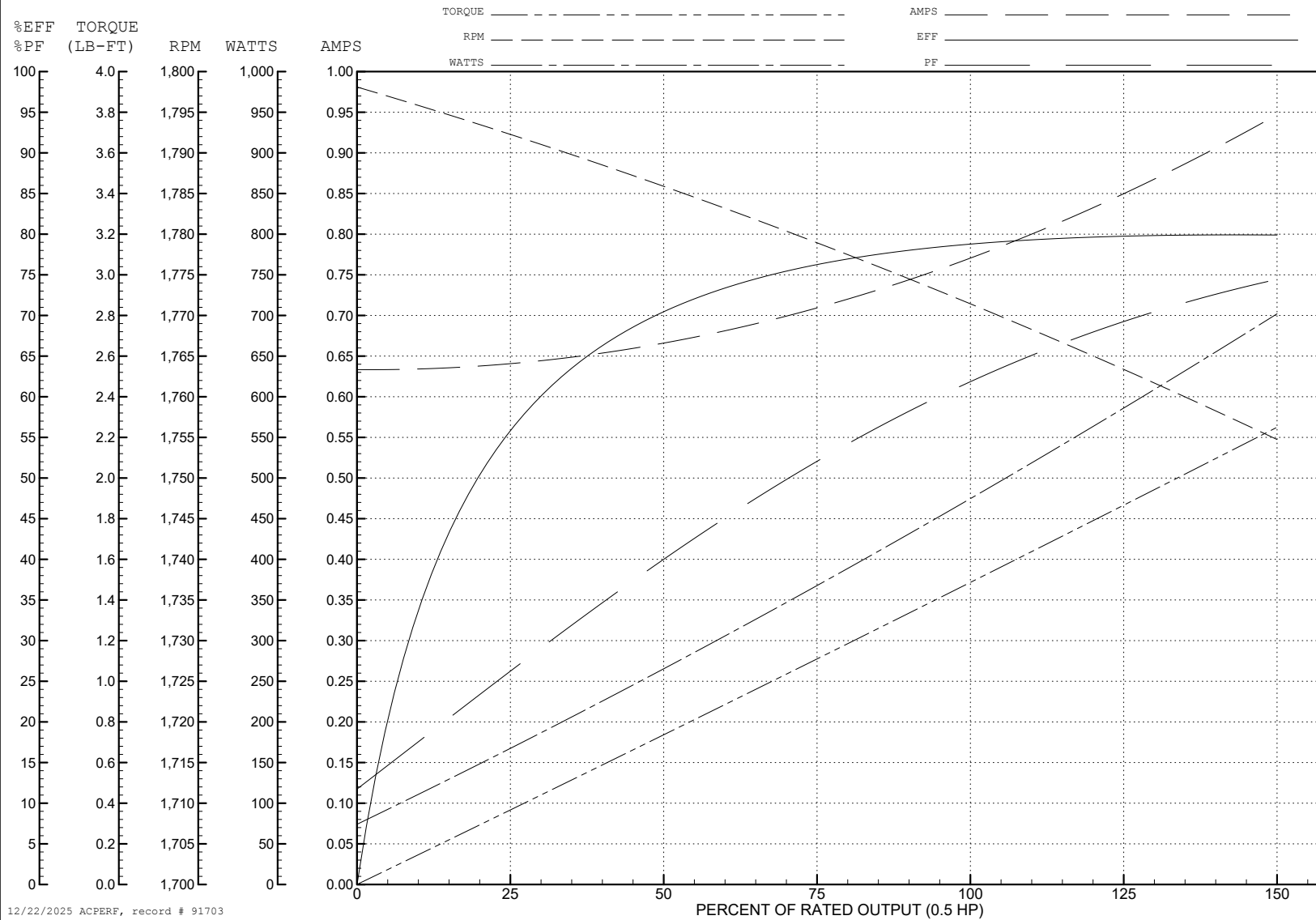
ABB Motors and Mechanical Inc.

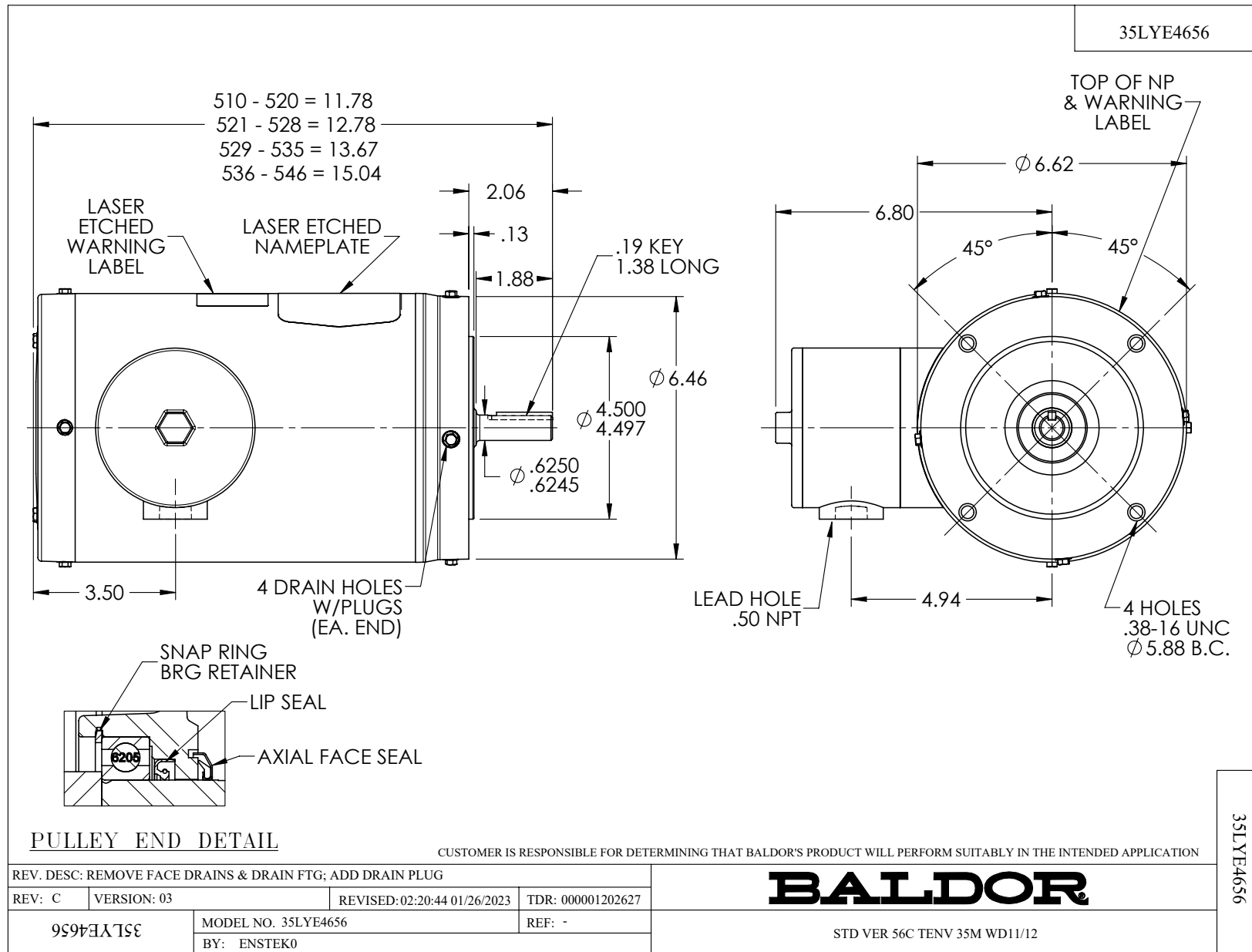
WINDING # 35WGZ951

Typical performance - not guaranteed values.

0.5 HP 3 PH 60 HZ 1770 RPM 575 V 3512M

TORQUES (LB-FT): PO=6.26 PU=3.25 LR=4.02 LRA=5.36





CD0006



- NOTES:
- 1. THREE LEAD MOTOR MAY BE EITHER WYE CONNECTED OR DELTA CONNECTED.
  - 2. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
  - 3. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
  - 4. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY VARY.
  - 5. LEAD COLORS ARE OPTIONAL. LEADS MUST BE NUMBERED AS SHOWN.

CD0006

|                                   |                                |                   |
|-----------------------------------|--------------------------------|-------------------|
| REV. DESC: ADD CLASS CONN00000007 |                                |                   |
| REV. LTR: E                       | VERSION: 01                    | TDR: 000001099922 |
| FILE: \AAA\00005\141              | REVISED: 10: 24: 49 02/19/2019 | BY: ENBRIRO       |
| MTL: —                            |                                |                   |

BALDOR - RELIANCE®

3PH, SV, 3 LEADS, WYE OR DELTA CONNECTED

SH 1 of 1