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# Customer information packet

## VFSWDNM3555-E

2HP, 3480RPM, 3PH, 60HZ, 56C, 3546M, TENV, F1, N

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             | 2.000 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               | UR<br>CSA                              |
| 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              | 2.400 A @ 460.0 V<br>4.800 A @ 230.0 V |
| Design Code                    | B                                      |
| Drip Cover                     | No Drip Cover                          |
| Duty Rating                    | CONT                                   |
| Efficiency @ 100% Load         | 88.5 %                                 |
| Electrically Isolated Bearing  | Not Electrically Isolated              |
| Feedback Device                | NO FEEDBACK                            |
| Front Face Code                | Standard                               |
| Front Shaft Indicator          | None                                   |
| Heater Indicator               | No Heater                              |
| High Voltage Full Load Amps    | 2.4 a                                  |

## Part detail

|              |                 |
|--------------|-----------------|
| Revision     | N               |
| Type         | AC              |
| Mech. spec.  | 35E4656         |
| Base         |                 |
| Status       | PRD/A           |
| Elec. spec.  | 35WGL288        |
| Layout       | 35LYE4656       |
| Eff. date    | 08-14-2023      |
| CD Diagram   | CD0005          |
| Poles        | 02              |
| Leads        | 9#18,0#,0#,0# Y |
| Proprietary  | False           |
| Created date | 07-10-2017      |

|                               |                        |
|-------------------------------|------------------------|
| Insulation Class              | H                      |
| Inverter Code                 | Not Inverter           |
| KVA Code                      | N                      |
| Lifting Lugs                  | No Lifting Lugs        |
| Locked Bearing Indicator      | Locked Bearing         |
| Motor Finish                  | UNPAINTED              |
| Motor Lead Exit               | Ko Box                 |
| Motor Lead Quantity/Wire Size | @ 0 AWG<br>9 @ 18 AWG  |
| Motor Lead Termination        | Flying Leads           |
| Motor Standards               | NEMA                   |
| Motor Type                    | 3546M                  |
| Mounting Arrangement          | F1                     |
| Number of Poles               | 2                      |
| Overall Length                | 15.04 IN               |
| Power Factor                  | 89                     |
| 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                | 0.625 IN               |
| Shaft Extension Location      | Pulley End             |
| Shaft Ground Indicator        | No Shaft Grounding     |
| Shaft Rotation                | Reversible             |
| Shaft Slinger Indicator       | No Slinger             |
| Speed                         | 3480 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

| NP4427AAA01 |               |       |         |      |      |               |      |      |       |      |      |       |   |  |
|-------------|---------------|-------|---------|------|------|---------------|------|------|-------|------|------|-------|---|--|
| CAT #       | VFSWDNM3555-E |       |         |      |      | WT            | 63   |      | LBS   |      |      |       |   |  |
| SPEC        | 35E4656L288G1 |       |         |      |      | ENCL          | TENV |      |       |      |      |       |   |  |
| SER #       |               |       |         |      |      | CC            | 010A |      | IP    | 69   |      |       |   |  |
| HP          | 2             |       | MAG CUR |      |      | 1.7/.85       |      |      |       |      |      |       |   |  |
| VOLTS       | 230/460       |       |         |      |      | NEMA NOM. EFF |      |      |       |      | 88.5 |       |   |  |
| AMPS        | 4.8/2.4       |       |         |      |      | PF            | 89   |      |       |      |      |       |   |  |
| RATING      | 40C AMB-CONT  |       |         |      |      |               |      |      |       |      |      |       |   |  |
| RPM         | 3480          |       |         |      |      | MAX RPM       |      | 5400 |       |      |      |       |   |  |
| FRAME       | 56C           |       | HZ      | 60   |      | CODE          | N    |      | CLASS | H    |      |       |   |  |
| SER.F.      | 1.15          |       | SF AMP  |      |      |               |      |      | PH    | 3    |      | DES   | B |  |
| DE          | 6205          |       |         | ODE  | 6205 |               |      |      |       |      |      |       |   |  |
| LUBRICATION | POLYREX EM    |       |         |      |      |               |      |      |       |      |      |       |   |  |
| ID LOGO     | INVERTER TYPE |       |         | VPWM |      | CHP           | 60   |      | TO    | 90   |      | 1.5:1 |   |  |
| ID LOGO     | WK2           | 0.127 |         | CT   | 15   |               | TO   | 60   |       | 4:1  |      |       |   |  |
| ID LOGO     | SL HZ         | 2     |         | VT   | 3    |               | TO   | 60   |       | 20:1 |      |       |   |  |
|             |               |       |         |      |      |               |      |      |       |      |      |       |   |  |
|             |               |       |         |      |      |               |      |      |       |      |      |       |   |  |
|             |               |       |         |      |      |               |      |      |       |      |      |       |   |  |
|             |               |       |         |      |      |               |      |      |       |      |      |       |   |  |
|             |               |       |         |      |      |               |      | QR   |       |      |      |       |   |  |
| YR          |               |       |         |      |      |               |      |      |       |      |      |       |   |  |

**AC Induction Motor Performance Data**

Record # 51581

Typical performance - not guaranteed values

| Winding: 35WGL288-R001 |  |              | Type: 3546M                              |                         | Enclosure: TENV |                       |            |          |
|------------------------|--|--------------|------------------------------------------|-------------------------|-----------------|-----------------------|------------|----------|
| Nameplate Data         |  |              | 460 V, 60 Hz:<br>High Voltage Connection |                         |                 |                       |            |          |
| Rated Output (HP)      |  | 2            | Full Load Torque                         |                         | 3.04 LB-FT      |                       |            |          |
| Volts                  |  | 230/460      | Start Configuration                      |                         | direct on line  |                       |            |          |
| Full Load Amps         |  | 4.8/2.4      | Breakdown Torque                         |                         | 17.3 LB-FT      |                       |            |          |
| R.P.M.                 |  | 3480         | Pull-up Torque                           |                         | 6.76 LB-FT      |                       |            |          |
| Hz                     |  | 60           | Phase                                    |                         | 3               | Locked-rotor Torque   | 14.8 LB-FT |          |
| NEMA Design Code       |  | B            | KVA Code                                 |                         | N               | Starting Current      | 29.7 A     |          |
| Service Factor (S.F.)  |  | 1.15         |                                          | No-load Current         |                 | 0.876 A               |            |          |
| NEMA Nom. Eff.         |  | 88.5         | Power Factor                             |                         | 89              | Line-line Res. @ 25°C |            | 5.3448 Ω |
| Rating - Duty          |  | 40C AMB-CONT |                                          | Temp. Rise @ Rated Load |                 | 104°C                 |            |          |
| S.F. Amps              |  |              |                                          | Temp. Rise @ S.F. Load  |                 | 128°C                 |            |          |

**Load Characteristics 460 V, 60 Hz, 2 HP**

| % of Rated Load | 25     | 50     | 75     | 100    | 125    | 150    | S.F. |
|-----------------|--------|--------|--------|--------|--------|--------|------|
| Power Factor    | 54     | 75     | 85     | 89     | 91     | 93     | 90   |
| Efficiency      | 84.9   | 89.3   | 89.9   | 89.2   | 88.1   | 86.5   | 88.5 |
| Speed           | 3568.9 | 3541.4 | 3511.5 | 3479.4 | 3445.1 | 3406.6 | 3459 |
| Line amperes    | 1.06   | 1.41   | 1.86   | 2.37   | 2.92   | 3.52   | 2.7  |

ABB Motors and Mechanical Inc.

WINDING # 35WGL288

Typical performance - not guaranteed values.

2 HP 3 PH 60 HZ 3480 RPM 460 V 3546M

TORQUES (LB-FT): PO=17.3 PU=6.76 LR=14.8 LRA=29.7





