

# ABB BALDOR RELIANCE III

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## Customer information packet

### CFSWDNM3556-E

1HP, 1180RPM, 3PH, 60HZ, 56C, 3544M, TENV, F1, N

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                                             |
|---------------------------------------|-------------------------------------------------------------|
| <b>Enclosure</b>                      | TENV                                                        |
| <b>Frame</b>                          | 56C                                                         |
| <b>Frame Material</b>                 | Stainless Steel                                             |
| <b>Frequency</b>                      | 60.00 Hz                                                    |
| <b>Haz Area Class and Group</b>       | None                                                        |
| <b>Haz Area Division</b>              | Not Applicable                                              |
| <b>Motor Letter Type</b>              | Three Phase                                                 |
| <b>Output @ Frequency</b>             | 1.000 HP @ 60 HZ                                            |
| <b>Phase</b>                          | 3                                                           |
| <b>Synchronous Speed @ Frequency</b>  | 1200 RPM @ 60 HZ                                            |
| <b>Voltage @ Frequency</b>            | 460.0 V @ 60 HZ<br>230.0 V @ 60 HZ                          |
| <b>Agency Approvals</b>               | CURUSEEV<br>NEMA PREMIUM<br>WEEE                            |
| <b>Ambient Temperature</b>            | 40 °C                                                       |
| <b>Auxiliary Box</b>                  | NO AUXILLARY BOX                                            |
| <b>Auxiliary Box Lead Termination</b> | None                                                        |
| <b>Base Indicator</b>                 | Rigid                                                       |
| <b>Bearing Grease Type</b>            | Polyrex EM (-20F +300F)                                     |
| <b>Blower</b>                         | None                                                        |
| <b>Current @ Voltage</b>              | 4.000 A @ 208.0 V<br>4.000 A @ 230.0 V<br>2.000 A @ 460.0 V |
| <b>Design Code</b>                    | B                                                           |
| <b>Drip Cover</b>                     | No Drip Cover                                               |
| <b>Duty Rating</b>                    | CONT                                                        |
| <b>Efficiency @ 100% Load</b>         | 82.5 %                                                      |
| <b>Electrically Isolated Bearing</b>  | Not Electrically Isolated                                   |
| <b>Feedback Device</b>                | NO FEEDBACK                                                 |
| <b>Front Shaft Indicator</b>          | None                                                        |
| <b>Heater Indicator</b>               | No Heater                                                   |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | B          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 35E4735    |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 35WGG332   |
| <b>Layout</b>       | 35LYE4735  |
| <b>Eff. date</b>    | 01-21-2025 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 06         |
| <b>Leads</b>        | 9#18       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 02-23-2023 |

|                               |                            |
|-------------------------------|----------------------------|
| High Voltage Full Load Amps   | 2.0 a                      |
| Insulation Class              | H                          |
| Inverter Code                 | Not Inverter               |
| KVA Code                      | N                          |
| Lifting Lugs                  | No Lifting Lugs            |
| Locked Bearing Indicator      | Locked Bearing             |
| Max Speed                     | 1800 rpm                   |
| Motor Finish                  | UNPAINTED                  |
| Motor Lead Quantity/Wire Size | 9 @ 18 AWG                 |
| Motor Lead Termination        | Flying Leads               |
| Motor Standards               | NEMA                       |
| Motor Type                    | 3544M                      |
| Mounting Arrangement          | F1                         |
| Number of Poles               | 6                          |
| Overall Length                | 15.04 IN                   |
| Power Factor                  | 57                         |
| 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                       |
| RoHS Status                   | ROHS COMPLIANT             |
| Service Factor                | 1.15                       |
| Shaft Diameter                | 0.625 IN                   |
| Shaft Ground Indicator        | No Shaft Grounding         |
| Shaft Rotation                | Reversible                 |
| Shaft Slinger Indicator       | No Slinger                 |
| Speed                         | 1180 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**

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**Nameplate**

| NP4427AAA01 |               |        |         |      |      |               |       |   |      |    |      |       |  |
|-------------|---------------|--------|---------|------|------|---------------|-------|---|------|----|------|-------|--|
| CAT #       | CFSWDNM3556-E |        |         |      |      | WT            | 64    |   | LBS  |    |      |       |  |
| SPEC        | 35E4735G332G2 |        |         |      |      | ENCL          | TENV  |   |      |    |      |       |  |
| SER #       |               |        |         |      |      | CC            | 010A  |   | IP   | 69 |      |       |  |
| HP          | 1             |        | MAG CUR |      |      | 3/1.5         |       |   |      |    |      |       |  |
| VOLTS       | 230/460       |        |         |      |      | NEMA NOM. EFF |       |   |      |    | 82.5 |       |  |
| AMPS        | 4/2           |        |         |      |      | PF            | 57    |   |      |    |      |       |  |
| RATING      | 40C AMB-CONT  |        |         |      |      |               |       |   |      |    |      |       |  |
| RPM         | 1180          |        |         |      |      | MAX RPM       |       |   | 1800 |    |      |       |  |
| FRAME       | 56C           | HZ     | 60      |      | CODE | N             | CLASS |   | H    |    |      |       |  |
| SER.F.      | 1.15          | SF AMP | 4.2/2.1 |      |      |               | 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           | 0.319  | CT      | 15   | TO   | 60            | 4:1   |   |      |    |      |       |  |
| ID LOGO     | SL HZ         | 1.1    | VT      | 3    | TO   | 60            | 20:1  |   |      |    |      |       |  |
|             |               |        |         |      |      |               |       |   |      |    |      |       |  |
|             |               |        |         |      |      |               |       |   |      |    |      |       |  |
|             |               |        |         |      |      |               |       |   |      |    |      |       |  |
|             |               |        |         |      |      |               |       |   |      |    |      |       |  |
|             |               |        |         |      |      |               | QR    |   |      |    |      |       |  |
| YR          |               |        |         |      |      |               |       |   |      |    |      |       |  |

**AC Induction Motor Performance Data**

Record # 87656

Preliminary Data Sheet

| Winding: 35WGG332-R001 |      |              | Type: 3544M                              |                       | Enclosure: TENV |  |
|------------------------|------|--------------|------------------------------------------|-----------------------|-----------------|--|
| Nameplate Data         |      |              | 460 V, 60 Hz:<br>High Voltage Connection |                       |                 |  |
| Rated Output (HP)      |      | 1            | Full Load Torque                         |                       | 4.5 LB-FT       |  |
| Volts                  |      | 230/460      | Start Configuration                      |                       | direct on line  |  |
| Full Load Amps         |      | 4/2          | Breakdown Torque                         |                       | 22.68 LB-FT     |  |
| R.P.M.                 |      | 1180         | Pull-up Torque                           |                       | 12.18 LB-FT     |  |
| Hz                     | 60   | Phase        | 3                                        | Locked-rotor Torque   | 14.18 LB-FT     |  |
| NEMA Design Code       | B    | KVA Code     | N                                        | Starting Current      | 14.64 A         |  |
| Service Factor (S.F.)  |      | 1.15         | No-load Current                          |                       | 1.52 A          |  |
| NEMA Nom. Eff.         | 82.5 | Power Factor | 57                                       | Line-line Res. @ 25°C | 11 Ω            |  |
| Rating - Duty          |      | 40C AMB-CONT | Temp. Rise @ Rated Load                  |                       | 74°C            |  |
| S.F. Amps              |      | 4.2/2.1      | Temp. Rise @ S.F. Load                   |                       | 84°C            |  |
|                        |      |              | Locked-rotor Power Factor                |                       | 43              |  |
|                        |      |              | Rotor inertia                            |                       | 0.319 lb-ft²    |  |

**Load Characteristics 460 V, 60 Hz, 1 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 23   | 36   | 48   | 57   | 64   | 69   | 61   |
| Efficiency      | 66.9 | 78.1 | 82.1 | 83.2 | 83.3 | 82.5 | 83.3 |
| Speed           | 1195 | 1190 | 1184 | 1178 | 1172 | 1165 | 1174 |
| Line amperes    | 1.55 | 1.64 | 1.79 | 1.98 | 2.21 | 2.47 | 2.12 |

ABB Motors and Mechanical Inc.

WINDING # 35WGG332

Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 1180 RPM 460 V 3544M

TORQUES (LB-FT) : PO=22.68 PU=12.18 LR=14.18 LRA=14.64







