

# ABB BALDOR RELIANCE III

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## Customer information packet

### CSSWDM3539-H

.5HP, 1175RPM, 3PH, 60HZ, 56HC, 3522M, TENV, F1

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                                       |
|---------------------------------------|-------------------------------------------------------|
| <b>Enclosure</b>                      | TENV                                                  |
| <b>Frame</b>                          | 56HC                                                  |
| <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>             | .500 HP @ 60 HZ                                       |
| <b>Phase</b>                          | 3                                                     |
| <b>Synchronous Speed @ Frequency</b>  | 1200 RPM @ 60 HZ                                      |
| <b>Voltage @ Frequency</b>            | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ<br>208.0 V @ 60 HZ |
| <b>Agency Approvals</b>               | CSA EEV<br>NEMA PREMIUM<br>NEMA_PREMIUM<br>UR         |
| <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>              | 2.000 A @ 208.0 V<br>1.000 A @ 230.0 V                |
| <b>Design Code</b>                    | B                                                     |
| <b>Drip Cover</b>                     | No Drip Cover                                         |
| <b>Duty Rating</b>                    | CONT                                                  |
| <b>Efficiency @ 100% Load</b>         | 78.5 %                                                |
| <b>Electrically Isolated Bearing</b>  | Not Electrically Isolated                             |
| <b>Feedback Device</b>                | NO FEEDBACK                                           |
| <b>Front Shaft Indicator</b>          | None                                                  |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | A          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 35E6083    |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 35WGG338   |
| <b>Layout</b>       | 35LYE6083  |
| <b>Eff. date</b>    | 06-14-2024 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 06         |
| <b>Leads</b>        | 9#18       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 02-21-2023 |

|                                      |                               |
|--------------------------------------|-------------------------------|
| <b>Heater Indicator</b>              | No Heater                     |
| <b>High Voltage Full Load Amps</b>   | 1.0 a                         |
| <b>Insulation Class</b>              | F                             |
| <b>Inverter Code</b>                 | Inverter Ready                |
| <b>KVA Code</b>                      | M                             |
| <b>Lifting Lugs</b>                  | No Lifting Lugs               |
| <b>Locked Bearing Indicator</b>      | Locked Bearing                |
| <b>Motor Lead Quantity/Wire Size</b> | 9 @ 18 AWG                    |
| <b>Motor Lead Termination</b>        | Flying Leads                  |
| <b>Motor Standards</b>               | NEMA                          |
| <b>Motor Type</b>                    | 3522M                         |
| <b>Mounting Arrangement</b>          | F1                            |
| <b>Number of Poles</b>               | 6                             |
| <b>Overall Length</b>                | 11.97 IN                      |
| <b>Power Factor</b>                  | 57                            |
| <b>Product Family</b>                | Wash Down All Stainless Steel |
| <b>Pulley End Bearing Type</b>       | Sealed Bearing                |
| <b>Pulley Face Code</b>              | C-Face                        |
| <b>Pulley Shaft Indicator</b>        | Standard                      |
| <b>Rodent Screen</b>                 | None                          |
| <b>Service Factor</b>                | 1.15                          |
| <b>Shaft Diameter</b>                | 0.625 IN                      |
| <b>Shaft Ground Indicator</b>        | No Shaft Grounding            |
| <b>Shaft Rotation</b>                | Reversible                    |
| <b>Shaft Slinger Indicator</b>       | No Slinger                    |
| <b>Speed</b>                         | 1175 rpm                      |
| <b>Speed Code</b>                    | Single Speed                  |
| <b>Starting Method</b>               | Direct on line                |
| <b>Thermal Device - Bearing</b>      | None                          |
| <b>Thermal Device - Winding</b>      | None                          |
| <b>Vibration Sensor Indicator</b>    | No Vibration Sensor           |
| <b>Winding Thermal 1</b>             | None                          |
| <b>Winding Thermal 2</b>             | None                          |

**Nameplate**

| NP1953A01    |               |  |      |     |   |      |  |    |       |   |   |
|--------------|---------------|--|------|-----|---|------|--|----|-------|---|---|
| CAT.NO.      | CSSWDM3539-H  |  |      |     |   |      |  |    |       |   |   |
| SPEC.        | 35E6083G338G1 |  |      |     |   |      |  |    |       |   |   |
| HP           | .5            |  |      |     |   |      |  |    |       |   |   |
| VOLTS        | 208-230/460   |  |      |     |   |      |  |    |       |   |   |
| AMP          | 2/1           |  |      |     |   |      |  |    |       |   |   |
| RPM          | 1175          |  |      |     |   |      |  |    |       |   |   |
| FRAME        | 56HC          |  |      | HZ  |   | 60   |  | PH |       | 3 |   |
| SER.F.       | 1.15          |  | CODE |     | M | DES  |  | B  | CLASS |   | F |
| NEMA-NOM-EFF | 78.5          |  |      | PF  |   | 57   |  |    |       |   |   |
| RATING       | 40C AMB-CONT  |  |      |     |   |      |  |    |       |   |   |
| CC           |               |  |      |     |   |      |  |    |       |   |   |
| DE           | 6205          |  |      | ODE |   | 6203 |  |    |       |   |   |
| ENCL         | TENV          |  | SN   |     |   |      |  |    |       |   |   |
|              | SFA 2.2/1.1   |  |      |     |   |      |  |    |       |   |   |

**AC Induction Motor Performance Data**

Record # 93061

Typical performance - not guaranteed values

| Winding: 35WGG338-R006 |    |              | Type: 3522M                              |                     | Enclosure: TENV |           |
|------------------------|----|--------------|------------------------------------------|---------------------|-----------------|-----------|
| Nameplate Data         |    |              | 460 V, 60 Hz:<br>High Voltage Connection |                     |                 |           |
| Rated Output (HP)      |    | .5           | Full Load Torque                         |                     | 2.23 LB-FT      |           |
| Volts                  |    | 208-230/460  | Start Configuration                      |                     | direct on line  |           |
| Full Load Amps         |    | 2/1          | Breakdown Torque                         |                     | 8.8 LB-FT       |           |
| R.P.M.                 |    | 1175         | Pull-up Torque                           |                     | 4.8 LB-FT       |           |
| Hz                     | 60 | Phase        | 3                                        | Locked-rotor Torque |                 | 5.2 LB-FT |
| NEMA Design Code       |    | B            | KVA Code                                 |                     | M               |           |
| Service Factor (S.F.)  |    | 1.15         | Starting Current                         |                     | 6.6 A           |           |
| NEMA Nom. Eff.         |    | 78.5         | No-load Current                          |                     | 0.789 A         |           |
| Power Factor           |    | 57           | Line-line Res. @ 25°C                    |                     | 30 Ω            |           |
| Rating - Duty          |    | 40C AMB-CONT | Temp. Rise @ Rated Load                  |                     | 70°C            |           |
| S.F. Amps              |    | 2.2/1.1      | Temp. Rise @ S.F. Load                   |                     | 79°C            |           |
|                        |    |              | Locked-rotor Power Factor                |                     | 50.7            |           |
|                        |    |              | Rotor inertia                            |                     | 0.16 lb-ft²     |           |

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

| % of Rated Load | 25    | 50    | 75    | 100  | 125  | 150  | S.F. |
|-----------------|-------|-------|-------|------|------|------|------|
| Power Factor    | 23    | 36    | 48    | 56   | 63   | 68   | 60   |
| Efficiency      | 63.7  | 75.6  | 79.4  | 81.4 | 81.5 | 80.6 | 81.5 |
| Speed           | 1194  | 1190  | 1185  | 1180 | 1174 | 1167 | 1176 |
| Line amperes    | 0.802 | 0.855 | 0.929 | 1.02 | 1.14 | 1.29 | 1.09 |

ABB Motors and Mechanical Inc.

WINDING # 35WGG338

Typical performance - not guaranteed values.

0.5 HP 3 PH 60 HZ 1175 RPM 460 V 3522M

TORQUES (LB-FT): PO=8.8 PU=4.8 LR=5.2 LRA=6.6





