

# ABB BALDOR RELIANCE III

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## Customer information packet

### CSSWDM3457

.33HP, 3450RPM, 3PH, 60HZ, 56C, 3512M, TENV, F1

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>             | .330 HP @ 60 HZ                                            |
| <b>Phase</b>                          | 3                                                          |
| <b>Synchronous Speed @ Frequency</b>  | 3600 RPM @ 60 HZ                                           |
| <b>Voltage @ Frequency</b>            | 460.0 V @ 60 HZ<br>230.0 V @ 60 HZ<br>208.0 V @ 60 HZ      |
| <b>Agency Approvals</b>               | CSA<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>              | 1.200 A @ 208.0 V<br>1.100 A @ 230.0 V<br>.550 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>         | 74.0 %                                                     |
| <b>Electrically Isolated Bearing</b>  | Not Electrically Isolated                                  |
| <b>Feedback Device</b>                | NO FEEDBACK                                                |
| <b>Front Face Code</b>                | Standard                                                   |
| <b>Front Shaft Indicator</b>          | None                                                       |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | S          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 35V814     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 35WG5766   |
| <b>Layout</b>       | 35LYV814   |
| <b>Eff. date</b>    | 02-19-2024 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 02         |
| <b>Leads</b>        | 9#18       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 12-18-2013 |

|                                      |                               |
|--------------------------------------|-------------------------------|
| <b>Heater Indicator</b>              | No Heater                     |
| <b>High Voltage Full Load Amps</b>   | 0.6 a                         |
| <b>Insulation Class</b>              | F                             |
| <b>Inverter Code</b>                 | Not Inverter                  |
| <b>KVA Code</b>                      | J                             |
| <b>Lifting Lugs</b>                  | No Lifting Lugs               |
| <b>Locked Bearing Indicator</b>      | Locked Bearing                |
| <b>Motor Lead Exit</b>               | Ko Box                        |
| <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>                    | 3512M                         |
| <b>Mounting Arrangement</b>          | F1                            |
| <b>Number of Poles</b>               | 2                             |
| <b>Overall Length</b>                | 11.09 IN                      |
| <b>Power Factor</b>                  | 80                            |
| <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>RoHS Status</b>                   | ROHS COMPLIANT                |
| <b>Service Factor</b>                | 1.15                          |
| <b>Shaft Diameter</b>                | 0.625 IN                      |
| <b>Shaft Extension Location</b>      | Pulley End                    |
| <b>Shaft Ground Indicator</b>        | No Shaft Grounding            |
| <b>Shaft Rotation</b>                | Reversible                    |
| <b>Shaft Slinger Indicator</b>       | No Slinger                    |
| <b>Speed</b>                         | 3450 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           |



|                   |      |
|-------------------|------|
| Winding Thermal 1 | None |
| Winding Thermal 2 | None |

**Nameplate**

| NP1951A01    |               |  |      |     |   |      |  |    |       |   |   |
|--------------|---------------|--|------|-----|---|------|--|----|-------|---|---|
| CAT.NO.      | CSSWDM3457    |  |      |     |   |      |  |    |       |   |   |
| SPEC.        | 35V814-5766G1 |  |      |     |   |      |  |    |       |   |   |
| HP           | .33           |  |      |     |   |      |  |    |       |   |   |
| VOLTS        | 208-230/460   |  |      |     |   |      |  |    |       |   |   |
| AMP          | 1.2-1.1/.55   |  |      |     |   |      |  |    |       |   |   |
| RPM          | 3450          |  |      |     |   |      |  |    |       |   |   |
| FRAME        | 56C           |  |      | HZ  |   | 60   |  | PH |       | 3 |   |
| SER.F.       | 1.15          |  | CODE |     | J | DES  |  | B  | CLASS |   | F |
| NEMA-NOM-EFF | 74            |  |      | PF  |   | 80   |  |    |       |   |   |
| RATING       | 40C AMB-CONT  |  |      |     |   |      |  |    |       |   |   |
| CC           |               |  |      |     |   |      |  |    |       |   |   |
| DE           | 6205          |  |      | ODE |   | 6203 |  |    |       |   |   |
| ENCL         | TENV          |  | SN   |     |   |      |  |    |       |   |   |
|              | 10:1CT 20:1VT |  |      |     |   |      |  |    |       |   |   |
|              |               |  |      |     |   |      |  |    |       |   |   |

**AC Induction Motor Performance Data**

Record # 50347

Typical performance - not guaranteed values

| Winding: 35WG5766-R007 |    |              | Type: 3512M                              |                           | Enclosure: TENV       |               |        |
|------------------------|----|--------------|------------------------------------------|---------------------------|-----------------------|---------------|--------|
| Nameplate Data         |    |              | 460 V, 60 Hz:<br>High Voltage Connection |                           |                       |               |        |
| Rated Output (HP)      |    | .33          | Full Load Torque                         |                           | 0.498 LB-FT           |               |        |
| Volts                  |    | 208-230/460  | Start Configuration                      |                           | direct on line        |               |        |
| Full Load Amps         |    | 1.2-1.1/.55  | Breakdown Torque                         |                           | 2.1 LB-FT             |               |        |
| R.P.M.                 |    | 3450         | Pull-up Torque                           |                           | 1.5 LB-FT             |               |        |
| Hz                     | 60 | Phase        | 3                                        | Locked-rotor Torque       |                       | 1.7 LB-FT     |        |
| NEMA Design Code       |    | B            | KVA Code                                 | J                         | Starting Current      |               | 3.75 A |
| Service Factor (S.F.)  |    | 1.15         |                                          | No-load Current           |                       | 0.313 A       |        |
| NEMA Nom. Eff.         |    | 74           | Power Factor                             | 80                        | Line-line Res. @ 25°C |               | 48.2 Ω |
| Rating - Duty          |    | 40C AMB-CONT |                                          | Temp. Rise @ Rated Load   |                       | 38°C          |        |
| S.F. Amps              |    |              |                                          | Temp. Rise @ S.F. Load    |                       | 43°C          |        |
|                        |    |              |                                          | Locked-rotor Power Factor |                       | 67            |        |
|                        |    |              |                                          | Rotor inertia             |                       | 0.0332 LB-FT2 |        |

**Load Characteristics 460 V, 60 Hz, 0.33 HP**

| % of Rated Load | 25    | 50    | 75    | 100   | 125   | 150   | S.F.  |
|-----------------|-------|-------|-------|-------|-------|-------|-------|
| Power Factor    | 55    | 68    | 77    | 82    | 86    | 87    | 84    |
| Efficiency      | 40.5  | 56.6  | 64.2  | 68    | 70.2  | 71.2  | 69.4  |
| Speed           | 3548  | 3520  | 3491  | 3459  | 3425  | 3387  | 3450  |
| Line amperes    | 0.349 | 0.404 | 0.471 | 0.549 | 0.633 | 0.729 | 0.602 |

ABB Motors and Mechanical Inc.

WINDING # 35WG5766

Typical performance - not guaranteed values.

0.33 HP 3 PH 60 HZ 3450 RPM 460 V 3512M

TORQUES (LB-FT): PO=2.1 PU=1.5 LR=1.7 LRA=3.75







