

# ABB BALDOR RELIANCE III

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## Customer information packet

### IDCSWDM3611T

3HP, 1760RPM, 3PH, 60HZ, 182TC, 3636M, TEFC, F1

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                                             |
|---------------------------------------|-------------------------------------------------------------|
| <b>Enclosure</b>                      | TEFC                                                        |
| <b>Frame</b>                          | 182TC                                                       |
| <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>             | 3.000 HP @ 60 HZ                                            |
| <b>Phase</b>                          | 3                                                           |
| <b>Synchronous Speed @ Frequency</b>  | 1800 RPM @ 60 HZ                                            |
| <b>Voltage @ Frequency</b>            | 230.0 V @ 60 HZ<br>460.0 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>              | 8.800 A @ 208.0 V<br>8.400 A @ 230.0 V<br>4.200 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>         | 89.5 %                                                      |
| <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                                                        |
| <b>Heater Indicator</b>               | No Heater                                                   |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | S          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 36K201     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 36WGS945   |
| <b>Layout</b>       | 36LYK201   |
| <b>Eff. date</b>    | 08-23-2023 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 04         |
| <b>Leads</b>        | 9#16       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 07-13-2012 |

|                               |                            |
|-------------------------------|----------------------------|
| High Voltage Full Load Amps   | 4.2 a                      |
| Insulation Class              | H                          |
| Inverter Code                 | Inverter Ready             |
| KVA Code                      | K                          |
| Lifting Lugs                  | No Lifting Lugs            |
| Locked Bearing Indicator      | Locked Bearing             |
| Max Speed                     | 6000 rpm                   |
| Motor Lead Exit               | Ko Box                     |
| Motor Lead Quantity/Wire Size | 9 @ 16 AWG                 |
| Motor Lead Termination        | Flying Leads               |
| Motor Standards               | NEMA                       |
| Motor Type                    | 3636M                      |
| Mounting Arrangement          | F1                         |
| Number of Poles               | 4                          |
| Overall Length                | 18.06 IN                   |
| Power Factor                  | 76                         |
| Product Family                | Wash Down Paint Free       |
| Pulley End Bearing Type       | Ball                       |
| Pulley Face Code              | C-Face                     |
| Pulley Shaft Indicator        | Standard                   |
| Rodent Screen                 | None                       |
| Service Factor                | 1.00                       |
| Shaft Diameter                | 1.125 IN                   |
| Shaft Extension Location      | Pulley End                 |
| Shaft Ground Indicator        | No Shaft Grounding         |
| Shaft Rotation                | Reversible                 |
| Shaft Slinger Indicator       | Shaft Slinger              |
| Speed                         | 1760 rpm                   |
| Speed Code                    | Single Speed               |
| Starting Method               | Direct on line             |
| Thermal Device - Bearing      | None                       |
| Thermal Device - Winding      | Normally Closed Thermostat |
| Vibration Sensor Indicator    | No Vibration Sensor        |
| Winding Thermal 1             | None                       |

**Winding Thermal 2**

**None**

**Nameplate**

| NP3956L        |              |    |         |            |       |       |      |   |         |
|----------------|--------------|----|---------|------------|-------|-------|------|---|---------|
| CAT.NO.        | IDCSWDM3611T |    |         |            |       |       |      |   |         |
| SPEC.          | 36K201S945G1 |    |         |            |       |       |      |   |         |
| FRAME          | 182TC        |    |         | H.P.       | 3 TE  |       |      |   |         |
| VOLTS          | 230/460      |    |         |            |       |       |      |   |         |
| MAG. CUR.      | 4.6/2.3      |    |         | F.L. AMPS  |       |       |      |   | 8.4/4.2 |
| R.P.M.         | 1760         |    |         | R.P.M. MAX |       |       | 6000 |   |         |
| HZ.            | 60           |    | PH.     | 3          | CLASS |       |      | H |         |
| SER.F.         | 1.00         |    | DES.    | B          |       | SL HZ |      |   | 1.3     |
| NEMA NOM. EFF. | 89.5         |    | WK2     | 0.372      |       |       |      |   |         |
| BLWR V         | PH           |    | HZ      |            | AMPS  |       |      |   |         |
| RATING         | 40C AMB-CONT |    |         |            |       |       |      |   |         |
| DE BRG         | 6206         |    | ODE BRG |            |       | 6205  |      |   |         |
| CC             | 010A         | SN |         |            |       |       |      |   |         |

**AC Induction Motor Performance Data**

Record # 39148

Typical performance - not guaranteed values

| Winding: 36WGS945-R002 |    |              | Type: 3636M                              |                           | Enclosure: TEFC |              |
|------------------------|----|--------------|------------------------------------------|---------------------------|-----------------|--------------|
| Nameplate Data         |    |              | 460 V, 60 Hz:<br>High Voltage Connection |                           |                 |              |
| Rated Output (HP)      |    | 3            | Full Load Torque                         |                           | 9.04 LB-FT      |              |
| Volts                  |    | 230/460      | Start Configuration                      |                           | direct on line  |              |
| Full Load Amps         |    | 8.4/4.2      | Breakdown Torque                         |                           | 34.81 LB-FT     |              |
| R.P.M.                 |    | 1760         | Pull-up Torque                           |                           | 18.62 LB-FT     |              |
| Hz                     | 60 | Phase        | 3                                        | Locked-rotor Torque       |                 | 21.9 LB-FT   |
| NEMA Design Code       |    | B            | KVA Code                                 |                           | K               |              |
| Service Factor (S.F.)  |    | 1            | No-load Current                          |                           | 2.25 A          |              |
| NEMA Nom. Eff.         |    | 89.5         | Power Factor                             |                           | 76              |              |
| Rating - Duty          |    | 40C AMB-CONT |                                          | Temp. Rise @ Rated Load   |                 | 62°C         |
|                        |    |              |                                          | Locked-rotor Power Factor |                 | 41           |
|                        |    |              |                                          | Rotor inertia             |                 | 0.335 LB-FT2 |

**Load Characteristics 460 V, 60 Hz, 3 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  |
|-----------------|------|------|------|------|------|------|
| Power Factor    | 36   | 56   | 69   | 76   | 80   | 83   |
| Efficiency      | 82.2 | 88.1 | 89.7 | 89.8 | 89.2 | 88.3 |
| Speed           | 1790 | 1781 | 1772 | 1762 | 1751 | 1738 |
| Line amperes    | 2.45 | 2.86 | 3.46 | 4.17 | 4.95 | 5.83 |

ABB Motors and Mechanical Inc.

WINDING # 36WGS945

Typical performance - not guaranteed values.

3 HP 3 PH 60 HZ 1760 RPM 460 V 3636M

TORQUES (LB-FT) : PO=34.81 PU=18.62 LR=21.9 LRA=34.1





