

# ABB BALDOR RELIANCE III

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## Customer information packet

### VEWDM3538

.5HP, 1775RPM, 3PH, 60HZ, 56C, 3514M, TENV, F1

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                        |
|---------------------------------------|----------------------------------------|
| <b>Enclosure</b>                      | TENV                                   |
| <b>Frame</b>                          | 56C                                    |
| <b>Frame Material</b>                 | 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>  | 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>                 | No Mounting                            |
| <b>Bearing Grease Type</b>            | Polyrex EM (-20F +300F)                |
| <b>Blower</b>                         | None                                   |
| <b>Current @ Voltage</b>              | 2.020 A @ 230.0 V<br>1.010 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>         | 81.5 %                                 |
| <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                              |
| <b>High Voltage Full Load Amps</b>    | 1.0 a                                  |
| <b>Insulation Class</b>               | F                                      |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | B          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 35S603     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 35WGG069   |
| <b>Layout</b>       | 35LYS603   |
| <b>Eff. date</b>    | 06-05-2025 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 04         |
| <b>Leads</b>        | 9#18       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 09-15-2023 |

|                                      |                     |
|--------------------------------------|---------------------|
| <b>Inverter Code</b>                 | Inverter Ready      |
| <b>KVA Code</b>                      | P                   |
| <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>                    | 3514M               |
| <b>Mounting Arrangement</b>          | F1                  |
| <b>Number of Poles</b>               | 4                   |
| <b>Overall Length</b>                | 11.06 IN            |
| <b>Power Factor</b>                  | 58                  |
| <b>Product Family</b>                | Wash Down           |
| <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>       | Shaft Slinger       |
| <b>Speed</b>                         | 1775 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

| NP2179L      |              |  |      |      |     |   |  |       |   |  |  |
|--------------|--------------|--|------|------|-----|---|--|-------|---|--|--|
| CAT.NO.      | VEWDM3538    |  |      |      |     |   |  |       |   |  |  |
| SPEC.        | 35S603G069G6 |  |      |      |     |   |  |       |   |  |  |
| HP           | .5           |  |      |      |     |   |  |       |   |  |  |
| VOLTS        | 230/460      |  |      |      |     |   |  |       |   |  |  |
| AMP          | 2.02/1.01    |  |      |      |     |   |  |       |   |  |  |
| RPM          | 1775         |  |      |      |     |   |  |       |   |  |  |
| FRAME        | 56C          |  | HZ   | 60   |     |   |  | PH    | 3 |  |  |
| SER.F.       | 1.15         |  | CODE | P    | DES | B |  | CLASS | F |  |  |
| NEMA-NOM-EFF | 81.5         |  | PF   | 58   |     |   |  |       |   |  |  |
| RATING       | 40C AMB-CONT |  |      |      |     |   |  |       |   |  |  |
| CC           |              |  |      |      |     |   |  |       |   |  |  |
| DE           | 6205         |  | ODE  | 6203 |     |   |  |       |   |  |  |
| ENCL         | TENV         |  | SN   |      |     |   |  |       |   |  |  |
| BLANK        | 2.2/1.1      |  |      |      |     |   |  |       |   |  |  |

**AC Induction Motor Performance Data**

Record # 102249

Typical performance - not guaranteed values

| Winding: 35WGG069-R082 |    |           | Type: 3514M                              |                     | Enclosure: TENV           |                       |
|------------------------|----|-----------|------------------------------------------|---------------------|---------------------------|-----------------------|
| Nameplate Data         |    |           | 460 V, 60 Hz:<br>High Voltage Connection |                     |                           |                       |
| Rated Output (HP)      |    | .5        | Full Load Torque                         |                     | 1.48 LB-FT                |                       |
| Volts                  |    | 230/460   | Start Configuration                      |                     | direct on line            |                       |
| Full Load Amps         |    | 2.02/1.01 | Breakdown Torque                         |                     | 8 LB-FT                   |                       |
| R.P.M.                 |    | 1775      | Pull-up Torque                           |                     | 4.4 LB-FT                 |                       |
| Hz                     | 60 | Phase     | 3                                        | Locked-rotor Torque |                           | 5.1 LB-FT             |
| NEMA Design Code       |    | B         | KVA Code                                 |                     | P                         | Starting Current      |
| Service Factor (S.F.)  |    | 1.15      | No-load Current                          |                     | 0.85 A                    |                       |
| NEMA Nom. Eff.         |    | 81.5      | Power Factor                             |                     | 58                        | Line-line Res. @ 25°C |
| Rating - Duty          |    | 40C       | AMB-CONT                                 |                     | Temp. Rise @ Rated Load   |                       |
| S.F. Amps              |    |           |                                          |                     | Temp. Rise @ S.F. Load    |                       |
|                        |    |           |                                          |                     | Locked-rotor Power Factor |                       |
|                        |    |           |                                          |                     | Rotor inertia             |                       |

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

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 24   | 37   | 48   | 58   | 65   | 71   | 62   |
| Efficiency      | 58.9 | 72.5 | 78.4 | 80.5 | 81.6 | 81.5 | 81.2 |
| Speed           | 1793 | 1788 | 1782 | 1776 | 1771 | 1763 | 1773 |
| Line amperes    | 0.85 | 0.89 | 0.94 | 1.01 | 1.11 | 1.21 | 1.07 |

ABB Motors and Mechanical Inc.

WINDING # 35WGG069

Typical performance - not guaranteed values.

0.5 HP 3 PH 60 HZ 1775 RPM 460 V 3514M

TORQUES (LB-FT) : PO=8 PU=4.4 LR=5.1 LRA=8.4





