

# ABB BALDOR RELIANCE III

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## Customer information packet

### CUHM3542

.75/.56KW IP44 IC411HP, 1765RPM, 3PH, 60HZ

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                                             |
|---------------------------------------|-------------------------------------------------------------|
| <b>Enclosure</b>                      | TEFC                                                        |
| <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>             | .750 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>               | CE<br>CSA<br>UR<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>              | 2.400 A @ 208.0 V<br>2.280 A @ 230.0 V<br>1.140 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                                                        |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | E          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 35X046     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 35WGG069   |
| <b>Layout</b>       | 35LYX046   |
| <b>Eff. date</b>    | 01-12-2026 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 04         |
| <b>Leads</b>        | 9#18       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 03-11-2022 |

|                                      |                     |
|--------------------------------------|---------------------|
| <b>Heater Indicator</b>              | No Heater           |
| <b>High Voltage Full Load Amps</b>   | 1.1 a               |
| <b>Insulation Class</b>              | F                   |
| <b>Inverter Code</b>                 | Not Inverter        |
| <b>KVA Code</b>                      | K                   |
| <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>          | F3                  |
| <b>Number of Poles</b>               | 4                   |
| <b>Overall Length</b>                | 12.23 IN            |
| <b>Power Factor</b>                  | 74                  |
| <b>Product Family</b>                | General Purpose     |
| <b>Pulley End Bearing Type</b>       | Ball                |
| <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>                         | 1765 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**

| NP1372L        |               |      |                 |    |      |   |    |   |   |  |  |
|----------------|---------------|------|-----------------|----|------|---|----|---|---|--|--|
| CAT.NO.        | CUHM3542      |      |                 |    |      |   |    |   |   |  |  |
| SPEC.          | 35X046G069G1  |      |                 |    |      |   |    |   |   |  |  |
| HP             | .75/.56KW     |      |                 |    |      |   |    |   |   |  |  |
| VOLTS          | 230/460       |      |                 |    |      |   |    |   |   |  |  |
| AMP            | 2.42/1.21     |      |                 |    |      |   |    |   |   |  |  |
| R.P.M. (1/MIN) | 1765          |      |                 |    |      |   |    |   |   |  |  |
| FRAME          | 56C           |      | HZ              |    | 60   |   | PH |   | 3 |  |  |
| SER.F.         | 1.15          | CODE |                 | K  | DES  | B | CL | F |   |  |  |
| NEMA-NOM-EFF   | 82.5          | PF   |                 | 74 |      |   |    |   |   |  |  |
| RATING         | 40C AMB-CONT  |      |                 |    |      |   |    |   |   |  |  |
| CC             |               |      | IP44 IC411 15KG |    |      |   |    |   |   |  |  |
| DE             | 6205          |      | ODE             |    | 6203 |   |    |   |   |  |  |
| ENCL           | TEFC          | SN   |                 |    |      |   |    |   |   |  |  |
|                | SFA 2.52/1.26 |      |                 |    |      |   |    |   |   |  |  |

**AC Induction Motor Performance Data**

Record # 82190

Typical performance - not guaranteed values

| Winding: 35WGG069-R005 |    |           | Type: 3514M                              |                     | Enclosure: TEFC         |           |        |
|------------------------|----|-----------|------------------------------------------|---------------------|-------------------------|-----------|--------|
| Nameplate Data         |    |           | 460 V, 60 Hz:<br>High Voltage Connection |                     |                         |           |        |
| Rated Output (HP)      |    | .75       | Full Load Torque                         |                     | 2.24 LB-FT              |           |        |
| Volts                  |    | 230/460   | Start Configuration                      |                     | direct on line          |           |        |
| Full Load Amps         |    | 2.42/1.21 | Breakdown Torque                         |                     | 8 LB-FT                 |           |        |
| R.P.M.                 |    | 1765      | Pull-up Torque                           |                     | 4.4 LB-FT               |           |        |
| Hz                     | 60 | Phase     | 3                                        | Locked-rotor Torque |                         | 5.1 LB-FT |        |
| NEMA Design Code       |    | B         | KVA Code                                 | K                   | Starting Current        |           | 8.4 A  |
| Service Factor (S.F.)  |    | 1.15      | No-load Current                          |                     | 0.85 A                  |           |        |
| NEMA Nom. Eff.         |    | 82.5      | Power Factor                             | 74                  | Line-line Res. @ 25°C   |           | 30.3 Ω |
| Rating - Duty          |    | 40C       | AMB-CONT                                 |                     | Temp. Rise @ Rated Load |           | 25°C   |
| S.F. Amps              |    | 2.64/1.32 | Temp. Rise @ S.F. Load                   |                     | 30°C                    |           |        |
|                        |    |           | Locked-rotor Power Factor                |                     | 66.8                    |           |        |
|                        |    |           | Rotor inertia                            |                     | 0.101 lb-ft²            |           |        |

**Load Characteristics 460 V, 60 Hz, 0.75 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 30   | 48   | 61   | 70   | 77   | 81   | 1    |
| Efficiency      | 68.4 | 79.2 | 82.1 | 82.9 | 82.4 | 81.1 | 82.8 |
| Speed           | 1791 | 1783 | 1775 | 1766 | 1757 | 1745 | 1752 |
| Line amperes    | 0.87 | 0.95 | 1.06 | 1.21 | 1.4  | 1.61 | 1.34 |

ABB Motors and Mechanical Inc.

WINDING # 35WGG069

0.75 HP 3 PH 60 HZ 1765 RPM 460 V 3514M

Typical performance - not guaranteed values.

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





