

# ABB BALDOR RELIANCE III

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## Customer information packet

### KM3454

.25HP, 1735RPM, 3PH, 60HZ, 56C, 3410M, TEFC, F1

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>             | .250 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>               | C UR US                                                    |
| <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>              | .600 A @ 460.0 V<br>1.100 A @ 208.0 V<br>1.200 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>         | 62.0 %                                                     |
| <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>    | 0.6 a                                                      |
| <b>Insulation Class</b>               | B                                                          |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | D          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 34A063     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 34WGR713   |
| <b>Layout</b>       | 34LYA063   |
| <b>Eff. date</b>    | 02-10-2025 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 04         |
| <b>Leads</b>        | 9#18       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 11-20-2020 |

|                                      |                     |
|--------------------------------------|---------------------|
| <b>Inverter Code</b>                 | Not Inverter        |
| <b>KVA Code</b>                      | L                   |
| <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>                    | 3410M               |
| <b>Mounting Arrangement</b>          | F1                  |
| <b>Number of Poles</b>               | 4                   |
| <b>Overall Length</b>                | 11.35 IN            |
| <b>Power Factor</b>                  | 63                  |
| <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>RoHS Status</b>                   | ROHS COMPLIANT      |
| <b>Service Factor</b>                | 1.35                |
| <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>                         | 1735 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**

| NP1256L      |                |      |     |    |      |   |       |  |   |
|--------------|----------------|------|-----|----|------|---|-------|--|---|
| CAT.NO.      | KM3454         |      |     |    |      |   |       |  |   |
| SPEC.        | 34A063R713     |      |     |    |      |   |       |  |   |
| HP           | .25            |      |     |    |      |   |       |  |   |
| VOLTS        | 230/460        |      |     |    |      |   |       |  |   |
| AMP          | 1.2/.6         |      |     |    |      |   |       |  |   |
| RPM          | 1735           |      |     |    |      |   |       |  |   |
| FRAME        | 56C            |      | HZ  |    | 60   |   | PH    |  | 3 |
| SER.F.       | 1.35           | CODE |     | L  | DES  | B | CLASS |  | B |
| NEMA-NOM-EFF | 62             | PF   |     | 63 |      |   |       |  |   |
| RATING       | 40C AMB-CONT   |      |     |    |      |   |       |  |   |
| CC           |                |      |     |    |      |   |       |  |   |
| DE           | 6203           |      | ODE |    | 6203 |   |       |  |   |
| ENCL         | TEFC           | SN   |     |    |      |   |       |  |   |
|              | SFA 1.32/0.66A |      |     |    |      |   |       |  |   |

**Parts List**

| Part number   | Description                              | Quantity |
|---------------|------------------------------------------|----------|
| SA388176      | SA 34A063R713                            | 1.000 ea |
| RA378525      | RA 34A063R713                            | 1.000 ea |
| NS2512A01     | INSULATOR, CONDUIT BOX X                 | 1.000 ea |
| 34CB3002A     | CB CAST W/.88 DIA HOLE                   | 1.000 ea |
| 34GS1029A01   | GASKET, CONDUIT BOX                      | 1.000 ea |
| 51XB1016A07   | 10-16 X 7/16 HXWSSLD SERTYB              | 2.000 ea |
| 11XW1032G06   | 10-32 X .38, TAPTITE II, HEX WSHR SLTD U | 1.000 ea |
| 34EP3102A01SP | FR ENDPLATE, MACH                        | 1.000 ea |
| HW5100A03     | WAVY WASHER (W1543-017)                  | 1.000 ea |
| 34EP3300A24SP | PU ENDPLATE, MACH                        | 1.000 ea |
| 51XN1032A20   | 10-32 X 1 1/4 HX WS SL SR                | 2.000 ea |
| 34FN3002A01SP | EXTERNAL FAN, PLASTIC, .637/.639 HUB W/  | 1.000 ea |
| 34FH4002A01SP | IEC FH NO GREASER PRIMED                 | 1.000 ea |
| 51XW1032A06   | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S | 3.000 ea |
| 34CB4517      | CB LID 4 MTG HOLES .22 DIA STAMPED, FOR  | 1.000 ea |
| 34GS1031A01   | GASKET, FLAT CONDUIT BOX LID (LEXIDE)    | 1.000 ea |
| 51XW0832A07   | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 4.000 ea |
| HW2501D13     | KEY, 3/16 SQ X 1.375                     | 1.000 ea |
| HA7000A04     | KEY RETAINER 0.625 DIA SHAFTS            | 1.000 ea |
| MG1050G01     | CELEROL MEDIUM CHARCOAL METALLIC GRAY    | 0.014 ga |
| 85XU0407S04   | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 ea |
| HA3100A12     | THRUBOLT 10-32 X 7.375                   | 4.000 ea |
| MN416A01      | TAG-INSTAL-MAINT no wire (2500 bx)11/25  | 1.000 ea |
| LB1624        | COMBINED WARNING LABEL, ISO/ANSI PICTOGR | 1.000 ea |
| LC0005        | CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING  | 1.000 ea |
| NP1256L       | ALUM UL CC INDUSTRIAL MOTOR A60          | 1.000 ea |
| PK3083        | STYROFOAM PACKING CRADLE                 | 1.000 ea |
| PK3088        | MICROFOAM, 8"X"8 PERF. SHEETS            | 1.000 ea |
| 34PA1002      | PKG GRP, PRINT PK1001A01                 | 1.000 ea |

**AC Induction Motor Performance Data**

Record # 85600

Preliminary Data Sheet

| Winding: 34WGR713-R001 |    |              | Type: 3410M                              | Enclosure: TEFC           |                       |               |        |
|------------------------|----|--------------|------------------------------------------|---------------------------|-----------------------|---------------|--------|
| Nameplate Data         |    |              | 460 V, 60 Hz:<br>High Voltage Connection |                           |                       |               |        |
| Rated Output (HP)      |    | 0.25         | Full Load Torque                         |                           | 0.76 LB-FT            |               |        |
| Volts                  |    | 230/460      | Start Configuration                      |                           | direct on line        |               |        |
| Full Load Amps         |    | 1.2/0.6      | Breakdown Torque                         |                           | 2.77 LB-FT            |               |        |
| R.P.M.                 |    | 1735         | Pull-up Torque                           |                           | 1.83 LB-FT            |               |        |
| Hz                     | 60 | Phase        | 3                                        | Locked-rotor Torque       |                       | 2.03 LB-FT    |        |
| NEMA Design Code       |    | B            | KVA Code                                 | L                         | Starting Current      |               | 2.89 A |
| Service Factor (S.F.)  |    | 1.35         |                                          | No-load Current           |                       | 0.545 A       |        |
| NEMA Nom. Eff.         |    | 63.4         | Power Factor                             | 63                        | Line-line Res. @ 25°C |               | 98.9 Ω |
| Rating - Duty          |    | 40C AMB-CONT |                                          | Temp. Rise @ Rated Load   |                       | 57°C          |        |
| S.F. Amps              |    | 1.32/0.66    |                                          | Temp. Rise @ S.F. Load    |                       | 70°C          |        |
|                        |    |              |                                          | Locked-rotor Power Factor |                       | 84.1          |        |
|                        |    |              |                                          | Rotor inertia             |                       | 0.0238 lb-ft² |        |

**Load Characteristics 460 V, 60 Hz, 0.25 HP**

| % of Rated Load | 25    | 50    | 75    | 100   | 125  | 150   | S.F.  |
|-----------------|-------|-------|-------|-------|------|-------|-------|
| Power Factor    | 33    | 43    | 54    | 63    | 71   | 78    | 75    |
| Efficiency      | 34.9  | 50.2  | 58.6  | 63.4  | 65.6 | 66.1  | 65.8  |
| Speed           | 1781  | 1767  | 1751  | 1733  | 1713 | 1690  | 1697  |
| Line amperes    | 0.547 | 0.552 | 0.568 | 0.598 | 0.64 | 0.695 | 0.662 |

ABB Motors and Mechanical Inc.

WINDING # 34WGR713

Typical performance - not guaranteed values.

0.25 HP 3 PH 60 HZ 1735 RPM 460 V 3410M

TORQUES (LB-FT): PO=2.77 PU=1.83 LR=2.03 LRA=2.89





