

# ABB BALDOR RELIANCE III

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## Customer information packet

### EM30012

.75HP, 3450RPM, 3PH, 60HZ, 48, 3416M, OPEN, F1

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                                             |
|---------------------------------------|-------------------------------------------------------------|
| <b>Enclosure</b>                      | OPEN                                                        |
| <b>Frame</b>                          | 48                                                          |
| <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>  | 3600 RPM @ 60 HZ                                            |
| <b>Voltage @ Frequency</b>            | 230.0 V @ 60 HZ<br>460.0 V @ 60 HZ                          |
| <b>Agency Approvals</b>               | CURUSEEV                                                    |
| <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 @ 460.0 V<br>2.400 A @ 230.0 V<br>2.700 A @ 208.0 V |
| <b>Design Code</b>                    | B                                                           |
| <b>Drip Cover</b>                     | No Drip Cover                                               |
| <b>Duty Rating</b>                    | CONT                                                        |
| <b>Efficiency @ 100% Load</b>         | 76.8 %                                                      |
| <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                                                   |
| <b>High Voltage Full Load Amps</b>    | 1.2 a                                                       |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | G          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 34F002     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 34WGW719   |
| <b>Layout</b>       | 34LYF002   |
| <b>Eff. date</b>    | 12-31-2024 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 02         |
| <b>Leads</b>        | 9#18       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 09-30-2014 |

|                                      |                            |
|--------------------------------------|----------------------------|
| <b>Insulation Class</b>              | <b>B</b>                   |
| <b>Inverter Code</b>                 | <b>Not Inverter</b>        |
| <b>KVA Code</b>                      | <b>L</b>                   |
| <b>Lifting Lugs</b>                  | <b>No Lifting Lugs</b>     |
| <b>Locked Bearing Indicator</b>      | <b>No Locked Bearing</b>   |
| <b>Motor Lead Exit</b>               | <b>Ko Box</b>              |
| <b>Motor Lead Quantity/Wire Size</b> | <b>9 @ 18 AWG</b>          |
| <b>Motor Lead Termination</b>        | <b>Flying Leads</b>        |
| <b>Motor Standards</b>               | <b>NEMA</b>                |
| <b>Motor Type</b>                    | <b>3416M</b>               |
| <b>Mounting Arrangement</b>          | <b>F1</b>                  |
| <b>Number of Poles</b>               | <b>2</b>                   |
| <b>Overall Length</b>                | <b>9.13 IN</b>             |
| <b>Power Factor</b>                  | <b>80</b>                  |
| <b>Product Family</b>                | <b>General Purpose</b>     |
| <b>Pulley End Bearing Type</b>       | <b>Ball</b>                |
| <b>Pulley Face Code</b>              | <b>Standard</b>            |
| <b>Pulley Shaft Indicator</b>        | <b>Standard</b>            |
| <b>Rodent Screen</b>                 | <b>None</b>                |
| <b>RoHS Status</b>                   | <b>ROHS COMPLIANT</b>      |
| <b>Service Factor</b>                | <b>1.25</b>                |
| <b>Shaft Diameter</b>                | <b>0.500 IN</b>            |
| <b>Shaft Extension Location</b>      | <b>Pulley End</b>          |
| <b>Shaft Ground Indicator</b>        | <b>No Shaft Grounding</b>  |
| <b>Shaft Rotation</b>                | <b>Reversible</b>          |
| <b>Shaft Slinger Indicator</b>       | <b>No Slinger</b>          |
| <b>Speed</b>                         | <b>3450 rpm</b>            |
| <b>Speed Code</b>                    | <b>Single Speed</b>        |
| <b>Starting Method</b>               | <b>Direct on line</b>      |
| <b>Thermal Device - Bearing</b>      | <b>None</b>                |
| <b>Thermal Device - Winding</b>      | <b>None</b>                |
| <b>Vibration Sensor Indicator</b>    | <b>No Vibration Sensor</b> |
| <b>Winding Thermal 1</b>             | <b>None</b>                |
| <b>Winding Thermal 2</b>             | <b>None</b>                |

Nameplate

| NP3155L        |              |  |      |      |     |   |  |    |   |  |  |
|----------------|--------------|--|------|------|-----|---|--|----|---|--|--|
| CAT.NO.        | EM30012      |  |      |      |     |   |  |    |   |  |  |
| SPEC.          | 34F002W719G1 |  |      |      |     |   |  |    |   |  |  |
| HP             | .75          |  |      |      |     |   |  |    |   |  |  |
| VOLTS          | 230/460      |  |      |      |     |   |  |    |   |  |  |
| AMP            | 2.4/1.2      |  |      |      |     |   |  |    |   |  |  |
| RPM            | 3450         |  |      |      |     |   |  |    |   |  |  |
| FRAME          | 48           |  | HZ   | 60   |     |   |  | PH | 3 |  |  |
| SER.F.         | 1.25         |  | CODE | L    | DES | B |  | CL | B |  |  |
| F.L. AVG. EFF. | 76.8         |  | PF   | 80   |     |   |  |    |   |  |  |
| RATING         | 40C AMB-CONT |  |      |      |     |   |  |    |   |  |  |
| CC             |              |  |      |      |     |   |  |    |   |  |  |
| DE             | 6203         |  | ODE  | 6203 |     |   |  |    |   |  |  |
| ENCL           | OPEN         |  | SN   |      |     |   |  |    |   |  |  |
|                | SFA 2.8/1.4  |  |      |      |     |   |  |    |   |  |  |

**Parts List**

| <b>Part number</b> | <b>Description</b>                       | <b>Quantity</b> |
|--------------------|------------------------------------------|-----------------|
| SA287697           | SA 34F002W719G1                          | 1.000 ea        |
| RA273905           | RA 34F002W719G1                          | 1.000 ea        |
| NS2512A01          | INSULATOR, CONDUIT BOX X                 | 1.000 ea        |
| 34CB3002A          | CB CAST W/.88 DIA HOLE                   | 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        |
| 34EP3210A01SP      | FR ENDPLATE, MACH                        | 1.000 ea        |
| HW5100A03          | WAVY WASHER (W1543-017)                  | 1.000 ea        |
| 34EP3212A02        | PU ENDPLATE, MODEL 34 OPEN               | 1.000 ea        |
| XY1032A02          | 10-32 HEX NUT DIRECTIONAL SERRATION      | 4.000 ea        |
| 34CB4517           | CB LID 4 MTG HOLES .22 DIA STAMPED, FOR  | 1.000 ea        |
| 51XW0832A07        | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 4.000 ea        |
| MG1050Y01          | CELEROL BALDOR GOLD *5 GALLON BUCKET*    | 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        |
| LC0005             | CONN.DIA.,TY M,9-LD,DUAL VOLT,REVERSING  | 1.000 ea        |
| NP3155L            | ALUM SUPER-E UL CC "SEMS"                | 1.000 ea        |
| 34PA1002           | PKG GRP, PRINT PK1001A02                 | 1.000 ea        |
| LB1624             | COMBINED WARNING LABEL, ISO/ANSI PICTOGR | 1.000 ea        |

**AC Induction Motor Performance Data**

Record # 47456

Typical performance - not guaranteed values

| Winding: 34WGW719-R010 |          |         | Type: 3416M                              |  | Enclosure: OPEN         |                       |          |
|------------------------|----------|---------|------------------------------------------|--|-------------------------|-----------------------|----------|
| Nameplate Data         |          |         | 460 V, 60 Hz:<br>High Voltage Connection |  |                         |                       |          |
| Rated Output (HP)      |          | .75     | Full Load Torque                         |  | 1.15 LB-FT              |                       |          |
| Volts                  |          | 230/460 | Start Configuration                      |  | direct on line          |                       |          |
| Full Load Amps         |          | 2.4/1.2 | Breakdown Torque                         |  | 5.62 LB-FT              |                       |          |
| R.P.M.                 |          | 3450    | Pull-up Torque                           |  | 3.98 LB-FT              |                       |          |
| Hz                     | 60 Phase | 3       | Locked-rotor Torque                      |  | 5.14 LB-FT              |                       |          |
| NEMA Design Code       |          | B       | KVA Code                                 |  | L                       | Starting Current      | 9.2 A    |
| Service Factor (S.F.)  |          | 1.25    | No-load Current                          |  | 0.611 A                 |                       |          |
| NEMA Nom. Eff.         |          | 76.8    | Power Factor                             |  | 80                      | Line-line Res. @ 25°C | 20.283 Ω |
| Rating - Duty          |          | 40C     | AMB-CONT                                 |  | Temp. Rise @ Rated Load |                       | 17°C     |
| S.F. Amps              |          | 2.8/1.4 | Temp. Rise @ S.F. Load                   |  | 21°C                    |                       |          |
|                        |          |         | Locked-rotor Power Factor                |  | 69                      |                       |          |
|                        |          |         | Rotor inertia                            |  | 0.0148 LB-FT2           |                       |          |

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

| % of Rated Load | 25     | 50     | 75     | 100    | 125    | 150    | S.F. |
|-----------------|--------|--------|--------|--------|--------|--------|------|
| Power Factor    | 45     | 64     | 75     | 82     | 87     | 89     | 87   |
| Efficiency      | 60.9   | 73.6   | 77.6   | 78.8   | 78.8   | 77.7   | 78.8 |
| Speed           | 3558.7 | 3525.3 | 3490.1 | 3452.4 | 3410.2 | 3364.3 | 3410 |
| Line amperes    | 0.661  | 0.769  | 0.92   | 1.1    | 1.3    | 1.54   | 1.3  |

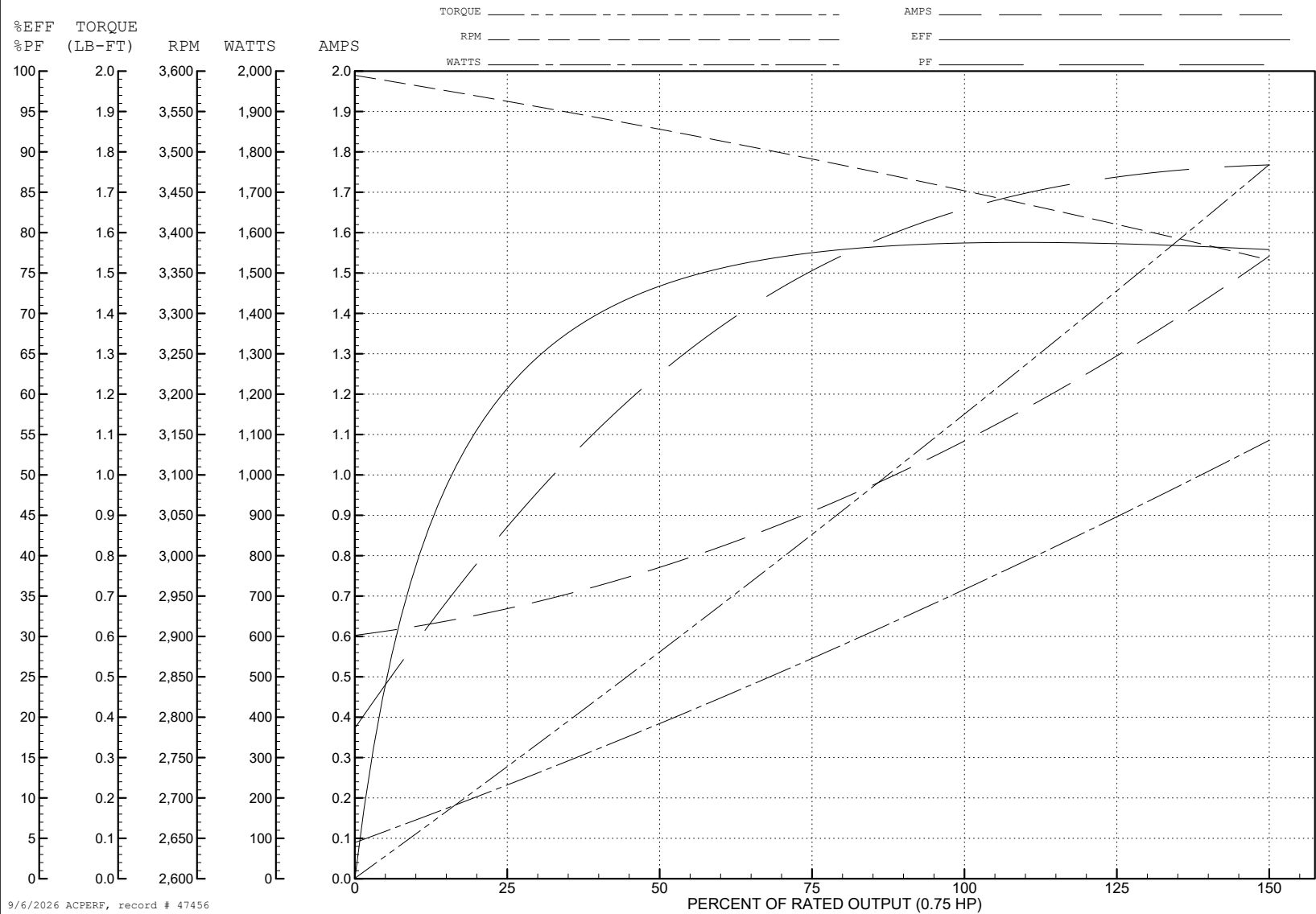
ABB Motors and Mechanical Inc.

WINDING # 34WG719

Typical performance - not guaranteed values.

0.75 HP 3 PH 60 HZ 3450 RPM 460 V 3416M

TORQUES (LB-FT) : PO=5.62 PU=3.98 LR=5.14 LRA=9.2



9/6/2026 ACPERF, record # 47456





