

# ABB BALDOR RELIANCE III

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## Customer information packet

### EL11204

.25HP, 1140RPM, 1PH, 60HZ, 48, 3416LC, 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>              | Cap Start, Cap Run                     |
| <b>Output @ Frequency</b>             | .250 HP @ 60 HZ                        |
| <b>Phase</b>                          | 1                                      |
| <b>Synchronous Speed @ Frequency</b>  | 1200 RPM @ 60 HZ                       |
| <b>Voltage @ Frequency</b>            | 115.0 V @ 60 HZ<br>230.0 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>              | 1.450 A @ 230.0 V<br>2.900 A @ 115.0 V |
| <b>Design Code</b>                    | N                                      |
| <b>Drip Cover</b>                     | No Drip Cover                          |
| <b>Duty Rating</b>                    | CONT                                   |
| <b>Efficiency @ 100% Load</b>         | 64.0 %                                 |
| <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>    | 1.5 a                                  |
| <b>Insulation Class</b>               | F                                      |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | K          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 34F351     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 34WGR066   |
| <b>Layout</b>       | 34LYF351   |
| <b>Eff. date</b>    | 12-31-2024 |
| <b>CD Diagram</b>   | CD0055     |
| <b>Poles</b>        | 06         |
| <b>Leads</b>        | 6#18       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 03-10-2014 |

|                                      |                     |
|--------------------------------------|---------------------|
| <b>Inverter Code</b>                 | Not Inverter        |
| <b>KVA Code</b>                      | J                   |
| <b>Lifting Lugs</b>                  | No Lifting Lugs     |
| <b>Locked Bearing Indicator</b>      | No Locked Bearing   |
| <b>Motor Lead Exit</b>               | Ko Box              |
| <b>Motor Lead Quantity/Wire Size</b> | 6 @ 18 AWG          |
| <b>Motor Lead Termination</b>        | Flying Leads        |
| <b>Motor Standards</b>               | NEMA                |
| <b>Motor Type</b>                    | 3416LC              |
| <b>Mounting Arrangement</b>          | F1                  |
| <b>Number of Poles</b>               | 6                   |
| <b>Overall Length</b>                | 9.76 IN             |
| <b>Power Factor</b>                  | 84                  |
| <b>Product Family</b>                | General Purpose     |
| <b>Pulley End Bearing Type</b>       | Ball                |
| <b>Pulley Face Code</b>              | Standard            |
| <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>                | 0.500 IN            |
| <b>Shaft Extension Location</b>      | Pulley End          |
| <b>Shaft Ground Indicator</b>        | No Shaft Grounding  |
| <b>Shaft Rotation</b>                | Reversible          |
| <b>Shaft Slinger Indicator</b>       | No Slinger          |
| <b>Speed</b>                         | 1140 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**

| NP3155L        |              |  |      |      |     |   |    |    |   |  |  |
|----------------|--------------|--|------|------|-----|---|----|----|---|--|--|
| CAT.NO.        | EL11204      |  |      |      |     |   |    |    |   |  |  |
| SPEC.          | 34F351R066G1 |  |      |      |     |   |    |    |   |  |  |
| HP             | .25          |  |      |      |     |   |    |    |   |  |  |
| VOLTS          | 115/230      |  |      |      |     |   |    |    |   |  |  |
| AMP            | 2.9/1.45     |  |      |      |     |   |    |    |   |  |  |
| RPM            | 1140         |  |      |      |     |   |    |    |   |  |  |
| FRAME          | 48           |  | HZ   | 60   |     |   |    | PH | 1 |  |  |
| SER.F.         | 1.35         |  | CODE | J    | DES | N | CL | F  |   |  |  |
| F.L. AVG. EFF. | 64           |  | PF   | 84   |     |   |    |    |   |  |  |
| RATING         | 40C AMB-CONT |  |      |      |     |   |    |    |   |  |  |
| CC             |              |  |      |      |     |   |    |    |   |  |  |
| DE             | 6203         |  | ODE  | 6203 |     |   |    |    |   |  |  |
| ENCL           | OPEN         |  | SN   |      |     |   |    |    |   |  |  |
|                | SFA 3.7/1.85 |  |      |      |     |   |    |    |   |  |  |

**Parts List**

| Part number   | Description                              | Quantity |
|---------------|------------------------------------------|----------|
| SA277761      | SA 34F351R066G1                          | 1.000 ea |
| RA264309      | RA 34F351R066G1                          | 1.000 ea |
| OC3020F12SP   | CAPACITORS 20 MFD 370 VAC                | 1.000 ea |
| EC1108C03     | ELEC CAP, 108-130 MFD, 250V, 1.81D X 3.  | 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 |
| 51XW0832A07   | 8-32 X .44, TAPTITE II, HEX WSHR SLTD SE | 2.000 ea |
| SP1006A01     | INSULATOR MODEL 35 SWITCH                | 1.000 ea |
| 34EP3210A01SP | FR ENDPLATE, MACH                        | 1.000 ea |
| 34GS5003A01   | FOAM SLEEVE, ID = 2 1/16" X 4 3/8"       | 2.000 ea |
| 34CB3801      | CAPACITOR BOX, DIE CAST                  | 1.000 ea |
| 51XB1214A08   | 12-14 X 1/2HX WS SL SR TYBX              | 2.000 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 |
| HA3100A44     | THRUBOLT 10-32 X 8.000                   | 4.000 ea |
| SP5056B08     | 34 TYPE LC STATIONARY SWITCH W/E, O, 8-R | 1.000 ea |
| MN416A01      | TAG-INSTAL-MAINT no wire (2500 bx)11/25  | 1.000 ea |
| LC0001A01     | CONN LABEL / WARNING LABEL (LC0001 / LB1 | 1.000 ea |
| NP3155L       | ALUM SUPER-E UL CC "SEMS"                | 1.000 ea |
| 35PA1066      | PKG GRP, PRINT PK1008A07                 | 1.000 ea |

**AC Induction Motor Performance Data**

Record # 44923

Typical performance - not guaranteed values

| Winding: 34WGR066-R002 |    |              | Type: 3416LC                            |                         | Enclosure: OPEN       |            |                                |
|------------------------|----|--------------|-----------------------------------------|-------------------------|-----------------------|------------|--------------------------------|
| Nameplate Data         |    |              | 115 V, 60 Hz:<br>Low Voltage Connection |                         |                       |            |                                |
| Rated Output (HP)      |    | .25          | Full Load Torque                        |                         | 1.14 LB-FT            |            |                                |
| Volts                  |    | 115/230      | Start Configuration                     |                         | direct on line        |            |                                |
| Full Load Amps         |    | 2.9/1.45     | Breakdown Torque                        |                         | 2.4 LB-FT             |            |                                |
| R.P.M.                 |    | 1140         | Pull-up Torque                          |                         | 2.67 LB-FT            |            |                                |
| Hz                     | 60 | Phase        | 1                                       | Locked-rotor Torque     |                       | 4.23 LB-FT |                                |
| NEMA Design Code       |    | N            | KVA Code                                | J                       | Starting Current      |            | 16.5 A                         |
| Service Factor (S.F.)  |    | 1.35         |                                         | No-load Current         |                       | 1.98 A     |                                |
| NEMA Nom. Eff.         |    | 64           | Power Factor                            | 84                      | Line-line Res. @ 25°C |            | 3.8763 Ω A Ph<br>7.1352 Ω B Ph |
| Rating - Duty          |    | 40C AMB-CONT |                                         | Temp. Rise @ Rated Load |                       | 48°C       |                                |
| S.F. Amps              |    | 3.7/1.85     |                                         | Temp. Rise @ S.F. Load  |                       | 63°C       |                                |

**Load Characteristics 115 V, 60 Hz, 0.25 HP**

| % of Rated Load | 25     | 50     | 75     | 100    | 125    | 150    | S.F. |
|-----------------|--------|--------|--------|--------|--------|--------|------|
| Power Factor    | 61     | 73     | 80     | 85     | 88     | 89     | 88   |
| Efficiency      | 33.6   | 51.9   | 61.3   | 65.6   | 66.9   | 65     | 66.1 |
| Speed           | 1186.6 | 1176.1 | 1163.7 | 1149.1 | 1130.7 | 1104.8 | 1120 |
| Line amperes    | 2.01   | 2.17   | 2.48   | 2.92   | 3.45   | 4.15   | 3.73 |

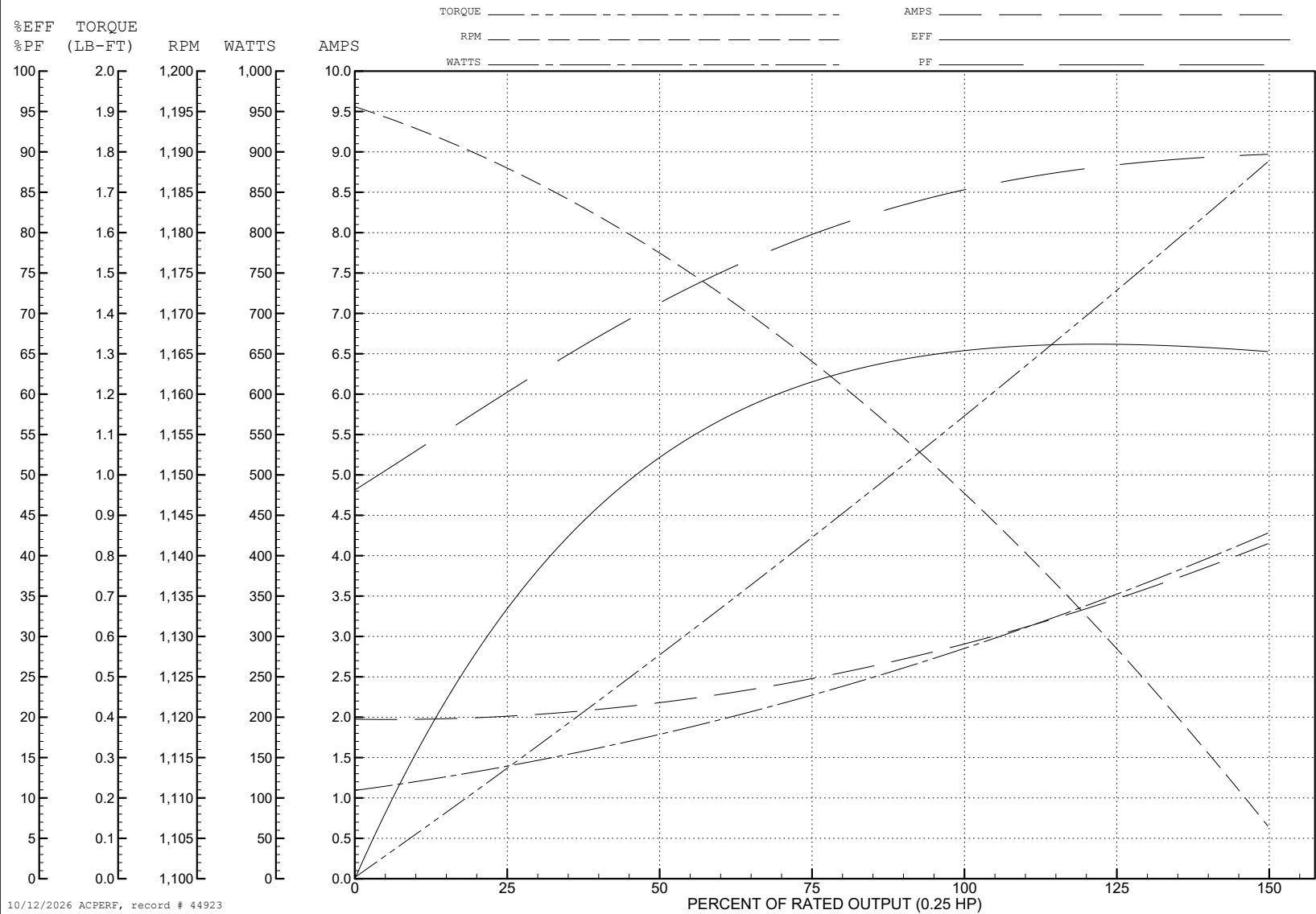
ABB Motors and Mechanical Inc.

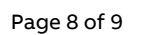
WINDING # 34WGR066

Typical performance - not guaranteed values.

0.25 HP 1 PH 60 HZ 1140 RPM 115 V 3416LC

TORQUES (LB-FT): PO=2.4 PU=2.67 LR=4.23 LRA=16.5





CD0055

