

# ABB BALDOR RELIANCE III

---

## Customer information packet

### KBL3409

.5HP, 1725RPM, 1PH, 60HZ, 56C, BRAKE, 3421L

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>              | Cap Start, Induction Run                                    |
| <b>Output @ Frequency</b>             | .500 HP @ 60 HZ                                             |
| <b>Phase</b>                          | 1                                                           |
| <b>Synchronous Speed @ Frequency</b>  | 1800 RPM @ 60 HZ                                            |
| <b>Voltage @ Frequency</b>            | 115.0 V @ 60 HZ<br>230.0 V @ 60 HZ                          |
| <b>Agency Approvals</b>               | UR<br>CSA                                                   |
| <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>              | 3.700 A @ 230.0 V<br>4.300 A @ 208.0 V<br>7.400 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>         | 68.0 %                                                      |
| <b>Electrically Isolated Bearing</b>  | Not Electrically Isolated                                   |
| <b>Feedback Device</b>                | NO FEEDBACK                                                 |
| <b>Front Face Code</b>                | Brake Mounting                                              |
| <b>Front Shaft Indicator</b>          | None                                                        |
| <b>Heater Indicator</b>               | No Heater                                                   |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | AZ         |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 34K027     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 34WG5422   |
| <b>Layout</b>       | 34LYK027   |
| <b>Eff. date</b>    | 10-28-2024 |
| <b>CD Diagram</b>   | CD0001     |
| <b>Poles</b>        | 04         |
| <b>Leads</b>        | 6#18       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 01-01-0001 |

|                               |                     |
|-------------------------------|---------------------|
| High Voltage Full Load Amps   | 3.7 a               |
| Insulation Class              | B                   |
| Inverter Code                 | Not Inverter        |
| KVA Code                      | J                   |
| Lifting Lugs                  | No Lifting Lugs     |
| Locked Bearing Indicator      | Locked Bearing      |
| Motor Lead Exit               | Ko Box              |
| Motor Lead Quantity/Wire Size | 6 @ 18 AWG          |
| Motor Lead Termination        | Flying Leads        |
| Motor Standards               | NEMA                |
| Motor Type                    | 3421L               |
| Mounting Arrangement          | F1                  |
| Number of Poles               | 4                   |
| Overall Length                | 16.07 IN            |
| Power Factor                  | 66                  |
| Product Family                | General Purpose     |
| Pulley End Bearing Type       | Ball                |
| Pulley Face Code              | C-Face              |
| Pulley Shaft Indicator        | Standard            |
| Rodent Screen                 | None                |
| RoHS Status                   | ROHS COMPLIANT      |
| Service Factor                | 1.25                |
| Shaft Diameter                | 0.625 IN            |
| Shaft Extension Location      | Pulley End          |
| Shaft Ground Indicator        | No Shaft Grounding  |
| Shaft Rotation                | Reversible          |
| Shaft Slinger Indicator       | No Slinger          |
| Speed                         | 1725 rpm            |
| Speed Code                    | Single Speed        |
| Starting Method               | Direct on line      |
| Thermal Device - Bearing      | None                |
| Thermal Device - Winding      | None                |
| Vibration Sensor Indicator    | No Vibration Sensor |
| Winding Thermal 1             | None                |

Winding Thermal 2

None

---

**Nameplate**

| NP1256L      |              |      |     |      |   |       |    |   |  |
|--------------|--------------|------|-----|------|---|-------|----|---|--|
| CAT.NO.      | KBL3409      |      |     |      |   |       |    |   |  |
| SPEC.        | 34K27-5422-B |      |     |      |   |       |    |   |  |
| HP           | .5           |      |     |      |   |       |    |   |  |
| VOLTS        | 115/230      |      |     |      |   |       |    |   |  |
| AMP          | 7.4/3.7      |      |     |      |   |       |    |   |  |
| RPM          | 1725         |      |     |      |   |       |    |   |  |
| FRAME        | 56C          |      | HZ  | 60   |   |       | PH | 1 |  |
| SER.F.       | 1.25         | CODE | J   | DES  | N | CLASS | B  |   |  |
| NEMA-NOM-EFF | 68           | PF   | 66  |      |   |       |    |   |  |
| RATING       | 40C AMB-CONT |      |     |      |   |       |    |   |  |
| CC           |              |      |     |      |   |       |    |   |  |
| DE           | 6203         |      | ODE | 6203 |   |       |    |   |  |
| ENCL         | TEFC         | SN   |     |      |   |       |    |   |  |
|              | SFA 8.2/4.1  |      |     |      |   |       |    |   |  |

**AC Induction Motor Performance Data**

Record # 6767

Typical performance - not guaranteed values

| Winding: 34WG5422-R001 |    |              |              | Type: 3421L                              |                       | Enclosure: TEFC |                            |
|------------------------|----|--------------|--------------|------------------------------------------|-----------------------|-----------------|----------------------------|
| Nameplate Data         |    |              |              | 230 V, 60 Hz:<br>High Voltage Connection |                       |                 |                            |
| Rated Output (HP)      |    | .5           |              | Full Load Torque                         |                       | 1.5 LB-FT       |                            |
| Volts                  |    | 115/230      |              | Start Configuration                      |                       | direct on line  |                            |
| Full Load Amps         |    | 7.4/3.7      |              | Breakdown Torque                         |                       | 4.13 LB-FT      |                            |
| R.P.M.                 |    | 1725         |              | Pull-up Torque                           |                       | 3.6 LB-FT       |                            |
| Hz                     | 60 | Phase        | 1            | Locked-rotor Torque                      |                       | 4.65 LB-FT      |                            |
| NEMA Design Code       |    | N            | KVA Code     | Starting Current                         |                       | 16.5 A          |                            |
| Service Factor (S.F.)  |    | 1.25         |              | No-load Current                          |                       | 2.8 A           |                            |
| NEMA Nom. Eff.         |    | 68           | Power Factor | 66                                       | Line-line Res. @ 25°C |                 | 4.44 Ω A Ph<br>3.19 Ω B Ph |
| Rating - Duty          |    | 40C AMB-CONT |              | Temp. Rise @ Rated Load                  |                       | 63°C            |                            |
| S.F. Amps              |    | 8.2/4.1      |              | Temp. Rise @ S.F. Load                   |                       | 77°C            |                            |

**Load Characteristics 230 V, 60 Hz, 0.5 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 32   | 46   | 59   | 66   | 72   | 80   | 72   |
| Efficiency      | 42   | 58   | 65   | 68   | 69   | 68   | 69   |
| Speed           | 1783 | 1765 | 1750 | 1730 | 1710 | 1680 | 1710 |
| Line amperes    | 2.8  | 3    | 3.3  | 3.7  | 4.1  | 4.8  | 4.1  |

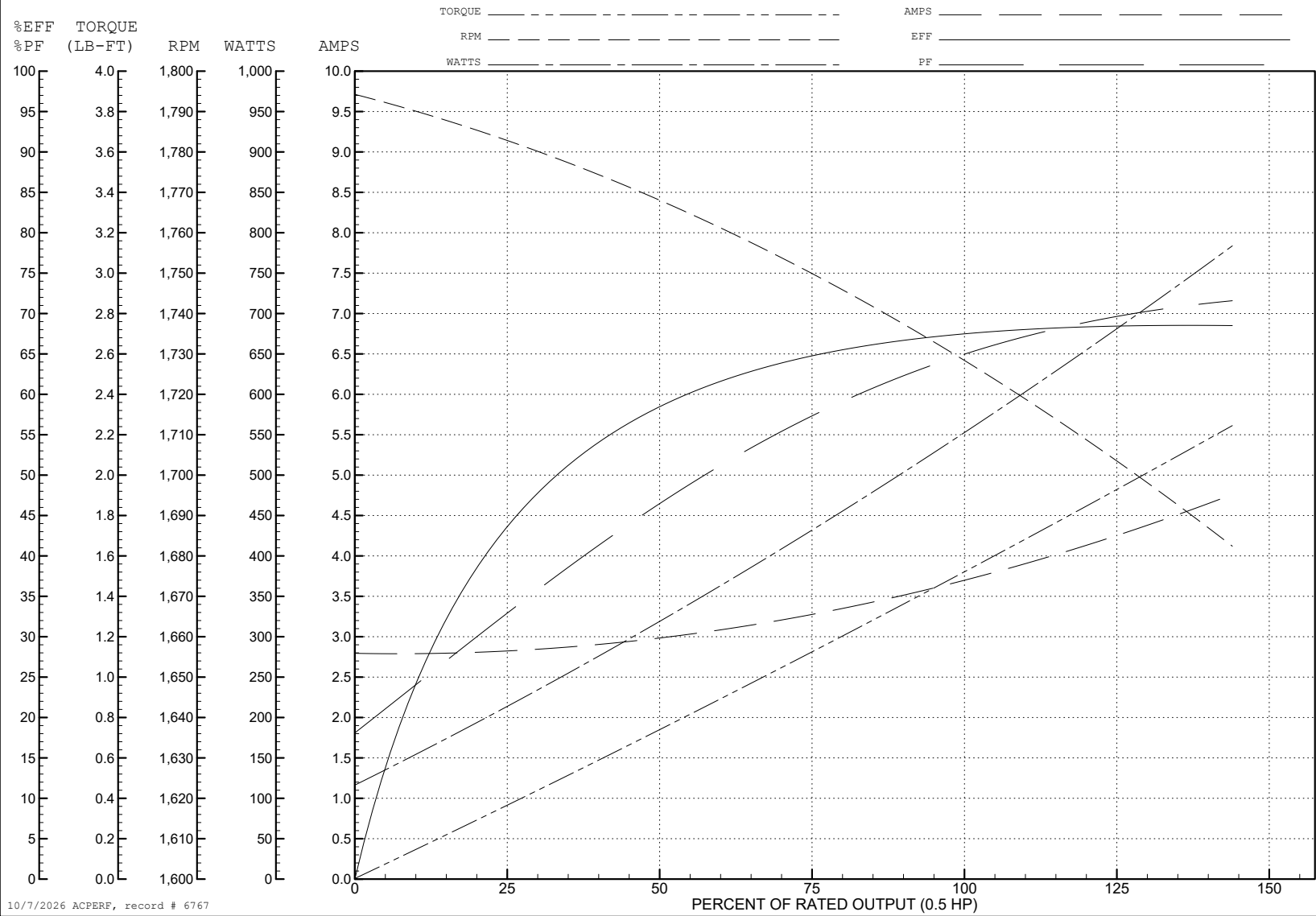
ABB Motors and Mechanical Inc.

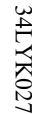
WINDING # 34WG5422

Typical performance - not guaranteed values.

0.5 HP 1 PH 60 HZ 1725 RPM 230 V 3421L

TORQUES (LB-FT): PO=4.13 PU=3.6 LR=4.65 LRA=16.5





CD0001

