

# ABB BALDOR RELIANCE III

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## Customer information packet

### CJM3115

1HP, 3450RPM, 3PH, 60HZ, 56J, 3420M, OPEN, F1

Class - None

Division - Not Applicable

**Specifications**

|                                       |                                                             |
|---------------------------------------|-------------------------------------------------------------|
| <b>Enclosure</b>                      | OPEN                                                        |
| <b>Frame</b>                          | 56J                                                         |
| <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>             | 1.000 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>               | CSA<br>UR                                                   |
| <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>              | 4.200 A @ 208.0 V<br>3.200 A @ 230.0 V<br>1.600 A @ 460.0 V |
| <b>Design Code</b>                    | B                                                           |
| <b>Drip Cover</b>                     | Drip Cover                                                  |
| <b>Duty Rating</b>                    | CONT                                                        |
| <b>Efficiency @ 100% Load</b>         | 77.0 %                                                      |
| <b>Electrically Isolated Bearing</b>  | Not Electrically Isolated                                   |
| <b>Feedback Device</b>                | NO FEEDBACK                                                 |
| <b>Front Face Code</b>                | Drip Cover Mounting                                         |
| <b>Front Shaft Indicator</b>          | None                                                        |
| <b>Heater Indicator</b>               | No Heater                                                   |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | AB         |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 34F029     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 34WG3226   |
| <b>Layout</b>       | 34LYF029   |
| <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> | 01-01-0001 |

|                               |                     |
|-------------------------------|---------------------|
| High Voltage Full Load Amps   | 1.6 a               |
| Insulation Class              | B                   |
| Inverter Code                 | Not Inverter        |
| KVA Code                      | L                   |
| Lifting Lugs                  | No Lifting Lugs     |
| Locked Bearing Indicator      | Locked Bearing      |
| Motor Lead Exit               | Ko Box              |
| Motor Lead Quantity/Wire Size | 9 @ 18 AWG          |
| Motor Lead Termination        | Flying Leads        |
| Motor Standards               | NEMA                |
| Motor Type                    | 3420M               |
| Mounting Arrangement          | F1                  |
| Number of Poles               | 2                   |
| Overall Length                | 12.34 IN            |
| Power Factor                  | 82                  |
| Product Family                | General Purpose     |
| Pulley End Bearing Type       | Ball                |
| Pulley Face Code              | C-Face              |
| Pulley Shaft Indicator        | Ext Thread          |
| Rodent Screen                 | None                |
| RoHS Status                   | ROHS COMPLIANT      |
| Service Factor                | 1.40                |
| 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                         | 3450 rpm            |
| Speed Code                    | Single Speed        |
| Starting Method               | Direct on line      |
| Thermal Device - Bearing      | None                |
| Thermal Device - Winding      | None                |
| Vibration Sensor Indicator    | No Vibration Sensor |

**Nameplate**

| NP1256L      |              |  |      |     |      |   |  |       |    |   |  |
|--------------|--------------|--|------|-----|------|---|--|-------|----|---|--|
| CAT.NO.      | CJM3115      |  |      |     |      |   |  |       |    |   |  |
| SPEC.        | 34F29-3226   |  |      |     |      |   |  |       |    |   |  |
| HP           | 1            |  |      |     |      |   |  |       |    |   |  |
| VOLTS        | 230/460      |  |      |     |      |   |  |       |    |   |  |
| AMP          | 3.2/1.6      |  |      |     |      |   |  |       |    |   |  |
| RPM          | 3450         |  |      |     |      |   |  |       |    |   |  |
| FRAME        | 56J          |  |      | HZ  | 60   |   |  |       | PH | 3 |  |
| SER.F.       | 1.40         |  | CODE | L   | DES  | B |  | CLASS |    | B |  |
| NEMA-NOM-EFF | 77           |  | PF   | 82  |      |   |  |       |    |   |  |
| RATING       | 40C AMB-CONT |  |      |     |      |   |  |       |    |   |  |
| CC           |              |  |      |     |      |   |  |       |    |   |  |
| DE           | 6203         |  |      | ODE | 6203 |   |  |       |    |   |  |
| ENCL         | OPEN         |  | SN   |     |      |   |  |       |    |   |  |
|              | SFA 4/2      |  |      |     |      |   |  |       |    |   |  |

**Parts List**

| <b>Part number</b> | <b>Description</b>                       | <b>Quantity</b> |
|--------------------|------------------------------------------|-----------------|
| SA005840           | SA 34F29-3226                            | 1.000 ea        |
| RA002586           | RA 34F29-3226                            | 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        |
| 34EP3212A03        | FR EP 34L FOR DRIP CVR                   | 1.000 ea        |
| HW5100A03          | WAVY WASHER (W1543-017)                  | 1.000 ea        |
| 34EP3401A01SP      | PU ENDPLATE, MACH                        | 1.000 ea        |
| 34AD2000           | BAFFLE PLATE, STAMPED                    | 1.000 ea        |
| 60XW0632A06        | 6-32 X 3/8 TORX HEAD SCREW TAPTITE II    | 4.000 ea        |
| 51XN1032A20        | 10-32 X 1 1/4 HX WS SL SR                | 2.000 ea        |
| 34FH4000A15        | DRIP COVER, STAMPED,PRIMER               | 1.000 ea        |
| 51XW1032A06        | 10-32 X .38, TAPTITE II, HEX WSHR SLTD S | 3.000 ea        |
| WD4101A09          | STIMPSON D3560, .875 DIA. HOLE PLUG      | 1.000 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        |
| RM1010A01          | 35-968-1 VINYL CLS                       | 1.000 ea        |
| MG1050G01          | CELEROL MEDIUM CHARCOAL METALLIC GRAY    | 0.014 ga        |
| 85XU0407S04        | 4X1/4 U DRIVE PIN STAINLESS              | 2.000 ea        |
| HA3100A44          | THRUBOLT 10-32 X 8.000                   | 4.000 ea        |
| LC0005E01          | CONN.DIA./WARNING LABEL (LC0005/LB1119N) | 1.000 ea        |
| NP1256L            | ALUM UL CC INDUSTRIAL MOTOR A60          | 1.000 ea        |
| 35PA1066           | PKG GRP, PRINT PK1008A07                 | 1.000 ea        |

**AC Induction Motor Performance Data**

Record # 23510

Typical performance - not guaranteed values

| Winding: 34WG3226-R001 |    |         | Type: 3420M                              |                     | Enclosure: TEFC         |                       |        |        |
|------------------------|----|---------|------------------------------------------|---------------------|-------------------------|-----------------------|--------|--------|
| Nameplate Data         |    |         | 460 V, 60 Hz:<br>High Voltage Connection |                     |                         |                       |        |        |
| Rated Output (HP)      |    | 1       | Full Load Torque                         |                     | 1.51 LB-FT              |                       |        |        |
| Volts                  |    | 230/460 | Start Configuration                      |                     | direct on line          |                       |        |        |
| Full Load Amps         |    | 3.2/1.6 | Breakdown Torque                         |                     | 7.966 LB-FT             |                       |        |        |
| R.P.M.                 |    | 3450    | Pull-up Torque                           |                     | 6.2 LB-FT               |                       |        |        |
| Hz                     | 60 | Phase   | 3                                        | Locked-rotor Torque |                         | 8.7 LB-FT             |        |        |
| NEMA Design Code       |    | B       | KVA Code                                 | L                   | Starting Current        |                       | 14.5 A |        |
| Service Factor (S.F.)  |    | 1.4     | No-load Current                          |                     | 0.913 A                 |                       |        |        |
| NEMA Nom. Eff.         |    | 77      | Power Factor                             |                     | 82                      | Line-line Res. @ 25°C |        | 13.6 Ω |
| Rating - Duty          |    | 40C     | AMB-CONT                                 |                     | Temp. Rise @ Rated Load |                       | 55°C   |        |
| S.F. Amps              |    | 4/2     | Temp. Rise @ S.F. Load                   |                     | 74°C                    |                       |        |        |

**Load Characteristics 460 V, 60 Hz, 1 HP**

| % of Rated Load | 25    | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|-------|------|------|------|------|------|------|
| Power Factor    | 41    | 59   | 72   | 80   | 85   | 89   | 87   |
| Efficiency      | 57.7  | 71.5 | 77.1 | 79.3 | 79.9 | 79.7 | 79.8 |
| Speed           | 3560  | 3536 | 3506 | 3475 | 3445 | 3406 | 3422 |
| Line amperes    | 0.967 | 1.09 | 1.27 | 1.47 | 1.7  | 1.99 | 1.87 |

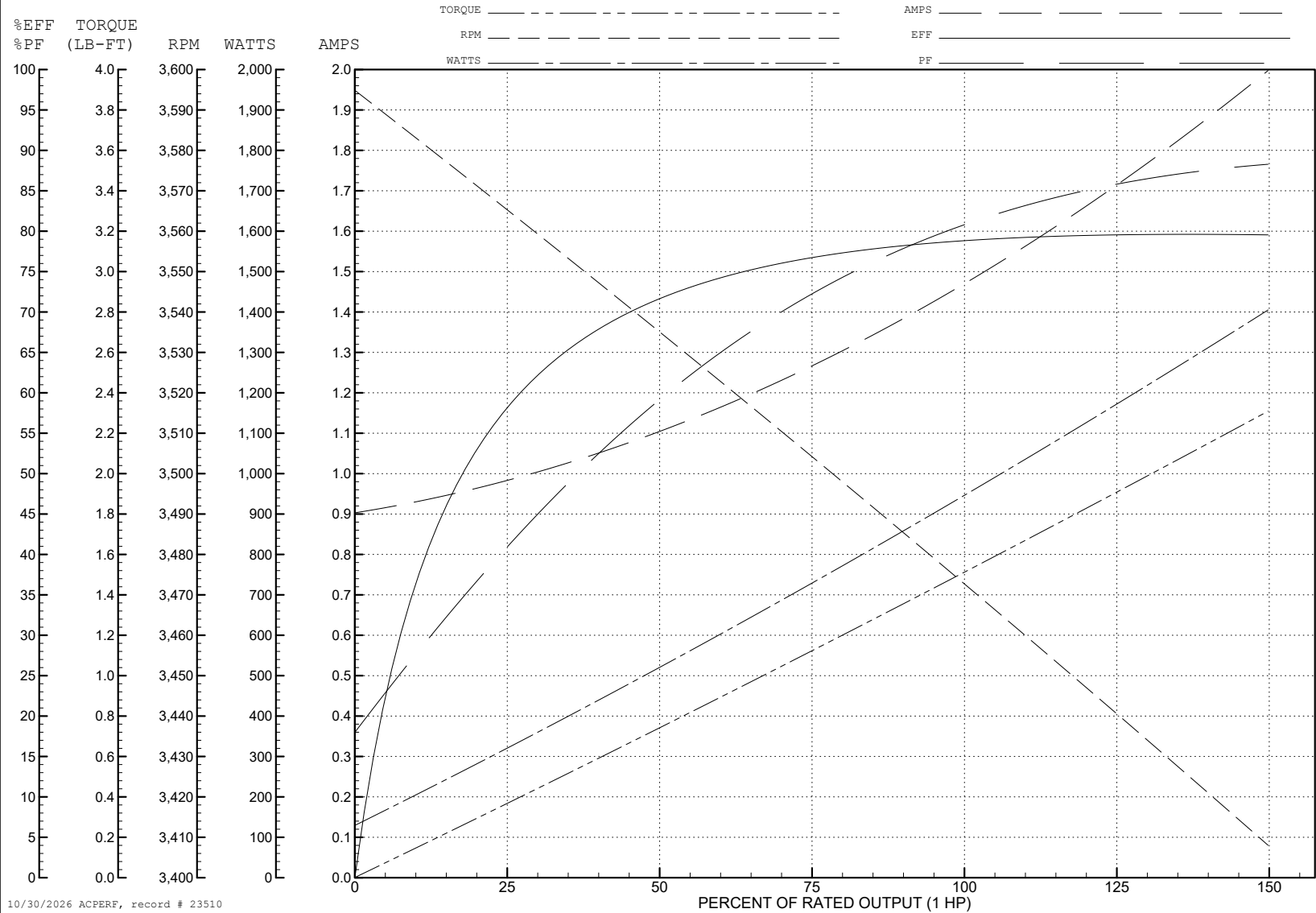
ABB Motors and Mechanical Inc.

WINDING # 34WG3226

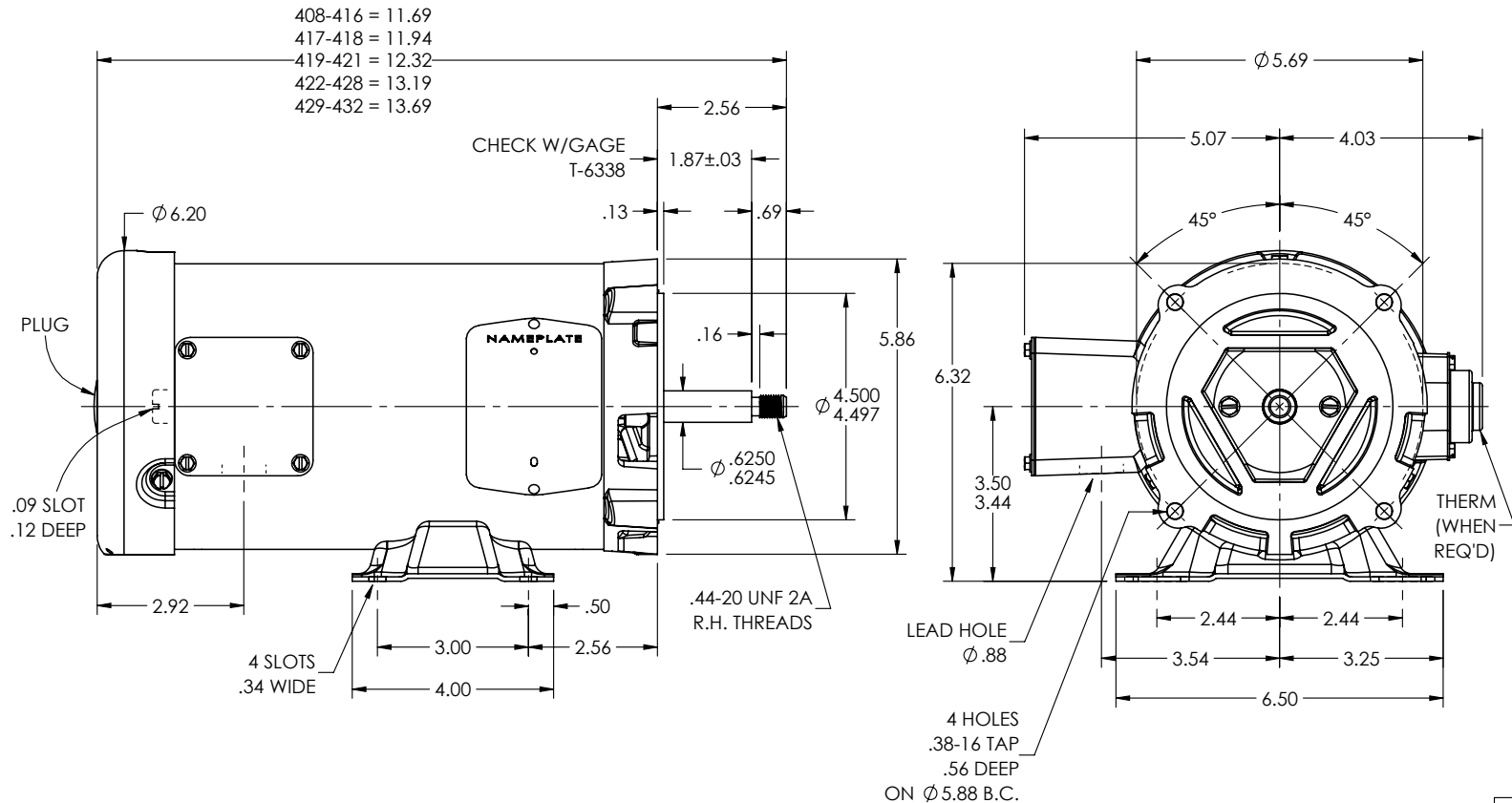
Typical performance - not guaranteed values.

1 HP 3 PH 60 HZ 3450 RPM 460 V 3420M

TORQUES (LB-FT): PO=7.966 PU=6.2 LR=8.7 LRA=14.5



34LYF029



CUSTOMER IS RESPONSIBLE FOR DETERMINING THAT THE PRODUCT WILL PERFORM SUITABLY IN THE INTENDED APPLICATION

REV. DESC: CLEAN UP DIMENSIONING

REV: N

VERSION: 04

REVISED: 01:53:09 08/29/2025

TDR: 000001262510

34LYF029

MODEL NO. 34LYF029

BY: ENJEFD0

REF: -

**BALDOR - RELIANCE®**

STD HOR 56J OPEN 34M W/DRIP CVR

34LYF029

