

# ABB BALDOR RELIANCE III

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## Customer information packet

### VEBM3542-D

.75HP, 1765RPM, 3PH, 60HZ, 56C, 3514M, TEFC, F3

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>             | .750 HP @ 60 HZ                                             |
| <b>Phase</b>                          | 3                                                           |
| <b>Synchronous Speed @ Frequency</b>  | 1800 RPM @ 60 HZ                                            |
| <b>Voltage @ Frequency</b>            | 460.0 V @ 60 HZ<br>230.0 V @ 60 HZ<br>208.0 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>                 | No Mounting                                                 |
| <b>Bearing Grease Type</b>            | Polyrex EM (-20F +300F)                                     |
| <b>Blower</b>                         | None                                                        |
| <b>Current @ Voltage</b>              | 2.420 A @ 230.0 V<br>2.420 A @ 208.0 V<br>1.210 A @ 460.0 V |
| <b>Design Code</b>                    | B                                                           |
| <b>Drip Cover</b>                     | No Drip Cover                                               |
| <b>Duty Rating</b>                    | CONT                                                        |
| <b>Efficiency @ 100% Load</b>         | 82.5 %                                                      |
| <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                                                   |

**Part Detail**

|                     |            |
|---------------------|------------|
| <b>Revision</b>     | G          |
| <b>Type</b>         | AC         |
| <b>Mech. spec.</b>  | 35X145     |
| <b>Base</b>         |            |
| <b>Status</b>       | PRD/A      |
| <b>Elec. spec.</b>  | 35WGG069   |
| <b>Layout</b>       | 35LYX145   |
| <b>Eff. date</b>    | 01-12-2026 |
| <b>CD Diagram</b>   | CD0005     |
| <b>Poles</b>        | 04         |
| <b>Leads</b>        | 9#18       |
| <b>Proprietary</b>  | False      |
| <b>Created date</b> | 01-10-2022 |

|                               |                     |
|-------------------------------|---------------------|
| High Voltage Full Load Amps   | 1.2 a               |
| Insulation Class              | F                   |
| Inverter Code                 | Inverter Duty       |
| IP Rating                     | NONE                |
| KVA Code                      | K                   |
| Lifting Lugs                  | No Lifting Lugs     |
| Locked Bearing Indicator      | Locked Bearing      |
| Motor Lead Quantity/Wire Size | 9 @ 18 AWG          |
| Motor Lead Termination        | Flying Leads        |
| Motor Standards               | NEMA                |
| Motor Type                    | 3514M               |
| Mounting Arrangement          | F3                  |
| Number of Poles               | 4                   |
| Overall Length                | 16.29 IN            |
| Power Factor                  | 74                  |
| Product Family                | General Purpose     |
| Pulley End Bearing Type       | Sealed Bearing      |
| Pulley Face Code              | C-Face              |
| Pulley Shaft Indicator        | Standard            |
| Rodent Screen                 | None                |
| Service Factor                | 1.15                |
| Shaft Diameter                | 0.625 IN            |
| Shaft Ground Indicator        | No Shaft Grounding  |
| Shaft Rotation                | Reversible          |
| Shaft Slinger Indicator       | No Slinger          |
| Speed                         | 1765 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**

| NP2934L               |                         |  |                 |      |  |            |   |           |   |
|-----------------------|-------------------------|--|-----------------|------|--|------------|---|-----------|---|
| <b>CAT.NO.</b>        | VEBM3542-D              |  |                 |      |  |            |   |           |   |
| <b>SPEC.</b>          | 35X145G069G1            |  |                 |      |  |            |   |           |   |
| <b>HP</b>             | .75/.56KW               |  |                 |      |  |            |   |           |   |
| <b>VOLTS</b>          | 208-230/460             |  |                 |      |  |            |   |           |   |
| <b>AMP</b>            | 2.42/1.21               |  |                 |      |  |            |   |           |   |
| <b>R.P.M. (1/MIN)</b> | 1765                    |  |                 |      |  |            |   |           |   |
| <b>FRAME</b>          | 56C                     |  | <b>HZ</b>       | 60   |  | <b>PH</b>  | 3 |           |   |
| <b>SER.F.</b>         | 1.15                    |  | <b>CODE</b>     | K    |  | <b>DES</b> | B | <b>CL</b> | F |
| <b>NEMA-NOM-EFF</b>   | 82.5                    |  | <b>PF</b>       | 74   |  |            |   |           |   |
| <b>RATING</b>         | 40C AMB-CONT            |  |                 |      |  |            |   |           |   |
| <b>CC</b>             |                         |  | IP54,IC411,19KG |      |  |            |   |           |   |
| <b>DE</b>             | 6205                    |  | <b>ODE</b>      | 6205 |  |            |   |           |   |
| <b>ENCL</b>           | TEFC                    |  | <b>SN</b>       |      |  |            |   |           |   |
|                       | IE3-83.3(75%),81.0(50%) |  |                 |      |  |            |   |           |   |

**AC Induction Motor Performance Data**

Record # 87328

Typical performance - not guaranteed values

| Winding: 35WGG069-R012 |    |                | Type: 3514M                              |                     | Enclosure: TENV           |           |              |
|------------------------|----|----------------|------------------------------------------|---------------------|---------------------------|-----------|--------------|
| Nameplate Data         |    |                | 460 V, 60 Hz:<br>High Voltage Connection |                     |                           |           |              |
| Rated Output (HP)      |    | .75            | Full Load Torque                         |                     | 2.24 LB-FT                |           |              |
| Volts                  |    | 208-230/460    | Start Configuration                      |                     | direct on line            |           |              |
| Full Load Amps         |    | 2.42/1.21      | Breakdown Torque                         |                     | 8 LB-FT                   |           |              |
| R.P.M.                 |    | 1765           | Pull-up Torque                           |                     | 4.4 LB-FT                 |           |              |
| Hz                     | 60 | Phase          | 3                                        | Locked-rotor Torque |                           | 5.1 LB-FT |              |
| NEMA Design Code       |    | B              | KVA Code                                 |                     | K                         |           |              |
| Service Factor (S.F.)  |    | 1.15           | Starting Current                         |                     | 8.4 A                     |           |              |
| NEMA Nom. Eff.         |    | 82.5           | Power Factor                             |                     | 74                        |           |              |
| Rating - Duty          |    | 40C            | AMB-CONT                                 |                     | Temp. Rise @ Rated Load   |           | 59°C         |
| S.F. Amps              |    | 2.72-2.64/1.32 |                                          |                     | Temp. Rise @ S.F. Load    |           | 69°C         |
|                        |    |                |                                          |                     | Locked-rotor Power Factor |           | 66.8         |
|                        |    |                |                                          |                     | Rotor inertia             |           | 0.101 LB-FT2 |

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

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  | S.F. |
|-----------------|------|------|------|------|------|------|------|
| Power Factor    | 31   | 48   | 61   | 70   | 76   | 81   | 78   |
| Efficiency      | 68.4 | 79.5 | 81.9 | 82.7 | 82.5 | 81.1 | 83.1 |
| Speed           | 1791 | 1783 | 1775 | 1766 | 1757 | 1745 | 1757 |
| Line amperes    | 0.87 | 0.95 | 1.06 | 1.21 | 1.4  | 1.61 | 1.26 |

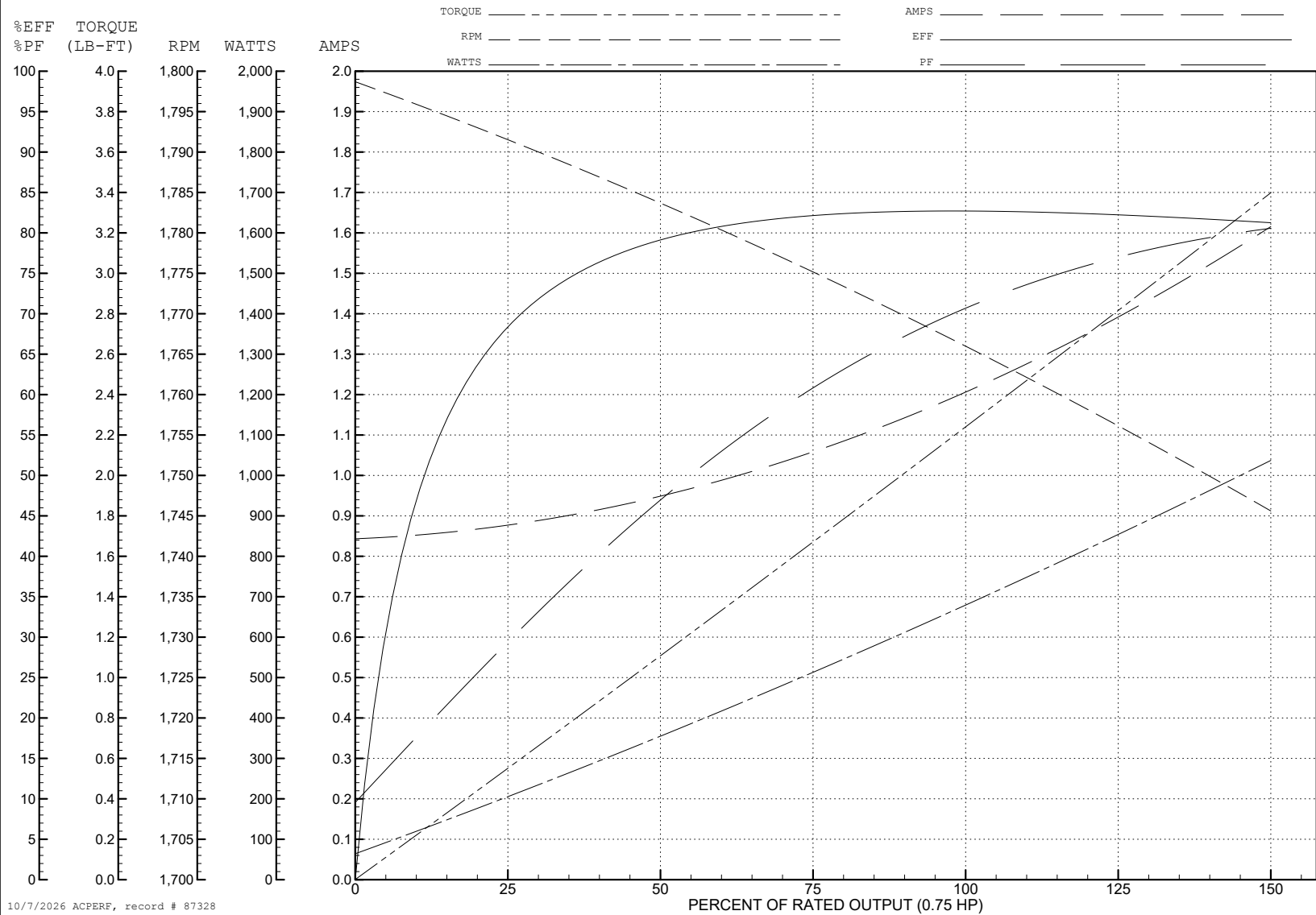
ABB Motors and Mechanical Inc.

WINDING # 35WGG069

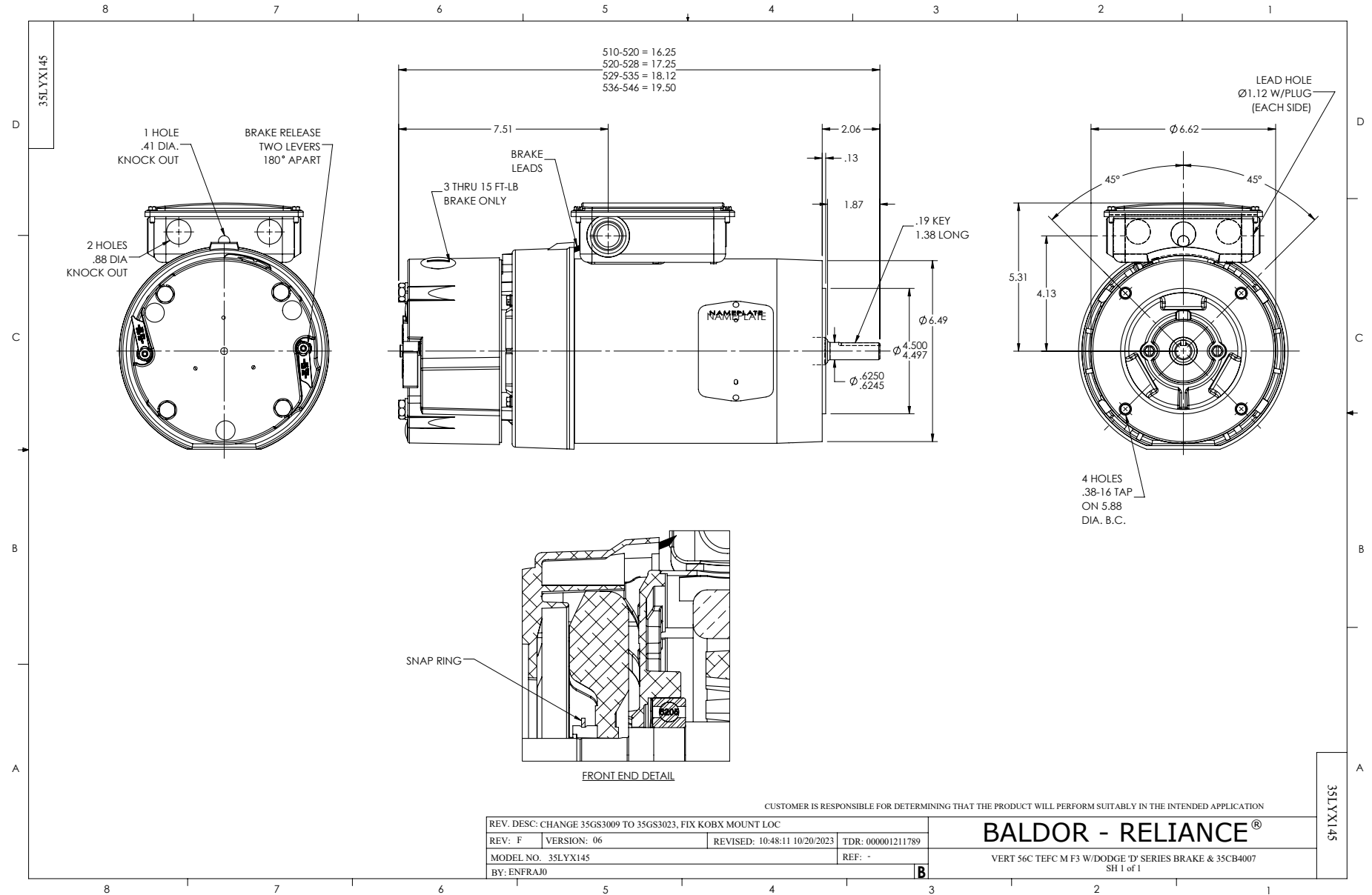
0.75 HP 3 PH 60 HZ 1765 RPM 460 V 3514M

Typical performance - not guaranteed values.

TORQUES (LB-FT) : PO=8 PU=4.4 LR=5.1 LRA=8.4



10/7/2026 ACPERF, record # 87328





CD2120

### WIRING CONNECTIONS (1 PHASE VAC)

|               | POWER LINE A | POWER LINE B | CAP TOGETHER | CAP ALONE                    |
|---------------|--------------|--------------|--------------|------------------------------|
| AC LOW VOLT.  | B1           | B2           | B3 & B5      | B4                           |
| AC HIGH VOLT. | B1 & B5      | B2           | ---          | B3 CAP ALONE<br>B4 CAP ALONE |
| DC VOLT.      | B1           | B2           | B3 & B5      | B4                           |

B1 WHITE  
 B2 BLACK  
 B3 GRAY  
 B4 BLUE  
 B5 RED

CD2120

|                      |             |                              |                                      |
|----------------------|-------------|------------------------------|--------------------------------------|
| REV. DESC: NEW       |             |                              | <b>BALDOR • DODGE • RELIANCE III</b> |
| REV. LTR: -          | VERSION: 00 | TDR: 000000741785            |                                      |
| FILE: \CKA\00037\282 |             | REVISED: 12:28:11 04/12/2012 |                                      |
| MTL: -               |             | BY: CKRONSO                  |                                      |

 D-SERIES MOTOR BRAKE 5LD AC\DC  
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