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# Customer information packet

## VBM3542-D

.75/.55 KWHP, 1765 1/MIN IP44 IC411 19 KG

Class - None

Division - Not Applicable

## Specifications

|                                |                                                             |
|--------------------------------|-------------------------------------------------------------|
| Enclosure                      | TEFC                                                        |
| Frame                          | 56C                                                         |
| Frame Material                 | Steel                                                       |
| Frequency                      | 60.00 Hz                                                    |
| Haz Area Class and Group       | None                                                        |
| Haz Area Division              | Not Applicable                                              |
| Motor Letter Type              | Three Phase                                                 |
| Output @ Frequency             | .750 HP @ 60 HZ                                             |
| Phase                          | 3                                                           |
| Synchronous Speed @ Frequency  | 1800 RPM @ 60 HZ                                            |
| Voltage @ Frequency            | 460.0 V @ 60 HZ<br>230.0 V @ 60 HZ<br>208.0 V @ 60 HZ       |
| Agency Approvals               | CE<br>CSA<br>UR<br>WEEE                                     |
| Ambient Temperature            | 40 °C                                                       |
| Auxiliary Box                  | NO AUXILLARY BOX                                            |
| Auxiliary Box Lead Termination | None                                                        |
| Base Indicator                 | No Mounting                                                 |
| Bearing Grease Type            | Polyrex EM (-20F +300F)                                     |
| Blower                         | None                                                        |
| Current @ Voltage              | 2.420 A @ 208.0 V<br>2.420 A @ 230.0 V<br>1.210 A @ 460.0 V |
| Design Code                    | B                                                           |
| Drip Cover                     | No Drip Cover                                               |
| Duty Rating                    | CONT                                                        |
| Efficiency @ 100% Load         | 82.5 %                                                      |
| Electrically Isolated Bearing  | Not Electrically Isolated                                   |
| Feedback Device                | NO FEEDBACK                                                 |

## Part detail

|              |            |
|--------------|------------|
| Revision     | F          |
| Type         | AC         |
| Mech. spec.  | 35X145     |
| Base         |            |
| Status       | PRD/A      |
| Elec. spec.  | 35WGG069   |
| Layout       | 35LYX145   |
| Eff. date    | 09-11-2024 |
| CD Diagram   | CD0005     |
| Poles        | 04         |
| Leads        | 9#18       |
| Proprietary  | False      |
| Created date | 01-10-2022 |

|                               |                     |
|-------------------------------|---------------------|
| Front Shaft Indicator         | None                |
| Heater Indicator              | No Heater           |
| 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

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## Nameplate

| NP1372L        |                        |      |                 |    |      |   |    |    |  |   |  |
|----------------|------------------------|------|-----------------|----|------|---|----|----|--|---|--|
| CAT.NO.        | VBM3542-D              |      |                 |    |      |   |    |    |  |   |  |
| SPEC.          | 35X145G069G2           |      |                 |    |      |   |    |    |  |   |  |
| HP             | .75/.55 KW             |      |                 |    |      |   |    |    |  |   |  |
| VOLTS          | 208-230/460            |      |                 |    |      |   |    |    |  |   |  |
| AMP            | 2.42/1.21              |      |                 |    |      |   |    |    |  |   |  |
| R.P.M. (1/MIN) | 1765                   |      |                 |    |      |   |    |    |  |   |  |
| FRAME          | 56C                    |      | HZ              |    | 60   |   |    | PH |  | 3 |  |
| SER.F.         | 1.15                   | CODE |                 | K  | DES  | B | CL | F  |  |   |  |
| NEMA-NOM-EFF   | 82.5                   | PF   |                 | 74 |      |   |    |    |  |   |  |
| RATING         | 40C AMB-S1 CONT        |      |                 |    |      |   |    |    |  |   |  |
| CC             |                        |      | IP44 IC411 KG19 |    |      |   |    |    |  |   |  |
| DE             | 6205                   |      | ODE             |    | 6205 |   |    |    |  |   |  |
| ENCL           | TEFC                   | SN   |                 |    |      |   |    |    |  |   |  |
|                | IE2-76.3(75%)71.1(50%) |      |                 |    |      |   |    |    |  |   |  |

## AC Induction Motor Performance Data

Record # 90018

Typical performance - not guaranteed values

| Winding: 35WGG069-R006 |    |                | Type: 3514M                              |                     | Enclosure: TEFC         |           |        |
|------------------------|----|----------------|------------------------------------------|---------------------|-------------------------|-----------|--------|
| Nameplate Data         |    |                | 460 V, 60 Hz:<br>High Voltage Connection |                     |                         |           |        |
| Rated Output (HP)      |    | .75            | Full Load Torque                         |                     | 2.25 LB-FT              |           |        |
| Volts                  |    | 208-230/460    | Start Configuration                      |                     | direct on line          |           |        |
| Full Load Amps         |    | 2.42/1.21      | Breakdown Torque                         |                     | 7.38 LB-FT              |           |        |
| R.P.M.                 |    | 1765           | Pull-up Torque                           |                     | 4.07 LB-FT              |           |        |
| Hz                     | 60 | Phase          | 3                                        | Locked-rotor Torque |                         | 4.7 LB-FT |        |
| NEMA Design Code       |    | B              | KVA Code                                 | K                   | Starting Current        |           | 7.7 A  |
| Service Factor (S.F.)  |    | 1.15           | No-load Current                          |                     | 0.734 A                 |           |        |
| NEMA Nom. Eff.         |    | 82.5           | Power Factor                             | 74                  | Line-line Res. @ 25°C   |           | 31.8 Ω |
| Rating - Duty          |    | 40C            | AMB-CONT                                 |                     | Temp. Rise @ Rated Load |           | 24°C   |
| S.F. Amps              |    | 2.72-2.64/1.32 | Temp. Rise @ S.F. Load                   |                     | 29°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    | 33    | 52    | 65    | 74   | 80   | 83   | 78   |
| Efficiency      | 71.4  | 81    | 83.3  | 83.6 | 82.7 | 81.2 | 83.1 |
| Speed           | 1790  | 1782  | 1773  | 1763 | 1753 | 1740 | 1757 |
| Line amperes    | 0.761 | 0.849 | 0.976 | 1.14 | 1.34 | 1.57 | 1.26 |

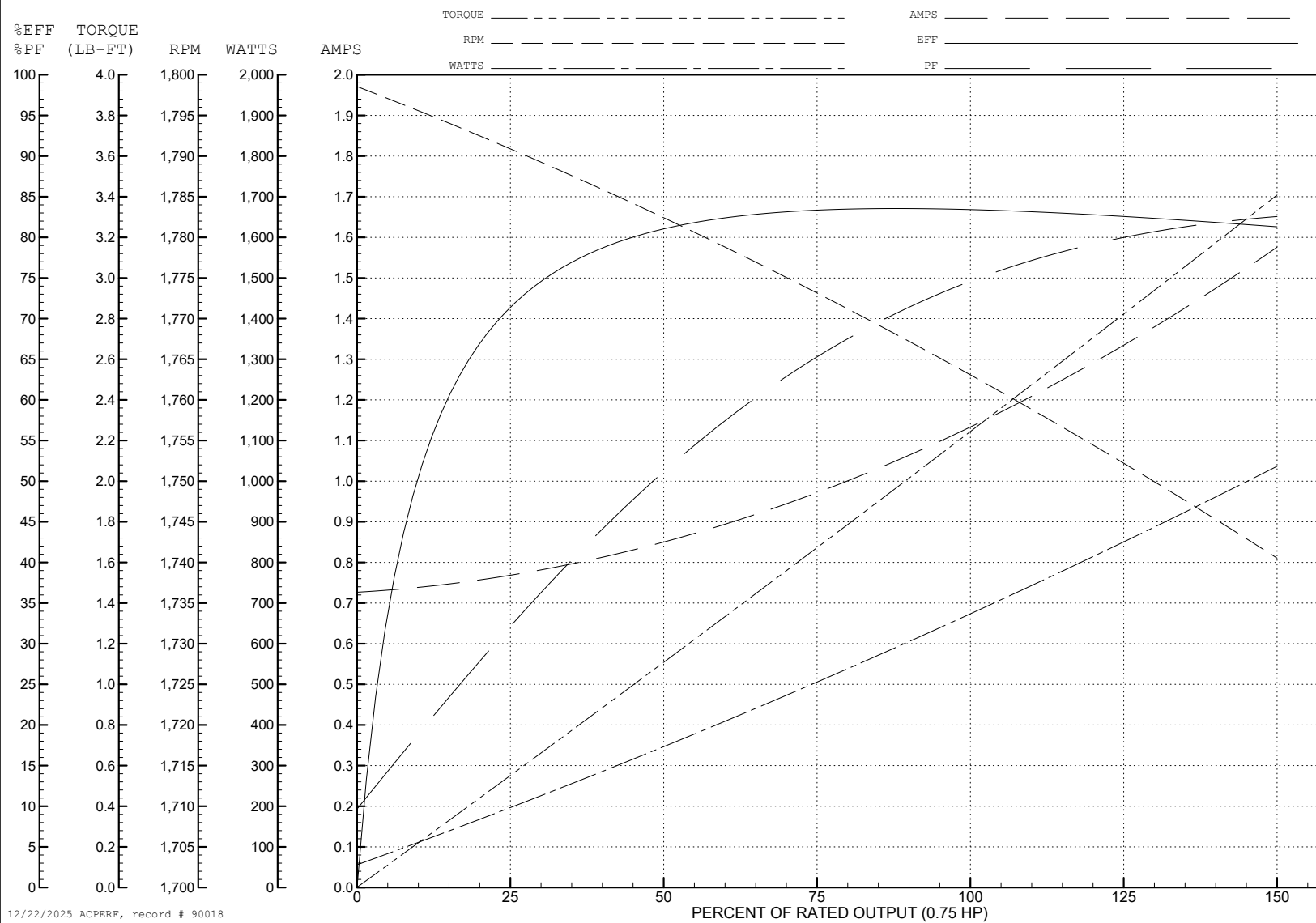
ABB Motors and Mechanical Inc.

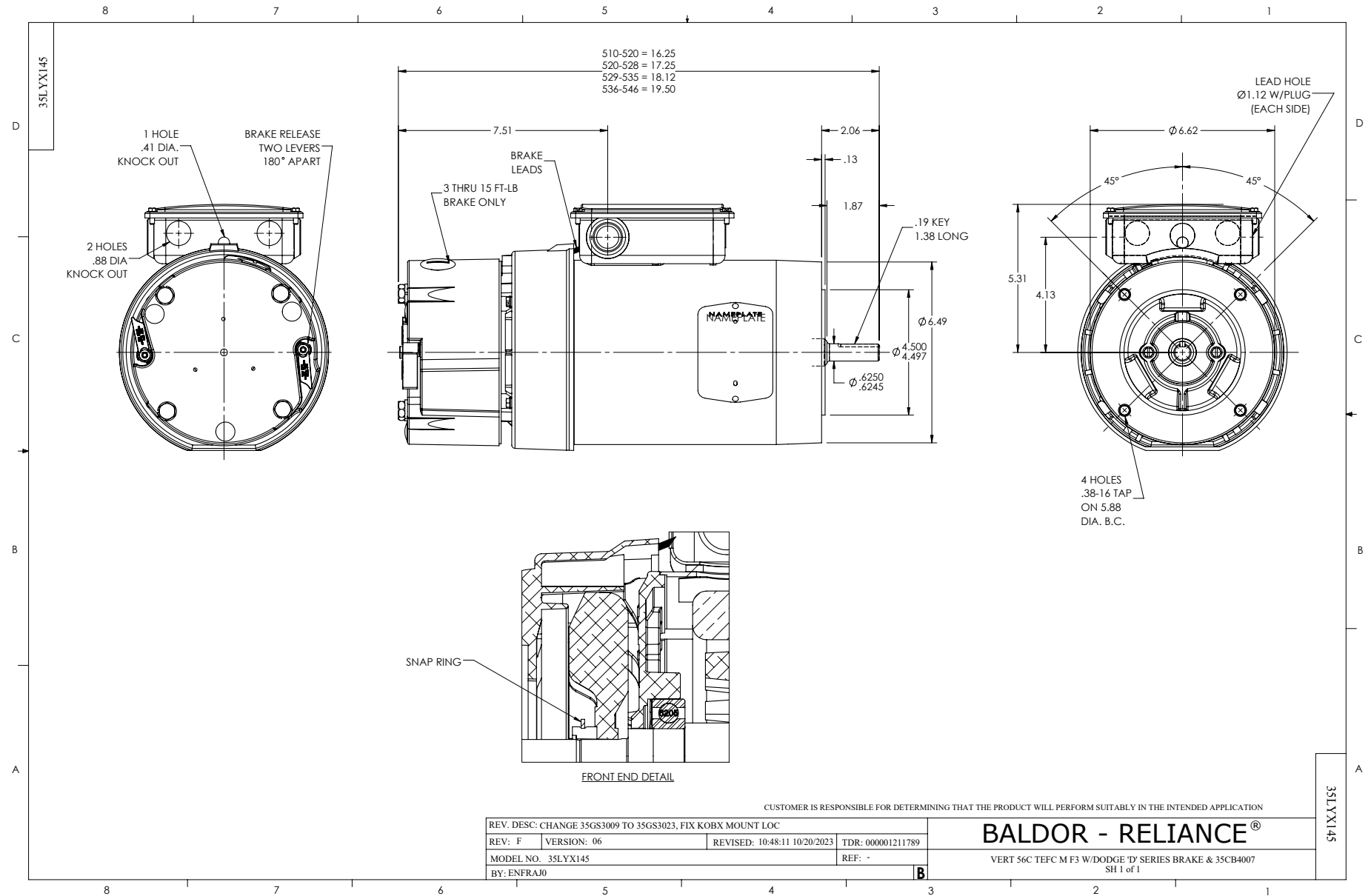
WINDING # 35WGG069

Typical performance - not guaranteed values.

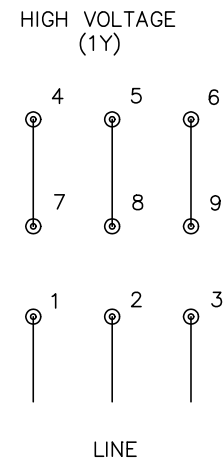
0.75 HP 3 PH 60 HZ 1765 RPM 460 V 3514M

TORQUES (LB-FT): PO=7.38 PU=4.07 LR=4.7 LRA=7.7





CD0005



- NOTES:
- 1. INTERCHANGE ANY TWO LINE LEADS TO REVERSE ROTATION.
  - 2. OPTIONAL THERMOSTATS ARE PROVIDED WHEN SPECIFIED.
  - 3. ACTUAL NUMBER OF INTERNAL PARALLEL CIRCUITS MAY BE A MULTIPLE OF THOSE SHOWN ABOVE.
  - 4. LEAD COLORS ARE OPTIONAL. LEADS MUST ALWAYS BE NUMBERED AS SHOWN.

|                                           |         |                         |              |
|-------------------------------------------|---------|-------------------------|--------------|
| REV. DESC: REVISE TO SHOW OPTIONAL COLORS |         |                         |              |
| REV. LTR: E                               | BY: JLP | REVISED: 01/19/99 10:15 | TDR: 0171435 |
| 900000                                    |         | FILE: AAA00005140       | MDL: -       |
|                                           |         | MTL: -                  |              |

BALDOR ELECTRIC Co.

3PH, DV, 9 LEADS

CD0005

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<br>B2 BLACK<br>B3 GRAY<br>B4 BLUE<br>B5 RED |

CD2120

REV. DESC: NEW

REV. LTR: -

VERSION: 00

TDR: 000000741785

FILE: \CKA\00037\282

REVISED: 12: 28:11 04/12/2012

MTL: -

BY: CKRONSO

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D-SERIES MOTOR BRAKE 5LD AC\DC

SH 1 of 1