



## Product Information Packet

# VBM3538

.5HP,1725RPM,3PH,60HZ,56C,BRAKE,3420M

| Part Detail |        |             |            |             |        |               |    |
|-------------|--------|-------------|------------|-------------|--------|---------------|----|
| Revision:   | AG     | Status:     | PRD/A      | Change #:   |        | Proprietary:  | No |
| Type:       | AC     | Elec. Spec: | 34WG0097   | CD Diagram: | CD0005 | Mfg Plant:    |    |
| Mech. Spec: | 34K045 | Layout:     | 34LYK045   | Poles:      | 04     | Created Date: |    |
| Base:       | N      | Eff. Date:  | 10-12-2019 | Leads:      | 9#18   |               |    |

| Specs                           |                         |                                |                 |
|---------------------------------|-------------------------|--------------------------------|-----------------|
| Catalog Number:                 | VBM3538                 | Insulation Class:              | B               |
| Enclosure:                      | TENV                    | Inverter Code:                 | Not Inverter    |
| Frame:                          | 56C                     | KVA Code:                      | K               |
| Frame Material:                 | Steel                   | Lifting Lugs:                  | No Lifting Lugs |
| Motor Letter Type:              | Three Phase             | Locked Bearing Indicator:      | Locked Bearing  |
| Output @ Frequency:             | .500 HP @ 60 HZ         | Motor Lead Quantity/Wire Size: | 9 @ 18 AWG      |
| Synchronous Speed @ Frequency:  | 1800 RPM @ 60 HZ        | Motor Lead Exit:               | Ko Box          |
| Voltage @ Frequency:            | 208.0 V @ 60 HZ         | Motor Lead Termination:        | Flying Leads    |
|                                 | 230.0 V @ 60 HZ         | Motor Type:                    | 3420M           |
|                                 | 460.0 V @ 60 HZ         | Mounting Arrangement:          | F1              |
| XP Class and Group:             | None                    | Power Factor:                  | 69              |
| XP Division:                    | Not Applicable          | Product Family:                | General Purpose |
| Agency Approvals:               | UR                      | Product Type:                  | BRAKE MOTOR     |
|                                 | CSA                     | Pulley End Bearing Type:       | Ball            |
| Auxillary Box:                  | No Auxillary Box        | Pulley Face Code:              | C-Face          |
| Auxillary Box Lead Termination: | None                    | Pulley Shaft Indicator:        | Standard        |
| Base Indicator:                 | No Mounting             | Rodent Screen:                 | None            |
| Bearing Grease Type:            | Polyrex EM (-20F +300F) | RoHS Status:                   | ROHS COMPLIANT  |

|                                       |                           |                                    |                     |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
| <b>Blower:</b>                        | None                      | <b>Shaft Extension Location:</b>   | Pulley End          |
| <b>Current @ Voltage:</b>             | .900 A @ 460.0 V          | <b>Shaft Ground Indicator:</b>     | No Shaft Grounding  |
|                                       | 1.800 A @ 230.0 V         | <b>Shaft Rotation:</b>             | Reversible          |
|                                       | 1.900 A @ 208.0 V         | <b>Shaft Slinger Indicator:</b>    | No Slinger          |
| <b>Design Code:</b>                   | B                         | <b>Speed Code:</b>                 | Single Speed        |
| <b>Drip Cover:</b>                    | No Drip Cover             | <b>Motor Standards:</b>            | NEMA                |
| <b>Duty Rating:</b>                   | CONT                      | <b>Starting Method:</b>            | Direct on line      |
| <b>Electrically Isolated Bearing:</b> | Not Electrically Isolated | <b>Thermal Device - Bearing:</b>   | None                |
| <b>Feedback Device:</b>               | NO FEEDBACK               | <b>Thermal Device - Winding:</b>   | None                |
| <b>Front Face Code:</b>               | Brake Mounting            | <b>Vibration Sensor Indicator:</b> | No Vibration Sensor |
| <b>Front Shaft Indicator:</b>         | None                      | <b>Winding Thermal 1:</b>          | None                |
| <b>Heater Indicator:</b>              | No Heater                 | <b>Winding Thermal 2:</b>          | None                |

## Nameplate NP1256L

|              |              |  |      |                |     |     |      |   |       |    |     |  |  |
|--------------|--------------|--|------|----------------|-----|-----|------|---|-------|----|-----|--|--|
| CAT.NO.      | VBM3538      |  |      |                |     |     |      |   |       |    |     |  |  |
| SPEC.        | 34K45-97-B   |  |      |                |     |     |      |   |       |    |     |  |  |
| HP           | .5           |  |      |                |     |     |      |   |       |    |     |  |  |
| VOLTS        | 208-230/460  |  |      |                |     |     |      |   |       |    |     |  |  |
| AMP          | 1.9-1.8/.9   |  |      |                |     |     |      |   |       |    |     |  |  |
| RPM          | 1725         |  |      |                |     |     |      |   |       |    |     |  |  |
| FRAME        | 56C          |  |      |                | HZ  |     | 60   |   |       | PH | 3   |  |  |
| SER.F.       | 1.00         |  | CODE |                | K   | DES |      | B | CLASS |    | B   |  |  |
| NEMA-NOM-EFF | 75.5         |  |      | PF             |     | 69  |      |   |       |    |     |  |  |
| RATING       | 40C AMB-CONT |  |      |                |     |     |      |   |       |    |     |  |  |
| CC           |              |  |      | USABLE AT 208V |     |     |      |   |       |    | 1.9 |  |  |
| DE           | 6203         |  |      |                | ODE |     | 6203 |   |       |    |     |  |  |
| ENCL         | TENV         |  | SN   |                |     |     |      |   |       |    |     |  |  |
|              |              |  |      |                |     |     |      |   |       |    |     |  |  |

**AC Induction Motor Performance Data**

Record # 6542

Typical performance - not guaranteed values

| Winding: 34WG0097-R001 |    |             | Type: 3420M                              |                     | Enclosure: TENV         |                       |      |         |
|------------------------|----|-------------|------------------------------------------|---------------------|-------------------------|-----------------------|------|---------|
| Nameplate Data         |    |             | 460 V, 60 Hz:<br>High Voltage Connection |                     |                         |                       |      |         |
| Rated Output (HP)      |    | .5          | Full Load Torque                         |                     | 1.5 LB-FT               |                       |      |         |
| Volts                  |    | 208-230/460 | Start Configuration                      |                     | direct on line          |                       |      |         |
| Full Load Amps         |    | 1.9-1.8/.9  | Breakdown Torque                         |                     | 6.8 LB-FT               |                       |      |         |
| R.P.M.                 |    | 1725        | Pull-up Torque                           |                     | 4.6 LB-FT               |                       |      |         |
| Hz                     | 60 | Phase       | 3                                        | Locked-rotor Torque |                         | 5.8 LB-FT             |      |         |
| NEMA Design Code       |    | B           | KVA Code                                 | K                   | Starting Current        |                       | 7 A  |         |
| Service Factor (S.F.)  |    | 1           | No-load Current                          |                     | 0.54 A                  |                       |      |         |
| NEMA Nom. Eff.         |    | 75.5        | Power Factor                             |                     | 69                      | Line-line Res. @ 25°C |      | 27.56 Ω |
| Rating - Duty          |    | 40C         | AMB-CONT                                 |                     | Temp. Rise @ Rated Load |                       | 57°C |         |

**Load Characteristics 460 V, 60 Hz, 0.5 HP**

| % of Rated Load | 25   | 50   | 75   | 100  | 125  | 150  |
|-----------------|------|------|------|------|------|------|
| Power Factor    | 38   | 53   | 65   | 71   | 75   | 81   |
| Efficiency      | 55   | 69   | 74   | 78   | 75.5 | 74.4 |
| Speed           | 1787 | 1774 | 1760 | 1749 | 1728 | 1717 |
| Line amperes    | 0.6  | 0.65 | 0.74 | 0.84 | 1    | 1.1  |

Performance Graph at 460V, 60Hz, 0.5HP Typical performance - Not guaranteed values





