



## Product Information Packet

# CM3538

.5HP,1720RPM,3PH,60HZ,56C,3416M,TEFC,F1

| Part Detail |        |             |            |             |        |               |            |
|-------------|--------|-------------|------------|-------------|--------|---------------|------------|
| Revision:   | A      | Status:     | PRD/A      | Change #:   |        | Proprietary:  | No         |
| Type:       | AC     | Elec. Spec: | 34WGR706   | CD Diagram: | CD0005 | Mfg Plant:    |            |
| Mech. Spec: | 34A062 | Layout:     | 34LYA062   | Poles:      | 04     | Created Date: | 11-19-2020 |
| Base:       | RG     | Eff. Date:  | 02-18-2021 | Leads:      | 9#18   |               |            |

| Specs                           |                         |                                |                 |
|---------------------------------|-------------------------|--------------------------------|-----------------|
| Catalog Number:                 | CM3538                  | Heater Indicator:              | No Heater       |
| Enclosure:                      | TEFC                    | Insulation Class:              | B               |
| Frame:                          | 56C                     | Inverter Code:                 | Not Inverter    |
| Frame Material:                 | Steel                   | KVA Code:                      | J               |
| Motor Letter Type:              | Three Phase             | Lifting Lugs:                  | No Lifting Lugs |
| Output @ Frequency:             | .500 HP @ 60 HZ         | Locked Bearing Indicator:      | Locked Bearing  |
| Synchronous Speed @ Frequency:  | 1800 RPM @ 60 HZ        | Motor Lead Quantity/Wire Size: | 9 @ 18 AWG      |
| Voltage @ Frequency:            | 460.0 V @ 60 HZ         | Motor Lead Exit:               | Ko Box          |
|                                 | 230.0 V @ 60 HZ         | Motor Lead Termination:        | None            |
| XP Class and Group:             | None                    | Motor Type:                    | 3416M           |
| XP Division:                    | Not Applicable          | Mounting Arrangement:          | F1              |
| Agency Approvals:               | CSA                     | Power Factor:                  | 75              |
|                                 | UR                      | Product Family:                | General Purpose |
| Auxillary Box:                  | No Auxillary Box        | Pulley End Bearing Type:       | Ball            |
| Auxillary Box Lead Termination: | None                    | Pulley Face Code:              | C-Face          |
| Base Indicator:                 | Rigid                   | Pulley Shaft Indicator:        | Standard        |
| Bearing Grease Type:            | Polyrex EM (-20F +300F) | Rodent Screen:                 | None            |
| Blower:                         | None                    | Shaft Extension Location:      | Pulley End      |

|                                       |                           |                                    |                     |
|---------------------------------------|---------------------------|------------------------------------|---------------------|
| <b>Current @ Voltage:</b>             | 1.600 A @ 230.0 V         | <b>Shaft Ground Indicator:</b>     | No Shaft Grounding  |
|                                       | 1.700 A @ 208.0 V         | <b>Shaft Rotation:</b>             | Reversible          |
|                                       | .800 A @ 460.0 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>               | Standard                  | <b>Vibration Sensor Indicator:</b> | No Vibration Sensor |
| <b>Front Shaft Indicator:</b>         | None                      | <b>Winding Thermal 1:</b>          | None                |
|                                       |                           | <b>Winding Thermal 2:</b>          | None                |

## Nameplate NP1256L

|              |              |  |  |      |                |   |      |     |       |    |     |
|--------------|--------------|--|--|------|----------------|---|------|-----|-------|----|-----|
| CAT.NO.      | CM3538       |  |  |      |                |   |      |     |       |    |     |
| SPEC.        | 34A062R706   |  |  |      |                |   |      |     |       |    |     |
| HP           | .5           |  |  |      |                |   |      |     |       |    |     |
| VOLTS        | 230/460      |  |  |      |                |   |      |     |       |    |     |
| AMP          | 1.6/.8       |  |  |      |                |   |      |     |       |    |     |
| RPM          | 1720         |  |  |      |                |   |      |     |       |    |     |
| FRAME        | 56C          |  |  |      | HZ             |   | 60   |     |       | PH | 3   |
| SER.F.       | 1.25         |  |  | CODE |                | J |      | DES |       | B  |     |
| NEMA-NOM-EFF | 75.5         |  |  |      | PF             |   | 75   |     | CLASS |    | B   |
| RATING       | 40C AMB-CONT |  |  |      |                |   |      |     |       |    |     |
| CC           |              |  |  |      | USABLE AT 208V |   |      |     |       |    | 1.7 |
| DE           | 6203         |  |  |      | ODE            |   | 6203 |     |       |    |     |
| ENCL         | TEFC         |  |  | SN   |                |   |      |     |       |    |     |
|              | SFA 1.9/0.95 |  |  |      |                |   |      |     |       |    |     |

**AC Induction Motor Performance Data**

Record # 85443

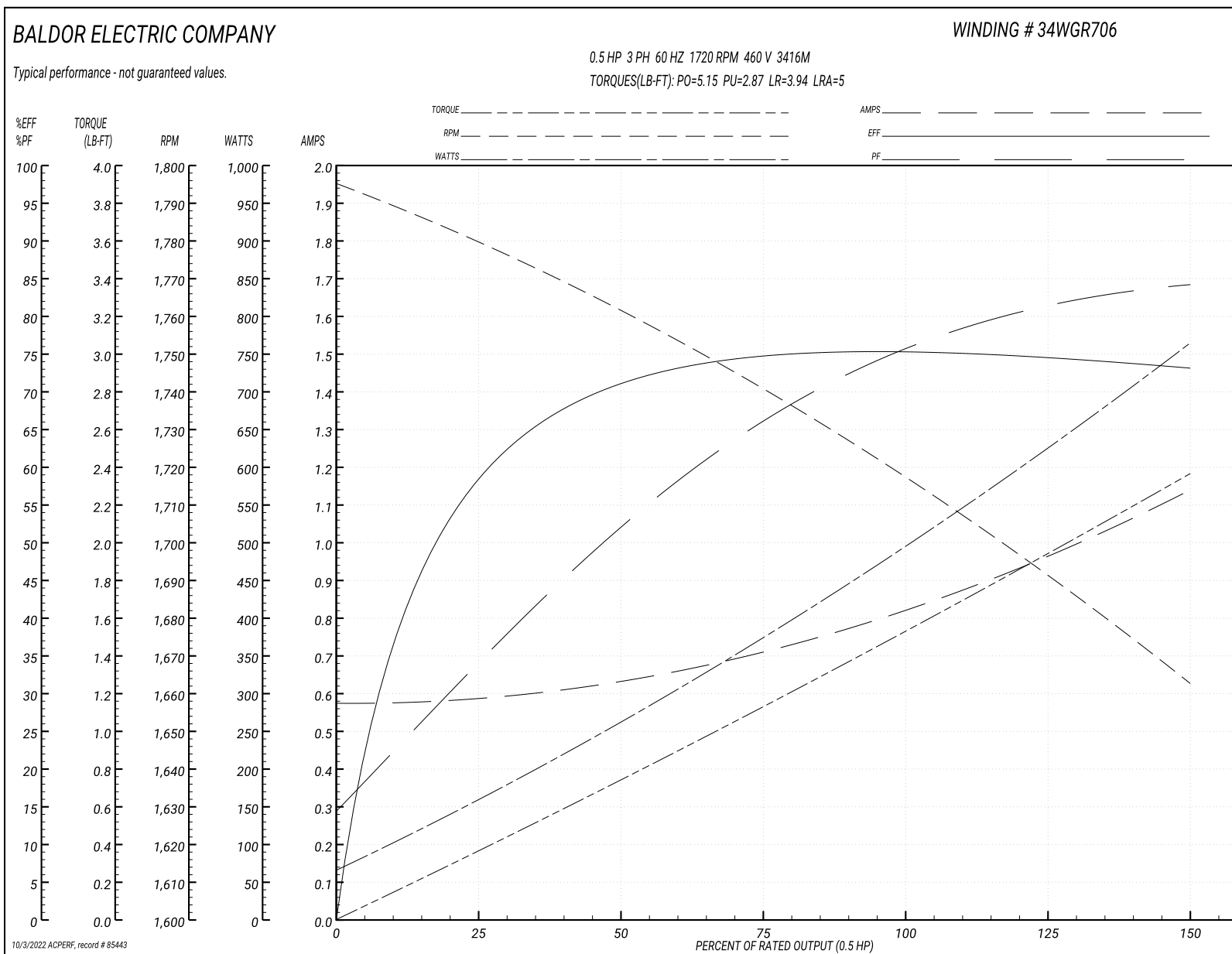
Typical performance - not guaranteed values

| Winding: 34WGR706-R001 |    |              | Type: 3416M                              | Enclosure: TEFC           |                       |               |        |
|------------------------|----|--------------|------------------------------------------|---------------------------|-----------------------|---------------|--------|
| Nameplate Data         |    |              | 460 V, 60 Hz:<br>High Voltage Connection |                           |                       |               |        |
| Rated Output (HP)      |    | 0.5          | Full Load Torque                         |                           | 1.53 LB-FT            |               |        |
| Volts                  |    | 230/460      | Start Configuration                      |                           | direct on line        |               |        |
| Full Load Amps         |    | 1.6/0.8      | Breakdown Torque                         |                           | 5.15 LB-FT            |               |        |
| R.P.M.                 |    | 1720         | Pull-up Torque                           |                           | 2.87 LB-FT            |               |        |
| Hz                     | 60 | Phase        | 3                                        | Locked-rotor Torque       |                       | 3.94 LB-FT    |        |
| NEMA Design Code       |    | B            | KVA Code                                 | J                         | Starting Current      |               | 5 A    |
| Service Factor (S.F.)  |    | 1.25         |                                          | No-load Current           |                       | 0.577 A       |        |
| NEMA Nom. Eff.         |    | 75.5         | Power Factor                             | 75                        | Line-line Res. @ 25°C |               | 48.9 Ω |
| Rating - Duty          |    | 40C AMB-CONT |                                          | Temp. Rise @ Rated Load   |                       | 50°C          |        |
| S.F. Amps              |    | 1.9/0.95     |                                          | Temp. Rise @ S.F. Load    |                       | 70°C          |        |
|                        |    |              |                                          | Locked-rotor Power Factor |                       | 70.8          |        |
|                        |    |              |                                          | Rotor inertia             |                       | 0.0381 lb-ft² |        |

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

| % of Rated Load | 25    | 50    | 75    | 100   | 125   | 150  | S.F.  |
|-----------------|-------|-------|-------|-------|-------|------|-------|
| Power Factor    | 34    | 53    | 66    | 75    | 81    | 84   | 81    |
| Efficiency      | 58.6  | 70.6  | 74.6  | 75.5  | 74.8  | 72.9 | 74.8  |
| Speed           | 1779  | 1761  | 1741  | 1718  | 1692  | 1662 | 1692  |
| Line amperes    | 0.583 | 0.631 | 0.712 | 0.824 | 0.962 | 1.14 | 0.962 |

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



10/3/2022 ACPERF, record # 85443

