tooth inside

AZURE Digi-Motor

Direct Drive Blower Applications

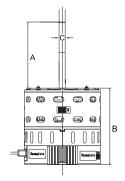
Ball Bearing

Azure® Digi-Motor® from MARS is a high efficiency variable speed direct drive blower motor for a multitude of applications. Azure® is a replacement for both standard PSC and Genteq X13 motors. These motors cover ratings from 1/5 HP to 1 HP at 115V or 230V and CW or CCW.

Azure® features an auto sizing learn mode. In start-up learn mode, Azure® runs for approximately 2 minutes

measuring the external static pressure of the system application. Azure® then assigns torque values to each of its speed taps selfprogramming itself to the correct horsepower for the application.

If none of the four speeds provides perfect airflow for the application or if duplicate speeds are desired on 2 or more taps, an optional hand held programmer (MARS No. 08502) can be used. The programmer connects to Azure® and displays the percentage of torque applied to the speed tap being energized. The percentage (motor speed) can then be



increased or decreased and permanently set with the programmer. This tool overrides the motor torques established in the auto sizing mode.

Unlike other electronically commutated motors, an outboard surge protector is included within Azure's® wire harness. This is a replaceable device (MARS No. 08593).

Features:

- · Outboard replaceable surge protector
- Adjustable speeds (with optional MARS No. 08502)
- 4 speeds plus 625 RPM constant fan mode
- High efficiency 85%
- Multi-horsepower, dual voltage
- Belly band mount

Specifications:

- Class "B" insulation
- Thermal overload protected
- Operating temperature range: -20°C to 55°C (-4°F to 131°F)
- **UL** Recognized
- For accessories see page M-5

| MARS No. | External Surge Protection | Auto- Sizing | Replaces |
|-------------|------------------------------|-----------------|----------------|
| 10860 | Yes | Yes | PSC/X13 |
| 10861 | Yes | Yes | PSC/X13 |
| 10865 | No | No | PSC |
| 10866 | No | No | PSC |
| 10867 | No | No | PSC |
| 10868 | No | No | Variable Speed |
| 10869 | No | No | Variable Speed |

| MARS | НР | VOLTS RPM ROTATION DIAMETER | DDM | POTATION | DIAMETER | DIMENSIONS | | |
|--------|---------|-----------------------------|----------|----------|----------|------------|------|-----|
| NO. | ПР | | DIAMETER | Α | В | С | | |
| 10860 | 1/5-1/2 | 115/230 | 1075 | Rev | 5-1/2 | 4.93 | 5.72 | 1/2 |
| 10861 | 1/2-1 | 115/230 | 1075 | Rev | 5-1/2 | 4.93 | 6.66 | 1/2 |
| 10865 | 1/3-1/2 | 115/230 | 1075 | Rev | 5-1/2 | 4.93 | 5.72 | 1/2 |
| 10866 | 3/4-1 | 115/230 | 1075 | Rev | 5-1/2 | 4.93 | 6.66 | 1/2 |
| 10867 | 1/8-1/3 | 115/230/277 | 1075 | Rev | 5 | 5.00 | 5.00 | 1/2 |
| 10868* | 1/3-1/2 | 115/230 | 1075 | Rev | 5-1/2 | 4.93 | 5.72 | 1/2 |
| 10869* | 3/4-1 | 115/230 | 1075 | Rev | 5-1/2 | 4.93 | 6.66 | 1/2 |

^{*} Includes 08506 with the motor

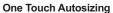
AZURE Digi-Motor®

Direct Drive Blower Applications Bluetooth

Ball Bearing

The latest generation of Azure® ECM features integrated Bluetooth control for use with the Azure® Blower Motor smartphone app. While not required for the installation of these motors, the app allows the installer to take full advantage of the ECM technology. While competitive aftermarket ECMs provide only 5 speed taps for setting airflow, the Bluetooth Azure® motors provide more than

50 speed selections and the ability to autosize to the ductwork all with a keystroke or two in the app.



One touch of a button automatically assigns correct torque for the ductwork; additional programming harnesses are not required.

Individual Speed Tap Adjustments

Dial in the temperature rise with 1% torque increments. Tune out annoying high frequency harmonics. Optimize CFM.

Monitor motor volts, amps, watts, and RPM's.

Drop-in Installation

Real Time Data

Simple to wire; connections are the same as the motor being replaced.

Features:

- · 4 speeds plus 625 RPM constant fan mode
- · High efficiency 85%
- · Multi-horsepower, dual voltage
- · Belly band mount

Specifications:

- · Class "B" insulation
- Thermal overload protected
- Operating temperature range: -20°C to 55°C (-4°F to 131°F)
- UL Recognized
- · For accessories see page M-5

| MARS No. | Adjustable Speeds* | Auto- Sizing* | Replaces | | | |
|--|-----------------------|------------------|---------------------|--|--|--|
| 10858 | Yes | Yes | X13, Ensite, Endura | | | |
| 10859 | Yes | Yes | X13, Ensite, Endura | | | |
| * When Azure® Blower Motor App is used | | | | | | |

| MARS NO. | НР | VOLTS | RPM | ROTATION | DIAMETER | A D | IMENSIOI B | NS C |
|-------------|-----------|---------|------|----------|----------|------|---------------|---------|
| 10858 | 1/5 – 1/2 | 115/230 | 1075 | Rev | 5-1/2 | 4.93 | 5.72 | 1/2 |
| 10859 | 1/2 – 1 | 115/230 | 1075 | Rev | 5-1/2 | 4.93 | 6.66 | 1/2 |

