AZURE® Bluetooth ECM

Installation Guide

MARS Motor No. 10858/10859

MARS Technical Help Line: 800-678-9888

M-F 8 am - 5 pm Eastern

⚠ WARNING!

To prevent electric shock, personal injury, or death, turn off the electric power at the disconnect or main service panel prior to making any electrical connections.

⚠ READ FIRST

This Bluetooth enabled motor includes all necessary connections to replace X13®, Endura Pro®, Ensite®, Digi-Motor® and SelecTech® constant torque ECMs. Use the correct harness / adapter for your application.

The factory speed tap harness can be re-used or the included 5 tap harness can be used in its place to provide additional torque options. NOTE: Most motors designate tap 1 as lowest torque and tap 5 as highest torque; but some may be the opposite. Adjust tap orientation as necessary. If the factory wire harnesses do not fit this Azure motor or any of the included adapters, then do not attempt to use this motor. No cutting of wire harnesses should ever be necessary.

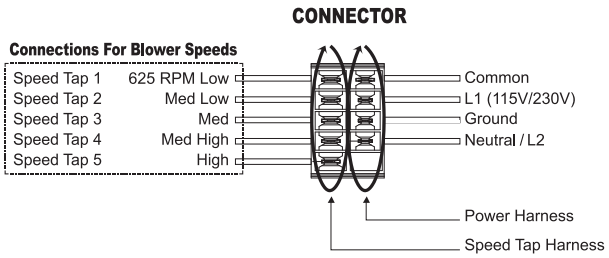
Autosizing this motor automatically self programs the necessary torque for each exact application; this often results in better performance than a 'pre-programmed' replacement ECM. The autosizing process can be repeated as many times as desired; the module will simply write over the previous torque settings. Bluetooth provides simple autosizing and RPM adjustments with the use of an Apple or Android smartphone.

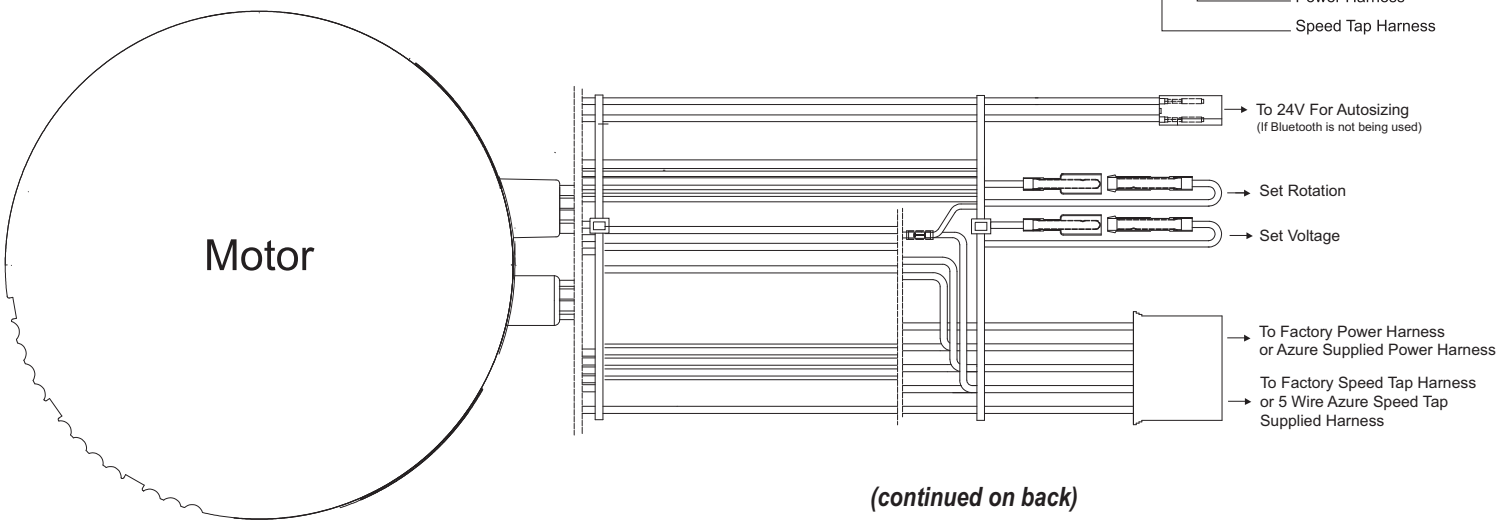
BLUETOOTH IS NOT REQUIRED TO INSTALL THIS MOTOR. Motor 10858 is preprogrammed for 1/2HP applications and ready to install out of the box. Autosizing should be run for lower HP applications OR to optimize 1/2HP applications. Motor 10859 is preprogrammed for 1HP applications and ready to install out of the box. Autosizing should be run for lower HP applications OR to optimize 1HP applications.

Android

Apple

Scan QR code for installation video





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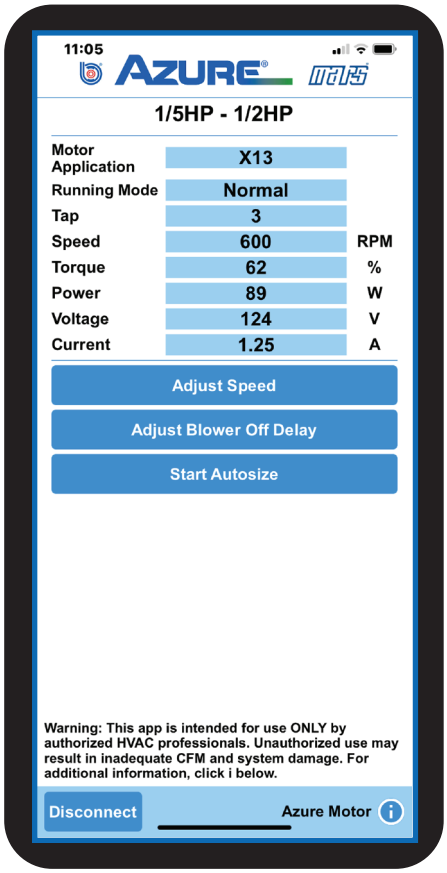
Bluetooth Installation – Smartphone Required

1. Scan the QR code to download the Azure Blower Motor app from your app store and then scan the QR code installation video to familiarize yourself with the app. The QR codes are located on the front page of this instruction sheet.
2. Adjust the set point on the thermostat so that no calls will be energized and then remove power to the air handler.
3. Set the voltage and rotation jumpers on the Azure motor to match the application.
4. Connect both factory harnesses to the Azure motor and install the motor in the blower scroll; close the blower housing door.

   NOTE: Replace the air filter (or ensure it is very clean) and ensure all supplies and returns are open and clear of obstructions before autosizing the motor.
5. Apply power to the air handler. Open the app and touch Start Autosize. The motor will run for approximately 60 seconds and then come to a complete stop. Remove power to lock in the program. Autosizing is complete.
6. Test system operation, confirm airflow, and make any necessary adjustments.

   NOTE: The app can be used to adjust individual speed tap RPM. This can be useful for fine tuning CFM or tuning out audible ECM harmonics. Some OEM motors have a built-in off delay. By default, the Azure motor does not have an off delay but one can be added using the app. If the included 5-wire speed tap harness is used, ensure none of the unused taps contact ground; they should be safely tied off and insulated.



Smartphone not included

Non-Bluetooth Installation – No Smartphone Required

1. Adjust the set point on the thermostat so that no calls will be energized and then remove power to the air handler.
2. Set the voltage and rotation jumpers on the Azure motor to match the application.
3. Connect both factory harnesses and the brown/white programming cable to the Azure motor and install the motor in the blower scroll.

   NOTE: Replace the air filter (or ensure it is very clean) and ensure all supplies and returns are open and clear of obstructions before autosizing the motor.
4. Connect the other end of the brown/white programming cable to a convenient 24V source. Close the blower housing door.
5. Apply power to the air handler. The motor will run for approximately 60 seconds and then come to a complete stop. Autosizing is complete.
6. Remove power and remove the brown/white programming cable.
7. Test system operation, confirm airflow, and make any necessary adjustments.

NOTE: If the OEM speed tap harness does not provide 5 speed tap options to allow airflow adjustments, the Azure included 5-wire speed tap harness can be used. Ensure none of the unused speed taps contact ground; they should be safely tied off and insulated.