

Installation Guide

MARS Motor No. 10858/10859

MARS Technical Help Line: **800-678-9888**

M-F 8 am - 5 pm EST.

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.

NOTICE

This motor replaces X13 and SelecTech style constant torque OEM ECM motors. If the factory wire harnesses do not fit this Azure motor, then do not attempt to use this motor. No cutting of wires should ever be necessary.

Some ductwork does not match the OEM's specifications, and OEM motors then do not perform as intended. The Azure motor can be field autosized to each application to optimize CFM performance.

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.

- ① Remove power to the air handler. Set the thermostat to OFF.
- ② **IMPORTANT:** Make certain the air filter is new/clean. Make certain all supply and returns are fully open and free of obstructions.
- ③ Set the motor voltage (red) and motor rotation (white) jumpers to match the application. **NOTE:** Rotation is as viewed from the lead end of the Azure motor.
- ④ Insert the 4-wire factory power harness (L1, N, Com, G) into the motor.

(If the motor is NOT being autosized to the application, skip steps 5-7)

- ⑤ To autosize, attach the brown/white programming lead to the motor and to 24V on the control board transformer or where ever 24V is convenient.
- ⑥ Close the blower door and apply power to the air handler. The motor will run for approximately 45 – 90 seconds and then stop. **IMPORTANT:** Autosizing is NOT complete until the motor comes to a COMPLETE STOP. Do not remove power until the motor has come to a COMPLETE STOP.
- ⑦ Remove power from the air handler. Disconnect and remove the brown/white programming lead. Motor torque has now been as signed for the application.
- ⑧ Insert the 5-wire speed tap harness into the Azure motor and connect the necessary speed taps to the 24V thermostat connections. **SUGGESTION:** Start with tap 4 or 5 on COOL and tap 3 or 4 on HEAT. Confirm airflow and adjust speed taps as necessary. The optional hand-held programmer (MARS No. 08502) can be used to manually adjust the motor to any RPM between 1075 and 600. Insulate and tie off any unused speed taps. Do not allow them to contact ground.



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Digi-Motor®

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CONNECTOR

