AZURE®

Installation Instructions

MARS No. 08502

Azure® Hand Held Programmer

Product Description

The Azure® Hand Held Programmer allows the Azure® Digi-Motor® (MARS No. 10860/10861) to be custom speed tuned to each application. Although the motor performs an auto sizing function that will correctly assign torque to each of the speed taps for the installed application, there may be instances when custom speeds are desired.

- Allows blower speed to be reduced to the low end of CFM tolerance for improved dehumidification.
- Allows duplicate speeds to be set on multiple speed taps.
- Allows CFM to be maximized especially in high altitude applications.
- Provides speed tap flexibility for multi-stage systems.

⚠ 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.

Connections

These instructions assume the Azure® motor has already been properly installed, auto sized, and the necessary speed taps have been connected.

1) Remove power to the HVAC system.

2) Plug the BROWN/WHITE harness on the programmer into the BROWN/WHITE harness on the Azure® motor.

3) Connect the RED power clip on the programmer to +24V (R on thermostat).

4) Connect the BLACK power clip on the programmer to 24V (C on thermostat).

Operation

When powered and connected to an operational Azure® Digi-Motor® , the programmer will provide a digital display of the % of max motor torque being applied by the speed tap that is energized on the motor. This figure is a direct correlation to motor speed and serves as a point of reference when increasing/decreasing and setting motor speeds on any of the taps.

1) Apply power to the system. If the blower is not running, the programmer will display '--'. If the blower comes on, the programmer will immediately display the % of torque on the energized tap.

NOTE: The programmer can only adjust one speed tap at a time. The speed tap must be energized. In order to read and set the speeds, one of the following procedures should be followed to energize the speed taps:

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(continued from front)

a) The HVAC system can be run normally, that is in heat and/or cool mode. During the cooling cycle, the programmer can be used to adjust the cooling speed. During the heating cycle the programmer can be used to adjust the heating speed.

Or

b) The individual speed taps can be 'forced on' by directly connecting them one at a time to a +115V line connection (or a +24V connection for X-13 mode).

2) Using one of the methods above, close the blower housing door and energize the Azure® motor. The programmer will display a 2-digit numerical value (between about 20 and 90). This represents the % of torque being applied by the motor.

3) To increase motor torque (speed), quickly press and release the S1 button. Each click will adjust torque by 1%. To decrease torque, quickly press and release the S2 button.

4) When the motor speed is set to the desired level and CFM is correct, press and hold the S1 button for 3 seconds then release. The display will read 'oH', the Azure® motor will briefly stop and then restart to indicate it has accepted the new setting. POWER MUST BE REMOVED FROM THE SYSTEM AT THE COMPLETION OF THE PROGRAMMING OF EACH SPEED TAP AND THE MOTOR MUST COME TO A COMPLETE STOP.

5) If additional speed taps are going to be programmed, POWER MUST BE REMOVED FROM THE SYSTEM AT THE COMPLETION OF THE PROGRAMMING OF EACH SPEED TAP AND THE MOTOR MUST COME TO A COMPLETE STOP. Then power can be reapplied and the next tap can be programmed.

6) Unclip the RED & BLACK programmer power leads and BROWN/WHITE harness. Programming is complete.

Brown/White Leads To Motor

To Azure™ Motor

LED Displays % of Torque

4.6.

MARS Azure™ Programming Tool

BROAD-OCEAN

S1 Increase (Torque)

To 24VAC

S2 Decrease (Torque)

Red/Black Leads To 24/VAC