

Overview

AirCare Automation's Small System Console intelligently monitors and controls an AirCare *VariPhase™* or ACM control network. The console provides communication (MODBUS-RTU platform), unit control, and system monitoring in one easy-to-use package.

With the AirCare *Console™* no programming is necessary to install a network. The console will automatically scan the network and the units/system can be configured through a simple menu driven format.

The single zone AirCare *Console™* has 2 models that can control up to 25 or 125 VariPhase/ACM addresses.



Main Functions

- Self-configuring upon power up
- Individual speed adjustment
- Global speed adjustment
- Global set-back speed adjustment
- Central monitoring of fault sensors (pressure drop on AC, RPM drop on EC type)
- Menu driven configuration options
- Monitors units and identifies error modes

Features

- Easy wall-mount
- 4 access levels to control modifications
- Simple User Interface
 - 7-segment LED display
 - Dual rotary encoders for selection and adjustment
- Supports small to medium scale networks
 - RS485 (2 wire)
 - Up to 125 slave nodes

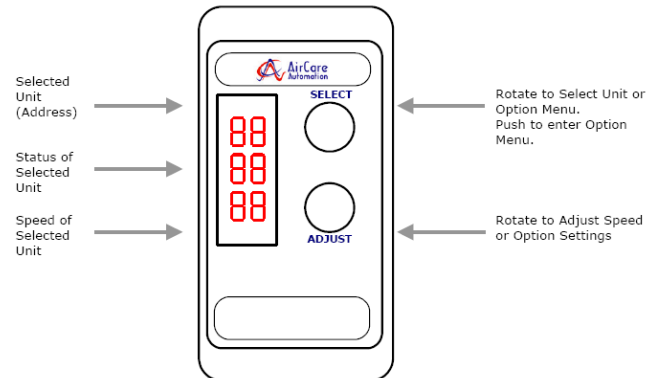
Specifications

- Supply Voltage : 8-13Vdc
- Typical Supply Current : 90mA
- Batteries : 4 x AA size Alkaline (option)
 - Battery Life : 30 hours
- Network transceivers : 2-wire 1/8" unit load type
- Operating Temperature : 0-40degC
- Electrical Connections
 - DC Power Connector : 2.1mm DC power jack
 - MODBUS network : RJ45 socket

Installation

The AirCare *Console™* can be mounted on a wall or any other surface requiring a DC source of power from a plug-in source (supplied) or from the network bus (ACM1008). Connections to the network are made through an RJ-45 connection using CAT5 cable/connections. Power should be cycled after installation as the ACC1-xxx scans the network upon powering.

Console Operation: Front Panel View



Network Wiring

A network is constructed by simple daisy-chain between the ACC1-xxx and the unit controls.

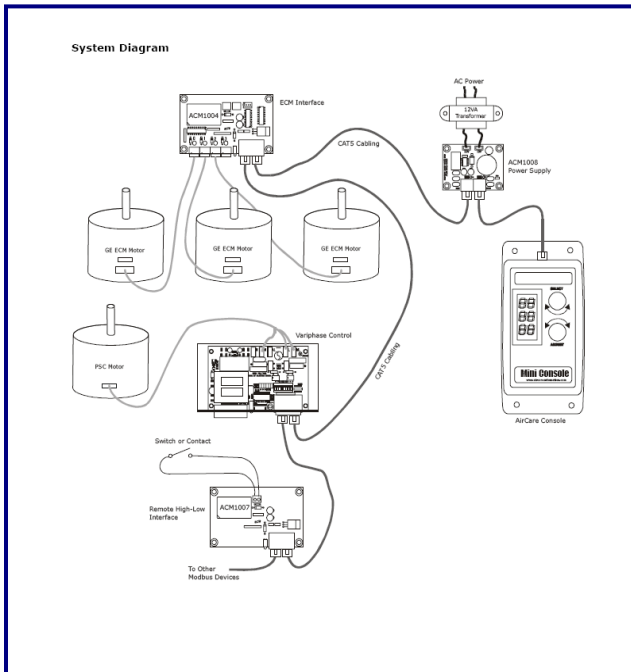
Network cable requirements should be specified based on:

- Distance between nodes
- Total network length
- Noisy electrical environment
- Environmental conditions
- Mechanical issues

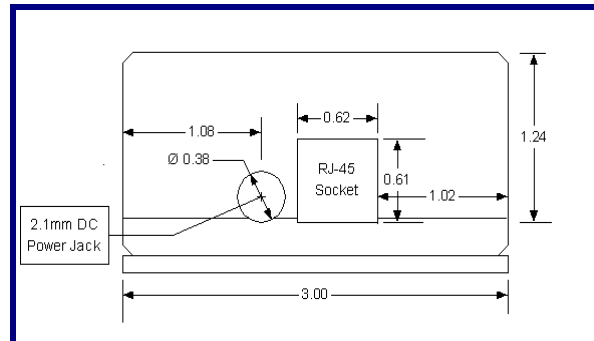
Pre-molded patch cables and customized plenum-rated cables are available from AirCare Automation.

Upon power-up the console will automatically scan the network for VariPhase/ECM controls.

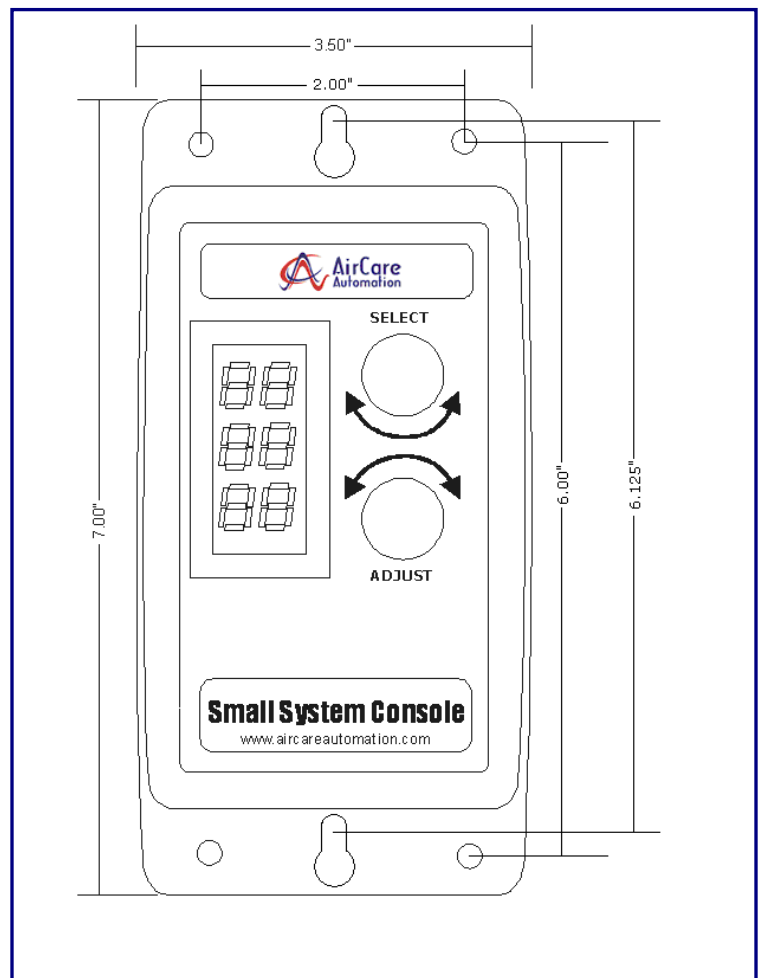
ACC1-xxx System Diagram (EC & AC types)



Mechanical Dimensions -Top View



Mechanical Dimensions – Front View



Mounting Instructions (2 options)

Permanent Installation: Using the 4 outer holes on the ACC1 to permanently mount the ACC1 to any desired location. *Please note that a wall outlet must be near the location mounted if the ACC1 is powered through a wall adaptor. Alternate approach is to power the ACC1-xxx through the CAT5 cable.*

Removable Installation: The key holes in the center of the ACC1 can be used to "hang" the ACC1 in any location desired.

** **NOTE:** most AirCare controllers have memory of the set-point and provide local control of their motor/fan. Disconnecting the ACC1-xxx from the network will **not** shut down the system. System will continue to run at last set-points until ACC1-xxx is reconnected and set-point modified**