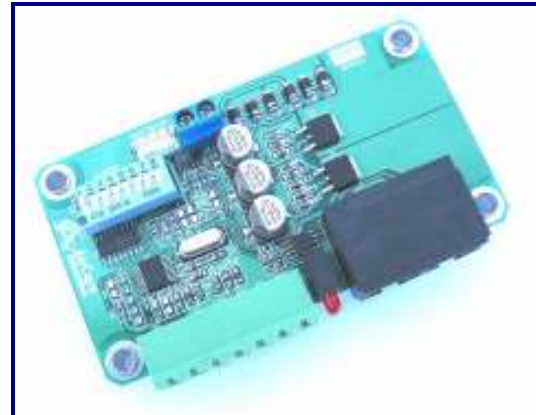


Overview

The ACM1015-SP provides MODBUS network or Analog control capabilities to a Rosenberg BLDC motor. ACM1015-SP is fully compatible with AirCare’s plug-and-play Small System products. Simply add any AirCare Control Console for a complete control and monitoring solution.

Alternatively, ACM1015-SP’s analog input enables 0-5V speed control from a voltage source, sensor or potentiometer. *The unit can be provided with an optional closed loop control (analog 2 port) using our built-in PID controller as a custom option.* BLDC from Rosenberg is a high-efficiency brushless-DC motor which is popular in high performance air-moving applications.



Specifications

- Control Interface for Rosenberg BLDC motor
- Network or Analog Control
- Simple connections
 - 4 Pin MTA for motor control signals
 - RJ45 for networking
 - 7 Pin terminal for analog inputs
- LED diagnostics
 - Board Status
 - Network Traffic
- Industry standard MODBUS Networking
 - RTU Protocol
 - RS485 9600,8,n,1
- Flexible analog control options
 - 0-5V source
 - Potentiometer
 - Sensor with 0-5V output
 - Internal closed-loop control
- Powered from Network or Local Supply
 - 12-24V AC or DC
- OEM module
 - Open-frame PCB with standoffs
 - 0-50°C operating temperature
 - 3.9” x 2.16” x 0.95”

Benefits

ACM1015-SP extends the available interface options for Rosenberg BLDC motors. Typically ACM1015-SP is mounted in a Fan-Filter Unit, close to the Rosenberg motor. The on-site installer need only connect the RJ45 patch cable to complete the control network.

Installation

ACM1015-SP gets its low voltage power from the 10Vdc Bias supplied by the Rosenberg Motor. **Please hook up using the ANALOG1 port located on the Rosenberg motor.**

Two RJ45 jacks provide In/Out connections for network cables. Like the AirCare VariPhase™, the ACM1015-SP is daisy-chained using CAT5 patch cables.

ACM to ECM Cable Control Wiring

Pin Number	Signal Name	Function	Motor Wire Color
1	+10V	+10Vdc Bias from motor	Orange
2	Tach	Feedback signal from motor	White
3	0V/Gnd	Common/ Ground	Black & Gray
4	Speed	PWM Speed to Motor	Yellow

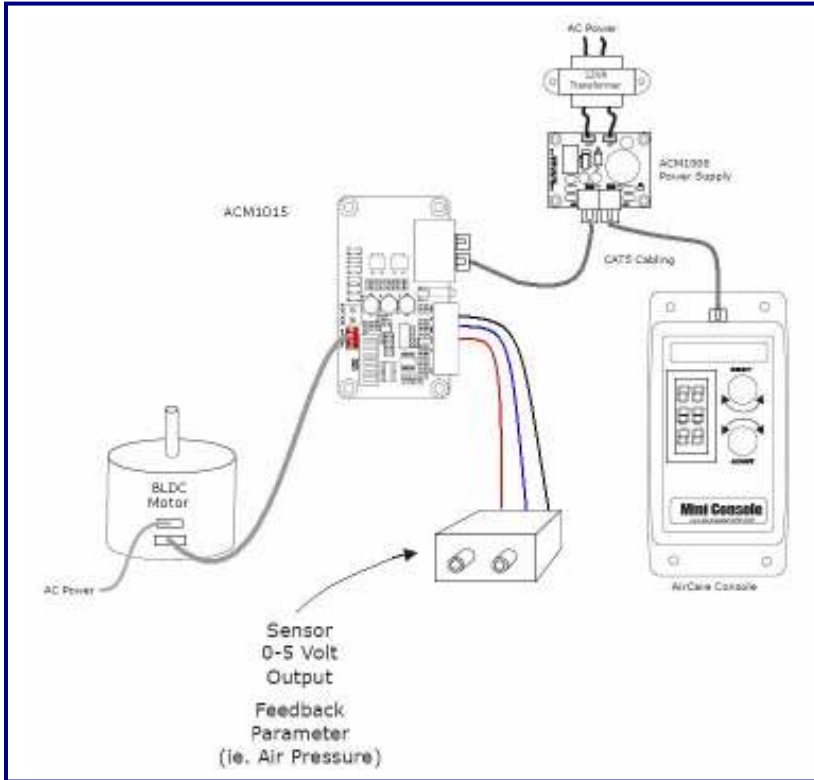
Mating connector for ACM1015-SP:
AMP MTA 640442-4

Mating connector for ACM1015-SP
ROSENBERG Motor: *Motor comes with flying leads – no additional connector is necessary.*

AirCare Console™ and AirCare VariPhase™ are trademarks of AirCare Automation Inc.

MODBUS™ is a registered trademark of Schneider Automation

ACM1015-SP System (w/ closed loop) Diagram



Modes

ACM1015-SP operates in one of two selectable modes:

Mode 0: Network speed control, open loop (default)

Mode 3: Analog speed control, open loop

To change modes go to REG 23 in the unit via MODSCAN or equivalent and enter the corresponding number for the desired mode.

ACM1015-SP is not presently compatible with the ACC1-SP1 or closed loop operation. This feature can be provided (as depicted in the system drawing) as a special order.

The ACM1015-SP hooks up to the ANALOG1 Port of the Rosenberg Motor.

Mechanical Dimensions

