

AirCare *VariPhase*™ B-Series Controls

Single-Phase AC Fan/Motor Speed Control – Panel Mount

Models ACB1031 3A/115V & ACB1032 3A/230V

Overview

AirCare's B-Series *VariPhase*™ sets a new standard in panel-mount fan speed controls by improving efficiency, adjustment accuracy, and linearity. The internal microprocessor **improves linear control of motor speed** over a wide range; **improved efficiency** along with **reduced motor heating** and **reduced mechanical hum** through 3-wire motor connection; while a user-selectable **soft-start feature*** eliminates high startup currents typical of AC induction motor fans.



VariPhase B-Series controls are designed to be panel-mounted in OEM equipment and require only a few simple electrical connections. They are suitable for both new and retrofit applications. The *VariPhase* B-Series also has a convenient On/Off switch that allows the user to switch the motor on and off without changing the speed setting.

* When soft-start is enabled and the *VariPhase* is switched on, the motor voltage will gently ramp to the minimum set speed or the speed set by the speed control knob on the front panel (whichever is greater).

Features

- Jumper selectable/enable soft-start.
- Easy to install in OEM equipment.
- Cost-effective variable-voltage phase-control.
- Installer-adjustable minimum speed limit. (to prevent motor stall)
- Linear speed adjustment range. (Improved over light-dimmer types.)
- LED indicator shows when motor is running at minimum speed or greater.
- Compatible with Single-Phase AC permanent split capacitor (PSC) and shaded-pole motors.

Models

Current	AC Voltage	
	115V	230V
3.0A	ACB1031	ACB1032

Specifications

Parameter	Min	Typical	Maximum	Notes
ACB1031 Supply Voltage (Vrms)	97V	115V	132V	
ACB1032 Supply Voltage (Vrms)	195V	230V	265V	
Load Current (Irms)			3.0 A	
Ambient Temperature (°F)	0°F	70°F	104°F	

Installation and Configuration

AirCare *VariPhase*™ B-Series controls can be installed with shaded-pole or PSC motors. (Other classes of AC motors are incompatible with this type of control.) PSC motors can be connected in 2-wire (standard) or 3-wire mode. Operation in 3-wire mode provides benefits that typically include higher electrical efficiency, less motor heating (with higher reliability), and reduced motor noise.

Product Specification Sheet ACB1031 & ACB1032

DIRECTIONS:

- 1) Wire the motor using 2-wire or 3-wire configuration below (PSC only for 3-wire).
- 2) Set the min. speed using a non-conductive slotted screwdriver [factory set to zero].
- 3) The soft-start feature is factory enabled; to disable soft-start, with power switch off, remove the jumper by pulling gently on the plastic tab of the jumper connector.

