

VariPhase B-Series Controls

AC Motor Speed Control

Models ACB1121 & ACB1122



Overview

AirCare’s B-Series VariPhase sets a new standard in wall-mount motor speed controls by improving efficiency, adjustment accuracy and linearity. The internal microprocessor provides precise control of motor speed over a wide range, while a user-selectable soft-start feature eliminates high-startup currents typical of AC induction motors.

VariPhase B-Series controls are designed to be panel-mount in OEM equipment and require only a few simple electrical connections. They are suitable for both new and retro-fit 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.

Features

- Variable voltage control of PSC and shaded-pole AC motors
- Linear speed adjustment range (improved over light-dimmer types)
- Easy to install in OEM equipment
- Jumper selectable soft-start
- Installer adjustable minimum speed limit (to prevent motor stall)
- LED indicator shows when motor is running at min. speed or greater

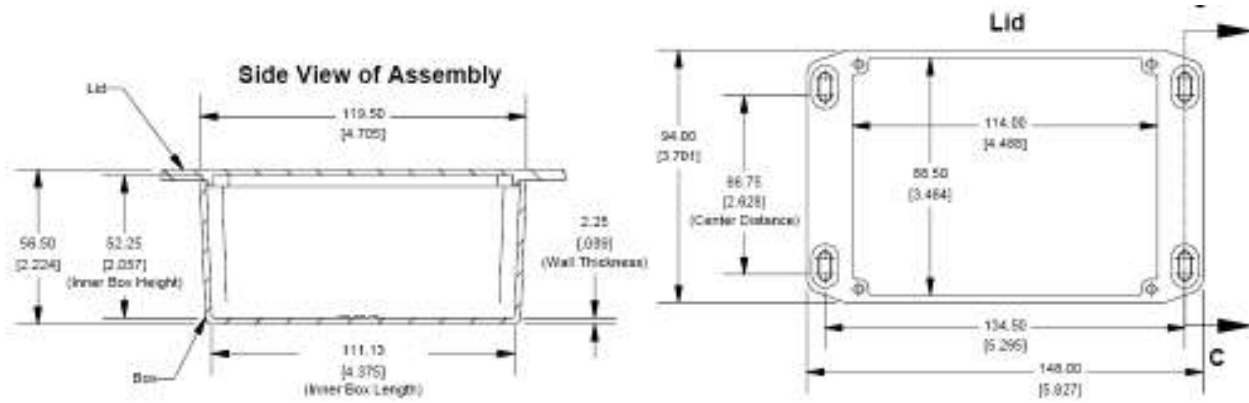
Models

	AC Voltage	
Current	115V	230V
12.0A	ACB1121	ACB1122

Specifications

Parameter	Min	Typical	Maximum	Notes
ACB1121 Supply Voltage (Vrms)	97V	115V	132V	
ACB1122 Supply Voltage (Vrms)	195V	230V	265V	
Load Current (Irms)			12.0A	
Ambient Temperature Range (°F)	0°F	70°F	90°F	

Mechanical

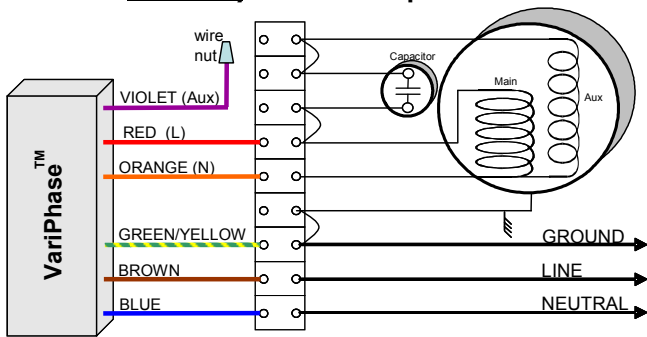


Installation and Configuration

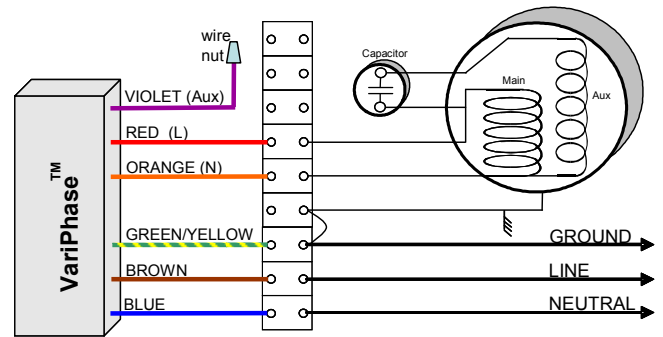
VariPhase B-Series controls can be installed with shaded-pole or PSC motors. They control the speed of the motor by phase-controlling the voltage. (Other classes of AC motors are incompatible with this type of control.) PSC motors can be connected in 2-wire (standard) or 3-wire mode. Operation in 3-wire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

With power removed, set the minimum speed using a slotted screwdriver. The soft-start feature is enabled in the factory; to disable soft-start, simply remove the jumper by pulling gently on the plastic tab of the jumper connector. 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).

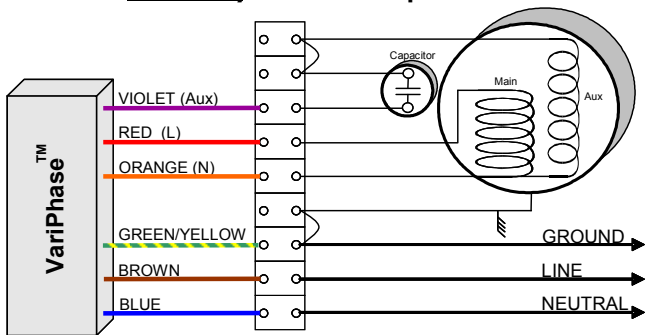
2-Wire Installation for externally connected capacitor



2-Wire Installation for internally connected capacitor



3-Wire Installation for externally connected capacitor



3-Wire Installation for internally connected capacitor

