

## Variphase B Series Controls

AC Motor Speed Control

Models ACB1041 & ACB1042



### Overview

AirCare's B-series Variphase sets a new standard in wall-mount motor speed controls by improving efficiency and adjustment accuracy. The internal microprocessor provides precise control of motor speed over a wide range. A user-selectable soft-start feature eliminates high-startup currents usually found in AC induction motors.

Variphase B-series controls mount in a standard 1-gang wall box and require only a few simple electrical connections. They are suitable for both new and retro-fit applications.



A unique feature of the B-series is the separate On/Off switch. The User can 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
- Easy to install in OEM equipment or 1-gang wall box
- Jumper selectable soft-start
- Installer adjustable minimum speed limit
- LED indicates when speed is changing

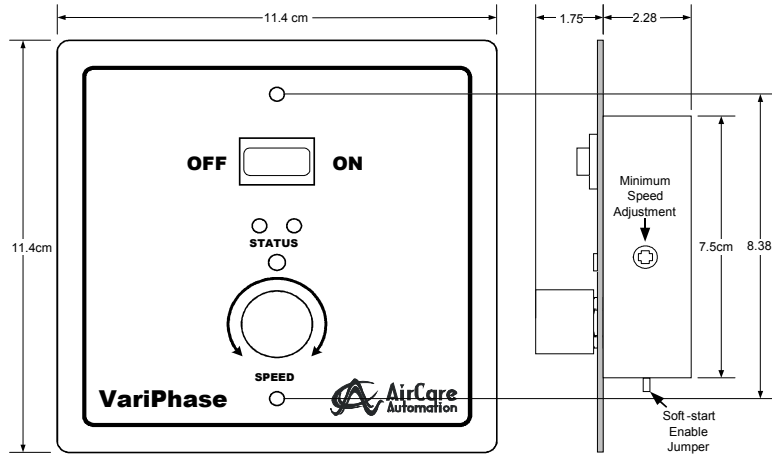
### Models

	AC Voltage	
Current	115V	230V
4.0A	<b>ACB1041</b>	<b>ACB1042</b>

### Specifications

Parameter	Min	Typical	Maximum	Notes
ACB1041 Supply Voltage (Vrms)	97V	115V	132V	
ACB1042 Supply Voltage (Vrms)	195V	230V	265V	
Load Current (Irms)			4.0A	
Ambient Temperature Range (°F)	0°F	70°F	90°F	

# Mechanical

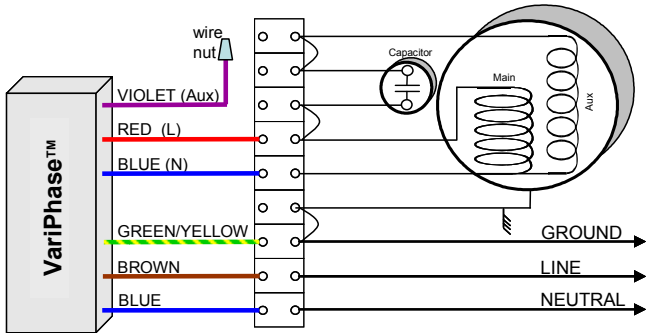


# Installation and Configuration

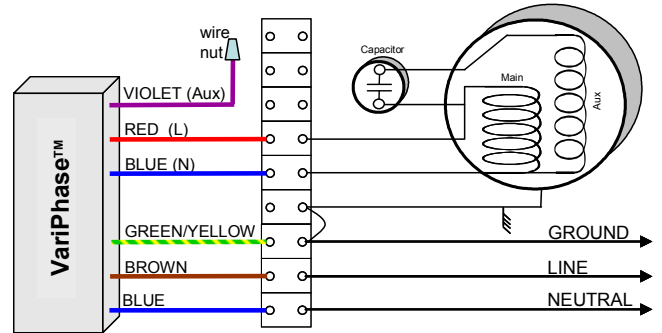
VariPhase B-series controls can be installed with shaded-pole or PSC motors. They control the speed of the motor by phase-controlling the voltage. Other classes of AC motors are incompatible with this type of control. PSC motor can be connected in 2-wire (standard) or 3-wire mode. Benefits for 3-wire operation are typically higher efficiency and quieter operation.

With power removed, set the minimum speed using a slotted screwdriver. The soft-start feature is enabled in the factory. To disable soft-start, remove the jumper by pulling gently in the plastic tab. When soft-start is enabled and VariPhase is switched on, the motor voltage will gently ramp to the set speed.

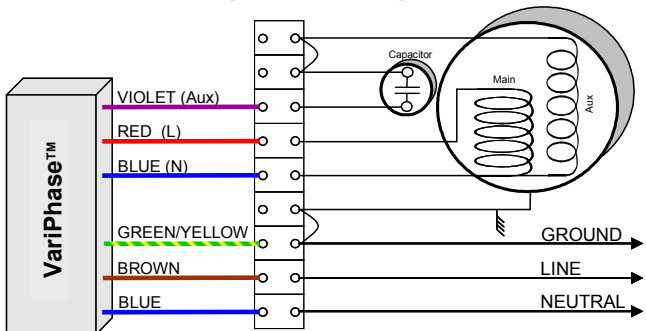
**2-Wire Installation for externally connected capacitor**



**2-Wire Installation for internally connected capacitor**



**3-Wire Installation for externally connected capacitor**



**3-Wire Installation for internally connected capacitor**

