MANUAL
MVS-1C

Manual Variable
Speed Control

Installation / User's Guide

This guide will inform the electrician on proper wiring and installation procedures and, will also inform the user on how to use the MVS-1C controller.

The manufacturer recommends that the following installation instructions be followed to as closely as possible, and that all work be performed by a certified electrician. Failure to do so may void the warranty.

Description

The MVS-1C controller is designed to control manually a variable speed output. A **Speed Selector** is used to adjust the speed of the variable output. That **Speed** Selector can also turn off the output by turning it counter-clockwise. The controller operates on 115/230V and 50/60Hz.

The MVS-1C comes in a PVC non-corrosive enclosure that is protected from dust and humidity. The MVS-1C is covered by a complete two-year warranty.

Unpacking

Unpack the MVS-1C module and inspect contents for damage. Should the contents appear to be damaged, contact your local distributor to return the material.

The package should contain the following standard items:
1 MVS-1C
1 Installation / User's guide

Mounting hardware required

This is the list of the mounting hardware needed, which is not included with the product:

Screws (to mount the module on the wall)
Screwdriver
Soldering iron kit or approved sealed connectors

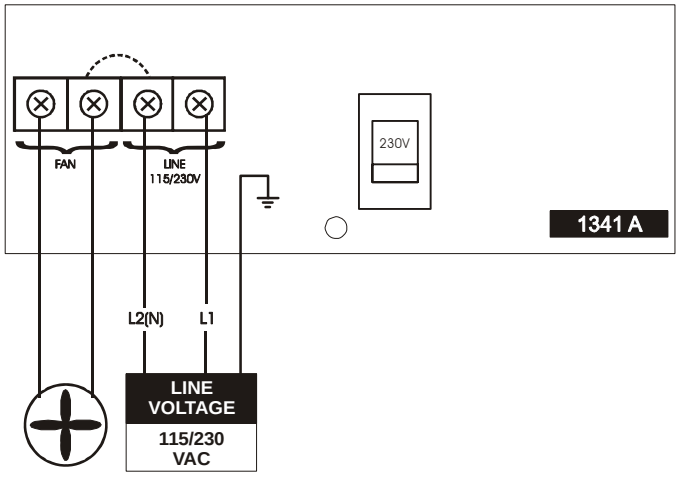
General installation guidelines

- It is recommended to install the unit in a hallway to limit the MVS-1C exposure to noxious gases.
- In order to avoid condensation problems inside the MVS-1C, it is recommended to install the module on an inside wall. If it is not possible, use spacers to have an air gap between the wall and the controller.
- The MVS-1C should be installed in easy-access location but away from damaging elements (heat, cold, water, direct sunlight…).
- Do not install the MVS-1C near high-voltage equipment, power supply or transformer.

Wiring Procedure

1. Open the MVS-1C controller enclosure.
2. Verify the technical specifications to know which wire to use.
3. Connect the equipment to the 2 black terminal block identified as FAN as shown in figure 1.
4. Connect the power source to the 2 black terminal block identified as LINE as shown in figure 1.
5. Make sure that the voltage selector switch is set to the correct voltage before powering up the MVS-1C (refer to figure 2 for the location of the switch).
6. Power up the MVS-1C controller. Verify that the controller operates correctly.
7. Close the MVS-1C enclosure. Don’t forget to put a security screw or a padlock.

Figure 1: Wiring Diagram



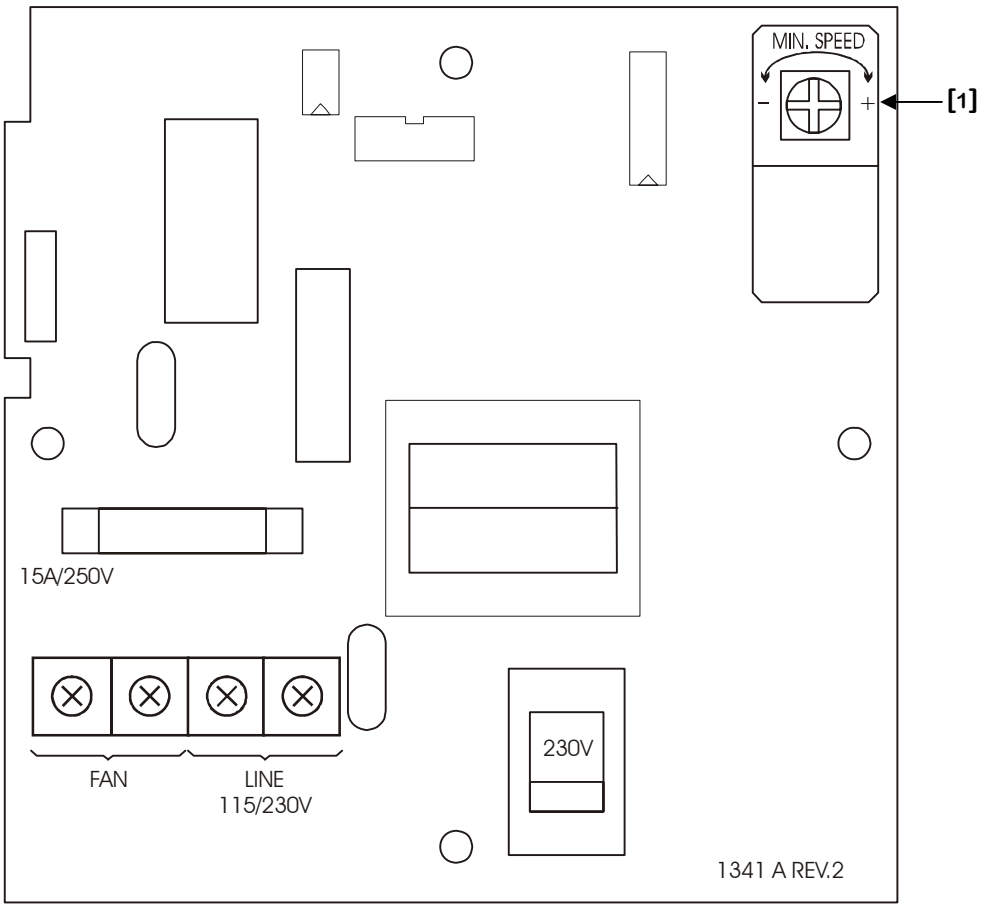
WARNING!

- **To avoid electric shock, disconnect power source prior to installation or troubleshooting.**
- **Make sure that the voltage selector switch is set to the correct voltage before powering up the controller.**

Using the MVS-1C

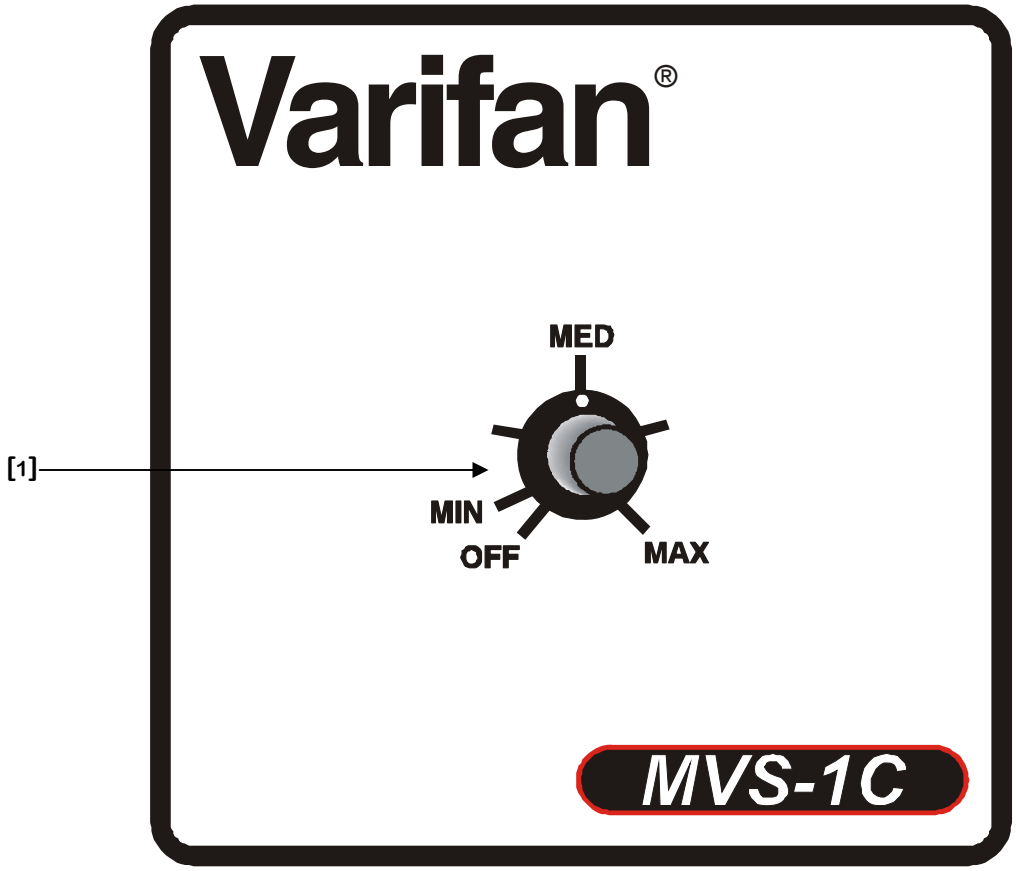
With the MVS-1C you can manually control a variable output. Refer to figures 2 and 3 for the location of the different switches and selectors of the controller.

Figure 2: Electronic Board and component location



1. **Minimum Speed** Potentiometer
This potentiometer is used to adjust the **Minimum Speed** of the fan. That **Minimum Speed** will be the speed of the output when the **Speed Selector** is set to LO.

Figure 3: MVS-1C Faceplate



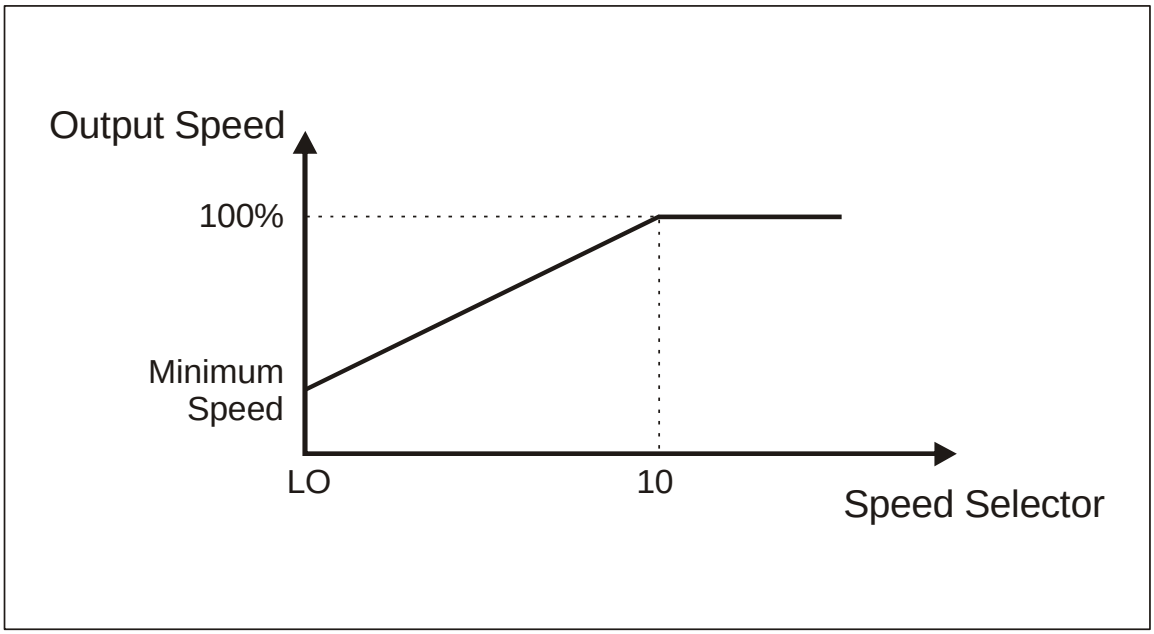
1. **Speed Selector**
This selector is used to set the speed at which the output will run. It I also used to turn off the output by turning it counter-clockwise to the OFF position.

The MVS-1C controller will make the fan modulate according to the **Speed Selector** on the faceplate (refer to figure 3). It is also possible to adjust the **Minimum Speed** with the potentiometer located inside the controller box on the electronic board (refer to figure 2). That **Minimum Speed** will be the speed of the output when the **Speed Selector** is set to LO.

Here is a description of the MVS-1C operation.

- To turn on or off the variable output, use the **Speed Selector** located on the faceplate (refer to figure 3)
- Also, use the **Speed Selector** to increase or decrease the variable output speed. When the **Speed Selector** is set to LO, the **Minimum Speed** set by the potentiometer inside the controller will be used (refer to figure 2).

Figure 4: Logic Diagrams



Specifications

DESCRIPTION	VALUE
Storage temperature	-4°F to 131°F (-20°C to 55°C)
Operating temperature	32°F to 113°F (0°C to 45°C)
Humidity	90% maximum Non-condensing
Weight	1,4 lb (0,6 kg)
Size	5 15/16” x 5 15/16” x 3 9/16” (15 cm x 15 cm x 10 cm)
Protection index	IP 66
Warranty	2 years
POWER SUPPLY	
Operational voltage range (SW1 @ 115V)	92 to 125VAC
Operational voltage range (SW1 @ 230V)	184 to 250VAC
Operational frequency range	45 to 65 Hz
VARIABLE OUTPUT	
Maximum Allowable Current (Fuse value)	15A, 250VAC
Recommended maximum current for fans	12FLA
Minimum load	300mA @ 230VAC

Limited Warranty

The manufactured equipment and supplied components have gone through rigorous inspection to assure optimal quality of product and reliability. Individual controls are factory tested under load, however the possibility of equipment failure and/or malfunction may still exist.

For service, contact your local retailer or supplier. The warranty period shall be for two years from manufacturing date. Proof of purchase is required for warranty validation.

In all cases, the warranty shall apply only to defects in workmanship and specifically exclude any damage caused by over-voltage, short circuit, misuse, acts of vandalism, lightning, fortuitous events, acts of God, flood, fire, hail or any other natural disaster. Any unauthorized work, modification or repair on this product automatically voids the warranty and disclaims the manufacturer from all responsibility.

The manufacturer assumes only those obligations set forth herein, excluding all other warranties or obligations. This warranty stipulates that in all cases the manufacturer shall be liable only for the supply of replacement parts or goods and shall not be liable for any personal injury, damages, loss of profits, interrupted operations, fines for infringement of the law or damages to the production of the PURCHASER and the PURCHASER shall take up the defence and hold the manufacturer faultless regarding any legal or extra legal proceedings, notice, or claim by the customer or by a third party, and regarding any legal and extra legal expenses and fees brought forward on by such damages.

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