# VCON6 Controller

# **Instruction Sheet**

# Three Speed Controller / Sensor Interface



## DESCRIPTION

The VCON6 is designed for use with all HR300 series units and in line mixed flow fans type BM100, BM125 and BM150. The VCON6 provides ON/OFF switching and control over three speeds. The controller also provides connection terminals for the optional use of external sensors/timers to provide automatic ON/OFF control at any speed, or switching between any two speeds as required. The 'sensor' position on the VCON6 brings this system into operation, speed control is dependent on the wiring option selected (see over).

### INSTALLATION

The VCON6 is built on a standard single gang plate and is designed for both surface and flush mounting, using a standard 25mm plastic or metal back box. If a metal back box is used, it must be earthed.

NOTE: The wiring should be suitably (BASEC or HAR) approved cable of appropriate current carrying capacity.

# MULTIPLE UNIT CONTROL

The VCON6 can be used to control up to three separate HR300 series units or up to six mixed flow fans, type BM100, BM125, and BM150. All multiple unit connections must be wired in parallel.

Multiple wires must not be taken to the controller. A junction box must be added with a single connection taken from the junction box to the controller. When securing the controller to it's back box, care must be taken to ensure that the P.C.B. and it's wires do not get damaged.

# AIR VOLUMES (M<sup>3</sup>/HR)

All the remote units as HR300, subject to effect of ducting layout and resultant system resistance (pressure drop).	HR300	Boost Normal Low	Extract 300 210 75	Supply 270 190 70	
	HR200V HR300RW6				

# MANUAL CONTROL WIRING



### DIMENSIONS



### **AUTOMATIC CONTROL OPTIONS**

These wiring options are activated when controller is turned to 'sensor' position.

#### **ON/OFF AT LOW SPEED**





Sensor/External Switch

#### LOW TO NORMAL SPEED SWITCHING

VCON6 Terminal Block



Change Over Switch/Sensor

#### **ON/OFF AT NORMAL SPEED**

VCON6 Terminal Block



Sensor/External Switch

#### NORMAL TO BOOST SPEED SWITCHING

VCON6 Terminal Block



Switch/Sensor

#### **ON/OFF AT BOOST SPEED**

VCON6 Terminal Block



#### LOW TO BOOST SPEED SWITCHING

VCON6 Terminal Block



Change Over Switch/Sensor

## AUTOMATIC CONTROL USING HUMIDITY SENSOR (REF: HS6)

These wiring options are activated when controller is turned to 'sensor' position. Fan units will turn ON or change speed on rise in humidity to above the preset level. Units will revert to lower speed or turn off when humidity level falls below the preset level.

#### **OFF/LOW SPEED**



LOW TO NORMAL

SPEED SWITCHING

0 2 1 N L

VCON6 Terminal Block

S

Μ

В

С

Neutral

HS6 Terminals

Live

#### **ON/OFF AT NORMAL SPEED**



#### NORMAL TO BOOST SPEED SWITCHING



#### **ON/OFF AT BOOST SPEED**



LOW TO BOOST SPEED SWITCHING

