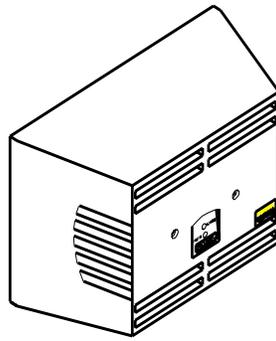




# Vent-Axia®

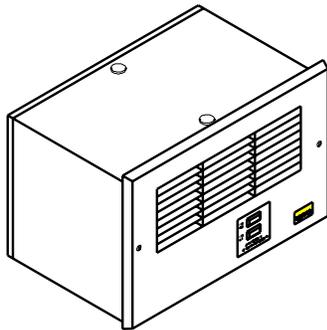
## Gemini & Duet Mk2

### INSTALLATION AND MAINTENANCE INSTRUCTIONS

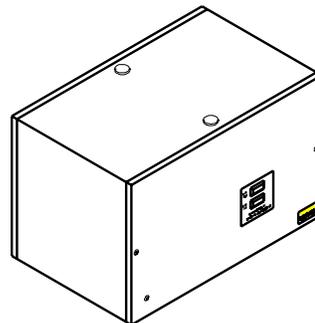


**Gemini  
Duet Mk2**

**Stock Ref No 457479  
Stock Ref No 180510C**



**Gemini     Stock Ref No 457480  
Duet Mk2   Stock Ref No 180610C**



**Gemini     Stock Ref No 457481  
Duet Mk2   Stock Ref No 180710C**

**FOR SURFACE, FLUSH & DUCT MOUNTING**

*PLEASE LEAVE THESE INSTRUCTIONS WITH THE END USER*



## READ INSTRUCTIONS CAREFULLY BEFORE STARTING INSTALLATION

### Vent-Axia Gemini & Duet MK2 Installation Instructions

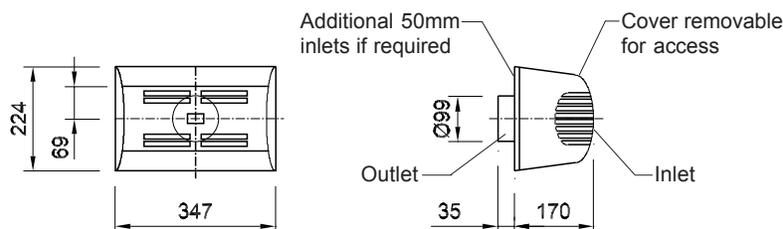
#### A. **IMPORTANT - SITING A VENT-AXIA Gemini/Duet**

1. All electrical connections should be made by a properly qualified electrician. The fan must be sited and connected in accordance with current I.E.E. regulations (BS7671) or the appropriate standards in your country.
2. This fan is not suitable for installation in a shower cubicle or enclosure and must be sited away from direct sources of water spray. It must be sited out of reach of a person using a fixed bath or shower. Site away from direct sources of heat. Ambient temperature range 0° to 40°C. Do not site in an area containing excessive levels of grease.
3. When the fan is installed in a room containing a fuel burning appliance the installer must ensure that air replacement is adequate for both the fan and the fuel burning appliance.
4. Wiring should be via a switched spur with a 3 amp fuse (UK). Double pole switch or plug and socket should be located outside the room containing a fixed bath or shower.
5. Ducted Applications. In circumstances where an excessive amount of moisture is present in the air a condensation trap will need to be installed in the exhaust duct. Horizontal ducts should fall away from the fan unit. Ducts passing through an unheated roof void should be insulated.

#### B. **DESCRIPTION**

"Gemini" & "Duet" units are a range of centrifugal extractor fans. The range consists of three models - surface, recessed or duct mounted. Each model is suitable for connection to an individual duct or communal ventilation system. There are two fans within the unit which duty share. Should one fan malfunction, the other will take over and continue the ventilating process. This will be indicated on the front panel of the surface and recessed models. There is an over-run timer (i.e. - continues to operate fan after switch off), incorporated into all models. This is pre-set at 20 minutes.

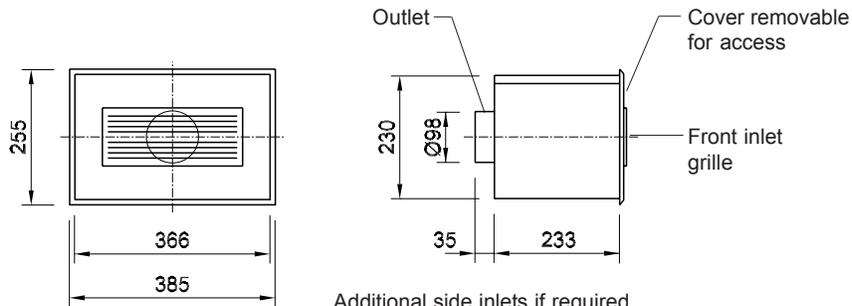
#### C. **SURFACE MOUNTING**





1. Remove unit from packaging.
2. Remove front cover and disconnect the power unit from the back plate by a quarter turn anti-clockwise on the two white fixing studs. (Using a flat bladed screw driver).
3. With reference to the unit, mark the position of the 4 fixing holes and the 100mm diameter exhaust spigot.
4. Drill and plug the 4 fixing screws, then cut the hole for the ducting (screws and wall plugs are supplied).
5. Connect the ducting, then screw the back plate to the wall. Take care not to over tighten the screws.
6. Connect the wiring in accordance with the enclosed details.
7. Plug the power unit into the back plate taking care to prevent fouling the shutter and secure with the 2 white fixing studs, using a flat bladed screw driver to lock them in position. (Ensure that the correct 3 & 4 pin plugs line up with the 3&4 way sockets in the back plate).
8. Replace front cover.

#### D. FLUSH MOUNTING



Additional side inlets if required.  
Alternative outlet positions top or bottom.

1. Remove unit from packaging.
2. Ensure structure is suitable for mounting.
3. With reference to the size of the casing, mark the position of the case.
4. Cut a hole in the wall for the case.
5. Remove front cover and put to one side. Then disconnect the power unit from the back plate by a quarter turn anti-clockwise on the 2 white fixing studs. (Use a flat bladed screw driver)
6. Mark the position of the fixing holes, drill and plug the holes (screws and wall plugs are supplied).
7. Cut the hole for the spigot. Bring ducting to the hole as required and grout the ducting into position. Secure and grout the case into the wall flush with the surface.
8. Run cable into the unit through the grommets in the casing.
9. Connect the wiring in accordance with the enclosed details.



10. Plug the power unit into the back plate taking care to prevent fouling the shutter and secure with the 2 white fixing studs, using a flat bladed screw driver to lock them in position. (Ensure that the correct 3 & 4 pin plugs line up with the 3 & 4 way sockets in the back plate).
11. Replace front cover (ensure indicator leads are connected to the neon in the front cover before replacing).

**NOTE:**

The unit is supplied for rear air discharge as standard. If top or bottom discharge is required, the wall plate can be repositioned to suit and the hole in the casing not required, blanked off. Auxiliary air inlets can be fitted in place of knockouts (as required) and are available with 100mm and 50mm spigots. Fix with pop rivets or self tapping screws.

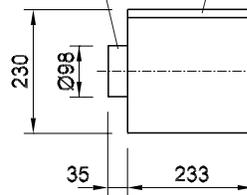
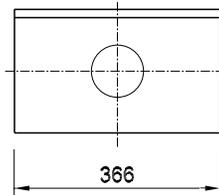
**E. DUCT MOUNTING**

The unit can be mounted in any plane, either mounted on joists in a ceiling void or installed within a wall (as per flush mounting instructions).

49/99mm inlet can be on any of 5 sides (refer to spigot detail)

Outlet can be side, top or bottom

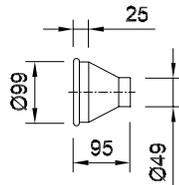
Cover removable for access



Additional 50mm spigot in any 3 sides



**F. SPIGOT DETAIL**



Dual sized spigots to give either 50mm or 100mm inlet to match standard pipe

**G. TIMER ADJUSTMENT**

The Gemini/Duet models are fitted with an electronic timer which is automatically activated when the fan is switched On by means of the remote switch, e.g. light switch. The fan will run at full speed for an adjustable pre-set period after the switch is turned Off. The timer is factory set at approximately 20 minutes.





#### BEFORE ADJUSTING TIMER ISOLATE FAN FROM MAINS SUPPLY

Remove the cover. The timer adjust knob is located on the side of the power pack - turn clockwise to increase the set time, anti-clockwise to decrease the set time.

### IMPORTANT - SAFETY

All air moving equipment may present electrical, mechanical or noise hazard either during installation or during operation. These instructions are meant to help in the prevention and/or minimisation of these hazards. It is important that due consideration is given to applicable statutory requirements.

Potential hazards from rotating parts that can be reached during operation must be eliminated by using appropriate guards meeting statutory requirements.

All electrical installations must be undertaken by a suitably qualified and competent person and must be carried out in accordance with all relevant Statutory Requirements. Please check the details on the unit rating plate to ensure that the correct power supply (Voltage, Frequency and Phase) is available. Do not use the fans with an incorrect power supply, overheating and failure of motor will occur.

### GENERAL WIRING

**Warning** - *The fan and ancillary control equipment MUST be isolated from the power supply during installation and/or maintenance. The equipment MUST be earthed.*

*On Gemini/Duet surface mounted models - wire by a slot, cut to suit, in the wall plate.*

*On Gemini/Duet recessed mounted models - wire by entry adjacent to connectors.*

1. This appliance is only suitable for connection to a 220-240V 50Hz supply.
2. Connection to mains supply should be in accordance with current I.E.E. regulations (BS7671) or the appropriate standard in your country.
3. The installation must be provided with a double pole isolator switch having a contact separation of not less than 3mm.

*N.B.* If used in a lighting circuit, for reliable operation, we recommend a tungsten filament lamp. The manufacturers of some fluorescent and low energy lighting systems indicate that these can interfere with electronic timer circuits.



## OPERATION

The units feature duty sharing, where the fans operate alternately. If a fan fails the other will automatically work every time power is applied.

The red light indicates a fan has failed. The amber light indicates a fan is working. A third indicator lamp is fitted internally to indicate power on the permanent live.

On the initial connection, one fan will operate for the set over-run period. After the fan stops the unit will only operate via the switched live.

## INSPECTION/CLEANING

These pieces of equipment require maintenance, cleaning and inspection, therefore allow reasonable access for these operations to be carried out by a suitably qualified person safely.

**ISOLATE FROM POWER SUPPLY AND ENSURE POWER CANNOT BE RE-CONNECTED BEFORE ANY WORK IS CARRIED OUT.**

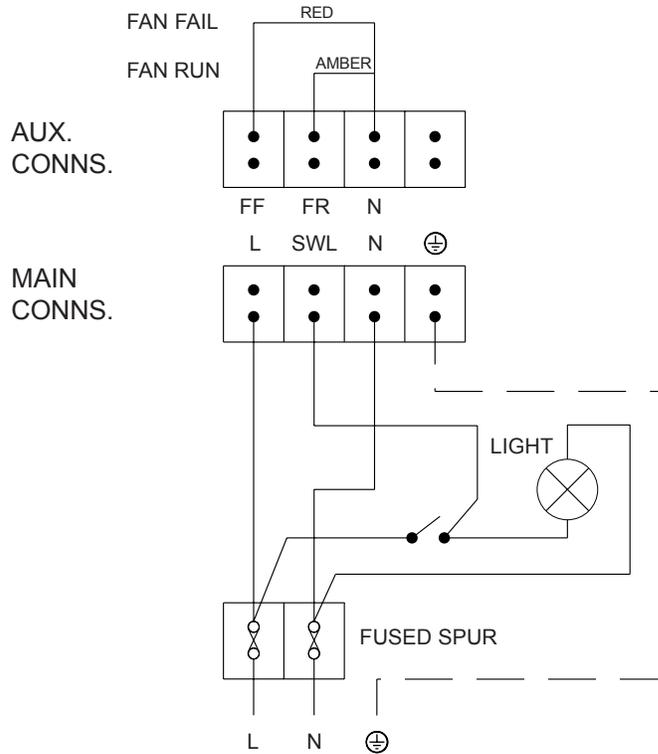
It is recommended that the fan be inspected after three months or sooner if conditions dictate. If a build up of dirt/deposits is evident then this should be carefully cleaned off. Please take care not to damage the fan or affect the balance of the impeller motor assembly (balance weights may be fitted to the impeller).

Further inspections should be carried out periodically as necessary dependant on experience and site conditions. It is recommended that a minimum of two inspections per year be carried out.



## WIRING DIAGRAM

220-240V 1PH 50Hz SUPPLY



L, SWL, N &  $\oplus$  TO BACKPLATE.  
REMOTE INDICATION (IF REQUIRED) CONNECT TO N, FR, FF.

### NOTE:

The remote indication connector has a blanked position to prevent accidental connection of the unit in the reverse position.

### CONNECTIONS MUST BE:

Live, Switched Live, Neutral and Earth to enable the auto-changeover and run-on features to work.

THESE PRODUCTS MUST BE INSTALLED BY A SUITABLY QUALIFIED AND COMPETENT PERSON IN ACCORDANCE WITH CURRENT APPLICABLE REGULATIONS.

