

100 Series Gas Ventilation Interlock System



I am the installation instructions for a gas *safety system*, please read me before you have a go. The product I support is virtually indestructible but I have no doubt someone will try!!

Intelligas takes every care in ensuring these products reach you in perfect working order. Each system is tested on dispatch and site induced damage *is* easily detectable.

Ensure the operation of this unit is explained fully to the kitchen staff.

For reference the infrastructure for the system you have is type - PCB 110A

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Siting the panel

Firstly choose a suitable mounting position for the control unit, mount the unit away from sources of extreme heat, ensure the panel is placed in a position where mechanical damage is unlikely and where it can be easily accessed for use and maintenance.

Fix the panel using the marked enclosure holes only, take care not to damage the internal wiring or PCB of the unit when drilling.

Field wiring

All wiring from the supply and to the gas valve carries mains voltage (230v ac nominal). The current edition of the IEE Wiring Regulations should be strictly adhered to, wiring and connections should be made by a suitably qualified electrician or competent person.

Field wiring voltage is reduced, do not connect mains to the aps, e-stop or fire alarm terminals

Intelligas recommends the use of FP200 or similar type of wiring for the fixed wiring installation.

Please follow the first fix wiring schedule set out below:

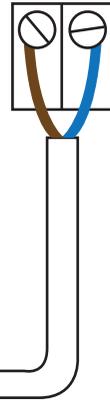
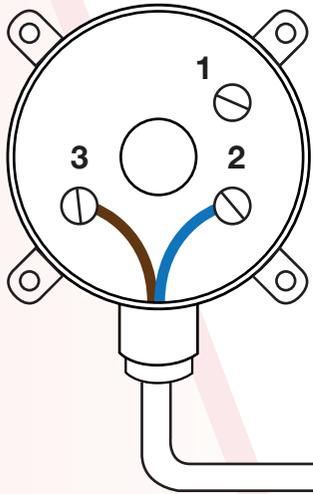
- 1) Gas valve 2 core + E 1.5mm
- 2) Emergency stops 2 core + E 1.5mm
- 3) Pressure switches 2 core + E 1.5mm
- 4) Fire alarm interlock (if req) 2 core + E 1.5mm
- 5) Main supply 2 core + E 1.5mm

The mains supply should be 230v 1 phase, fed via a fused DP connection switch fused at 5 amp max.

UNDER NO CIRCUMSTANCES SHOULD TERMINATIONS BE MADE OR DISCONNECTED WHILE POWER IS APPLIED TO THE UNIT.

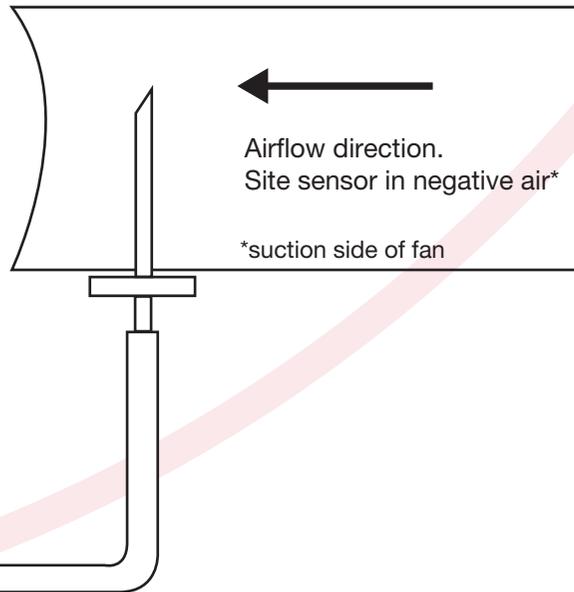
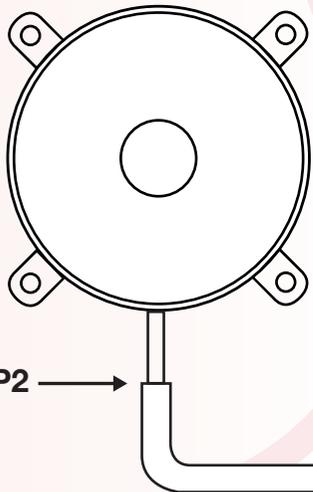
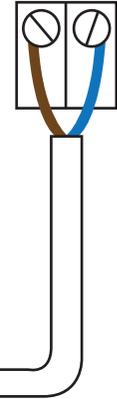
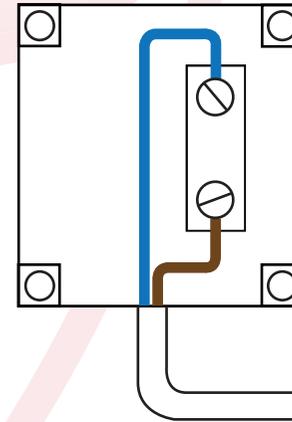
Peripheral items installation

Airflow switches (electrical installation)



For airflow pressure switches use PCB terminals marked either intake or extract fan, these interlocks have a time delay in the software to prevent the effects of pressure switch flutter.

For emergency stop switches use PCB terminals marked Estop



Fire alarm interface (if used)



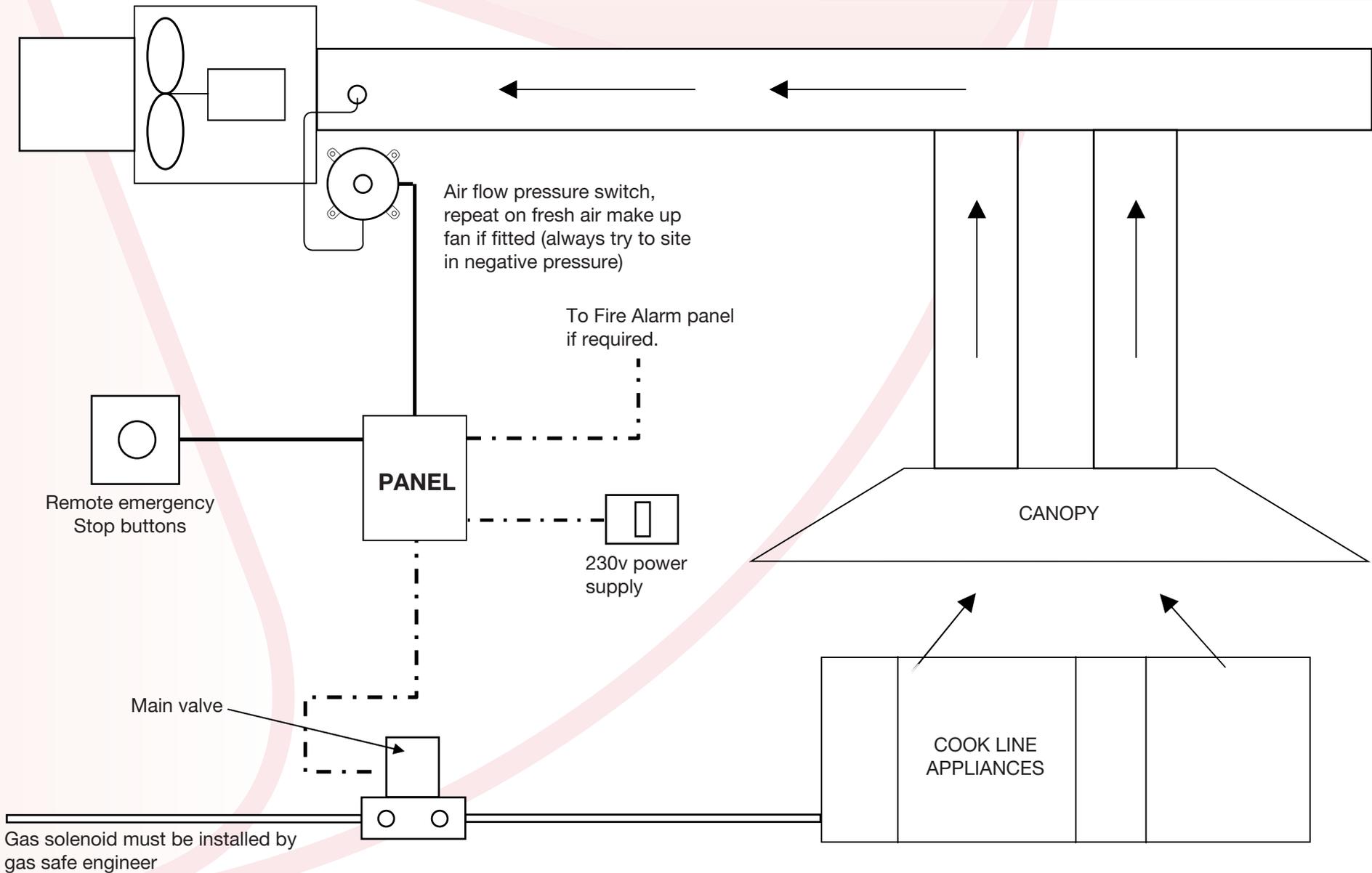
If fire alarm interface is not to be used then link as shown.

This termination is low voltage and no isolation relay between the Intelligas panel and the building fire alarm is required.

3) Installation Schematic

- basic install, shown in kitchen

KEY	
	Mains rated wiring 2 core
	Mains rated wiring 2core + earth



Commissioning

Double check all terminations have been made and checked for tightness, check all peripheral equipment such as emergency stops and pressure switches are connected and the covers are in place. The power may now be applied

After initial power up start all fans and set any speed controllers to minimum, assuming the minimum fan speed still satisfies minimum ventilation levels in the kitchen continue and set the pressure differential switches. This can be done by slowly increasing the Pascal setting on the pressure differential switch until it clicks off, then turn it back down in 5 Pascal increments waiting 30 seconds each time until it makes again. Repeat this procedure for each pressure switch installed.

Once the pressure switches have been set up and all emergency stops are reset press the reset button, the two top LEDs will show green and the unit will beep 3 times to indicate that all the interlocks are ok. The bottom LED will illuminate amber requesting the reset button to be re-pressed to enable the gas valve. Once re-pressed the bottom LED will change to green to show the gas valve output is energised.

There is a delay on the fan pressure switch inputs, this is to overcome high winds momentarily effecting the operation of the switch, the panel will show any fault immediately as it happens but the gas will not be shut off or warning beeper operated until the 20 second timer has elapsed

The unit is now commissioned and ready for use.

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