EGIP-1

Installation instructions

Technical Support 07952269791

Thank you for choosing Intelligas to supply your combined interlock and proving system.

Please read these installation instructions carefully, if you are in any doubt or not familiar with such systems please do not hesitate to contact Intelligas on the technical support number above.

This system is also available as the EGI-1, a gas interlock system when proving is not necessary, please contact Intelligas if this is of interest to you.

Intelligas also produces bespoke systems tailored to suit individual installation requirements, our technical support line can help with enquires of this nature and provide a free design service on placement of initial order.

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 an 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 to the interlocks carries 24vdc, however, to comply with regulations in force this should be insulated within the control panel to the highest voltage present (namely 230vac).

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

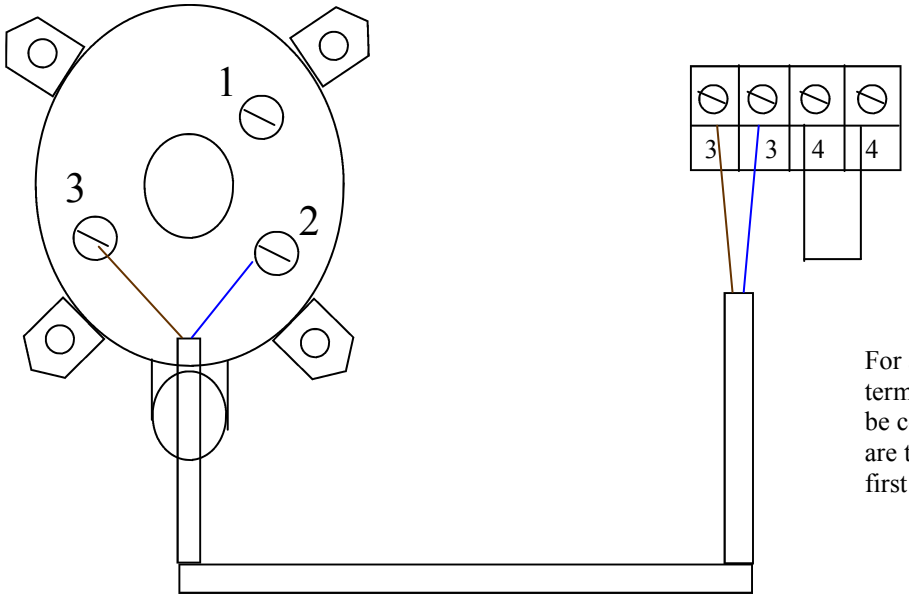
Please follow the first fix wiring schedule set out below,

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

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

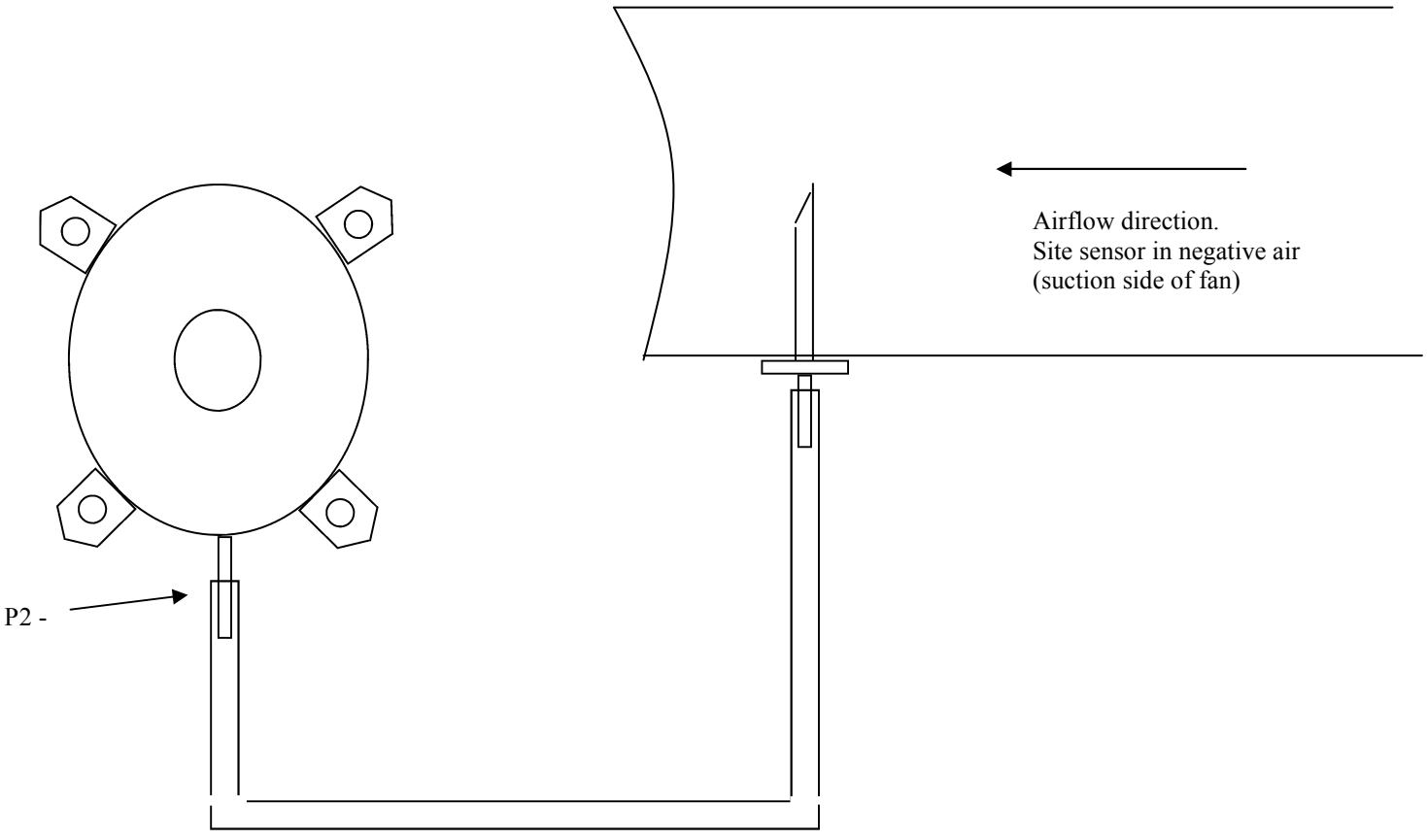
Peripheral items installation

Airflow switches (electrical installation)



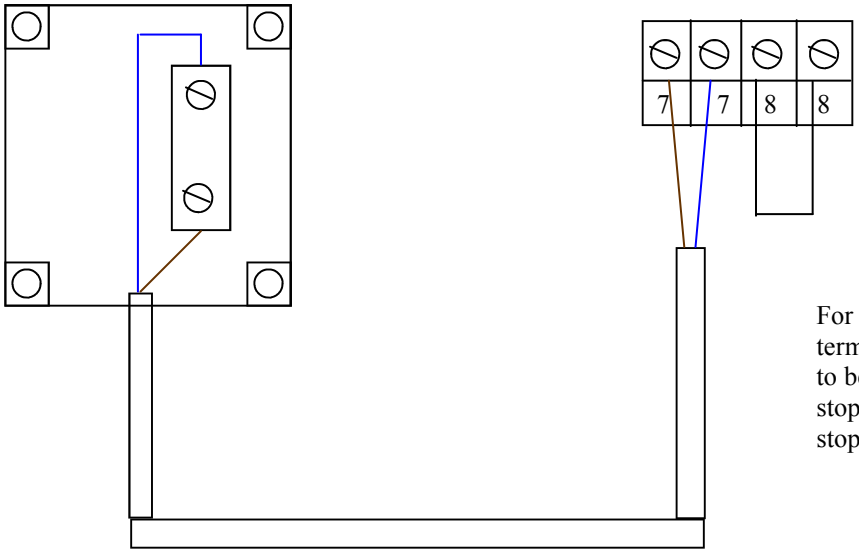
For airflow pressure switches use PCB terminals marked 3,3 & 4,4 if only 1 APS is to be connected link 4,4 as shown or if 2 APS's are to be fitted then connect second APS as first to terminals 4,4

Airflow switches (mechanical installation)



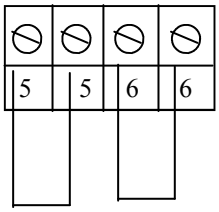
Peripheral items installation cont...

Emergency stops (electrical installation)



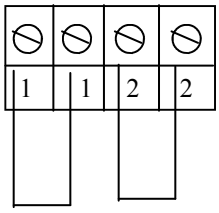
For emergency stop switches use PCB terminals marked 7,7 & 8,8 if only 1 E stop is to be connected link 8,8 as shown or if 2 E stops are to be fitted then connect second E stop as first to terminals 8,8

Fire alarm interface (if used)



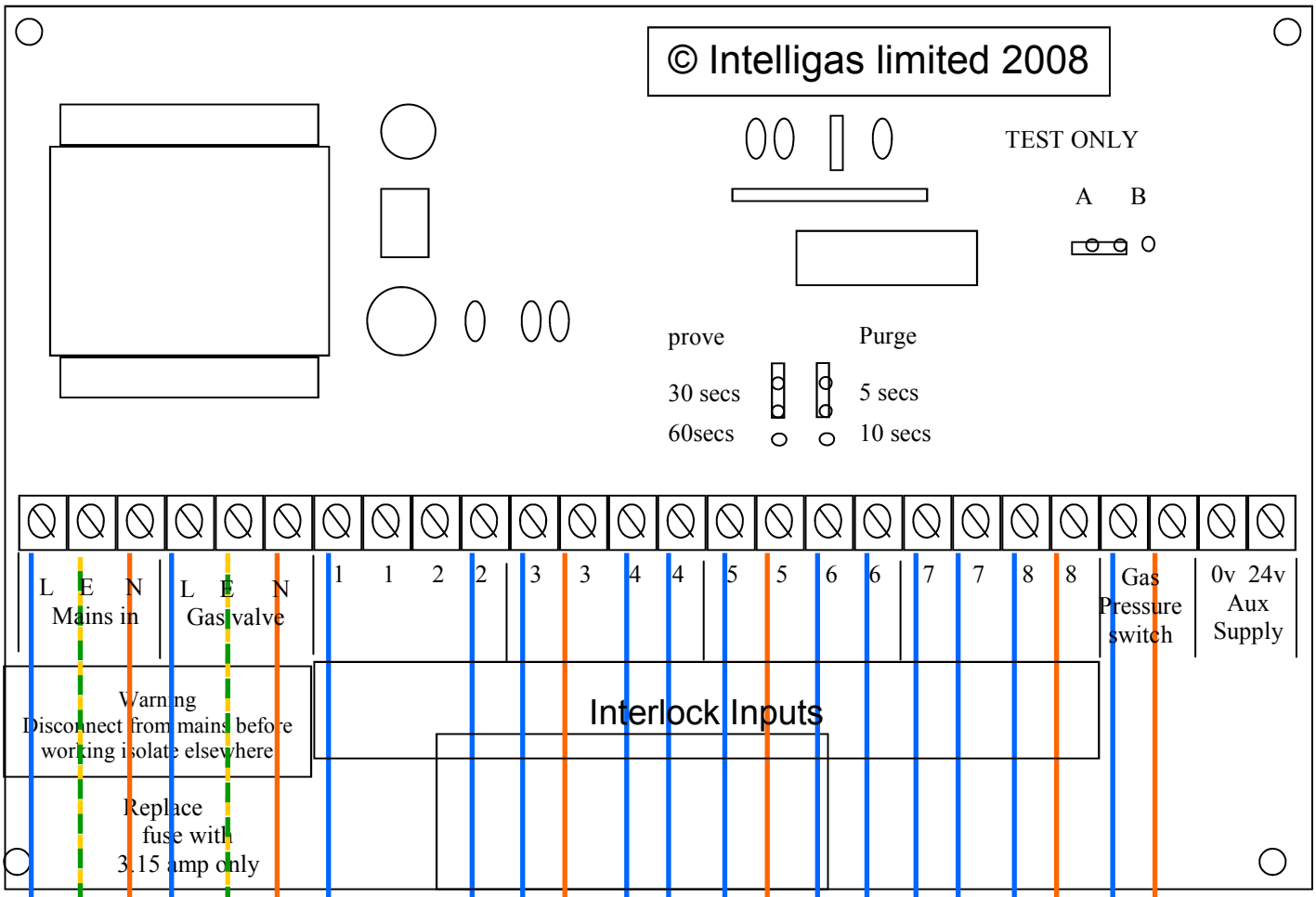
If fire alarm interface is not to be used then link as shown, 2 channels of fire alarm are provided so connection to both the buildings system and possibly connection to an Ansuls system can be achieved. The interlock should be wired normally closed

Aux interlocks (if used)



If the aux interlock is not to be used then link as shown, 2 channels of auxiliary interlock are provided so connection to other control devices such as time clocks or gas detectors can be achieved. The interlock should be wired normally closed.

EGIP-1 & EGI-1 system wiring schematic full kitchen version



From switched fused spur fused at 5A max

To gas solenoid valve And power contactor if required

If neither channel of the interlock is to be used link both channels out as shown

If only 1 channel of the interlock is to be used link channel 2 out as shown

To fan air pressure switch use Terminals 2 & 3 on aps Refer to aps fitting instructions

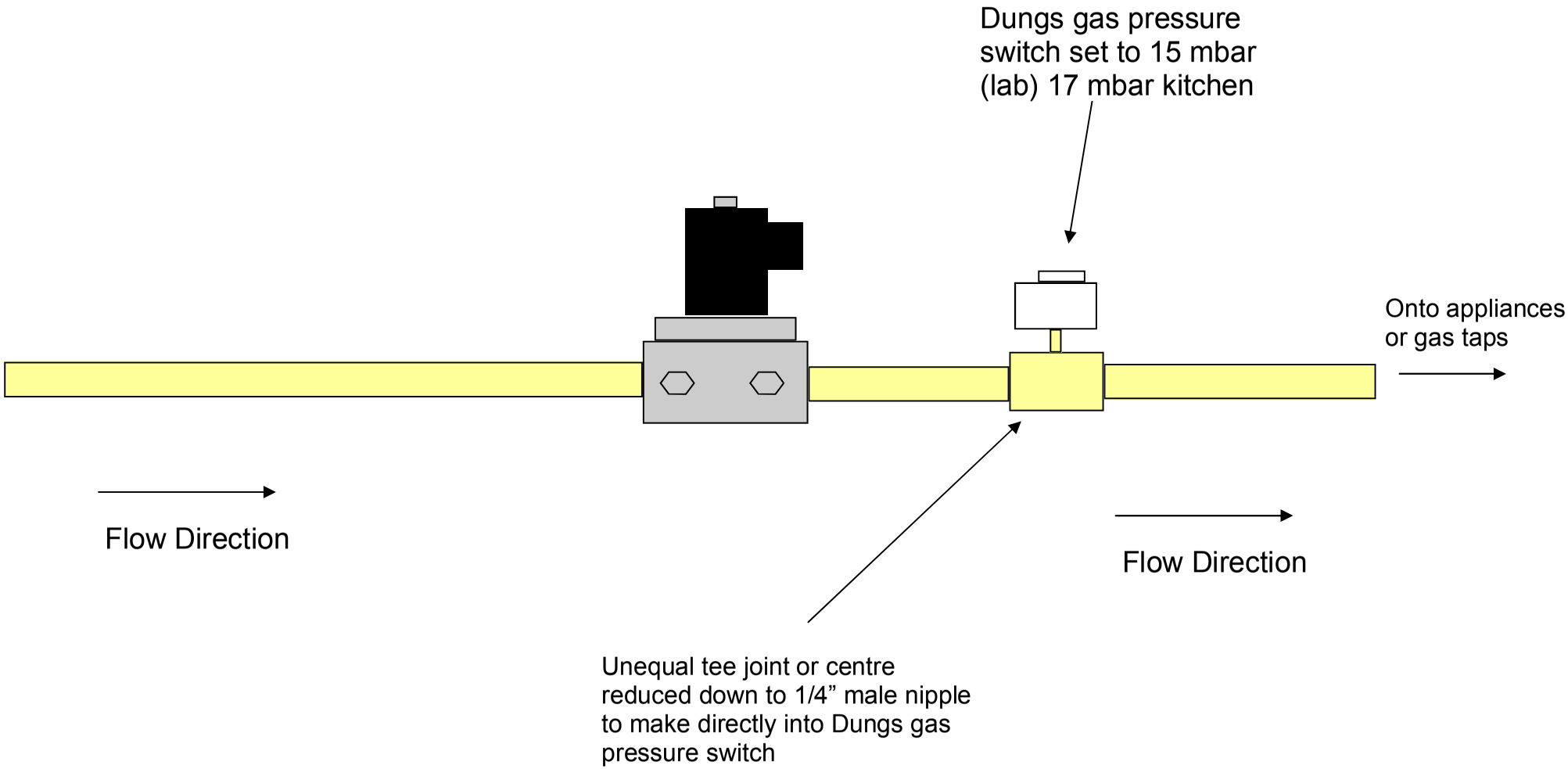
To fire alarm panel, connect to fire alarm aux fire relay common and normally closed

To emergency stop button, use terminals 1 & 2 in button (normally closed)

To gas pressure switch mounted on pipe work down stream of solenoid valve use terminals 2 & 3 (make on pressure rise)**

All interlock channels are normally closed and carry 24vdc
** not used on EGI-1 installation

Intelligas gas proving system mechanical layout (lab & kitchen)



To comply with gas regulations manual isolation points, purge points and test nipples may be required. This drawing is for information only and the necessity of the above items should be checked to ensure compliance with the current regulations.

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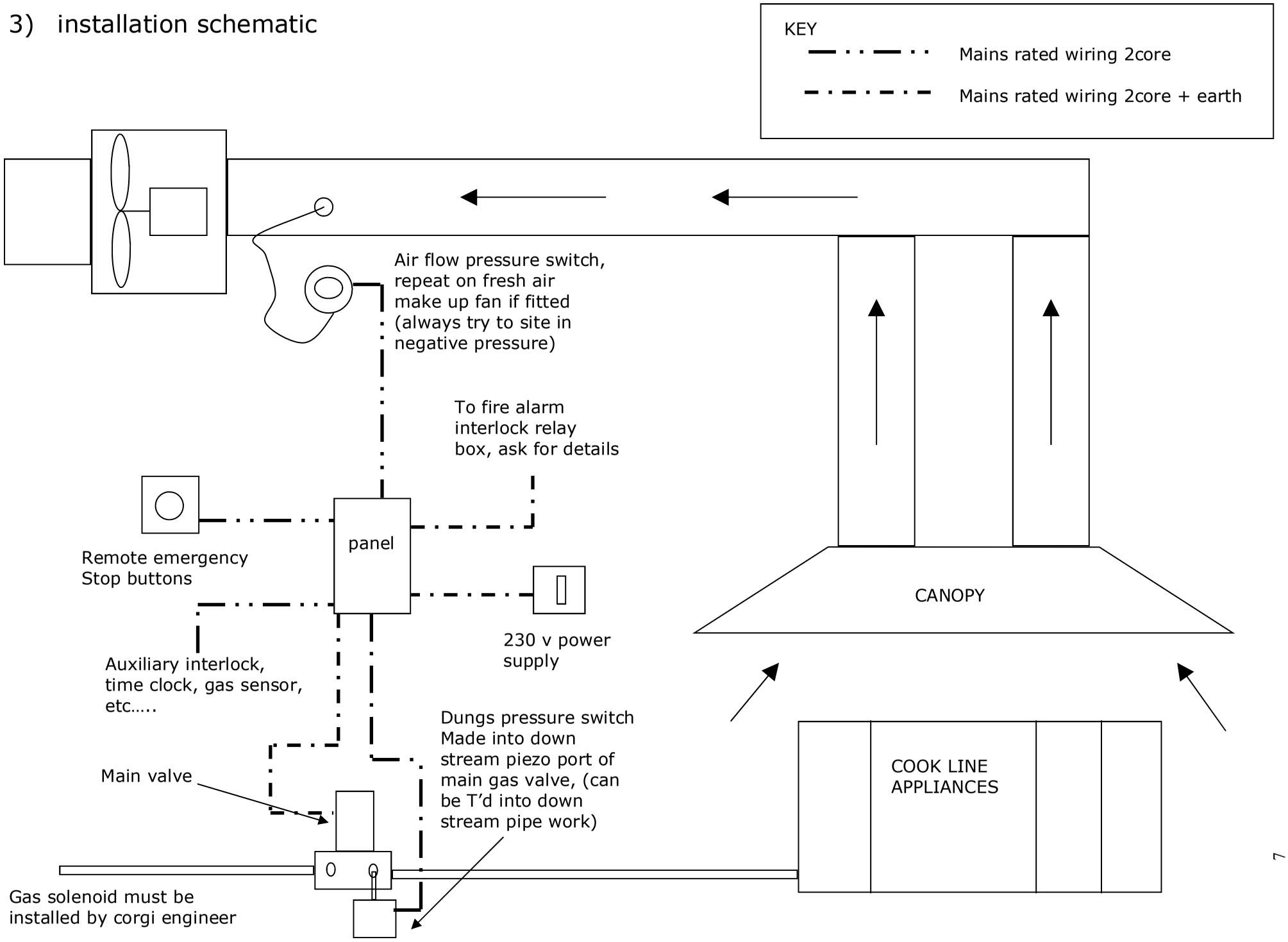
Gas safety & control systems

3) installation schematic



Commissioning

Double check all terminations have been made and checked for tightness, check all peripheral equipment such as emergency stops, pressure switches and gas valve are connected and the covers are in place.

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 10 seconds each time until it makes again (use a test meter across terminals 2 & 3 to check continuity) once the switch makes turn the setting down a further 10 pascals to ensure anti flutter. Repeat this procedure for each pressure switch installed. Replace all covers!

Once the pressure switches have been set apply the power and continue to the next stage of commissioning.

Check all fans are running and the emergency stops are all reset, the control panel should now display bottom led red. Disconnect the unit from the mains.

Now the Dungs pressure switch needs to be set up, assuming the gas pipe and meter are correctly sized the standing pressure should be 21mbar (natural gas) or 37mbar (LPG). The pressure switch should be set to no more than 3mbar under the standing pressure or 1mbar under the measured pressure when the cook line is fully "on load"

Now the gas pressure switch has been commissioned and the covers replaced the system can be fully tested. Set the purge and prove times using the jumper links on the PCB, larger systems will require more time to purge and prove.

Re-apply the power, start all fans and reset all emergency stops, press the stop/reset button, the bottom led will be red, turn the keyswitch clockwise and allow to spring return, the system will now begin to auto prove the gas line, take notice of the led array for information about what the system is doing, if gas on is not shown after the sum of the set prove time and purge rime then check all down stream gas valves are shut and check what the panel is showing, its most likely to be purge failed—low gas pressure, restart the system by first pressing the stop / reset button and then turning the keyswitch, before contacting technical please ensure every effort has been made to pressurise the system).

THE KEY IS TO BE HANDED TO THE KITCHEN MANAGER AND NOT THE CHEF, IT IS THE KITCHEN MANAGERS RESPONSIBILITY TO ENSURE THE SAFETY OF THE GAS SYSTEM THERFORE HIS DUTY TO ARM AND RESET IF REQUIRED THE PROVING SYSTEM.