INTELLIGAS

Gas safety & control systems

100 CS CO2 Gas Ventilation Interlock System

INSTALLATION GUIDE

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.

24 hour technical support line - 02381 290444

intelligas.co.uk

Introduction

Thank you for choosing an Intelligas product. Please follow these instructions to ensure a safe, functional and long-lasting installation.

This information is important and should be read and understood before attempting installation.

If you are unsure of the terminations and their design voltages or function then refer to this guide or our technical support line, you can call 02381 290444 or you can text 07952269791 and we'll get back to you as soon as we're available.

Siting the panel

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.

Under no circumstances should wiring be routed behind the PCB of the control panel.

Control panel supply

All our control panels (except the KVM-SF) should be supplied via a fused spur connection unit. The fuse should be changed to one that's rated at 5amps.

KVM-SF ONLY if the panel is supplying the fans directly from the PCB then it should be supplied via a 16amp single phase isolator. If the panel is controlling Inverters and only the output signals are being used then, as above, the panel should be supplied by a 5amp fused spur.

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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.

The field wiring voltage to the interlock inputs is reduced to 24 volts, do not connect mains to the air pressure switch terminals, e-stop, analogue input/output 0-10v control, gas detector or fire alarm terminals.

Please follow the first fix wiring schedule set out below:

1) Main supply 2 core + E 1.5mm (as per regulatory requirements)
2) Gas valve 2 core + E 1.5mm (as per regulatory requirements)
3) Pressure switches 2 core + E 1.5mm (YY type cable)
4) Fire alarm interlock (if req) 2 core + E 1.5mm (FP type cable)
5) Emergency stops 2 core + E 1.5mm (YY type cable)
6) Gas detection equipment, If fitted, 3 core screened (CY type cable)
7) Gas pressure switch, if fitted, 2 core + E 1.0mm (YY type cable)
8) 0-10v signal wiring, if fitted, 2 core 1.0mm (CY type cable)

Where multiple supplies enter a control panel, perhaps in a current sensing interlock. It is preferable that each supply is on the same phase. If this can't be achieved, then additional warning labels should fixed in a suitable location on the control panel.

The advice given on these instruction pages, specifically to cable types and ratings may change depending on cable lengths and installation conditions. If you are not sure about any of the cable types or ratings then contact our technical support team.

Supply to the gas valve.

Ensure there is a local point of isolation for the gas valve.

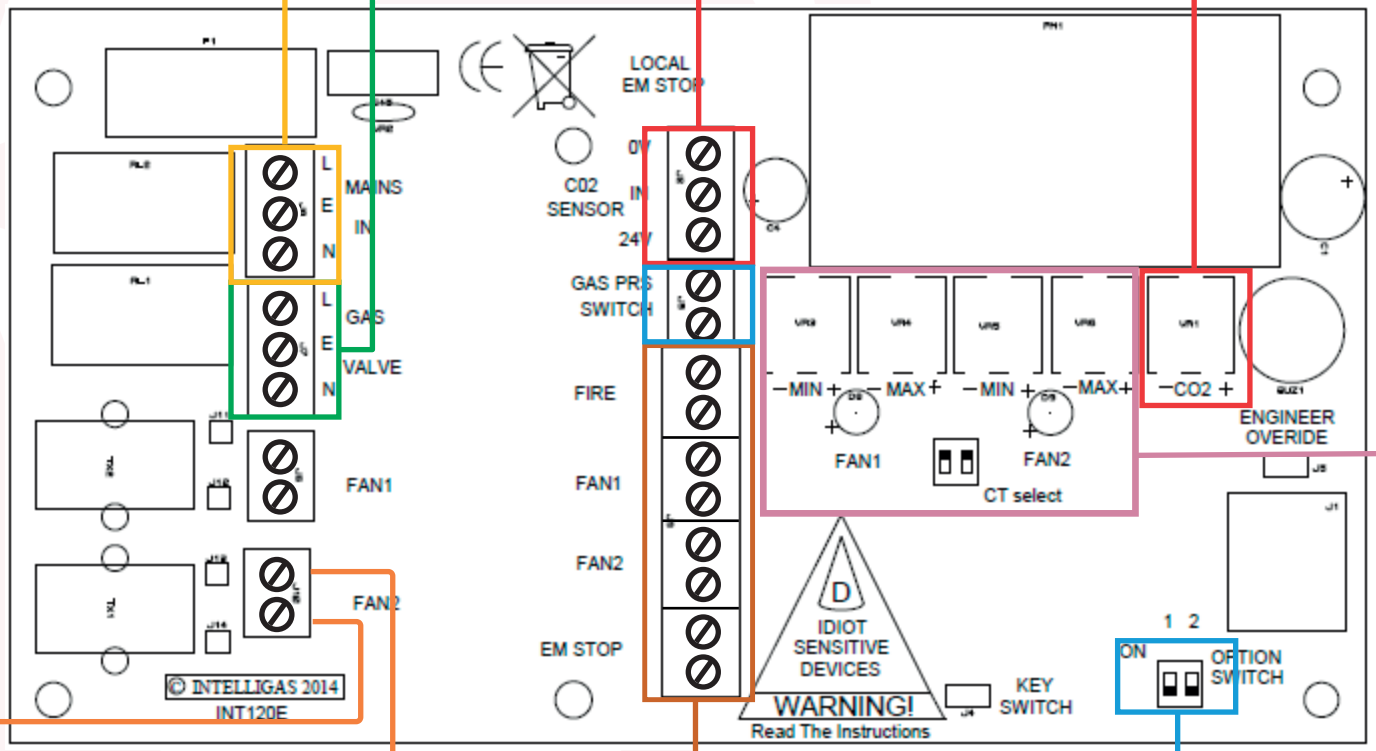
Connect the CO2 detector into these terminal as set out below:

24V - AC/DC + | 0v - AC/DC - | in - Vco2

Commission the CO2 detector using the pot marked CO2. If the pot is turned fully anti clockwise, the CO2 function of the panel will be disabled, however, when a co2 detector is connected the alarm level should be set on this pot setting the pot at 12 o'clock will be an alarm point of 2500ppm. 9 o'clock is 400oppm and so on. Pre alarm is set to 60% of the alarm setting.

Mains supply in to the unit (230v).

This supply should be derived from a fused spur fitted with a 3amp fuse.



Set the fan current levels using the pots on the PCB for each fan. Run the fan at minimum speed to set the low limit and at full speed to set the high limit. Once the setting is in range then the green LED will illuminate

NB: If only one fan is being used then the other current sensor must be disabled by turning the unused current sensor to "on" or "disable" using the dip switch on the PCB.

Interrupt the phase conductor from the spur to the fan speed controller and divert the supply through the on-board current sensor.

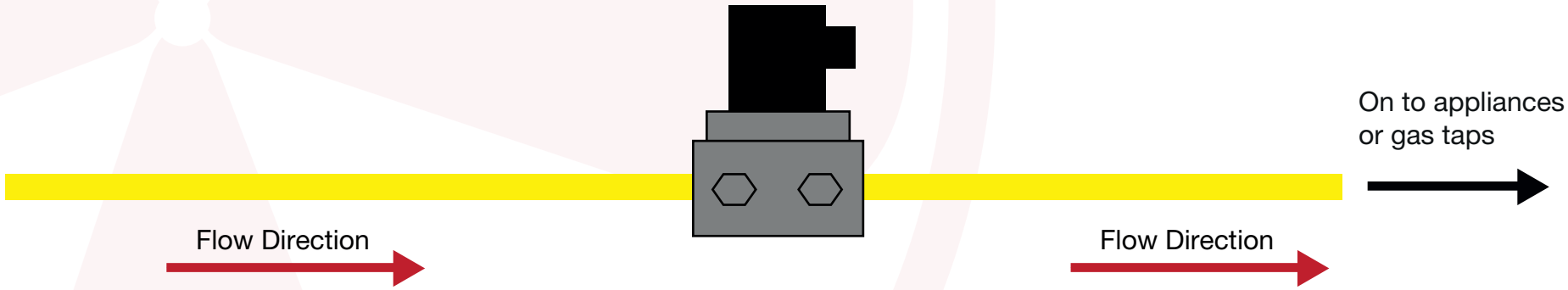
Do not divert supplies out of any speed controller, it won't work!

These terminals can be used to connect extra current sensors or pressure switches to indicate fan faults on the front of the panel. Estops and Fire signals can also be connected here. Link if not in use.

Option switches - switch 1 turns on / off gas proving function of the panel, link the terminal marked "gas proving switch or switch a" regardless of whether gas proving is in use. Switch 2 extends the gas proving time from 30 seconds to 60 seconds. Gas pressure switch is required for the gas proving function.

Intelligas gas proving system mechanical layout

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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