INTELLIGAS

Gas safety & control systems

EGIP GAS PRESSURE PROVING SYSTEM WITH VENTILATION INTERLOCK

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.

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.

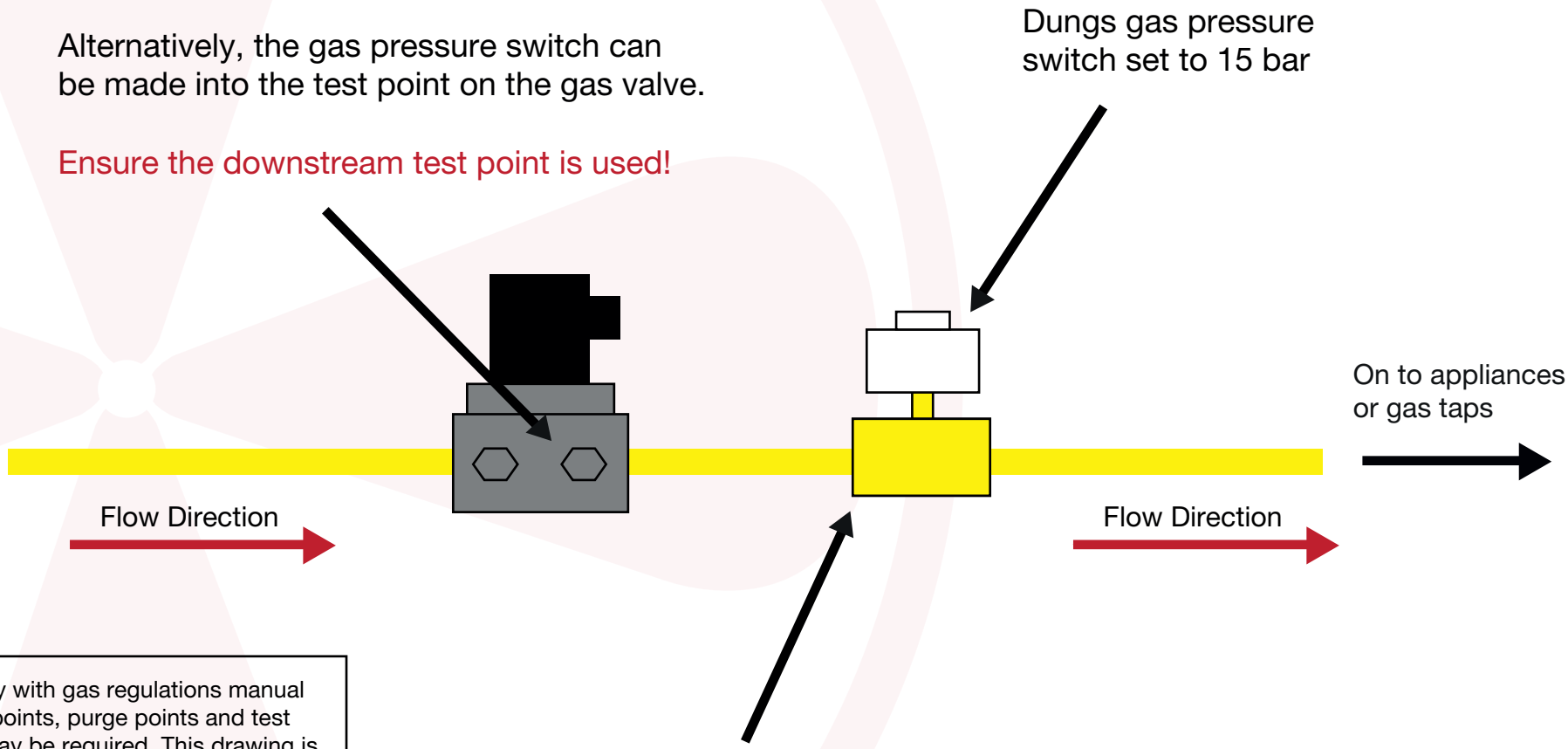
The advice given on these instruction pages, specifically to cable types and ratings may change depending on cable lengths and installation conditions. If you are not sure about any of the cable types or ratings then contact our technical support team.

Intelligas gas proving system mechanical layout

Installation option 1

Alternatively, the gas pressure switch can be made into the test point on the gas valve.

Ensure the downstream test point is used!



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.

Installation option 2

Unequal tee joint or centre reduced down to 1/4” male nipple to make directly into Dungs gas pressure switch

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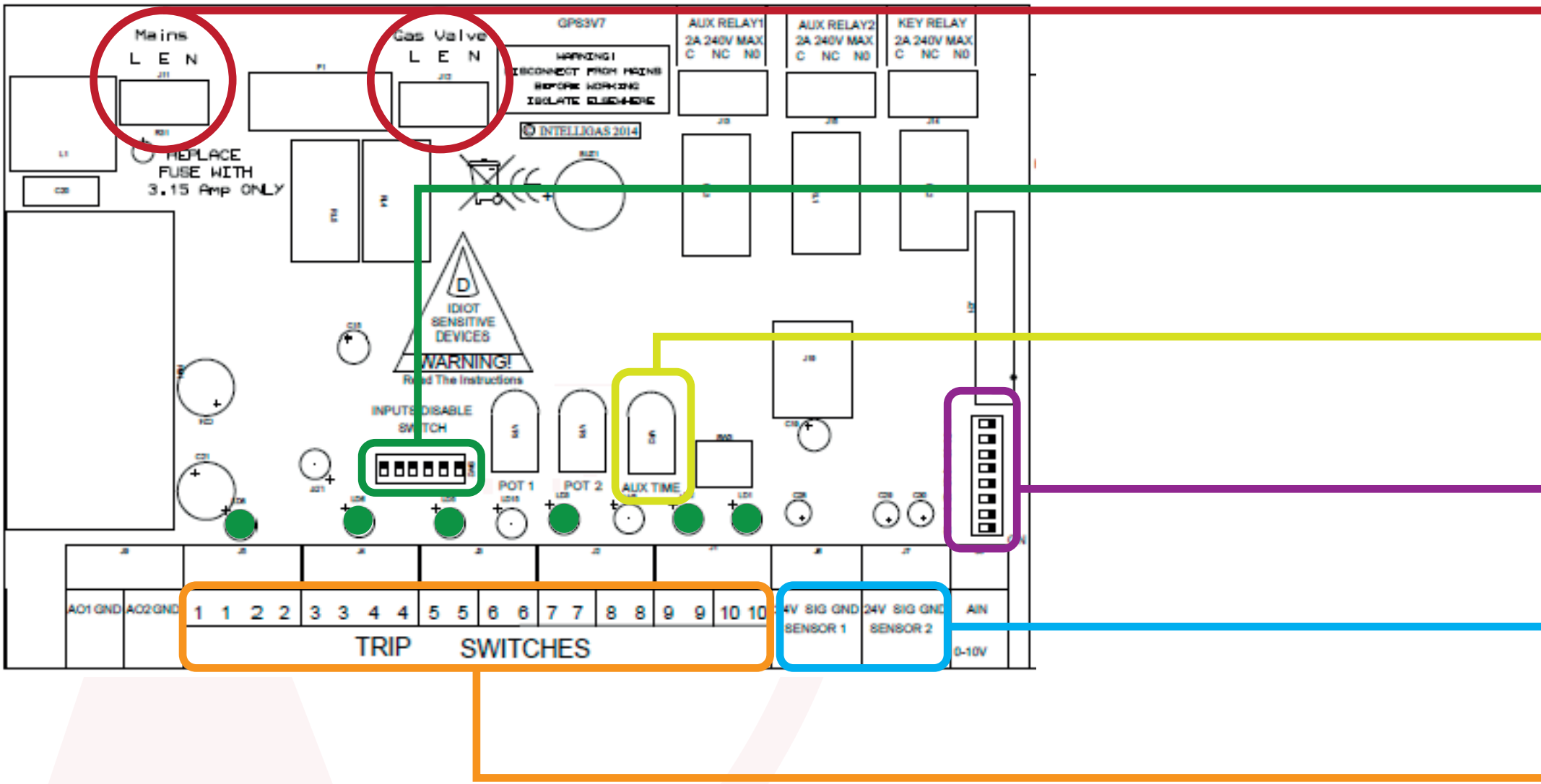

SEE NEXT PAGE FOR DETAILED INFORMATION

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Live, earth and neutral supply and gas valve output. Only connect a gas valve to the output. No other current consuming device may be connected. supply requirements:-

5A 230v 1Ph 50hz

Peripheral items connections

Gas pressure switch

Use terminals 2 & 3
(make on pressure rise)

Air pressure switch / current sensor

Use terminals 2 & 3 on an APS or Com and N/o on a fan current sensor

Inputs disable switches

Use these dip switches to by pass the interlock inputs, the switches override the interlocks as follows:-

1 Emergency stop
2 Fire alarm
3 Auxiliary interlock
4 Extract Fan
5 Supply fan
6 Gas pressure switch

These switches are designed to enable fast wiring and are not for use to bypass safety features that are in use.

The LED's above the interlocks will illuminate to show a "closed circuit" or "satisfied interlock"

This pot enables a delay timer to be set on the auxiliary interlock.

The deflection of the pot is 0 (immediate) up to 5 mins (maximum delay)

Gas sensor input terminals.

Use 24v and gnd to power the sensor and connect sig to the 0-10v output terminal of the sensor head.

Use pot 1 & 2 to set trip level.

Interlock input terminals (all these inputs need to be closed to be satisfied

1,1 & 2,2 are emergency stop connections
3,3 & 4,4 are fire alarm connections
5,5 Auxiliary interlock connections
6,6 Extract fan pressure switch / current sensor input
8,8 Supply fan pressure switch / current sensor input
10,10 gas pressure switch input for gas proving

Terminals 7,7 & 9,9 are early warning terminals when using twin airflow pressure switches, contact technical for advice if you want to use this feature. Do not link these terminals.

All Intelligas products are designed to be as flexible and adaptable as possible. We realise that site conditions can vary, even temporarily. These switches can turn certain parts of the software on and off and therefore should be used carefully. Below is a list of what the switches do.

Switch 1 on - gas purge time 6 seconds
Switch 1 off - gas purge time 3 seconds
Switch 2 on - gas prove time 60 seconds
Switch 2 off - gas prove time 30 seconds
Switch 3 On - purge and prove time extended (doubled)
Switch 3 off - purge and prove times as selected on switch 1 & 2
Switch 4 on - gas sensing on
Switch 4 off - gas sensing off
Switch 5 on - 2 x detection inputs are used
Switch 5 off - 1 x detection inputs are used
Switch 6 - spare
Switch 7 on - CO2 fan control 0-10v on (AO2)
Switch 7 off - 10v on start 0v on off (AO2)
Switch 8 0n - BB100 function off (normal)
Switch 8 off - BB100 function on