

***VariSense the Intelligent answer***



## ***VariSense models 01/02/03***

***GAS SUPPLY CONTROL with  
MULTI FUNCTION SOLUTIONS***

***OPERATOR'S MANUAL***

# **VariSense** *the Intelligent answer*

## **Product Overview**

The VariSense system is designed to meet the current requirements of IGEM/UP/2 revision 2 and IGEM/UP/11 revision 2.

### **VariSense**

### Plant Room and Boiler House Gas Safety Interlock

## **Contents**

1. How does my VariSense unit work?
2. How do I start my VariSense?
3. How do I stop my VariSense?
4. What do I do if my VariSense does not operate?
5. What do I do if my VariSense goes into an alarm?
6. Do I have any form of override?
7. VariSense facia details
8. Fault finding and alarm codes
9. System Display

### **1. How does my VariSense unit work?**

Your VariSense unit is designed to help ensure that your plant room or boiler house equipment is operating safely and in accordance with current regulations.

The VariSense is operated via an easy wipe clean touch pad and LED indicator arrangement or has an operator free auto start option. See section 6.

### **2. How do I start my VariSense?**

Press the START pad on the VariSense unit. The VariSense will carry out a number of system checks. If all checks are clear the gas valve output will switch on and open the gas valve.

If during the start up sequence the VariSense goes into an alarm mode, please refer to section 5.

### **3. How do I stop my VariSense?**

Press the STOP pad on the VariSense unit. The gas valve output will switch off and the gas valve will close, isolating the gas supply to your appliances.

### **4. What do I do if my VariSense does not operate?**

If when you press the START pad, your VariSense does not operate,

- 1 Ensure you have power to the unit; is the power ON LED lit?
- 2 If not, have your supply to the unit checked by an electrician.
- 3 If power is on to the unit, refer to section 7 of this manual for further instructions.

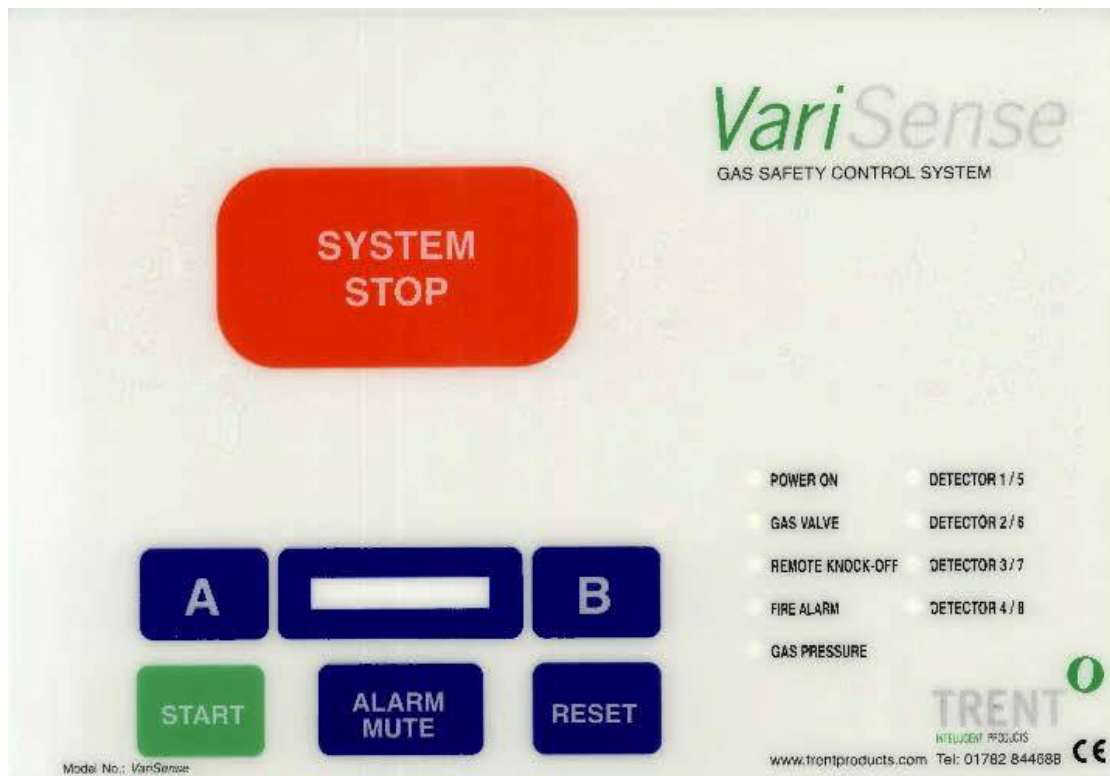
# VariSense the Intelligent answer

## 5. What do I do if my VariSense goes into an alarm?

If when you press the START pad or during its operation, the VariSense goes into an alarm mode and the audible alarm buzzer sounds.

- 1 Press the ALARM MUTE pad and the audible alarm will stop. *(Note: 1.1)*
- 2 Identify the LEDs which are flashing and refer to section 8 of this manual for further instructions.

## 6. VariSense facia details





**Notes:** 1.1 Alarm Mute, if the cause of the alarm is not cleared or the alarm has not been responded to, the audible alarm will re-sound.

## 7. Fault finding and Alarm Codes










In the event that your VariSense has not operated or has gone into an alarm mode, the following has been designed to help you identify your problem and offer a course of action for you to take.

**Fault finding** Only to be carried out by a qualified engineer

<b>Fault</b>	<b>Possible cause</b>	<b>Action</b>
No Power On LED	a. No power to the unit	Check power supply to unit is switched on. Contact a qualified electrician.
Gas valve output LED is red and gas valve is closed	a. The unit is in an alarm mode	Check for any flashing LEDs and look-up in alarm codes in section 8.
	b. Start pad has not been pressed	Press  pad and press  pad again.
	c. None of the above	Call for further assistance
Gas valve output LED is green and gas valve is closed	a. No power to gas valve	Contact a qualified electrician.
Gas valve open but no gas at appliance	b. Gas valve not operational	Contact a qualified electrician.
	a. Gas supply has been isolated or is blocked	
	b. No gas pressure	Responsible person to check gas isolation valves.










## 8. Alarm Codes and System Display

### 9.1 - SYSTEM STOPPED

	POWER ON		DETECTOR 1 / 5
	GAS VALVE		DETECTOR 2 / 6
	REMOTE KNOCK OFF		DETECTOR 3 / 7 (if required)
	FIRE ALARM		DETECTOR 4 / 8 (if required)
	GAS PRESSURE		










Cause: - The system has been stopped  
Solution: - Press "Start" key to begin startup sequence

### 9.2 - FIRE ALARM

	POWER ON		DETECTOR 1 / 5
	GAS VALVE		DETECTOR 2 / 6
	REMOTE KNOCK OFF		DETECTOR 3 / 7 (if required)
	FIRE ALARM / THERMAL		DETECTOR 4 / 8 (if required)
	GAS PRESSURE		










Cause: - The link between terminals 9 and 10 has been broken by either the fire alarm being activated or a thermal link has been broken. The gas valve output will be deactivated.  
Solution: - Ensure fire alarm is not activated. Check thermal links have not been broken. The system must be reset by pressing "STOP" before it can be restarted.

### 9.3 - KNOCK OFF BUTTON

	POWER ON		DETECTOR 1 / 5
	GAS VALVE		DETECTOR 2 / 6
	REMOTE KNOCK OFF		DETECTOR 3 / 7 (if required)
	FIRE ALARM / THERMAL		DETECTOR 4 / 8 (if required)
	GAS PRESSURE		

Cause: - The link between terminals 11 and 12 has been broken (knock off pressed). The gas valve output will be deactivated.  
Solution: - Ensure remote knock off button has been released. Check wiring to remote knock-off button. The system must be reset by pressing "STOP" before it can be restarted.










## 9.4 - DETECTOR FAULT

	POWER ON		DETECTOR 1 / 5
	GAS VALVE		DETECTOR 2 / 6
	REMOTE KNOCK OFF		DETECTOR 3 / 7 (if required)
	FIRE ALARM / THERMAL		DETECTOR 4 / 8 (if required)
	GAS PRESSURE		

Cause: - One or more of the detectors have reached the switch output setpoint. The gas valve output will be deactivated.

Solution: - Carry out necessary precautions and contact a qualified engineer to investigate.

## 9.5 - GAS PRESSURE FAULT

	POWER ON		DETECTOR 1 / 5
	GAS VALVE		DETECTOR 2 / 6
	REMOTE KNOCK OFF		DETECTOR 3 / 7 (if required)
	FIRE ALARM		DETECTOR 4 / 8 (if required)
	GAS PRESSURE		

Cause: - The system has failed its gas pressure test.

Solution: - Ensure all gas appliances are off. Check gas pressure. Check wiring to gas pressure sensor. The system must be reset by pressing "STOP" before it can be restarted.

**If the above does not solve your problem, contact Trent Products.**

**Notes:**

[illegible]

## ***VariSense the Intelligent answer***

FOR FURTHER TECHNICAL ASSISTANCE, PLEASE CONTACT US BY

Phone: 01782 844688

Fax: 01782 844772

E-mail: [info@trentproducts.com](mailto:info@trentproducts.com)

Web site: [www.trentproducts.com](http://www.trentproducts.com)

- Note:
- i) Ensure that the electrical installation has been installed in accordance with the current edition of the IEE regulations.
  - ii) Ensure that the gas installation has been installed in accordance with the current gas regulations (GAS SAFE).
  - iii) If in doubt, ask! (contact us on or by any of the above).
  - iv) Ensure that the client has been shown how to operate the system and that they have been handed the user guide.

**TRENT PRODUCTS**  
Trent House  
Dewsbury Road  
Fenton  
Stoke-on-Trent  
Tel: 01782 844688 Fax: 01782 844772