CaterSense V2

GAS SUPPLY CONTROL with MULTI FUNCTION SOLUTIONS

OPERATOR'S MANUAL

CaterSense the Intelligent answer

Product Overview

The CaterSense system is based on a range of products and ancillary equipment designed to meet the ever changing requirements of the catering industry and associated regulations.

CaterSense V2 Multi Function intelligent controller

Contents

1. How does my CaterSense unit work?

Your CaterSense unit is designed to ensure that your kitchen ventilation system is operational and maintaining the design system air flow rates for your kitchen, before your gas supply is enabled to your cooking appliances.

The CaterSense is operated via an easy wipe clean touch pad and LED indicator arrangement as indicated in section 7.

2. How do I start my CaterSense?

Press the START RESET / GPT pad on the CaterSense unit. The CaterSense will start your ventilation system, and carry out a number of system checks. If all checks are clear the gas valve output will switch on after 1 minute and open the gas valve and supply to your cooking appliances.

On certain models, the speeds of the fans can be adjusted using the A◄ and ►B pads on the facia. Both fans will go up and down together at a pre-determined ratio.

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

3. How do I stop my CaterSense?

Press the SYSTEM STOP GAS SHUT OFF pad on the CaterSense unit. The gas valve output will switch off and the gas valve will close, isolating the gas supply to your appliances. The fans will also stop unless there is a gas fired / electric heater battery connected, then the fans will continue to run for a further 5 minutes.

NOTE: Always ensure that all appliances have been switched off and taps closed.

4. What do I do if my CaterSense does not operate?

If when you press the START RESET / GPT pad your CaterSense does not operate,

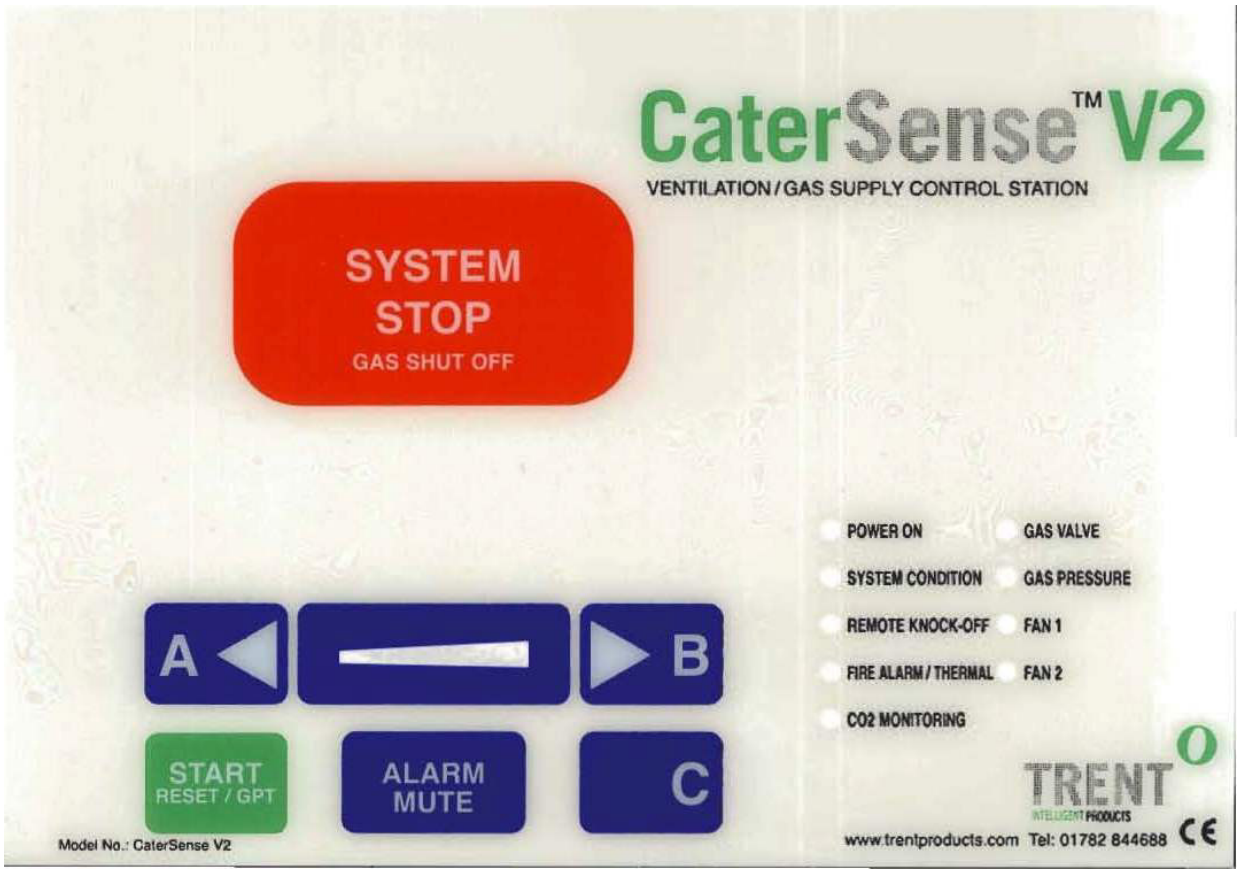
1 Ensure that your kitchen canopy ventilation system is operational.
2 Ensure you have power to the unit; is the “POWER ON” LED illuminated? If not, have your supply to the unit checked by an electrician.
3 If power is on to the unit, refer to section 7 (Fault finding and alarm codes) of this manual for further instructions.

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

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

1 Press the ALARM MUTE pad and the audible alarm will stop. *Please note if the cause of the alarm is not cleared or the alarm has not been responded to, the audible alarm will re-sound.*
2 Identify the LEDs which are flashing and refer to section 9 of this manual for further instructions.

6. CaterSense facia details



7. Fault finding and Alarm Codes

In the event that your CaterSense 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

Fault		Possible cause	Action
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 SYSTEM STOP GAS SHUT OFF pad and press START RESET / GPT 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.
	b.	Gas valve not operational	Contact a qualified electrician.
Gas valve open but no gas at appliance	a.	Gas supply has been isolated or is blocked	Responsible person to check gas isolation valves.
	b.	No gas pressure	Contact a GAS SAFE engineer to check gas supply.
CO2 levels within the catering environment	a.	 CO2 MONITORING The CO2 level has reached between 2800 - 3799PPM	Warning Stage: In this stage attempt to reduce the CO2 level by – increasing the fan speed, opening windows etc.
	b.	 CO2 MONITORING The CO2 level has reached between 3800 - 4799PPM	Alarm Stage: Ensure the catering area is well ventilated by opening all windows and doors. It also be necessary to reduce the cooking load and introduce portable fans.
	c.	 CO2 MONITORING The CO2 level has reached between 4800 - 4949 PPM	Shutdown Stage: The CO2 level has now reached the maximum safe levels and gas supply to the appliances has will be closed after 5 minutes.
	d.	 CO2 MONITORING The CO2 level has reached between +4950 PPM	Instant shutdown Stage: The CO2 level has now surpassed the maximum safe levels and gas supply to the appliances has been closed.

WARNING: If this system is controlling a low pressure hot water tempered air system, DO NOT SWITCH OFF. Doing so may increase risk of the heater battery coil freezing up in cold weather.

8. Alarm Codes and System Display

8.1 - SYSTEM STOPPED

●	POWER ON	●	GAS VALVE
●	SYSTEM CONDITION	○	GAS PRESSURE
●	REMOTE KNOCK OFF	○	FAN 1
●	FIRE ALARM / THERMAL	○	FAN 2
○	CO2 MONITORING		

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

8.2 - FIRE ALARM

●	POWER ON	●	GAS VALVE
●	SYSTEM CONDITION	○	GAS PRESSURE
●	REMOTE KNOCK OFF	○	FAN 1
✸	FIRE ALARM / THERMAL	○	FAN 2
○	CO2 MONITORING		

Cause: - The link between terminals 9 and 10 has been broken by either the fire alarm being activated, a LPHW heater battery the capillary fan hold off stat has been activated or a fan thermal cut out has been activated. The fan and gas valve outputs will be deactivated
Solution: - Ensure fire alarm is not activated. Check wiring to fire alarm Interface panel. Check that there is hot water available for the heater battery. Check if the thermal link has been broken. The system must be reset by pressing "STOP" before it can be restarted.

8.3 - KNOCK OFF BUTTON

●	POWER ON	●	GAS VALVE
●	SYSTEM CONDITION	○	GAS PRESSURE
✸	REMOTE KNOCK OFF	●	FAN 1
●	FIRE ALARM / THERMAL	●	FAN 2
○	CO2 MONITORING		

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(s) has been released. The system must be reset by pressing "STOP" before it can be restarted.

8.4 - FAN UNDERCURRENT

●	POWER ON	●	GAS VALVE
●	SYSTEM CONDITION	○	GAS PRESSURE
●	REMOTE KNOCK OFF	●	FAN 1 *or* FAN 2
●	FIRE ALARM / THERMAL		
○	CO2 MONITORING		

Cause: - The indicated fan is drawing less current than the minimum current established during commissioning.

Solution: - Contact a qualified electrician to establish that the fan(s) are working correctly. Check that regular maintenance has been carried out e.g. filters have been cleaned, ductwork has been cleaned etc. The system must be reset by pressing "STOP" before it can be restarted.

8.5 - FAN OVERCURRENT

●	POWER ON	●	GAS VALVE
●	SYSTEM CONDITION	○	GAS PRESSURE
●	REMOTE KNOCK OFF	✸	FAN 1 or FAN 2
●	FIRE ALARM / THERMAL		
○	CO2 MONITORING		

Cause: - The indicated fan is drawing more current than the maximum current established during commissioning.

Solution: - Contact a qualified electrician to establish that the fan(s) are working correctly. Check that regular maintenance has been carried out e.g. filters have been cleaned, ductwork has been cleaned etc. The system must be reset by pressing "STOP" before it can be restarted.

8.6 - GAS PRESSURE FAULT 1

●	POWER ON	●	GAS VALVE
●	SYSTEM CONDITION	●	GAS PRESSURE
●	REMOTE KNOCK OFF	○	FAN 1
●	FIRE ALARM / THERMAL	○	FAN 2
○	CO2 MONITORING		

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

Solution: - Ensure all gas appliances are off. Responsible person to check gas supply isolation valve(s). Contact GAS SAFE engineer to check gas supply. The system must be reset by pressing "STOP" before it can be restarted.

8.7 - GAS PRESSURE FAULT 2

●	POWER ON	●	GAS VALVE
●	SYSTEM CONDITION	✸	GAS PRESSURE
●	REMOTE KNOCK OFF	○	FAN 1
●	FIRE ALARM / THERMAL	○	FAN 2
○	CO2 MONITORING		

Cause: - The gas pressure has dropped below 12mbar during normal running.
Solution: - Ensure all gas appliances are off. Contact GAS SAFE engineer to check gas supply. The system must be reset by pressing "STOP" before it can be restarted.

8.8 - HIGH LEVELS OF CO2

●	POWER ON	●	GAS VALVE
●	SYSTEM CONDITION	○	GAS PRESSURE
●	REMOTE KNOCK OFF	●	FAN 1
●	FIRE ALARM / THERMAL	●	FAN 2
✸	CO2 MONITORING		

Cause: - The system has detected that the CO2 levels within the kitchen environment are too high.
Solutions: - Please see page 4 for further information.

8.9 - MEMORY ERROR

●	POWER ON	●	GAS VALVE
●	SYSTEM CONDITION	○	GAS PRESSURE
●	REMOTE KNOCK OFF	○	FAN 1
●	FIRE ALARM / THERMAL	○	FAN 2
○	CO2 MONITORING		

Cause: - The system has failed the test of its internal memory (tested at power on).
Solution: - The system must be recommissioned to store new values into the memory. Please contact a competent person and consult your installation manual.

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

FOR FURTHER TECHNICAL ASSISTANCE, PLEASE CONTACT US BY

Phone: 01782 844688

Fax: 01782 844772

E-mail: info@trentproducts.com

Web site: 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 operators manual.

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