Model: **AGSCT1500S**
Technical Specification She
2015

Merlin Gas Ventilation & CO Interlock

Key Features

- True ventilation interlock.
- Protects kitchen employees from exposure to harmful gases.
- Interlock up to 4 fans.
- Clear LED status display.
- Key lock for authority control.
- Interlock up to 6 Carbon Monoxide Detectors (CO)
- Built-in connectivity to existing BAS and fire alarms
- Additional external gas detection sensors available.

Overview

The Merlin CT1500S is a true ventilation interlock. The unit will only allow gas to be supplied to the appliances once the fans have been proven to be operational. Long term exposure to low levels of CO, CO^2 and other harmful gases generated by the combustion process have been proven to cause serious ailments. The Merlin CT1500S does not allow the combustion of gas to occur unless the environment is sufficiently ventilated. Gas control is via an electric solenoid valve. The Merlin CT1500S can interlock up to 4 fans via air pressure differential switches or through a current monitor. The PM2 current monitor allows the fan speed to be calibrated on site to match environmental circumstances. The minimum required fan speed can be easily set to lock in a pre-determined exhaust and make up requirement. Once the gas is supplied the Merlin CT1500S will monitor the fans. If a fan fault occurs, the unit will warn the end user with flashing LED's for 20 seconds before going into fan fault mode. In fan fault mode the unit will display a red LED display, signal an audible alarm and close the gas solenoid valve. Once the fan fault has been investigate and remedied, the unit can be re-set using the authorization key. The Merlin CT1500S can act as a standalone CO Carbon Monoxide Interlock, capable of connecting up to Six separate detectors to protect the kitchen employees from harmful levels of CO. A clearly labelled PCB board and detachable wiring connections ease installation and make the unit perfect for renovation work and new build alike. Built in connectivity is available for existing fire alarms and comes with an advisory output for High CO Detection. Remote emergency stop buttons can be added along with optional gas detection sensors to compliment the safety of the Kitchen.

Application

- Restaurants
- Care Facilities
- School and College Kitchens

- Interlock for appliances with flame failure devices already fitted.
- Automatic isolation of the gas supply upon EM stop or gas detection.
- Provides safe environment for kitchen employees.

Merlin Gas Ventilation & CO Interlock

AMERICAN GAS SAFETY

Technical Specifications

Power supply – 100-120vac 50/60HZ

Protection – Overvoltage, overcurrent, surge protection (3amp)

Enclosure – Wall mounted Fully UL certified enclosure. Flush Mount kit available.

Dimensions – W255 x H180 x D77 mm (10x7x3in)

Gas Solenoid Control Signal Output – 100/240VAC 50/60HZ

BAS Advisory Output - N/c, Com, N/o Max 1A @ 120VAC

EM Stop Input – Volt Free*

Fan Switch Output – Volt Free*

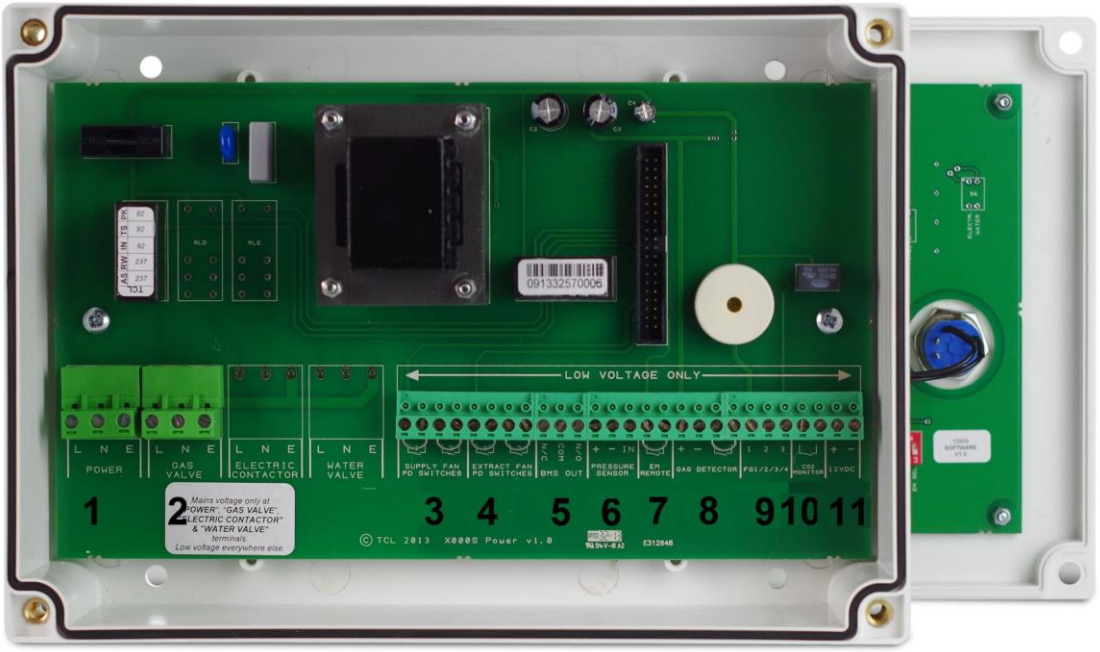
Sensor Power Output – 24VDC
Sensor Signal Input – Volt Free*

CO^2 Monitor Signal Input – Volt Free*

Adjustable Time-out period – 2hr, 4hr or 8hr or disabled

Adjustable BAS Signal Output – Gas Detected “on” or Gas “on” / Gas “off”

*Volt Free. Do Not connect any device which generates a separate source of voltage on this circuit. Any voltage applied to these connections will damage the microcontroller.



1. Mains Supply Input, Single phase 100/240VAC 50/60HZ
2. Gas Solenoid Valve Power Output, Single phase 100/240VAC 50/60HZ
3. Make-Up Air Fan pressure switch or current monitor connection. (see user manual)
4. Exhaust Fan pressure switch or current monitor connection. (see user manual)
5. BAS Output Contacts. Common, Normally Closed and Normally Open low voltage relay.
6. N/A
7. Remote Emergency Stop Button and Fire Alarm input (wired in series) Volt Free
8. Gas Detector (Nat Gas, CO, CO^2, LPG or NOX) power supply and returned signal.
9. N/A
10. CO^2 Monitor Signal Return
11. Permanent 12vdc output. Powers PM2 current monitor.