AGS Merlin 2000X Datasheet

Gas Ventilation Interlock, Emergency Shutdown & Gas Leak Detection

UL 61010 Listed Controller

Clear LEDs Display System Indications

Keyed ON/OFF Authority Over Utilities

BMS & Fire Panel Connectivity

Interlock With Up To 4 Fans

Automatic Emergency Utility Shutdown In Alarm

Front Mounted Panic Button For Quick Shutdown

Protects kitchen employees from exposure to harmful gases
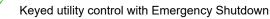
Product Overview

The Merlin 2000X has the unique gas pressure proving technology which ensures there are no open kitchen appliances or gas leaks before gas can be introduced to the kitchen. The controller also monitors for high & low pressure on the mains incoming to the kitchen. Gas pressure proving can be used with appliances that have electrical ignition & flame failure devices fitted. Appliances with standing pilots are not compatible.

In addition, ventilation interlocking ensures the fans are running before gas can be introduced into the kitchen. This prevents the build-up of Carbon Monoxide that can be inhaled. The systems uses unique built in current monitors displaying the exact fan current, in order to interlock with the ventilation with precision accuracy.

The Merlin controller has a front mounted emergency shutdown button and has in-built connectivity for fire alarm & building management systems.

Popular Applications:

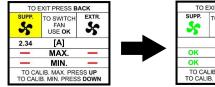✓ Keyed utility control with Emergency Shutdown

✓ Automatic Isolation Of Utilities Supply Upon Gas Detection, Fire Alarm or Emergency Panic Button Activation

✓ Designed specifically for Commercial Kitchens

✓ Carbon Monoxide Monitoring

In-Built Fan Current Monitor Overview

In-built configurable settings menu to configure the panel and calibrate fans with the 2000X controller.

Gas Proving Proving Overview:

The AGS Merlin pressure transducer is used with the AGS range of gas proving systems. This pressure transducer checks the gas pipe work for leaks every time the system is turned on.

In the event of a gas leak or a open appliance during the testing sequence, the transmitter will send a signal to the Merlin unit to isolate the gas solenoid valve.

Product Specifications

General	Installation
Model:	2000X
Visual Indication	LED Status Display / TFT Screen Inside For Fan Calibration
Mains Electrical Power Input	110-120VAC
Gas Solenoid Valve Output	110-120VAC
Current Consumption	4.7 W (Panel), 20W Max @ 120VAC
Internal Fuse	3.15A
Operating Temperature	32 – 122°F 30-85%RH Non-Condensing
Audible Alarm Buzzer dB	65 dB (300mm distance in quiet conditions)
Single Phase AC Current Monitor Calibration Range	0.1 - 18 Amps
Single Phase AC Current Monitor Display	0 - 22 Amps
Flame Rating	UL 94
Housing Material	Polylac PA-765
O/All Dimensions (H x W x D) mm / inch	7.08 x 10 x 3.03"
Pressure Sensor Operating Pressure	0-1.45psi

PCB Wiring Specifications

8. Pressure Sensor
9. Merlin Gas Detector
10. Merlin CO2 Monitor
11. 24Vdc Output

Sensor screwed to downstream port of gas valve

Fuse 3.15A

1. Power / Line In
2. Gas Solenoid Valve
3. Building Management System
4. Remote Emergency Stop
5. Fire panel
6. External Fan Current Sensors
7. Supply & Extract Live Fan Current Monitoring In/Out   Max 20A

Live
Neutral
Ground/Earth
Positive
Negative
Volt Free
High Voltage 100-240Vac

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