## KITCHEN EQUIPMENT





# CT1250

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#### Merlin CT1250

The Merlin CT1250 ventilation interlock system, with built in current monitoring, is designed specifically for use in commercial kitchens to meet **BS6173: 2001**, which is now a much-recognised standard in the catering industry.

This panel is to be used when the kitchen appliances <u>do</u> have flame failure devices, therefore Gas proving is not a requirement.

The Merlin CT1250 acts as an interlock between the ventilation system and the gas solenoid valve. The system has a built in power monitor which is a method used for interlocking a kitchens gas supply with the ventilation system. As an alternative to pressure differential switches the CT1250 is designed to monitor the electrical current going to a ventilation fan. When the fan is turned "on" the CT1250 monitors the electrical current going to the fan motor, when there is sufficient current going to the fan motor our panel receives a signal to indicate the fans are operating. Turning the key to the "on" position will open the gas solenoid valve. If the fans should fail, the "fan fault" LED on the panel will illuminate and the gas solenoid valve will close.

When there is a "fan fault" the supply fan or extract fan led on the Merlin CT1250 panel fascia will flash. This informs the electrician or kitchen staff which fan has failed.

Operating the system in the above manner will ensure the requirements of **BS6173**: 2001 are fully met where all the catering equipment has flame failure devices fitted. Installation for the Merlin CT1250 is easy as there is no calibration. Wiring of the system is straightforward using volt free connections for all BMS and remote emergency stops. A corgi-registered installer would be required to fit the gas solenoid valve. All panels and gas solenoid valves supplied by S&S Northern carry a full 3-year manufactures warranty.

### **Current Monitoring**

Calibration of the current monitor is easy, once wired set the fan speed controller to setting 1 (or low setting) for example.

Turn the blue rotary switches anti-clockwise until the green LED goes out, then slowly turn clockwise until the green LED is again illuminated. This will give you the minimum current requirement, if the fan is turned off the LED will go out, send a signal to the Merlin panel, which will in turn shut off the gas.

#### **Key features of the Merlin CT1250**

- Allows Compliance with BS6173: 2001 for commercial kitchens
- Clear LED display for system indications
- Complete all in one box
- Can be used when pressure differential switches cannot be used e.g. wall-mounted fans
- Reliable method of interlock, with no moving parts there's little to go wrong
- Straightforward to install and calibrate. The CT1250 can be easily adjusted to the users requirements
- This method is not recommended with belt driven fans
- Easy installation
- BMS Terminals Normally Closed or Normally open and common.
- Will accept remote emergency shut-off buttons
- Three year warranty
- All Merlin systems are designed to comply with the latest CE requirements and low voltage directives





#### Merlin CT1200S

The Merlin CT1200S ventilation interlock system is designed specifically for use in commercial kitchens to meet **BS6173: 2001**, which is now a much-recognised standard in the catering industry.

This panel is to be used when the kitchen appliances <u>do</u> have flame failure devices. Therefore Gas proving is not a requirement.

The Merlin CT1200S acts as an interlock between the ventilation system and the gas solenoid valve. It ensures the gas solenoid valve cannot be opened until the ventilation system is proven to be operating. The fans are monitored with air pressure differential switches. To operate the Merlin CT1200S the fans should be turned to

the "on" position, once our panel receives a signal to indicate the fans are operating turn the key to the "on" position this will open the gas solenoid valve. If the fans should fail, the "fan fault" LED on the panel will illuminate and the gas solenoid valve will close.

When there is a "fan fault" the supply fan or extract fan led will flash to inform the electrician or kitchen staff which fan has failed.

Operating the system in the above manner will ensure the requirements of **BS6173**: **2001** are fully met where all the catering equipment has flame failure devices fitted. Installation for the Merlin CT1200S is easy as there is no calibration. Wiring of the system is straightforward using volt free connections for all air pressure differential switches and remote emergency stops. A corgi-registered installer would be required to fit the gas solenoid valve. All Gas solenoid valves supplied by S&S Northern carry a full 3-year manufactures warranty.

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#### **Service**

If an air pressure differential switch goes into alarm (indicating fan fault) and drops the gas solenoid valve this indicates a fan fault. If however upon inspection it is found the fan is operating correctly and the fault lies with the air pressure differential switch a service facility is available. An "Electrician" can bypass the air pressure differential switch by opening the panel and turning "on" the service switch this allows gas to be used until the situation can be resolved.

The service switch will give the kitchen gas until an electrician has resolved the problem with the airflow switch or any fan fault, which may need tending to.

## Air pressure differential Switch (volt free)

We only supply the highest quality air pressure differential switches for increased longevity and reliability. Electrical connections are made by use of two-core cable.

Incorporated in the Merlin CT1200S is a 30 seconds Airflow dropout delay. In the event of interruptions to airflow for less than 30 seconds the delay will allow the gas solenoid valve to remain open, preventing nuisance tripping. Should the airflow be interrupted for 30 seconds or more the fan fail LED will illuminate and the gas solenoid

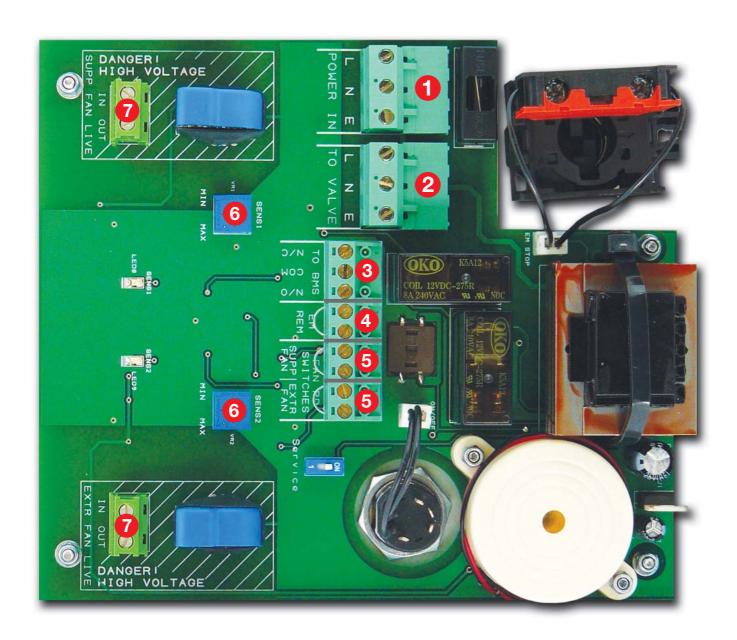




#### **Key features of the Merlin CT1200S**

- Complies with BS6173: 2001 for commercial kitchens
- Clear LED display for system indications
- Interlocking with fans using Air pressure differential switches.
- Easy installation
- BMS Terminals Normally Closed or Normally open and common.





### **Merlin CT1250 Wiring Diagram**

- 1 230v AC Supply
- 1 230v AC Supply
- 2 230v AC output to valve
- 3 Terminal for BMS connections
- 4 Remote emergency stop Input
- 5 Fan sensor input- close when fan on (for use with PD switches)
- 6 Pots are adjusted to increase or decrease sensitivity
- 7 Live wire going to the fan goes in and back out onto the fan

#### **Merlin CT1250 Dimensions**

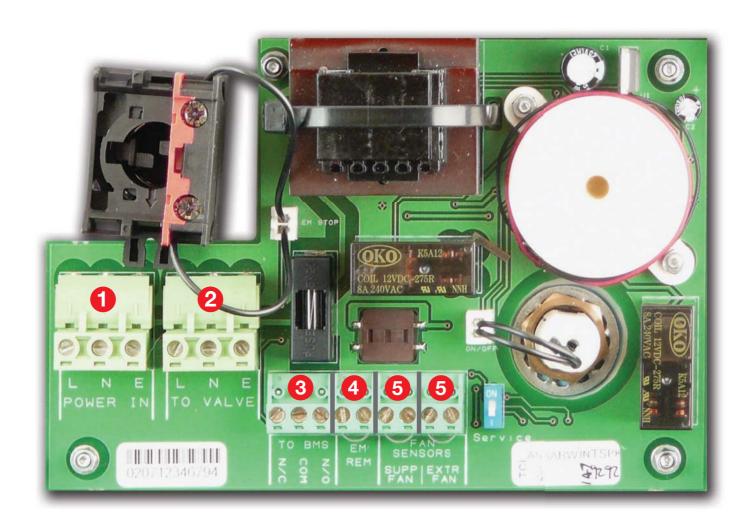
Height 254 mm

Length 178 mm

Depth 62 mm

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### **Merlin CT1200S Wiring Diagram**

- 1 230v AC Supply
- 2 230v AC output to valve
- 3 Terminal for BMS connections
- 4 Remote emergency stop Input
- 5 Fan sensor input- close when fan on (for use with PD switches)

#### **Merlin CT1200S Dimensions**

Height 113 mm

Length 163 mm

Depth 62 mm











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