

# THE MERLIN RANGE

## MERLIN CT1400/1450 SYSTEMS

*The Merlin CT1450 System is microcontroller based ventilation interlock and fan speed controller for two single phase fans, this system has been designed specifically for use in commercial kitchens to meet BS6173. This panel is to be used when the kitchen appliances do have flame failure devices, therefore gas proving is not a requirement.*

The Merlin CT1450 acts as an interlock and control between the ventilation system and the gas solenoid valve.

The system has two built-in current monitors and speed controllers to interlock and control two single phase fans with running currents between 0.3A and 8A.



### Key Features of the Merlin CT1400 & CT1450 Systems

- Allows Compliance with BS6173:2009 for commercial kitchens.
- Clear LED display for system indications
- To be used when all appliances have flame failure devices
- Interlocks, and works as a fan controller all in one box
- Includes Auto-Calibration to make it easy on installation
- BMS Normally Closed or Normally Open and Common
- Will accept remote and emergency knock-off buttons
- Can control two fans with current between 0.3A and 8A
- 9 speed fan control and EM fault can isolate the gas only or the gas and fan supplies. This is adjustable via a dipswitch.
- Covered by S&S Northern Ltd 3 year warranty



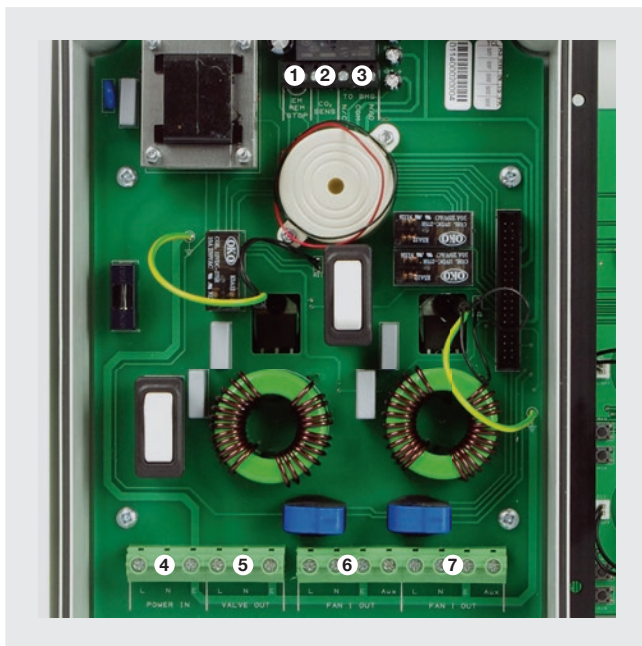
# KITCHEN EQUIPMENT ENGINEERED TO MEET BS6173

The Merlin CT1450 can monitor and control two single phase fans up to 8A (minimum 0.3A) The system uses an auto-calibration. When the system is first fitted and the correct wiring is in place, the installer must press and hold the 'calib' button inside the Merlin 1450 System, this is located on the back of the front fascia. After 3 seconds the panel will run the fan through 9 different speeds and then the system will refer to these values to constantly monitor the status of the fan. This process must be repeated for fan 1 and fan 2. The installer is able to set their high and low limits to ensure that there is always an adequate level of ventilation in each particular kitchen.

When switching the system on, as long as the power LED is illuminated red then the Fan Control Switch should be put in the "on" position, and then the "Up" and "Down" arrows should be used to adjust the ventilation speed to the user's need. The gas key switch can be turned to "on", the supply and extract fan LED should be illuminated green if the Merlin CT1450 System is satisfied the fans are running at the correct speed, the gas valve will open and "Gas on" LED will be illuminated.

**Please note:**

If there is only one fan present in the commercial kitchen it would be easier to use the Merlin CT1400 System. The Merlin CT1400 can monitor and control one single phase fan up to 12A (minimum 0.3A).



### Merlin CT1450 System Wiring Diagram

1. Remote Emergency Stop Input/Fire Alarm Low Voltage Connection
2. External CO2 Monitor
3. Terminal for BMS Connections
4. Mains Input 230V Single Phase
5. Power Output 230V to Valve
6. Power Output 230V to Fan 1
7. Power Output 230V to Fan 2

### CT1400/1450 Box Dimensions

<b>Height</b>	<b>254mm</b>
<b>Length</b>	<b>210mm</b>
<b>Depth</b>	<b>90mm (includes heat sink)</b>



S&S Northern has a full technical team available on 01257 470 983 or if you are based in the South East please call 01702 291 725