



# POWRMATIC®

Delivering complete climate control solutions worldwide

All Powrmatic control systems explained  
**In one manual.**

# Powrmatic Control Systems

Industrial & Commercial Heating Systems



# Control Systems Powrmatic



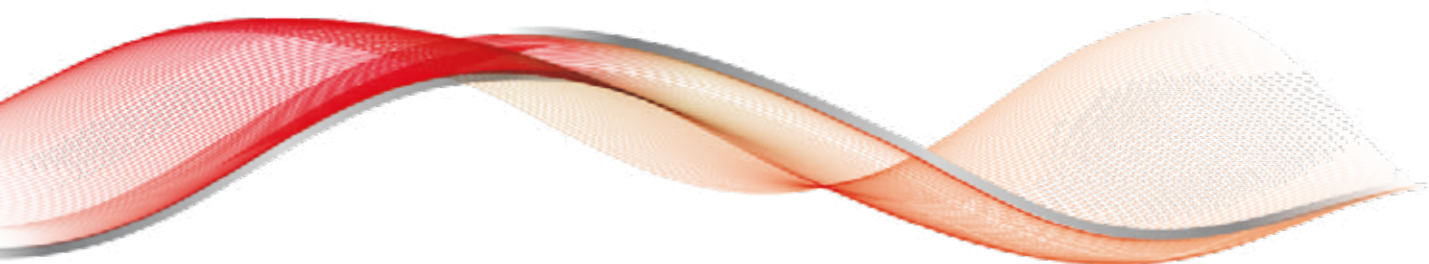
The MC200 is a digital, high specification controller for individual heaters that provides the flexibility of variable time and temperature control as well as optimised start/stop prediction. Adjustable frost protection, remote burner reset and summer fan-only operation are also included. All cabinet heaters are factory fitted with the MC200 control as standard.

The MC200 is a high specification heating controller that uses optimum start technology as standard. By monitoring the heating systems previous performance it can determine the optimum time to turn the heating on to raise the building temperature to the required level.

MC200 Optimised Start Control is designed for ease of use and to maximise the performance of your heating system controlling only the unit heater.

#### Compatible with:

- NVx
- NVS
- OUH
- CP+
- Radiant (Linear & U-Tube)
- CPX (factory fitted)
- VPC (factory fitted)
- TE (factory fitted)



# MC200

## Flexibility

The MC200 has the ability to set a variety of time and temperature programs, whilst still enabling the user to adjust the temperature within controlled limits if required. Adjustable frost protection protects against low temperatures. The MC200 also allows for remote burner lockout reset, and summer fan only operation.

## Cabinet Heaters

Heaters are supplied ready for automatic operation and are complete with safety and comfort controls. The Powrmatic CPx, VPC, TE are factory fitted with the MC200.

## Economy

One of the key energy-saving features of the MC200 is its ability to set a variety of time and temperature programs, including optimum start configuration with weather compensation. By monitoring the previous performance of the heater and taking account of ambient temperatures, the MC200 can determine the optimum time to turn the heating on. 'Optimum stop' can be configured to save energy at the end of the heating period.

The MC200 can provide direct control of both high/low and modulating burners – the latter via an internally generated 0-10V signal.

The user keypad and back-lit display allows easy selection of heating and fan-only modes, override functions and full reset. The MC200 will also provide a read-out of the burner's operating hours to ensure servicing at appropriate intervals. When programmed with the correct data, it can also provide an indication of the running costs of the appliance.

## Security

The MC200 features password-controlled access. This can be locked in various combinations to allow different levels of password-controlled access. There are two levels of password-controlled access, the second level being for use by commissioning and servicing engineers. This provides access to parameters normally used only in the initial setting of the controller, accessing the fault log and resetting the system.

## Customer Benefits

- Simple to use controls
- Anywhere installation for convenient access
- Security protected for authorised personnel
- Instant temperature adjustment
- 24/7 programmable temperature control
- Manufactured in the UK

## Ease Of Use

The MC200 features an easy-to-use interface for selection of heating and fan-only modes, override functions and full reset.

## Location

When used with a remote sensor the MC200 can be sited wherever is convenient, such as in a manager's office. If used with its internal temperature sensor, the unit should be located in a spot that is generally representative of the area to be heated. In such cases it should be sited 1.7m above floor level away from draughts and direct sources such as sunlight or heat emitters. It should also be in an easily accessible position for programming and operation.

## Approvals

LNVx heaters are type tested and CE approved. In addition LNVx heaters made available to the market from September 2018 onwards comply with the requirements of the Directive 2009/125/EC - Lot 21 Tier 1.



# Control Systems Powrmatic

## Customer Benefits

- Simple to use controls
- Anywhere installation for convenient access
- Security protected for authorised personnel
- 24/7 programmable temperature control
- Instant temperature adjustment
- Manufactured in the UK

## Flexibility

The MC300 has the ability to set a variety of time and temperature programs, whilst still enabling the user to adjust the temperature within controlled limits if required and adjustable frost protection against low temperatures.

The MC300multi also allows for remote burner lockout reset, and summer fan only operation.

## Economy

One of the key energy-saving features of the MC300 is its ability to set a variety of time and temperature programs, including optimum start configuration with weather compensation. By monitoring the previous performance of the heater and taking account of ambient temperatures, the MC300 can determine the optimum time to turn the heating on. 'Optimum stop' can be configured to save energy at the end of the heating period.

The MC300 can provide direct control of both high/low and modulating burners. The user keypad and back-lit display allows easy selection of heating and fan-only modes, override functions and full reset.

The MC300 will also provide a read-out of the burner's operating hours to ensure servicing at appropriate intervals. When programmed with the correct data, it can also provide an indication of the running costs of the appliance.

\*The slave unit is factory fitted at an additional cost

## Multiple Connectivity

When controlling multiple heaters the MC300 Multi acts as the master unit and communicates with a factory-fitted PCB on each of the 'slave' heaters it controls, thereby reducing the cost and time of installation.

Further cost reductions are achieved through the use of low voltage control wiring (5-core for on/off, 6-core for high/low, 7-core for modulating units).

## Security

The MC300 features password-controlled access, This can be locked in various combinations to allow different levels of password-controlled access. There are two levels of password-controlled access, the second level being for use by commissioning and servicing engineers. This provides access to parameters normally used only in the initial setting of the controller, accessing the fault log and resetting the system

## Ease Of Use

The MC300 Multi features an easy-to-use interface for selection of heating and fan-only modes, override functions and full reset.

## Location

When used with a remote sensor the MC300 Multi can be sited wherever is convenient, such as in a manager's office. If used with its internal temperature sensor, the unit should be located in a spot that is generally representative of the area to be heated. In such cases it should be sited 1.7m above floor level away from draughts and direct sources such as sunlight or heat emitters. It should also be in an easily accessible position for programming and operation.

## Approvals

All Powrmatic products are CE approved.



**Need help with your control system?  
Check out our YouTube Channel  
for our helpful 'How To' tutorials.**



# MC300 Multi



Powrmatic's new MC300 'Multi' digital controller enables the control of multiple numbers of unit air heaters and features optimum start/stop with weather compensation, adjustable frost protection, remote burner reset and summer fan-only operation as standard.

A slave unit is factory fitted (additional cost) within each heater prior to delivery, which gives significant savings on the time and cost of installation. Further cost reductions are achieved through the use of low voltage control wiring (5-core for on/off, 6-core for high/low, 7-core for modulating units).

An easy-to-use interface facilitates the setting of a variety of time and temperature programs, as well as the ability

to adjust temperature within controlled boundaries if required. MC300 Multi software provides up to 14 time settings, each of which can be assigned to any single day of the week, or in groupings such as weekdays or weekends.

There are two levels of password controlled access, one for users and the other for commissioning and servicing engineers.

#### Compatible with:

- All Powrmatic Warm Air & Radiant Heaters



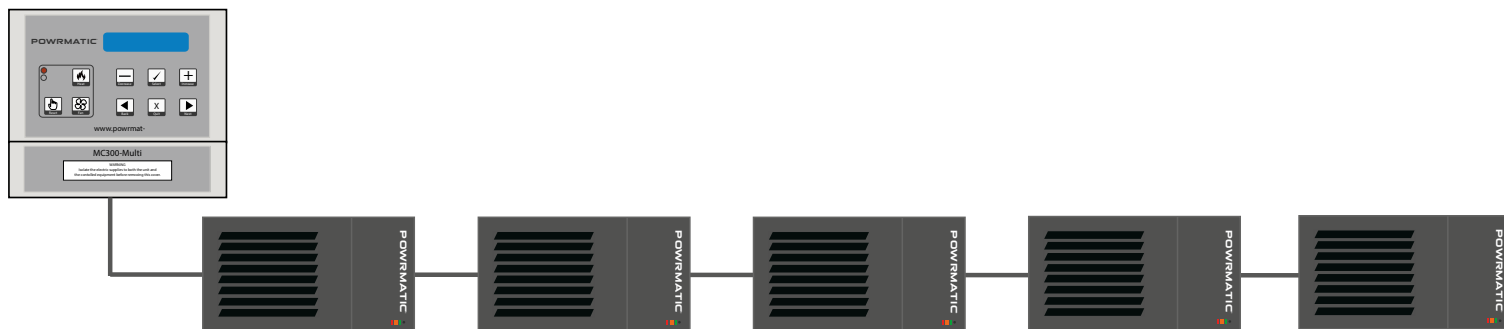
# Control Systems Powrmatic MC

The MC300 Multi can be connected to each heaters slave PCB in various ways depending on your application setup. The maximum cable length between each heater is 100m.

Unlike other multi-zone systems, the MC300 Multi setup keeps costs extremely low as the factory fitted slave PCB connects each heater and not by another slave controller.

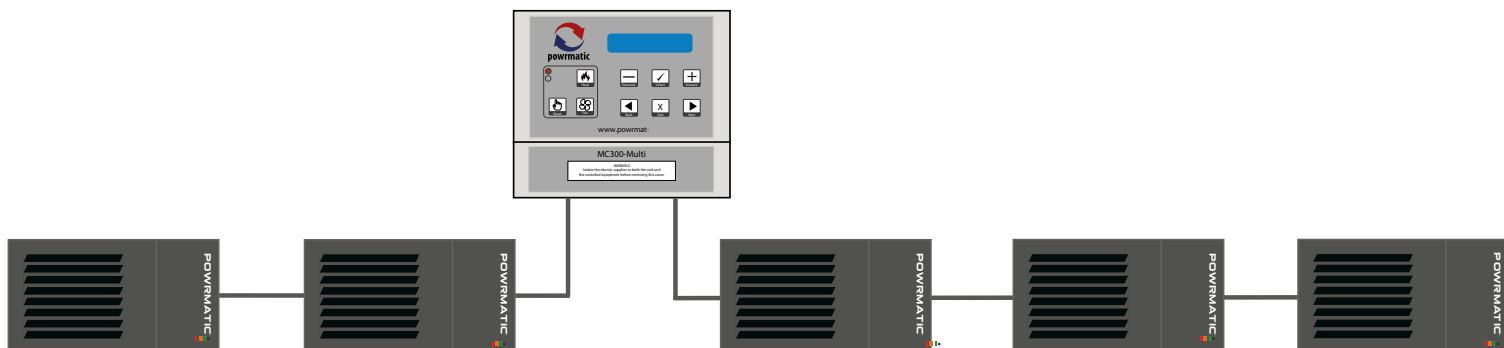
Here are just a few examples of how multiple heaters can be connected with the MC300 Multi.

## MC300 Multi Master Control



Unit Heaters Factory Fitted With Slave Unit

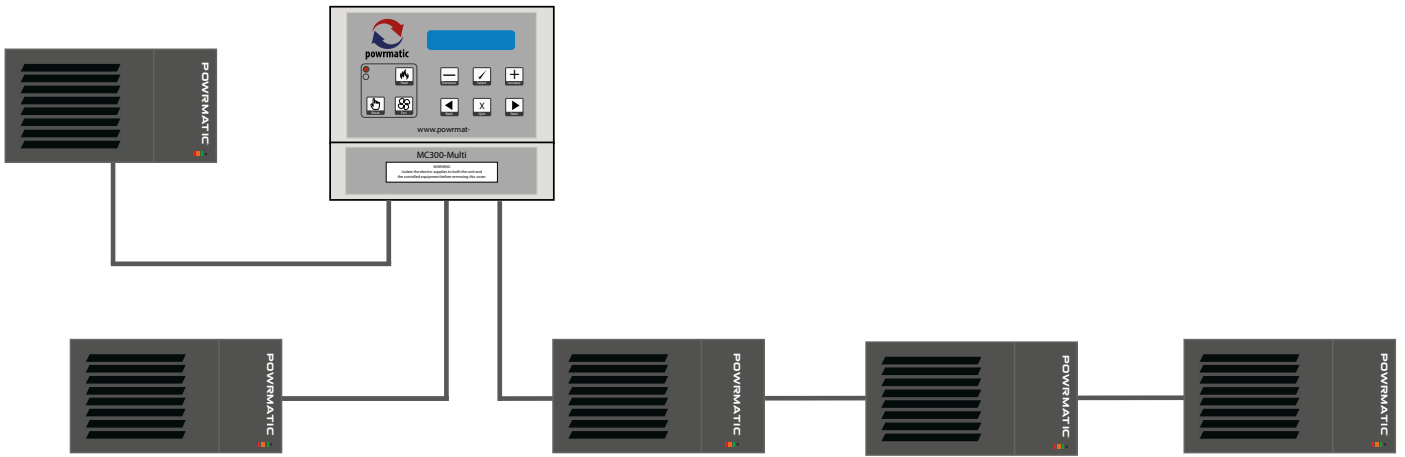
## MC300 Multi Master Control



Unit Heaters Factory Fitted With Slave Unit

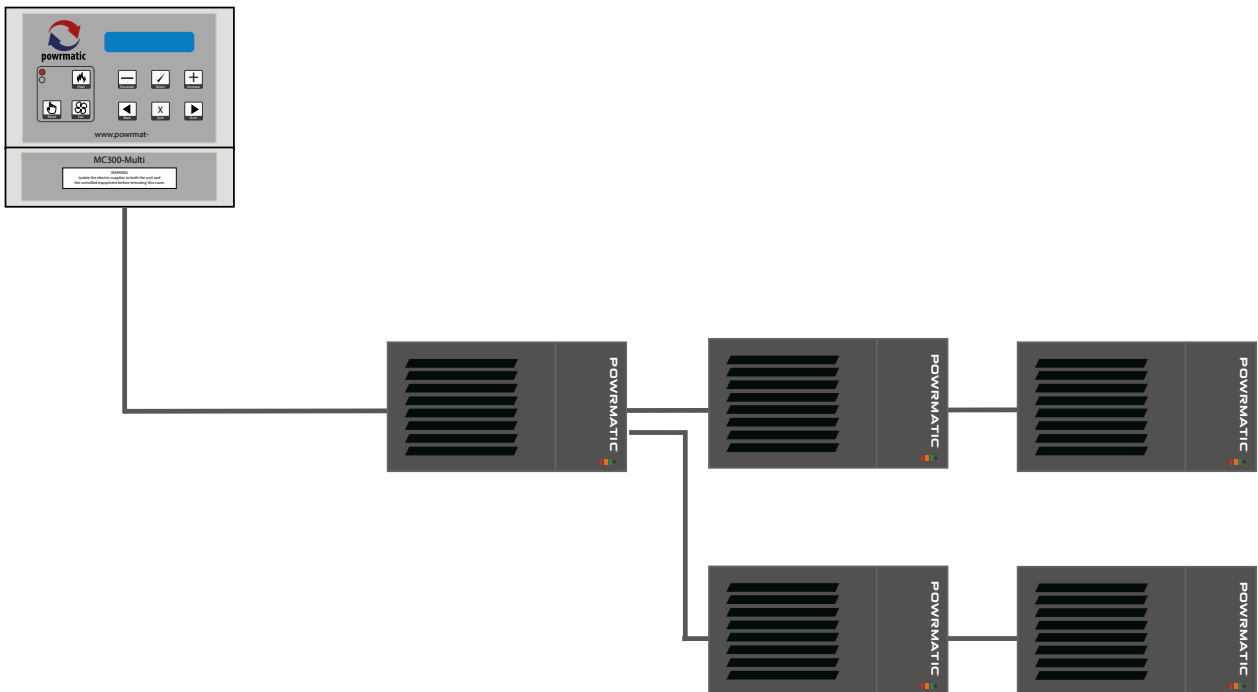
# MC300 Multi Connectivity (optional)

## MC300 Multi Master Control



Unit Heaters Factory Fitted With Slave Unit

## MC300 Multi Master Control



Unit Heaters Factory Fitted With Slave Unit

# About Us

Powrmatic design, develop and deliver HVAC solutions worldwide across a wide range of commercial and industrial applications creating comfortable and safe environments, differentiated through innovation, integrity, compliance and service.

Our specialised HVAC divisions:

## Heating

Industrial and commercial warm air and radiant space heating solutions manufactured to achieve efficient performance, compliance and reliability for every application in partnership with the HVAC trade.

## Ventilation

Custom designed highly efficient, cost-effective smoke, natural and powered ventilators manufactured to meet project requirements of building operators, architects, specifiers and contractors.

## Air Conditioning

Worldwide distributors of innovative wall mounted heat pumps air conditioner technology providing efficient comfort cooling and heating all year round.

## Engineered Products

Bespoke heating and ventilation solutions designed to serve individual customers specific project requirements. In addition our OEM products provide partner AHU manufacturers with high quality energy efficient gas fired heat exchangers.

## Contact Us

Powrmatic Limited  
Hort Bridge, Ilminster  
Somerset  
TA19 9PS

tel: **+44 (0) 1460 53535**

fax: **+44 (0) 1460 52341**

e-mail: **info@powrmatic.co.uk**



#keepingthenationwarm

Powrmatic Ireland  
45 Broomhill Close  
Tallaght  
Dublin 24

tel: **+353 (0) 1452 1533**

fax: **+353 (0) 1452 1764**

e-mail: **info@powrmatic.ie**



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