

# **TEMPERATURE CONTROLLER & FURNACE ACCESSORIES**

# Control Systems

## Temperature Control Systems



Protherm Furnaces provide a wide range of temperature controller options for customers to choose from.

Furnaces are equipped with the clients' choice of controller.

All controllers provided by Protherm Furnaces have built in sockets and easy to replace, for faster and quicker servicing.

Touch screen controllers provided are specifically designed for the dental series, and can maintain the control of the temperature as well as the motorized equipment provided with the system.

Controllers used by Protherm Furnaces are especially provide a rugged, durable and user friendly utilization.

### Controller Features

- ✓ Rugged and durable design
- ✓ Worldwide trusted brand options
- ✓ Click on sockets for ease of change and service
- ✓ High-quality material
- ✓ High level temperature accuracy
- ✓ Data export option
- ✓ Suitability with thermocouples
- ✓ Electrical protection
- ✓ Durable and long lasting membrane buttons
- ✓ Intuitive controller user interface

Brand	Model	Dimensions (HxW) mm	Display	Specs.	Alarm	Program Possibility	Number of Programs & Segments
Honeywell	DC1010	48x48	Dual	PID	Yes	N/A	none
Protherm	PC442T	48x48	Dual	PID	Yes	N/A	Timer
Protherm	PC442/2	72x72	Dual	PID	Yes	Yes	2 steps
Protherm	PC442/6	72x72	Dual	PID	Yes	Yes	6 steps
Protherm	PC442/18	72x72	Dual	PID	Yes	Yes	18 steps
Protherm	PC442/MP5	72x72	Dual	PID	Yes	Yes	5Prg x 20 Steps
Protherm	PC442/MP20	72x72	Dual	PID	Yes	Yes	20Prg x 30 Steps
Eurotherm	3208	45x92	Dual	PID	Yes	Yes	5Prg x 4 Steps

\*For accessories please check the accessory page for furnaces.

## **Controller Information**

### **Honeywell DC1010**

A simple and economical PID controller. Housed in 48 x 48 mms case (1/16 DIN) this controller has a dual display where set and actual temperature is observed. Several alarm definition features are possible.

### **PC 442T**

Housed in a 48x48mms case, PC 442T is the simplest type of PC series controller. Only the time function is available with this version of the PC series. This controller will turn off the furnace at a predetermined time slot. Alarm relay is standard and computer connection is available as an option. It provides a Hot Start facility thus restart of the program is a standard feature.

### **PC 442/2**

Housed in a 72x72mms case, the simplest programmable controller of PC442 series. Only a single ramp and single dwell time is available for setting. Alarm relay is standard and computer connection is available as an option. It provides Hot Start facility thus restart of the program is a standard feature.

### **PC 442/6**

Housed in a 72x72mms case, PC442/6 provide 6 steps of ramps and dwell times. Alarm relay is standard and computer connection is available as an option. It provides Hot Start facility thus restart of the program is a standard feature.

### **PC 442/18**

Housed in a 72x72mms case, PC442/18 provide 18 steps of ramps and dwell times. Alarm relay is standard and computer connection is available as an option. It also provides Hot Start facility thus restart of the program is a standard feature.

### **PC 442/ MP5**

A very handy and capable type of 442, PC 442/MP5 provides a very satisfactory range of independent programs. With 5 different program options, the controller has a standard delay timer feature. Alarm relay is standard and computer connection is available as an option. It provides Hot Start facility thus restart of the program is a standard feature.

### **PC 442/ MP20**

The most functional version of 442 series, PC 442/MP5 provides 20 different programs for your satisfaction. With 30 steps available at each program, the controller has standard delay timer feature. Alarm relay is standard and computer connection is available as an option. It also provides Hot Start facility thus restart of the program is a standard feature.

### **Eurotherm 3208**

Eurotherm 3208 model provides 4 ramps and 4 dwells for each of the 5 programs that it obtains. Alarm relay is a standard feature and computer connection is available as an option with the controller.

## Accessories Furnace Accessories



Protherm Furnaces provide a wide range of accessories for furnaces in order to fulfill the extra needs of customer.

Furnaces are equipped with the clients' choice of accessories, and even possible customized ones according to the furnace.

All furnace accessories provided by Protherm Furnaces are tested and fitted perfectly to the furnace for the clients operation.

Besides mechanical components, electrical components such as vacuum gauges, mass flow meters, scales, load cells and various other pieces of equipment is also provided.

### Accessory Features

- ✓ Rugged and durable design
- ✓ Worldwide trusted brand
- ✓ High-quality material
- ✓ Designed and manufactured in house
- ✓ Tests completed according to quality standards
- ✓ Electrical protection

Accessory	Application
End Plugs	Stabilizing the temperature inside the tube
Suction Fan	For removal of fumes
Crucible Tray	variable sizes for different crucibles
Gas feed in system	Gas feed in system for experiments
Gas blend system	In order to create a certain gas mixture in the furnace environment
Gas Flange	For working with different gases inside of tubes
Vacuum Flange	Creating different vacuum values inside of the tube
Cylinder Plate	Sample placing
Clamp & O-Rings	Connecting components together
Connective components	Enabling different inputs and outputs to the system
Vacuum Gauge	Vacuum value measuring
Mass Flow controller	Precise flow rate and mass measurements
Rotameter	Available for multiple flow rates
Data logger & software	Output of data

\*For more accessories please check the accessory page from the website.

\*For your inquiries and questions please contact us

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