ALL IN ONE CONTROL **SELF ADAPTIVE** **LCD DISPLAY** **WEATHER COMPENSATION** **HOT WATER BOOST** **TAMPER-PROOF** **FROST PROTECT**

Chalmor
Universal Controller
Tel: 01582 748700

Universal Heating Controller

Chalmor's Universal Heating Controller (UNI/H) is a simple to use, powerful heating control solution designed to offer the energy saving features of Building Management Systems (BMS) but at a justifiable price for medium and smaller buildings.

The UNI/H is flexible to control electric, warm air and wet heating systems. It features a clear, informative display and easy to use, intuitive programming. Programmes are tamper proof, with password protection. Battery back up ensures programmes are preserved in the event of mains failure.

The Universal Heating Controller can utilise up to six temperature sensors including external, boiler flow return, hot water and two room sensors. It can also be combined with PIR sensors for electric heating systems. Plus there is a mixing valve control option (0-10v output).

Energy efficiency features include:

- Intelligent boiler control with load scheduling, which adjusts the boiler firing pattern to suit load conditions and eliminate "dry cycling"
- Self adaptive optimum start/stop facility for two heating zones, which automatically adjusts switch on/off times in accordance with speed of plant response and building temperature characteristics
- Weather compensation
- Single or dual zone heating control with independent time and temperature control for each zone. 3 on/offs per day per zone
- Hot water time and temperature control with facility for hot water boost to combat legionella
- Occupancy option automatically reduces heating when areas are vacated (electric systems only, requires a PIR sensor per zone)
- Multi-stage frost protection

General

Dimensions	216 (L) x 124 (W) x 62 (D) mm
Controller	Pale grey ABS

Power Supply

Battery Back Up	5000 hours of clock back up and up to 5 years of programme back up.
Battery life	5 years or more
Mains Supply	230 VAC 50 Hz

Operating Conditions and Precautions

Control operating temperature range	0°C to 40°C
Control operating humidity range	0 to 90% RH
Control IP rating	IP30
Control safety construction	Class II

Outputs

Relay outputs	Relay 1-2 are rated 16A / 240Vac resistive - 6A / 240Vac inductive - 550W motor load **Total maximum load for relays 1 and 2 is 12A**.
	Relays 3 - 7 are rated: 10A / 240Vac resistive - 4A/240Vac inductive - 370W motor load **Maximum load for each of relays 3 and 4 is 6A.**
	Total maximum load for relays 5 to 7 is 12A.

Outputs

Relay outputs	Where the plant has a higher rating, it is recommended that the relays are used to operate suitably rated contactor relays.
Mixing valve control output	0 - 10V

Other

Conformities	EMC – 89/336/EEC, LVD – 73/23/EEC

Product Codes

UNI/H	Universal Heating Controller
UNI/RS	Remote Room Temperature Sensor
UNI/CS	Clamp on Sensor
UNI/EXT	External Sensor
UNI/AV	Averaging Remote Room Temperature Sensor
BW/MINI	BlueWave Mini Occupancy Sensor
PIR/CM	Ceiling Mounting Occupancy Sensor

Disclaimer

Due to continual research and product development, this specification is subject to change without notice.
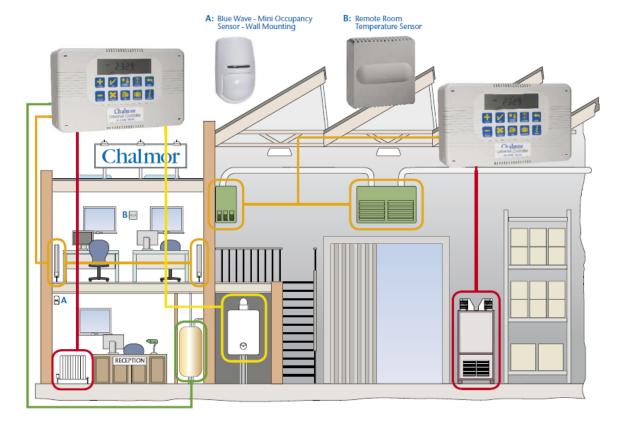
Flexibility to control multiple types of heating system:

A: Blue Wave - Mini Occupancy Sensor - Wall Mounting

B: Remote Room Temperature Sensor