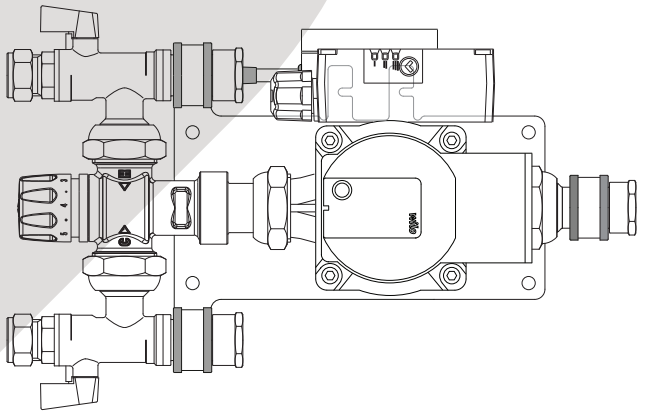


UFH compact control unit



installation guide

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UFH compact control unit

Introduction

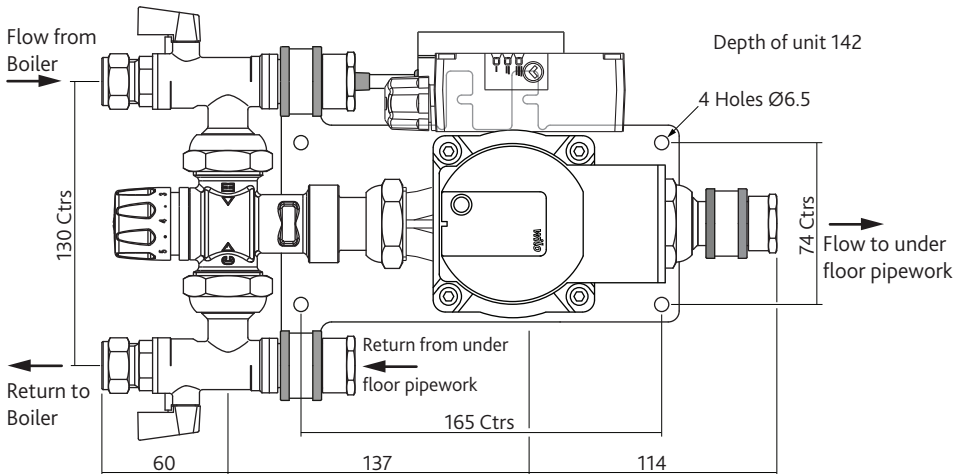
The Altecnic UFH single zone control unit is designed for use on smaller heating circuits such as conservatories and extensions. It provides temperature controlled pre mixed water to under floor heating zones with a heat output of up to 3kW, satisfying under floor areas up to 40 square metres.

The Altecnic UFH is pre assembled and wired for installer convenience and is supplied complete with a mounting bracket for installation on a wall. A pre wired flow thermostat is connected via a wiring centre to the pump, which in turn has a mains cable supplied for connection to the power supply.

Connections to the primary heating system are made via two isolation ball valves. A thermostatic blending valve and Wilo pump are all mounted on central bracket complete with anti vibration mountings for a near silent operation. G $\frac{1}{2}$ " connections allow for flexible connection to the UFH from the under floor heating circuit.

Please check all items before commencing installation.

Dimensions



Installation

The UFH compact control unit allows for wall fixing and should be mounted in a vertical position.

Ideally the electrical connection unit should be uppermost. Under no circumstances should the unit be mounted on the floor.

Provision should be made to vent air to protect against pump cavitation; the unit must be installed with the pump motor shaft in a horizontal position. The pump manufactures installation instructions must be adhered to at all times, these are supplied with the UFH control unit.

Once the location of the manifold and pump set has been chosen, providing adequate space for all items including venting and future maintenance, mark the mounting holes on the wall. Having marked the hole positions on the wall taking care not to damage any of the electrical connections. Using an 7mm drill bit, drill and plug the holes with suitable fixings for the wall type (not provided) then mount the kit to th wall.

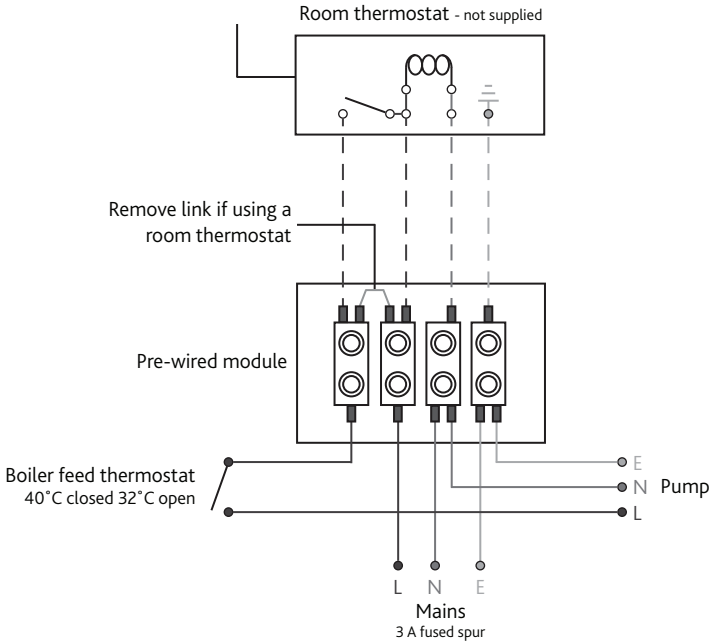
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Installation Continued

The unit can now be connected to the primary heating supply and under floor heating circuits. It is important to note at this point that the under floor circuit can be connected, filled and pressurised via the integral ball valves and isolated from the primary circuit. This function can be used if the floor is to be screeded allowing the installer to check for any leaks in the pipe circuits.

Wiring Diagram



Wiring Connections

Care should be taken when undertaking electrical wiring and should only be carried out by a registered professional and must conform with current IEE regulations.

The pump has an earth connection which is connected via the control box. A flexible mains lead is provided, this should be connected to a switch fuse spur rated at 3 amps.

If connected via a room thermostat follow the wiring diagram:

If the UFH Compact is zoned and controlled by a programmable room thermostat then follow the wiring information supplied with the controls.

UFH compact control unit

Operating Principle

The Altecnic single zone under floor heating control is activated when the room thermostat calls for heating when the primary circuit is operational. Once the primary has reached 43°C the pump will turn on, feeding the under floor heating loops via a tempering valve. The tempering valve blends the flow from the primary with the return water from the under floor heating loop thus sending a reduced temperature through the floor system.

Differing floor types require a different temperature and for this reason the Altecnic single zone control is fully adjustable. Using the control knob the unit can be adjusted to suit the temperature and comfort level needed. The controlling room thermostat will turn the pump off when the desired temperature is reached within the space being heated.

In the event that the primary circuit is off and the room thermostat is still calling for heat the pump will circulate until the heating loop falls below 30°C at which point the pump will turn off.

The below is a guide to the tempering valve settings:

| | | | | | | | | |
|------|------|------|------|------|------|------|------|------|
| MIN | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Max |
| 35°C | 40°C | 45°C | 48°C | 52°C | 56°C | 60°C | 63°C | 65°C |

It can be advised that the two main floor types are screeded floors (40-45°C), and timber floors (55-60°C). Other floor types may require different temperatures consult the flooring manufacturer before commissioning the unit. A maximum floor surface temperature of 29°C should not be exceeded with the exception of wet areas such as bathrooms and shower rooms where 35°C should not be exceeded. Breaching these surface temperatures could lead to uncomfortable feelings under foot. Laminate flooring and other timber based products should not have a surface temperature exceeded 27°C due to the chance of the timber contracting excessively.

Please leave this Manual for the User

In this procedure document we have endeavoured to make the information as accurate as possible.

We cannot accept any responsibility should it be found that in any respect the information is inaccurate or incomplete or becomes so as a result of further developments or otherwise.

Altecnic Ltd Mustang Drive, Stafford, Staffordshire ST16 1GW

T: +44 (0)1785 218200 E: sales@altecnic.co.uk

Registered in England No: 2095101

altecnic.co.uk

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