

Fact Sheet 14

Kanmor 360e Weather Compensator



Background

In order to provide comfortable indoor temperatures, the heating control system needs to match heat input to building heat losses.

There is a direct relationship between the building heat loss and outside air temperature - when the air temperature outside falls the building heat losses change proportionally. As the heat losses rise, the heat input required to maintain indoor comfort, increases. The control system lifts the under-floor heating water temperature, which raises the floor surface temperature and therefore provides for more heat into the building.

This close matching of heat inputs against heat losses reduces the indoor temperature swings, which are often associated with less sophisticated control systems.

The Kanmor weather compensator utilises a characterised heating curve to set the relationship between the outdoor temperature and the supply water temperature. Standard curves can be selected to match the appropriate floor construction, i.e. solid or timber suspended.

Kanmor 360e

The new Kanmor 360e provides weather compensated control for WIRSBO underfloor heating systems. Monitoring weather conditions and using a 3-port mixing valve, the Kanmor 360e controller modulates the water temperature to the underfloor heating system. The combination of the Kanmor 360e, WIRSBO underfloor heating and modern condensing boiler technology will result in extremely high energy efficiencies, and hence save the building owner money.

The Kanmor 360 represents cost-effective and reliable

weather responsive mixing and works seamlessly with WIRSBO individual room controls.

Benefits to the Installer

- Ease of installation
- Quick set-up and programming routine
- Fault diagnostics
- Built-in test sequence to ensure correct component operation
- Simple wiring – no additional relays needed for stand alone installation
- Compatible with WIRSBO individual room controls (IRC)

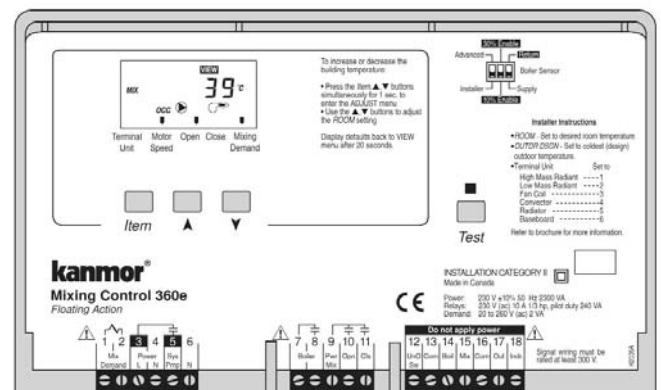
Benefits to the Home-owner

- Optimum comfort and fuel economy.
- Intelligent system shut-down during periods of warm weather
- Automatic set-back of water temperature via a remote time-switch
- Simple user adjustment

Other Features

- Optional room sensor for indoor temperature feedback
- UFH pump and boiler demand relays
- LCD user interface for viewing, adjusting, and monitoring system operation.
- Unoccupied / Night set-back mode
- Advanced settings menu.

Kanmor 360e



Ordering Information

The Kanmor 360e is delivered together with an outside sensor and two water temperature sensors. WIRSBO also provides the 3-port mixing valve and actuator, which is ordered separately.

Product Code	Product Description
010 210	Kanmor 360e weather compensator with outside and pipe strap-on sensors

Valve Selection Guide

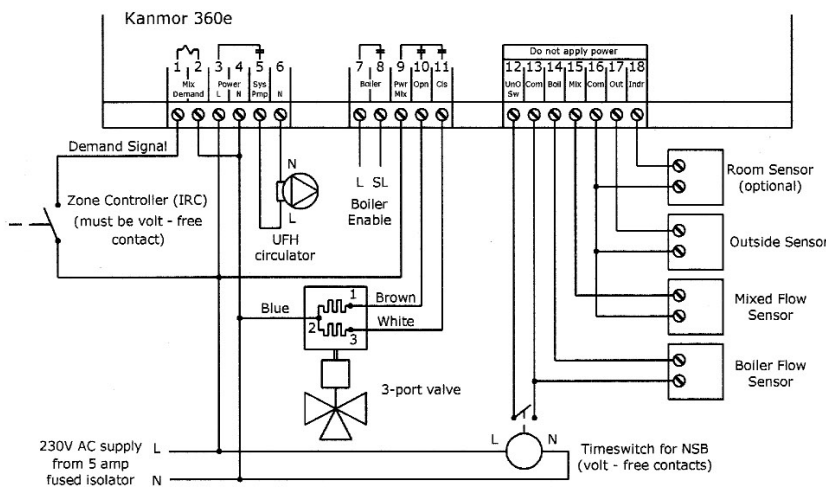
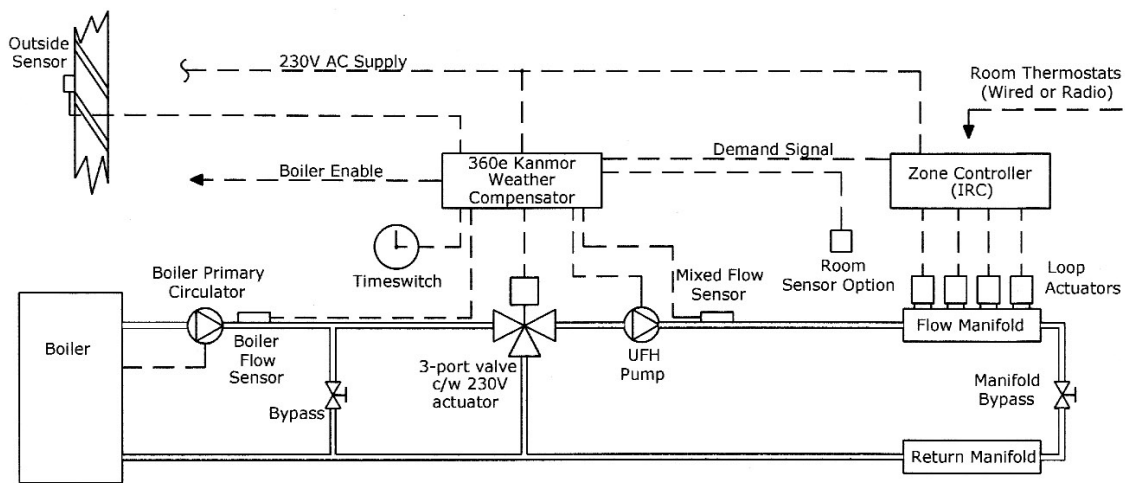
Product Code	Product Description	Kvs Value	Max Floor Area (at 100 W/m ²)
010 211	20mm 3-port valve c/w 230V actuator	4	60
010 212	20mm 3-port valve c/w 230V actuator	6.3	90
010 213	25mm 3-port valve c/w 230V actuator	8	120
010 214	25mm 3-port valve c/w 230V actuator	12	180
010 215	32mm 3-port valve c/w 230V actuator	18	270

Note: Maximum floor area is given for guidance only. Calculated for 20x2mm WIRSBO laid at c/c 300mm with dT = 5°C. Total pressure loss over all components of the UFH system should not exceed 40 kPa.

Pump Selection

Contact WIRSBO Technical Department for pump selection advice.

Pipework and Wiring Schematic – Kanmor weather compensator with IRC



Notes:

- 1 Project specific pipework and wiring details available on request.
 - 2 IRC denotes Individual Room Control, e.g. Wirsbo CoSy wiring box, CoSy Radio base unit, or Genius base unit.
 - 3 A manifold by-pass is required if actuators are fitted on every loop.
 - 4 Terminals 7 and 8 'Boiler' volt-free contacts can be wired to start boiler and primary pump or to signal to BMS.
 - 5 Programmed Night Set-Back (NSB) can be done centrally (as shown) or via programmer on IRC wiring unit.
 - 6 Wiring of 3-port valve actuator subject to valve porting arrangement at bottom of drawing.
- All wiring must comply with the current IEE Regulations.