



# Frese OPTIMIZER 6-way

## Pressure Independent Control Group

Innovative Modulating Control Group for both heating and cooling applications

The Frese OPTIMIZER 6-way Pressure Independent Control Group provides complete pressure independent balancing and control for 4-pipe heating and cooling systems.

The Frese OPTIMIZER 6-way provides modulating control, which works independently of any variations in the differential pressure of the system.

The group consists of an OPTIMA Compact pressure independent control valve (PICV) with a 0-10V modulating actuator, a 6-way control valve with a rotating actuator and the Control Unit.

The Frese OPTIMIZER 6-way can be used in 4-pipe systems, such as:

- Heating and cooling ceilings
- Convectors
- Decentralised ventilation units
- Fan coil systems
- Convection heating & cooling units

### Benefits

- Modulating control for both cooling and heating with only one data point for the BMS
- Energy saving through optimum pressure independent flow limitation and regulation
- Full comfort without recommissioning should the system be extended during the construction phase
- Compact solution with small space requirements
- Stand alone or central room temperature control

### Frese

Innovative solutions from Frese balance global HVAC systems accurately and efficiently. From cooling systems in the Middle East to heating systems in Scandinavia, our products transform state of the art technology into everyday solutions.



## Frese OPTIMIZER 6-way • Function & Setting

The Frese OPTIMIZER 6-way controls both heating and cooling with only one single data point from the BMS system, through a 0 -10V external input signal.

Full modulation is provided at all times even with different design flows for heating and cooling.

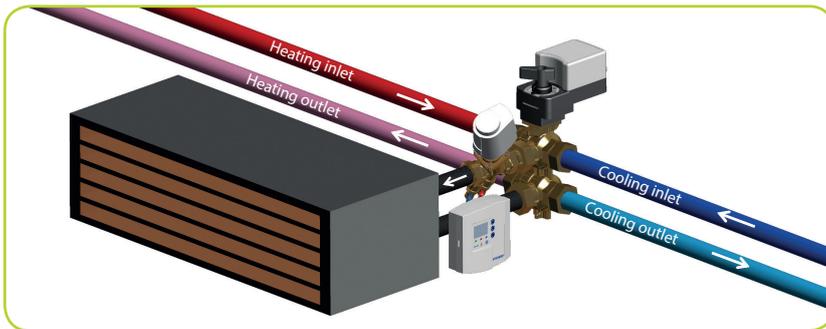
The design flow rate for the cooling system defines the maximum flow through the coil and it is set using the Pressure Independent Control Valve, Frese OPTIMA Compact (see page 4).

The Frese OPTIMIZER 6-way Control Unit allows the setting of hot water maximum flow, from 100% down to 10% of the maximum cooling flow.

The heat offset flow can be set using the buttons on the Frese OPTIMIZER 6-way Control Unit. The set value is confirmed by pressing **OK (1)**

The switch over from cooling to heating is automatically changed via the signal from the BMS data point.

The Frese OPTIMA Compact pressure independent control valve is closed during the switch over and remains closed for approximately 5 minutes until the switching of the 6 port valve has been safely completed. The switch over condition is signalled by the simultaneous flashing of the red & blue LEDs. **(2)**



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