# FC BASICSTAT

## Thermostats for 2-pipe and 4-pipe Fan Coils

## Description

This range of fan coil controllers offers a simple but efficient solution for the control of 2/4-pipe fan coils with electric heaters.
The modern, ergonomic design enables simple installation on the wall or inside the fan coil unit.
The minimum thermostat guarantees an adequate level of comfort while preventing unpleasant draughts of cold air in the winter season.
The models with electronic ambient thermostat are equipped with special pegs that limit the set-point value to avoid energy waste.

**Installations**
- Independent wall-mounted thermostat for fan coils in compartments, ceiling-mounted or above doors.
- Installation integrated in floor-standing fan coil.

**Main features**
- Electronic ambient thermostat with set-point entered by means of knob (on FSS models only)
- Manual selection of operating mode.
- 3 fan speeds (min/med.max)
- Easy to use and install
- Hot Start function with digital input and temperature probe
- Set point limitation by means of special pegs
- "Built-in" or remote ambient air temperature probe (on FSS models only)

## Models

**Various models are available to meet the requirements of a wide range of applications and installations.**

**FSC100**
Manual mode selection, 3 fan speeds, hot start with digital input

**FSC200**
Manual mode selection, 3 fan speeds, hot start with temperature probe

**FSS110**
Ambient thermostat, manual mode selection, 3 fan speeds, built-in hot start air probe with digital input

**FSS210**
Ambient thermostat, manual mode selection, 3 fan speeds, built-in air probe, hot start with temperature probe

**FSS120**
Ambient thermostat, manual mode selection, 3 fan speeds, remote air probe, hot start with digital input

**FSS220**
Ambient thermostat, manual mode selection, 3 fan speeds, remote air probe, hot start with temperature probe

AIR CONDITIONING

**eliwell**

**Invensys Controls Europe**
An Invensys Company

| Features | | FC CAP | | FC STAT | | | |
|---|---|---|---|---|---|---|---|
| **Model** | | FSC 100 | FSC 200 | FSS 110 | FSS 210 | FSS 120 | FSS 220 |
| Part Number | | FSC100000500 | FSC200000500 | FSS1B0000500 | FSS2B0000500 | FSS1R0000500 | FSS2R0000500 |
| **Application** | | | | | | | |
| 2 pipes | | ● | ● | ● | ● | ● | ● |
| 2 pipes with electric heaters | | ● | ● | ● | ● | ● | ● |
| 4 pipes | | ● | ● | ● | ● | ● | ● |
| **Outputs** | | | | | | | |
| Cold water valve | | ● | ● | ● | ● | ● | ● |
| Hot water valve | | ● | ● | ● | ● | ● | ● |
| Fan speed | | 3 | 3 | 3 | 3 | 3 | 3 |
| **Inputs** | | | | | | | |
| Built-in air probe | | - | - | ● | ● | - | - |
| Remote air probe (not supplied) | | - | - | - | - | ● | ● |
| Water probe (not supplied) | | - | ● | - | ● | - | ● |
| Hot Start digital input | | ● | - | ● | - | ● | - |
| **Functions** | | | | | | | |
| Ambient thermostat | | - | - | ● | ● | ● | ● |
| Manual mode selection | | ● | ● | ● | ● | ● | ● |
| Manual speed selection | | ● | ● | ● | ● | ● | ● |
| Hot Start with probe | | - | ● | - | ● | - | ● |
| Hot Start with digital probe | | ● | - | ● | - | ● | - |

## Description of product codes

| Nr. | Code | Description |
|---|---|---|
| Model | FS | FC BASICSTAT |
| 1st | C | CAP |
| | S | STAT |
| 2nd | 1 | Hot Start Digital Input present |
| | 2 | Hot Start Analogic Input present |
| 3rd | 0 | Air temperature probe not present |
| | 1 | Air temperature probe built-in |
| | 2 | Air temperature probe remote |
| 4th | 0 | Fixed |

# User Interface

## FC CAP

Slider 2 - Mode

OFF
Hot
Cold

Slider 1 - fan speed

high
medium
low

## FC STAT

Slider 2 - Mode

OFF
Hot
Cold

Knob

+ and –
configurable as per
parameter

Slider 1 - fan speed

high
medium
low
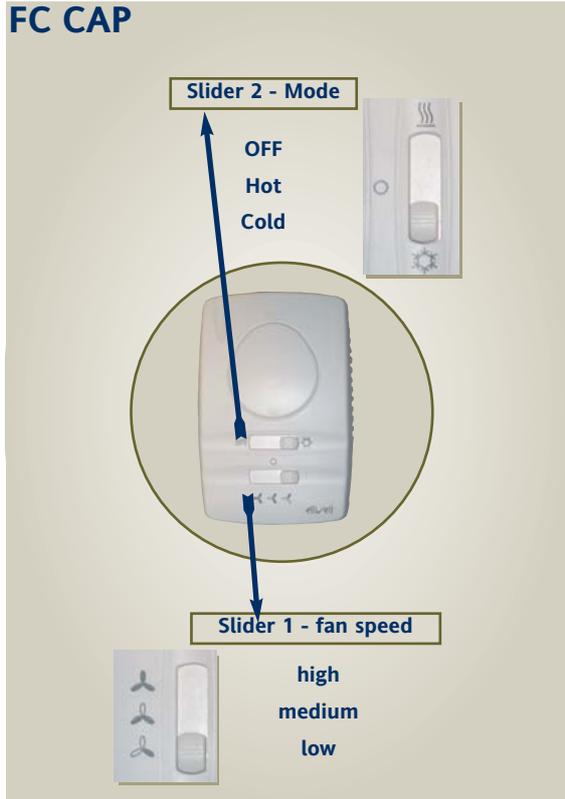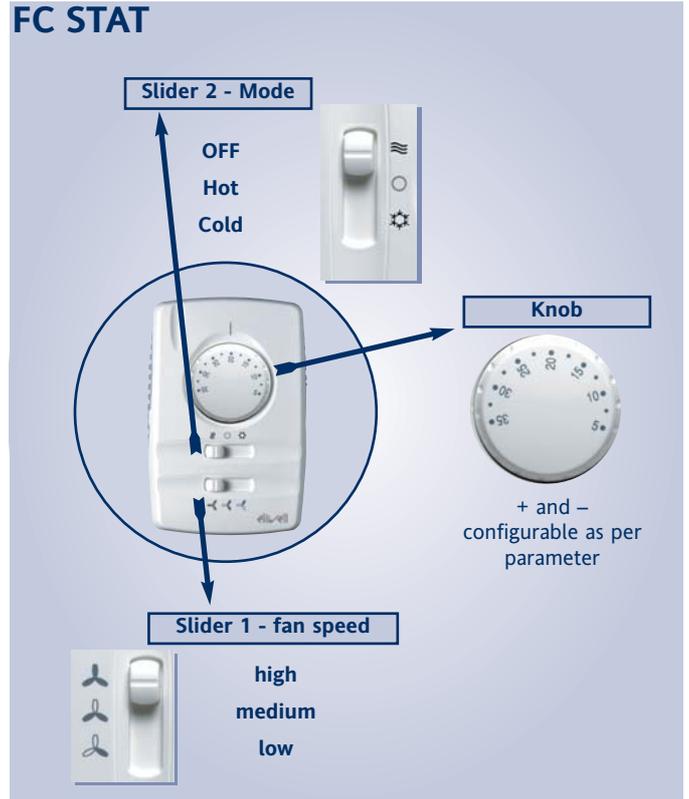
# Technical Data

## FC CAP

• Power supply: 230V~ 50Hz

• Electrical data of 230C output: max. 0.5A max for valve outputs and max. 1 for fan outputs

• Insulation class: II

• Protection rating: IP30

• Analogue inputs: 1 (+1) NTC probes 103 AT-2

> • water probe* (see wiring diagrams)

* probe present depending on model

• Outputs: 2 relay outputs

• Unit dimensions: 120x80x40 mm

• Mounting: wall-mounted, on-board unit

• Housing colour:

> • Front panel: white;

> • Base plate: white.

• Connections: screw-on terminal block for wires

> • with max. diameter 2.5 mm$^2$ for rigid cable

> • with max. diameter 1.5 mm$^2$ for flexible cable

• Ambient Temperature: 0...55 °C

• Storage Temperature: -20...85 °C

• Storage humidity: 10...90% (non condensing)

• Conformity: CE LV-EMC conformity

## FC STAT

• Power supply: 230V~ 50Hz

• Electrical data of 230C output: max. 0.5A max for valve outputs and max. 1 for fan outputs

• Insulation class: II

• Protection rating: IP30

• Analogue inputs: 1 (+1) NTC probes 103 AT-2

> • air probe* (see wiring diagrams)

> • water probe* (see wiring diagrams)

* probe present depending on model

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• Ambient Temperature: 0...55 °C

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• Storage humidity: 10...90% (non condensing)

• Conformity: CE LV-EMC conformity

# Wiring diagrams

## Models
### FSC100
### FSS110

Clicson

| 1 |
| 2 |

| /// | 4 | Heating valve |
| ☼ | 5 | Cooling valve |
| | 6 | max |
M | | 7 | med |
| | 8 | min |
L | 9 |
N | 10 |
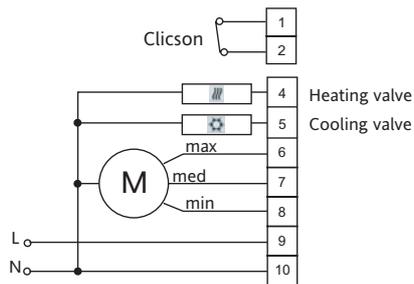
### Legenda

| 1 - 2 | Hot Start D.I. |
| 4 - 5 | relay output |
| 6 | High speed |
| 7 | Med speed |
| 8 | Low speed |
| 9 | L phase |
| 10 | N Neutral |

## Models
### FSC200
### FSS210
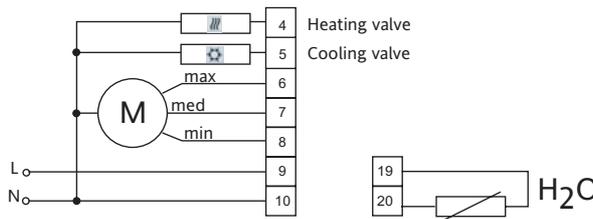
| /// | 4 | Heating valve |
| ☼ | 5 | Cooling valve |
| | 6 | max |
M | | 7 | med |
| | 8 | min |
L | 9 |
N | 10 |

| 19 |
| 20 | H2O

### Legenda

| 4 - 5 | relay output |
| 6 | High speed |
| 7 | Med speed |
| 8 | Low speed |
| 9 | L phase |
| 10 | N Neutral |
| 19 - 20 | Water probe (H$_2$O) |

## Models
### FSS120
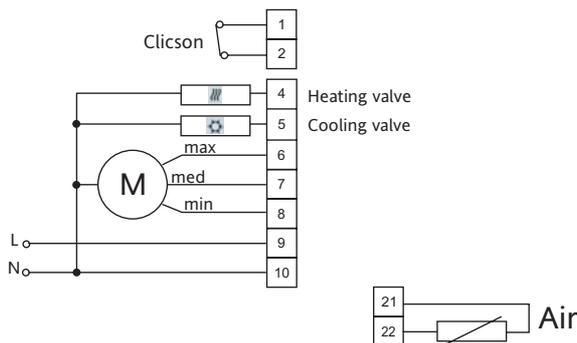
Clicson

| 1 |
| 2 |

| /// | 4 | Heating valve |
| ☼ | 5 | Cooling valve |
| | 6 | max |
M | | 7 | med |
| | 8 | min |
L | 9 |
N | 10 |

| 21 |
| 22 | Air

### Legenda

| 4 - 5 | relay output |
| 6 | High speed |
| 7 | Med speed |
| 8 | Low speed |
| 9 | L phase |
| 10 | N Neutral |
| 19 - 20 | Water probe(H2O) |
| 21 - 22 | Air probe (Air) |

## Models
### FSS220

| /// | 4 | Heating valve |
| ☼ | 5 | Cooling valve |
| | 6 | max |
M | | 7 | med |
| | 8 | min |
L | 9 |
N | 10 |

| 19 |
| 20 | H2O
| 21 |
| 22 | Air

### Legenda

| 4 - 5 | relay output |
| 6 | High speed |
| 7 | Med speed |
| 8 | Low speed |
| 9 | L phase |
| 10 | N Neutral |
| 19 - 20 | Water Probe (H$_2$O) |
| 21 - 22 | Air probe (Air) |

## Accessories

### PROBES

**Remote water probe**

SN8PAA1500 NTC probe, PVC cable, plastic resin AISI 304 pipe with reinforced insulation (metal) 1.5 m long metal cover 6X40

**Remote air probe**

SN8PCL1500 NTC probe with plastic resin pipe with reinforced insulation 6X40 PVC cable 1.5 m long; plastic cover 7X24.5