

March 2008

DELTA i-system	Fan-Coil Unit Operator Panels Hotel	UP 237F	5WG1 237-2FB_1
DELTA profil	Fan-Coil Unit Operator Panels Hotel	UP 252F	5WG1 252-2FB_1
DELTA style	Fan-Coil Unit Operator Panels Hotel	UP 254F	5WG1 254-2FB_1





Product	DELTA i-system		DELTA profil	
Fan-Coil Unit Operator Panels Hotel	titanium white carbon metallic aluminum metallic	5WG1 237-2FB11 5WG1 237-2FB21 5WG1 237-2FB31	pearl grey titanium white anthracite silver	5WG1 252-2FB01 5WG1 252-2FB11 5WG1 252-2FB21 5WG1 252-2FB71
Frames	ordered separately from the DELTA ranges			
Fidilles			cut	out frames
Bus Transceiver Module	The necessary Bus Transceiver Module UP 117 must be ordered separately.		ed separately.	



Product	DELTA style		
Fan-Coil Unit Operator Panels Hotel	titanium white / metallic silver basalt black / metallic silver platinum metallic	5WG1 254-2FB11 5WG1 254-2FB21 5WG1 254-2FB41	
Frames	ordered separately from the DELTA ranges		
Bus Transceiver Module	The necessary Bus Transceiver Module UP 117 mu ordered separately.		

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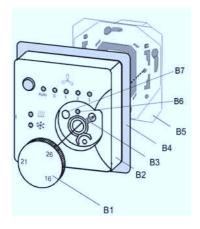


Diagram 1: Mounting the Fan-Coil Unit Operator Panel

- B1 Rotary button \*)
- B2 Fan-Coil Unit Operator Panel Hotel \*)
- B3 Fixing screw \*)
- B4 Frame
- B5 Bus Transceiver Module UP 117
- B6 Programming LED \*)
- B7 Programming button \*)
- \*) included with supply

# Product and function description

The Fan-Coil Unit (FCU) Operator Panels Hotel UP 237F, UP 252F and UP 254F are designed for use in hotel rooms or residential rooms that are heated and / or cooled by a fan-coil unit which is controlled by a FCU Controller (FCC) REG 540.

A FCU Operator Panel Hotel can only function together with the necessary Bus Transceiver Module (BTM) UP 117 and the associated application program.

#### **Push button**

Via the button of a FCU operator panel hotel, the room user can set the fan speed level by pressing the button briefly several times (until the LED of the desired fan speed level illuminates) and even switch off the fan (if he doesn't like its noise or the air-stream) or switch it back to the automatic fan speed control mode. Each time the button is released after a push of it, the illuminated LED for displaying the fan speed level moves one step further to the right or left position and will change the direction after having reach the farest right or left position. After an interval of 2 seconds following the last button activation, the fan speed level preset by the room user is transmitted to the FCU controller. If the button is activated again during this interval, the interval until the value is transmitted recommences.

Adjustment of the LED from the "Auto" position leads to the fan control being switched from automatic to manual operation, and adjustment to the "Auto" position, from manual to automatic operation. If fan speed "0" is selected, the fan is switched off and any open valve is closed, i.e. the room is neither heated nor cooled. This is recognizable by the fact that neither of the LEDs for displaying heating or cooling operation illuminates. If, for example, the room temperature falls beneath the frost alarm threshold whilst the fan is switched off, the FCU controller automatically opens the heating valve and switches the fan to automatic operation.

# Rotary knob

The rotary button of the FCU operator panel hotel serves to set the room temperature setpoint in the range from 16...26°C.

## **LED displays**

The clear-to-view and self-explanatory user interface contains besides the push button and the rotary button 5 yellow light-emitting diodes (LEDs) for displaying the automatic fan speed control (Auto) by the FCU controller and/or the current fan speed level adjusted by the room user, and 2 green LEDs for displaying whether the heating valve or the cooling valve is open, therefore whether the room is being heated or cooled.

#### Commissioning

Before commissioning a FCU Operator Panel Hotel by means of the ETS (engineering tool software), it must be attached to a bus transceiver module (BTM) UP 117.

The BTM UP 117 serves to supply the operator panel with power and receives and transmits data via the *instabus*.

Modifications reserved

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The openings for the pushbutton for toggling between normal mode / addressing mode and for the LED displaying normal mode / addressing mode are visible once the rotary button (to adjust the setpoint) has been removed.

<u>Note</u>: The bus transceiver module UP 117 and the associated DELTA frame are not supplied and must be ordered separately.

# **Application program**

The application program "0701 FCU Operator Panel Hotel 802601", loadable from ETS2 V1.3, supports the following functions:

- Setting of the desired fan speed level respectively resetting to automatic fan speed control by pressing the pushbutton
- Display of the manually selected fan speed level respectively of the automatic fan speed control by the FCU controller via five yellow LEDs
- Display if heating or cooling operation active via two green LEDs
- Setpoint adjustment of room temperature via the rotary knob.

## Installation instructions

• The device can be used for fixed installations, in dry interior spaces and for integration into a flush socket.



## **DANGER**

- The device may only be installed and commissioned by an authorized electrician.
- The device may not be inserted in the same box as 230 V devices.
- The device may be used in switch sockets, if VDE approved devices have been used.
- The prevailing safety and accident regulations must be observed.
- The device may not be opened.
- For planning and construction of electric installations, the relevant guidelines, regulations and standards of the respective country are to be considered.

## **Technical data**

# **Power supply**

• via the bus cable and bus transceiver module UP 117

## **Operating elements**

- 1 rotary button for manual setpoint adjustment in the range 16...26° C
- 1 button for toggling for setting of the fan rotational speed

# **Display elements**

- 5 LEDs for Display of the manually set fan rotational speed resp. of automatic fan speed setting
- 1 green LED for heating
- 1 green LED for cooling

#### Connections

 10-pole plug-in connector for connection with the bus transceiver module UP 117

## Mechanical data

- Casing: plastic
- Dimensions:
  - Fan-Coil Unit Operator Panel Hotel UP 237F for DELTA i-system: (L x W x D): 55 x 55 x 16 mm (excluding clamp)
  - Fan-Coil Unit Operator Panel Hotel UP 252F for DELTA profil: (L x W x D): 65 x 65 x 16 mm (excluding clamp)
  - Fan-Coil Unit Operator Panel Hotel UP 254F for DELTA style: (L x W x D): 68 x 68 x 16 mm (excluding clamp)
- Weight:
  - DELTA i-system and DELTA profil approx. 30 g
  - DELTA style approx. 40 g
- Fire load: approx. 730 kJ +I -10%
- Mounting: The operator panel is attached to the BTM UP 117 and screwed to its mounting frame.

# **Electrical safety**

- Degree of pollution (according to IEC 60664-1): 2
- Type of protection (according to EN 60529): IP 20
- Protection class (according to IEC 61140): III
- Overvoltage category (according to IEC 60664-1): III
- Bus: Safety extra-low voltage SELV DC 24V
- Device complies with EN 50090-2-2

## **EMC** requirements

• Complies with EN 50090-2-2 and EN 61000-6-1

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#### **Environmental conditions**

- Climatic withstand capability: EN 50090-2-2
  Ambient operating temperature: 5 ... + 45 °C
- Storage temperature: 25 ... + 70 °C
- Rel. humidity (not condensing): 5 % to 93 %

#### Markings

• KNX EIB

#### CE mark

• In accordance with the EMC guideline (residential and functional buildings), low voltage guideline

# Position and function of the display and operating elements

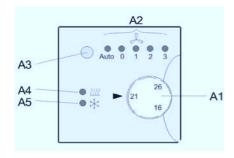


Figure 2: Position of the operating and display elements

- A1 Rotary button for manual setpoint adjustment in the range  $16...26^{\circ}$  C
- A2 Automatic operation display / manually-adjusted fan level
- A3 Button for switching fan levels
- A4 Display green: illuminates when heating outlet open
- A5 Display green: illuminates when cooling outlet open

# Mounting, wiring and commissioning

# General description

The FCU Operator Panel Hotel is attached with the associated DELTA frame to the BTM UP 117 and screwed to its mounting frame.

## Mounting and start-up (see figure 3)

- Fix the BTM UP 117 (B5) on the flush socket and attach the bus cable (see mounting instructions for BTM UP 117)
- Remove rotary button (B1) from the Operator Panel Hotel (B2)
- Attach the Operator Panel Hotel with DELTA frame (B4) to the BTM UP 117 and secure using screw (B3)
- Press start-up button (B7): start-up LED (B6) illuminates
- Load physical address and the configured application program by means of the ETS
- Replace rotary button (B1).

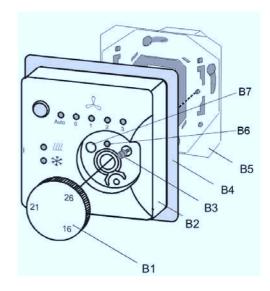


Figure 3: Mounting the FCU Operator Panel Hotel

- 31 Rotary button for setpoint adjustment
- B2 Fan-Coil Unit Operator Panel Hotel
- B3 Screw for securing the Operator Panel Hotel to the mounting frame of the UP 117 (anti-theft protection)
- B4 DELTA frame
- B5 Bus Transceiver Module UP 117
- B6 LED for displaying normal mode (LED Off) or address mode (LED On); it is automatically extinguished once the physical address has been transferred
- B7 Button for toggling between normal mode / addressing mode for transferring the physical address.

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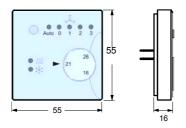
# Disassembly (see figure 3)

- Remove rotary button (B1).
- Loosen screw (B3)
- Remove Operator Panel Hotel together with DELTA frame
- Remove BTM UP 117 (B5) according to disassembly instructions.

# **Dimension drawings**

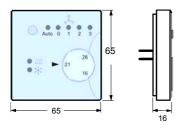
DELTA i-system

Dimensions in mm



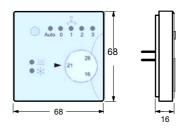
**DELTA profil FCU** 

Dimensions in mm



# DELTA style

Dimensions in mm



## **General Notes**

- The operating instructions must be handed over to the client.
- Any faulty device should be returned to the local Siemens office.
- If you have further questions concerning the product please contact our technical support:

**\*** +49 (180) 5050-222

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www.siemens.com/automation/support-request