

ROOM CONTROLLER

Features & Benefits



Room unit display for use with DCV.

RC room controller is a room unit intended for use together with DCV zone controller.

- Simple installation
- Built-in temperature sensor
- Backlit display



Applications

The DCV controller is suitable in building where you want optimal comfort and low energy consumption, for example offices, schools, shopping centre, airports, hotels and hospitals etc.

Design

The Room Controller is of a modern unobtrusive aesthetic design.

Sensor

The room unit has a built-in temperature sensor.

Easy to Install

The modular design with a separate bottom plate for wiring makes the Room Controller easy to install and commission. The bottom plate can be put into place before the electronics are installed. Mounting is directly on the wall or on an electrical connection box.

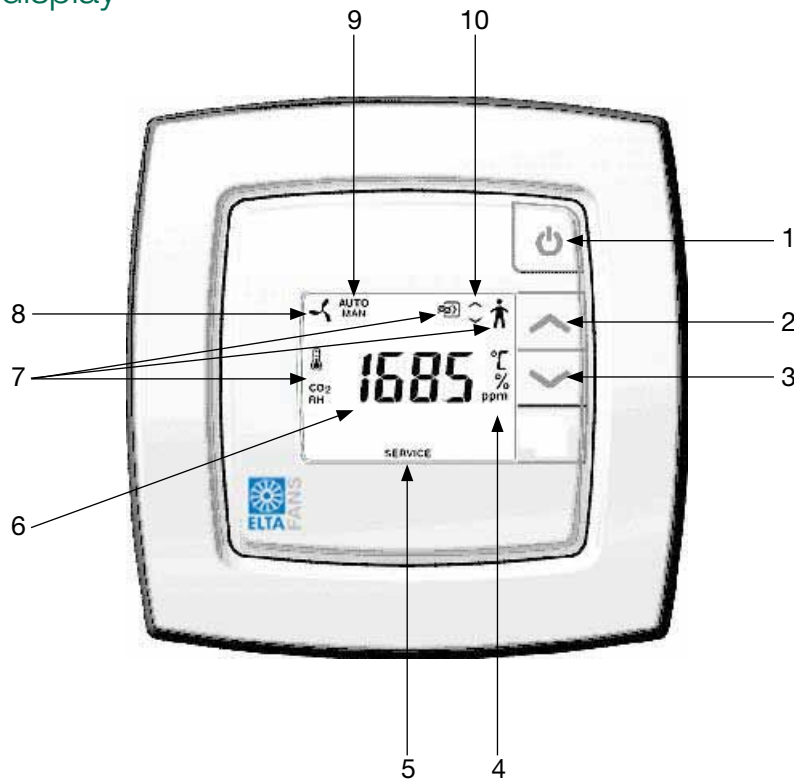
Connection to Controller

The Room Controller is connected to the DCV Zone controller with an RJ12-cable, max length 30m. Two cables are supplied as standard with a 3m long cable with an optional 149-DCV-CBL10 (10m) accessory.

Operation & Configuration







Room Unit with display



Buttons / Display

1. **Acknowledge.** Is used to:
 - a. enter Parameter Edit mode
 - b. to acknowledge a parameter change and return to Parameter List mode
 - c. to acknowledge a fan failure
2. **Increase.** Is used to
 - a. select a parameter
 - b. to increase a parameter value in edit mode.
 - c. if both increase and decrease buttons are pressed at the same time for at least 5 seconds the Parameter List mode is entered
3. **Decrease.** Is used to:
 - a. select a parameter
 - b. to decrease a parameter value in edit mode.
 - c. If both increase and decrease buttons are pressed at the same time for at least 5 seconds
4. **Units.** For each application different unit symbols will be shown. Voltage and pressure applications don't have any units.
5. **Service.** Is visible during the process to enter Parameter List mode.
6. **Value.** Input signal value or parameter value. In the parameter list the text P01, P02 etc is shown instead of a value. At fan failure (one or both fans) the text **FAIL** will flash together with the value.

7. **Applications.** Indicate selected application:
-  for Temperature control
 - CO₂** for CO2 control
 - RH** for Humidity control
 -  for pressure control
 -  for Manual control
8. **Fan running.** A fan blade symbol () is used to indicate the status of the fans:
- A rotating fan blade symbol indicates that at least one fan is running: *BMS Enable* is closed.
 - A stationary fan blade symbol indicates that the fans are stopped but OK: *BMS Enable* is open
 - A rotating fan blade symbol along with flashing “FAIL”, means that one fan has failed, and has changed over to the backup fan.
9. **AUTO/MAN.** Indicates whether the fans are in Auto or Manual mode. Auto mode is when the parameter P09 is set to 1, even for the manual application. Manual mode is only used when the unit is commissioned.
10. **Increase/Decrease.** Flashing symbols indicate that the increase or decrease button can be used to select a parameter in the parameter list or to modify a parameter in parameter edit mode.

Operation

In normal operation the room unit is only used as a display to view the analogue input value (in engineering units) and the fan running status.

In Manual application the fan speed is set using the Increase and Decrease buttons. Press one of the buttons repeatedly or hold continuously to increase or decrease the fan speeds.

Configuration

The fan controller has a list of parameters. By setting the parameter values you can select fan application, min and max fan speeds, set points etc.

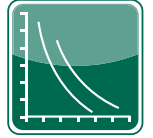
To enter the Parameter List mode:

- Press the **Increase** and **Decrease** buttons at the same time for at least 5 seconds or until the **SERVICE** symbol at the display bottom will be turned on and the **Increase** symbol in the top right corner will start to flash.
- Press **Increase** button twice. The text “P01” (for Parameter 1) will appear on the display. Select parameter number with **Increase** or **Decrease** buttons.

To enter Parameter Edit mode

- Press **Acknowledge** button the view the value of the selected parameter.
- The parameter value can be increased or decreased with the buttons. Confirm and return to Parameter List mode with **Acknowledge** button.
- Leave the Parameter List mode by pressing **Increase** and **Decrease** buttons at the same time shortly.

Technical Data



Supply voltage	Fed from DCV zone controller
Ambient temperature	0...50°C
Storage temperature	-20...+ 70°C
Ambient humidity	Max 90% RH
Protection class	IP20
Display	LCD with background illumination
Built-in temperature sensor	NTC type, measuring range 0... 50°C, accuracy +/-0.5°C at 15...30°C
Material, casing	Polycarbonate, PC
Weight	110g
Colour	Cover: Polar white RAL9010 Bottom plate: light gray

Cable for connection between RC and zone controller
Cables that can be ordered from Elta Fans

Type RJ12, max length 30m.
RU-CbL3 (length 3m, supplied with fan unit)
149-DCV-CBL10 (length 10m)
This product conforms with the requirement of European EMC standards CENELEC EN 61000-6-1 and EN 61000-6-3, and the requirements of European standard IEC 60730-1. It carries the CE mark.



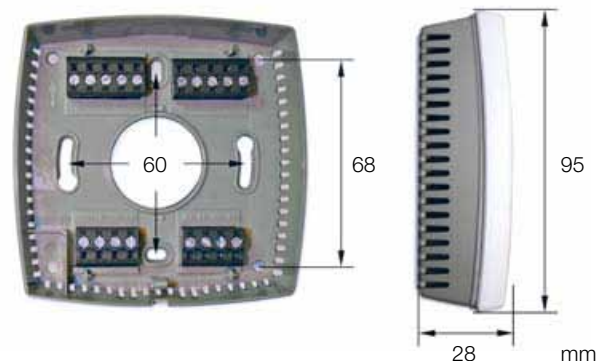
Terminal blocks in Room Controller

So-called lift type for cable cross-section 2.1mm²

Wiring

Terminal	Cable Colour	Operation
40	Black	+5 V supply voltage
41	Yellow + Brown	0 V voltage
42	Red	RU-Bus A
43	Orange	RU-Bus B

Dimensions



Elta Fans Ltd - Building Services

46 Third Avenue,
Pensnett Trading Estate,
Kingswinford, West Midlands,
DY6 7US, UK

T: +44 (0) 1384 275800

E: bs@eltafans.co.uk

F: +44 (0) 1384 275810

W: eltafans.com

A member of the

ELTA
GROUP LIMITED