

# HYDRONIC FAN COIL COMMUNICATING CONTROLLER (NTC)



## Controls NTC

### Network communication

- The NTC communicating controller can be connected on an RS 485 bus, using the Carrier Comfort Network (CCN) protocol.
- Units equipped with the NTC controller can be part of the Aquasmart Evolution system.

### Advanced functions

- Low Energy Consumption (LEC) variable speed control.
- The NTC controller can drive the fan speed continuously within a configurable range for optimal thermal and acoustic comfort.
- Hydronic control - The NTC controls both floating and fixed-point value actuator types (230 V on-off and 230 V three point).
- Demand controller ventilation (DCV) - On fan coils equipped with CO<sub>2</sub> sensors and fresh air dampers, the NTC controller can adjust the amount of fresh air admitted to the room, as required by the occupants.
- IAQ management - The NTC controller can control all features related to Indoor Air Quality that are included in Carrier terminal fan coil units.

### Description

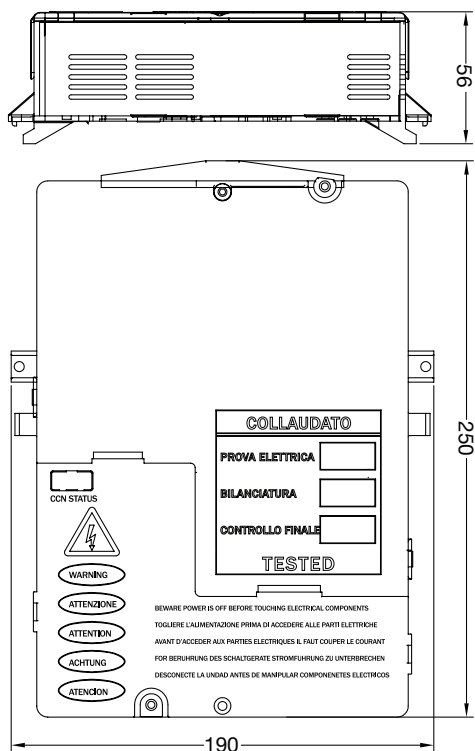
Carrier offers one of the market's most sophisticated and complete communicating controllers for hydronic fan coil ranges, the NTC controller, that is compatible with the full Carrier fan coil range.

For the customer and installer the same controller simplifies and eases installation and service operations whilst covering a wide range of hydronic system types and applications.

The controller can be applied and function as either a standalone control, as part of a larger CCN system application, or at the heart of a Aquasmart system functioning with the Aquasmart Touch Pilot System Manager.

### Features

- The NTC controller controls and optimises the operation of hydronic terminal fan coil units. It is a microprocessor-based CCN (Carrier Comfort Network) compatible communicating controller with energy-saving algorithms.
- Energy-saving algorithms manage water valve operation and fan speed control simultaneously to ensure minimum energy consumption whilst maximising comfort conditions for the occupant.
- Factory-installed on terminal fan coils  
The NTC controller is factory-installed on the terminal fan coil; the assembly is also factory-tested. As a result, field installation is extremely simple.
- A wide range of user interfaces  
Depending on the application, two user interface types can be selected:
  - a simplified wired analogue user interface (SUI) that can be wall-mounted
  - a wired communicating user interface (CRC2) that can be wall-mounted or incorporated in compatible terminal fan coils (42N)
  - an infrared user interface (IR2) for use together with a wall-mounted infrared receiver or a receiver incorporated on compatible terminal fan coils (42GW)
  - a multi-function user interface (ZUI) that can control comfort, lights and blinds within a Carrier system



Carrier Room Controller (CRC2)



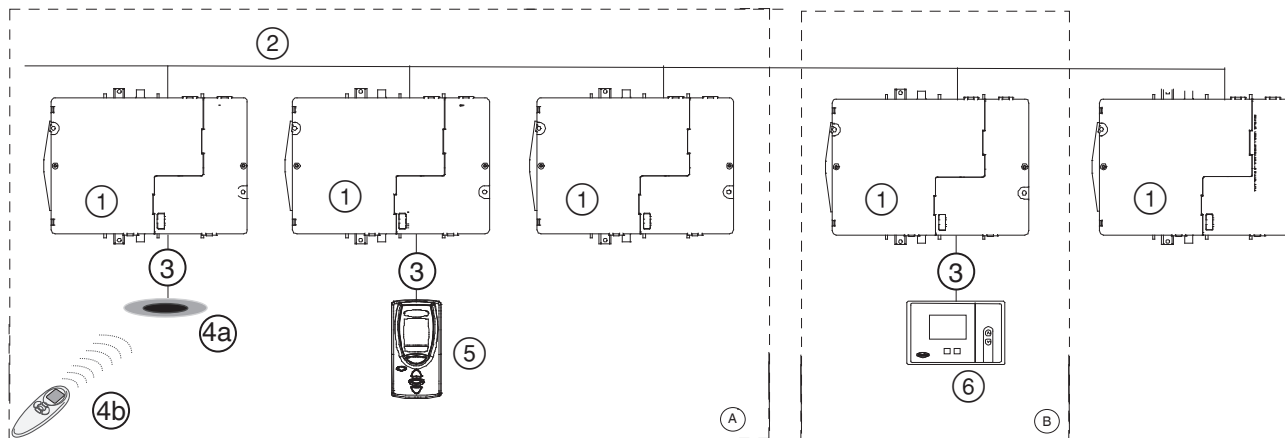
Simplified User Interface (SUI)



Infrared Remote Control (IR2) and receiver



Zone User Interface (ZUI)



## Legend

- 1 NTC controller
- 2 Secondary communication bus
- 3 User interface connection
- 4 IR2
- 5 ZUI2
- 6 CRC2
- A Room A
- B Room B