

Fan Coil Controllers



Features

- Models available with internal humidity sensing
- Advanced occupancy functions
- 3 configurable inputs
- Configurable fan functions button
- Unique configuration setup utility
- Auto Fan speed mode
- 24Vac On/Off, Floating or 0-10Vdc output
- Auxiliary output

Specification

Power requirements	9-30Vac 50/60 Hz; 2 VA Class 2
Operating conditions:	
Temp.	0 to 50°C
RH	0 to 95% (non-condensing)
Storage conditions:	
Temp.	-30 to +50°C
RH	0 to 95% (non-condensing)
Sensor	Local 10K NTC thermistor
Resolution	±0.1°C
Control accuracy	±0.5°C @ 21°C typical calibrated
RH sensor and calibration	Single point calibrated bulk polymer type sensor
RH sensor accuracy	Reading range from 10-90 % RH non-condensing
	10 to 20% - accuracy = 10%
	20 to 80% - accuracy = 5%
	80 to 90% - accuracy = 10%
Occupied and unoccupied setpoint range cooling	12.0 to 37.5°C
Occupied and unoccupied setpoint range heating	4.5 to 32°C
Room and outdoor air temperature display range	-40 to +50°C
Proportional band for room temperature control	Cooling & Heating: 1.8°C
Binary inputs	Dry contact across terminal BI1, BI2 & UI3
Contact output rating	Fan relay output: 30Vac, 1A Maximum, 3A. in-rush
Valve triac output	30Vac, 1A Maximum, 3A in-rush
Valve analogue	0-10Vdc into 2kΩ resistance min.
Wire size	18 gauge maximum, 22 gauge recommended
Conformity	CE EMC Directive 89/336/EEC
Dimensions	125 x 86 x 29mm
Country of origin	Canada

Product Codes

Commercial Controllers:

CN-7300A

FCU Controller, on/off output

CN-7300C

FCU Controller, floating output

CN-7300F

FCU Controller, analogue output

CN-7300C

FCU Controller, floating output with RH sensor

CN-7300F

FCU Controller, analogue output with RH sensor

Hotel Controllers:

CN-7305A

FCU Controller, on/off output

CN-7305C

FCU Controller, floating output

CN-7305F

FCU Controller, analogue output

CN-7355C

FCU Controller, floating output with RH sensor

CN-7355F

FCU Controller, analogue output with RH sensor

Suffixes:

B

BACnet MS-TP interface

E

Echelon TP/FT-10 interface

-PIR

Integral PIR detector

Technical Overview

The CN-7300 series of fan coil controllers is specifically designed for fan coil control. The product features a backlit LCD display with dedicated function menu buttons for simple operation. Accurate temperature control is achieved using a P+I control algorithm, which virtually eliminates the temperature offset associated with traditional, differential-based units. Models are available with On/Off, 3-point floating or 0-10Vdc outputs.

All models can control three, two or single fan speeds. 3 additional inputs are also provided for various functions and feature configurable system and fan button functions to suit most applications. All contain an SPST auxiliary switch that can be used to control lighting or auxiliary reheat.

The specific difference between commercial and hotel type controllers is the operation of the centre button. The centre button on the commercial type is used to activate the unoccupied override timer. The centre button on the hotel type is used to change the display from °C to °F.

Benefits

- Increased occupant comfort through dehumidification
- Single model meets more applications
- Meets more applications with a single model
- Tamperproof, no need for housing guards
- Increased occupant comfort in cooling mode by reducing humidity
- Less fan noise in all mode of operation
- Meets advanced applications requirements
- Can be used for lighting or reheat

Installation

- Remove security screw on the bottom of thermostat cover.
- Open up by pulling on the bottom side of thermostat
- Remove Assembly and remove wiring terminals from sticker.



A) Location:

1. Should not be installed on an outside wall.
2. Must be installed away from any heat source.

Installation (continued)

A) Location (continued)

3. Should not be installed near an air discharge grill.
4. Should not be affected by direct sun radiation.
5. Nothing must restrain vertical air circulation to the thermostat.

B) Installation:

1. Swing open the thermostat PCB to the left by pressing the PCB locking tabs. (Fig. 1)
2. Pull out cables 6" out of the wall.
3. Wall surface must be flat and clean.
4. Insert cable in the central hole of the base.
5. Align the base and mark the location of the two mounting holes on the wall. Install proper side of base up.
6. Install anchors in the wall.
7. Insert screws in mounting holes on each side of the base. (Fig. 1)
8. Gently swing back the circuit board on the base and push on it until the tabs lock it.
9. Strip each wire 1/4 inch.
10. Insert each wire according to wiring diagram.
11. Gently push back into hole excess wiring (Fig. 2)
12. Re-Install wiring terminals in correct location. (Fig. 2)
13. Reinstall the cover (top side first) and gently push back extra wire length into the hole in the wall.
14. Install security screw.

See page 3 for Fig. 1 & 2

Installation (continued)

Fig. 1

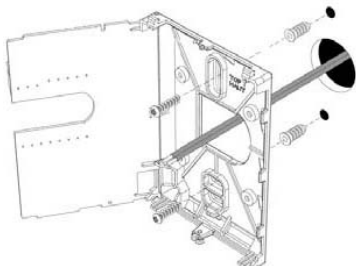
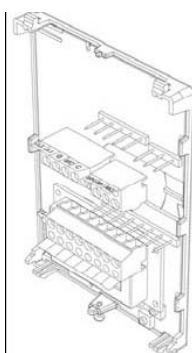


Fig. 2



Note:

Full operating instructions are supplied with each unit.

Dimensions

