



■ **EFCB** **Fan Coil Controller**

The EFCB Fan Coil Controller is designed for simple and accurate control of any fan coil application. The controller incorporates a configurable fan coil algorithm, variable three speed fan control and either modulating or digital heating and cooling outputs.

APPLICATIONS

- 2 or 4 pipe systems
- Fan coil unit (up to 3 speeds and/or analog 0-10Vdc)
- Cooling signal (on/off, floating or modulating 0-10Vdc)
- Heating signal (on/off, floating, pulse or modulating 0-10Vdc)
- Reheat signal (on/off, floating, pulse or modulating 0-10Vdc)

MODELS

Product	Model	Type	Extra 3A Relay
Fan Coil Controllers	EFCB10TU2	24Vac	2
	EFCB10TU4		4
	EFCB11TU2	120Vac	2
	EFCB11TU4		4
	EFCB12TU2	240Vac	2
	EFCB12TU4		4
	Middle East and Asian Markets		
	EFCB10T-OE1	24Vac	0
	EFCB10TU2-OE1		2
	EFCB10TU4-OE1		4
	EFCB12T-OE1	240Vac	0
	EFCB12TU2-OE1		2
	EFCB12TU4-OE1		4

FEATURES

- Available in 24, 120 or 240 Vac
- Up to 10 inputs and 15 outputs
- Real Time Clock (RTC) with 24 hour backup
- Configurable PI (Proportional-Integral) function
- Selectable proportional control band and dead band
- Independent cool/heat setpoint for NSB/OCC mode
- 3-speed or ECM (analog) fan control
- Selectable internal or external temperature sensor (10K Ω)
- Changeover by contact or external temperature sensor
- Freeze protection
- Removable, raising clamp, non-strip terminals

INPUTS/OUTPUTS

Inputs:

- 4 configurable analog inputs (0-10Vdc or 10K Ω)
- 3 dedicated sensor inputs
- 3 configurable digital inputs

Outputs:

- 4 analog outputs (configurable)
- 4 TRIAC outputs (configurable)
- 3 fan outputs (configurable)
- Up to 4 digital outputs (configurable)

TFL - Digital Room Sensor

FEATURES

- Built-in temperature sensor and optional humidity and CO₂ sensors
- Backlit LCD with simple icon and text driven menus
- BACnet service port via on-board mini USB connector
- Selectable Fahrenheit or Celsius scale
- Three wire connection between digital room sensor and controller
- Used to configure and operate the EFCB Fan Coil Controllers

NETWORK COMMUNICATION

- BACnet MS/TP or Modbus RTU communication (selectable via menu)
- Select MAC address via DIP switch or via network
- Automatic baud rate detection

BACnet MS/TP

- BACnet scheduler (up to 6 events)
- Firmware upgradeable via BACnet
- COV (change of value)
- Copy and broadcast configuration to other EFCB modules via menu or network
- Automatic device instance configuration

Modbus RTU

- Modbus RTU @9600, 19200, 38400 or 57600 bps
- RTU Slave, 8 bits (configurable parity and stop bits)
- Connects to any Modbus RTU master



Model	Temp	Humidity	CO ₂	Type
TFL54	•			3*3
TFL24	•			2*4
TFLH24-INT	•	Internal		
TFLH24-EXT	•	External		
TFLG24	•		•	
TFLGH24	•	Internal	•	

TDF - Universal Digital Room Sensors



● TDF10

● TDF40

○ TDF70



● TDF00



● TDF30



○ TDF60

Horizontal Models	Temp.	RH	CO ₂
● TDF10-100 ● TDF40-100 ○ TDF70-100	•		
● TDF10-101 ● TDF40-101 ○ TDF70-101	•	•	
● TDF10-102 ● TDF40-102 ○ TDF70-102	•	•	•
● TDF10-103 ● TDF40-103 ○ TDF70-103	•		•

Vertical Models	Temp.	RH	CO ₂	PIR	VOC
● TDF00-100 ● TDF30-100 ○ TDF60-100	•				
● TDF00-101 ● TDF30-101 ○ TDF60-101	•	•			
● TDF00-102 ● TDF30-102 ○ TDF60-102	•	•	•		
● TDF00-104 ● TDF30-104 ○ TDF60-104	•			•	
● TDF00-105 ● TDF30-105 ○ TDF60-105	•	•		•	
● TDF00-106 ● TDF30-106 ○ TDF60-106	•	•	•		•
● TDF00-107 ● TDF30-107 ○ TDF60-107	•	•	•	•	•
● TDF00-108 ● TDF30-108 ○ TDF60-108	•	•	•	•	

TDF FEATURES

- Built-in temperature sensor and optional humidity, CO₂, VOC and occupancy sensors
- Elegant design
- Universal wall-mount design
- Used to configure and operate the EFCB Fan Coil controllers
- Three wire connection between digital room sensor and controller
- Selectable Fahrenheit or Celsius scale
- BACnet service port via on-board mini USB connector
- Horizontal or vertical configuration

TYPICAL APPLICATION

