## INSTALLATION INSTRUCTIONS

ALL phases of this installation must comply with NATIONAL, STATE AND LOCAL CODES

Model:

CNT07750

# Airflow Control (AFC) for Air Handler Installations

NOTE: This control is compatible with the Hydronic Heat Control, CNT06197

**IMPORTANT** — This Document is customer property and is to remain with this unit. Please return to service information pack upon completion of work.

- Remove the existing control. 1.
  - Set the dip switches on the replacement board before removing the existing control so they match the current board. a.
  - Remove the factory wiring connections. Label wires as necessary. b.

NOTE: Lift the low voltage terminal block. The individual thermostat wires do not need to be removed.

- Remove the six mounting screws and set aside C.
- Install the new control. 2.

a. Install the new control in reverse order.

NOTE: Ensure the terminal block is properly aligned when installing on the new board.

- Verify Dip Switch settings are accurate per the following tables. b.
- Power up the air handler and test for proper operation. c.



### AFC DIP SWITCH SETTINGS

#### **Dip Switch S1**

• Set the S1-1 and S1-2 dip switches for the OD multiplier (tonnage) per the chart.

INDOOR MODEL	S1-1	S1-2	OD MULTIPLIER
	OFF	OFF	2
TAM7A0A24H21SB	OFF	ON	1.5
*AM7A0A24H21SA	ON	OFF	2.5
	ON	ON	3
	OFF	OFF	2
TAM7A0B30H21SB	OFF	ON	1.5
*AM7A0B30H21SA	ON	OFF	2.5
	ON	ON	3
	OFF	OFF	3
TAM7A0C36H31SB	OFF	ON	2
*AM7A0C36H31SA	ON	OFF	2.5
	ON	ON	3.5
	OFF	OFF	3.5
TAM7A0C42H31SB	OFF	ON	2.5
*AM7A0C42H31SA	ON	OFF	3
	ON	ON	4
	OFF	OFF	4
	011		
TAM7A0C48H41SB	OFF	ON	3
TAM7A0C48H41SB *AM7A0C48H41SA	<b>.</b>		•
	OFF	ON	3
	OFF ON	ON OFF	3 3.5 4.5**
	OFF ON	ON OFF	3 3.5
	OFF ON ON	ON OFF ON	3 3.5 4.5**
*AM7A0C48H41SA	OFF ON ON OFF	ON OFF ON OFF	3.5 3.5 4.5** 4.5**

\* May be "A" or "T"

NOTE: The OD multiplier in conjuction with the CFM/TON can be used to adjust total airflow for your application.

Example: 4.5T x 370 CFM/TON = 1665 CFM

\*\* Not an actual OD size

• Set the S1-3 dip switch for AC or HP.

OD TYPE	S1-3
HP	OFF
AC	ON



• Set the S1-4 dip switch for the number of stages on the outdoor unit.

OD STAGES	S1-4
1	OFF
2	ON

16 SEER = 2 Stages 19 SEER = 2 Stages 20 SEER = 2 Stages

• Set the S1-5 dip switch for the number of compressors.

# COMPRESSORS	S1-5
1	OFF
2	ON

16 SEER = 1 Compressor 19 SEER = 2 Compressors 20 SEER = 2 Compressors



#### **Dip Switch S2**

• Set the S2-1 and S2-2 dip switches for the Cooling and Heating CFM/Ton.

INDOOR MODEL	S2-1	<b>\$2-2</b>	COOLING CFM/TON	HEATING CFM/TON
	OFF	OFF	400	430
TAM7A0A24H21SB	OFF	ON	360	390
*AM7A0A24H21SA	ON	OFF	380	410
	ON	ON	420	450
	OFF	OFF	400	430
TAM7A0B30H21SB	OFF	ON	360	390
*AM7A0B30H21SA	ON	OFF	380	410
	ON	ON	420	450
	OFF	OFF	370	420
TAM7A0C36H31SB	OFF	ON	350	400
*AM7A0C36H31SA	ON	OFF	390	440
	ON	ON	410	450
	OFF	OFF	370	400
TAM7A0C42H31SB	OFF	ON	330	360
*AM7A0C42H31SA	ON	OFF	350	380
	ON	ON	390	420
	OFF	OFF	350	400
TAM7A0C48H41SB	OFF	ON	330	380
*AM7A0C48H41SA	ON	OFF	370	420
	ON	ON	390	440
	OFF	OFF	370	400
TAM7A0C60H51SB	OFF	ON	380	410
*AM7A0C60H51SA	ON	OFF	390	420
	ON	ON	400	430

\* May be "A" or "T"

• Set the S2-3 and S2-4 dip switches for the Cool Off Delay.

BLOWER OFF DELAY	S2-3	S2-4
1.5m @ 100%	OFF	OFF
NO DELAY	OFF	ON
3m @ 50%	ON	OFF
ENHANCED	ON	ON

#### **Indoor Blower Timing**

This ENHANCED MODE selection provides a ramping up and ramping down of the blower speed to provide improved comfort, quietness, and potential energy savings. The graph on the right shows the ramping process.

Enhanced Mode works in cooling, HP, heating, Torque, and constant CFM modes.

• Set the S2-5 dip switch for the airflow mode.

AIRFLOW MODE	S2-5
*TORQUE	OFF
CONSTANT CFM	ON

\* All zoning applications MUST be set to Constant CFM mode. \* Torque mode is optional and is recommended for high static applications. High static conditions dramatically increase energy consumption with variable speed motors. Evaluate the blower performance table in relationship to the duct system to determine the benefit of each installation.

\* For the 2 ton air handler, torque mode will reduce airflow when static is above approximately 0.3" water column.

\* For the 2-1/2, 3, and 3-1/2 ton air handlers, torque mode will reduce airflow when static is above approximately 0.35" water column.

\* For the 4 and 5 ton air handlers, torque mode will reduce airflow when static is above approximately 0.4" water column.

When selected, Torque Mode is used for cooling operation only. All heating modes default to constant CFM.





The manufacturer has a policy of continuous product and product data improvement and reserves the right to change design and specification without notice.