## **Electronic Controls**

# Hydro Air Fan Control

Taco Hydro Air Fan Controls are the ideal interface between the thermostat and air handler. The Fan Controls provide advance diagnostic capabilities, universal thermostat compatibility, a simplified wiring layout, and automatic multi-speed switching while increasing year round comfort and operating efficiency.





## **Submittal Data Information Hydro Air Fan Control**

Submittal Data # 101-146 Supersedes: 101-055 • 09/01/99

THERMOSTAT

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C R W Y G

HAFC201-4 HYDRO AIR FAN CONTRL

8888

Dry Contacts To "T T" on Boiler o Switching Relay

**Boiler Relay** 

Rating

24 VAC, 1 A

C

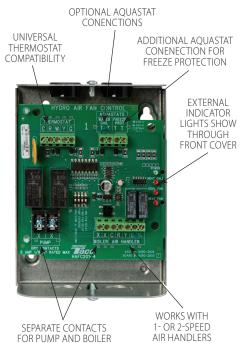
The Hydro Air Fan Control is an interface between the thermostat and air handler. It also has an isolated end switch to start the boiler and/or pump. When the thermostat calls for heat, the Fan Control energizes the end switch relay and allows the fan to operate at low speed when the water is above the optional aquastat setting. When the thermostat calls for cooling, the Fan Control energizes the condenser and operates on high speed. The Fan Control also includes three built-in fan time delay options, two selectable pump exercise modes, a secondary aquastat connection for freeze protection and the ability to switch a pump and / or boiler.

#### **Features**

- Automatic Multi-Speed Switching
- Prevents False Calls for Fan Operation
- Simplified Wiring
- Contractor-Friendly PC-Board Layout
- Built-in Time Delays
- Pump Exercise Timer
- 100% Factory Tested

### **External Diagnostics**

External lights show full functionality of the Hydro Air Fan Control. The green light should always be on indicating that power is connected. Red lights indicate fan operation for heating and cooling modes.



120 VAC INPUT 

Optional Power Wire to Thermostat that Requires 24VAC

NOTE: For 4 minute ON DELAY

of Heating Fan, switch 1 and 3 MIN ON DELAY to ON position.



(or to "TT" ons witching relay)

Power

Input

24 VAC, 60 HZ, CLASS 2

- transformer to power some styles of thermostats
- Red Side of transformer use R to switch all functions
- W White - Heating signal
- Y Yellow - Condenser signal
- Green Fan Signal G

#### WATER COIL AOUASTAT

Product

Number

HAFC-201-4

**Wiring Diagram** 

TT Remove factory installed jumper and connect to aquastat at air handler to control operation of the fan when in the heating mode.

#### FREEZE PROTECTION AOUASTAT

Connect to aquastat or thermostat TT to sense low ambient temperature. Reduces the chance of pipes freezing by energizing the pump dry contacts.

### PUMP DRY CONTACTS

XX May switch pump directly by bringing in external line voltage or connect to "TT" on switching relay.



#### **BOILER DRY CONTACTS**

Pump Relay

Rating

1/6 H

POWER

XX Connects to the boiler or "TT" terminals on a switching relay.

To: Optional Aquastat on Return Line of Hydro Coil

To: Optional Aquastat or Thermostat to sense low ambient temperature

CONDE

Width

4-7/8

Hight

6-5/8"

Depth

2-3/8"

POWER HEAT CALL

COOL FAN HEAT FAN

#### **AIR HANDI FR**

- Common side of transformer to (power the Fan Control
- R Red - Side of transformer used to switch all functions
- Υ Yellow - Condenser signal **One Speed Motor**
- $G_{low}$  Connect the fan to the relay. Keep the jumper installed between G<sub>high</sub> and G<sub>low</sub>. **Two Speed Motor**

 $G_{high}$  Remove jumper and connect  $G_{high}$  to the high speed fan relay and connect G<sub>low</sub> to low speed fan relay.

### Switch Settings

- 1 minute on fan delay, in heating mode. 1
- 2 3 minute on fan delay, in heating mode.
- 1&2 4 minute on fan delay, in heating mode.
- Pump dry contact activated for 3 2 minutés every 24 hours (boiler contracts not activated).
- 4 Pump dry contacts activated for 30 seconds every two weeks (boiler contacts not activated).

Taco Inc., 1160 Cranston Street. Cranston, RI 02920 / (401) 942-8000 / Fax (401) 942-2360 Taco (Canada) Ltd., 8450 Lawson Road, Unit #3, Milton, Ontario L9T 0J8 / (905) 564-9422 / Fax (905) 564-9436 www.TacoComfort.com