

TAY - D - 1

Plus One (+1) Add-on Kit for Split System Heat Pump

TAYPLUS103A Control Center



## PLUS ONE (+1) CONTROL CENTER ADD-ON HEAT PUMP KIT TAYPLUS103A

- Electrically connects the Weathertron® Heat Pump with a warm air furnace.
- Compatible with furnaces having at least 35VA 24 volt transformer.
- UL listed.
- Labeled terminal block for simplified wiring.
- The enclosure is 9 3/16" x 7 1/8" x 2 1/2" in size and made of galvanized steel.
- The control center as shipped is ready for operation in the "NON-RESTRICTED"\*\* mode, and is convertible to the "RESTRICTED"\* mode with the addition of the TAYSTAT250A Outdoor Thermostat Kit.
- An oil furnace application requires the bonnet thermostat (\*THT1248) (see cover) in the heating control circuit.
- The Control Center is installed in close proximity to the warm air furnace.
- All field electrical connections are to the terminal block or wire nuts (field supplied).

### **SEQUENCE OF HEATING OPERATION**

### \*\*NON-RESTRICTED MODE - (As shipped)

Upon a call for first stage heat, the heat pump (only) operates in heating. If the outdoor temperature is high enough that the heat pump can handle the load, first stage will be satisfied after the required run time and the system shuts off until the next (first stage) call for heat.

If the outdoor temperature is below the balance point of the system, and the heat pump cannot handle the load, when the temperature in the room drops approximately 1-1/2 degrees further, second stage heat is called for. Second stage turns the heat pump off and simultaneously brings the furnace on. The furnace will now satisfy the second stage only. The first stage of the thermostat is still calling. After a minimum delay of 45 seconds, the heat pump will resume operation. If the indoor temperature continues to rise, the thermostat will be satisfied. If indoor temperature does not continue to rise but falls, the second stage will call and bring on the furnace again.

Moving thermostat with emergency heat switch to the "EMERGENCY HEAT" position converts the system to "furnace only" operation.



• The Control Center may be mounted in any position.

### \*RESTRICTED MODE - (Requires TAYSTAT250A)

The O.D.T. changeover must be at or above the application or economic balance point of the system. The heat pump alone cannot handle the load at outdoor temperatures below the application balance point.

At any temperature above the setting of the O.D.T., the heat pump only will operate when called for by the first stage of the thermostat. When the outdoor temperature drops below the setting of the outdoor thermostat, the call for heat goes to the furnace and the heat pump is cut off. When the outdoor temperature rises above the setting of the outdoor thermostat, the system returns to heat pump (only) operation.

Moving thermostat with emergency heat switch to the "EMERGENCY HEAT" position converts the system to "furnace only" operation.

(**NOTE: Economic Balance Point** is the outdoor temperature at which it is more economical to use the alternate fuel energy than the primary electric heat pump energy.)

## **PRODUCT DATA**



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Since The Trane Company has a policy of continuous product improvement, it reserves the right to change the specifications and design without notice.

#### **The Trane Company**

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Library	Product Literature
Product Section	Unitary
Product	Split System Heat Pump
Model	TAYPLUS103A
Literature Type	Data Catalog
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