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What is Integrated Dehumidification Solution?

IDS is an easy dehumidification solution that was designed for residential applications. Today's tighter home building envelopes result in a tendency of running higher indoor Relative Humidity in the shoulder seasons due to the fact that the house is not leaky and the AC does not need to run much. We developed this solution for residential applications to help combat high indoor Relative Humidity due to the lack of AC runtime, in order to make the house more comfortable.

What is it Great for?

- Higher performance homes that are tight will run higher indoor Relative Humidity in the shoulder seasons due to a lack of AC runtime
- Markets where this is desired are areas such as the Gulf Coast, Florida, Houston, Georgia, South Carolina

How it Works:

IDS is specific software that is designed to assist in lowering indoor Relative Humidity of the home or space. With this solution, a more expensive whole house ducted dehumidifier and installation is not needed. IDS will run only when necessary and can run independently from an air conditioning call. *IDS will run only if the last call was a cooling call. Future software upgrade will allow IDS to run if the last call was either heating or cooling.

Necessary Components:

- Correctly sized AC or HP outdoor unit
- Indoor VSPD Air Handler (TEM6, TEM8 or TAM9)
- Electric heat strip sized close to the OD unit AC capacity
- IDS enabled 824 or 1050 control (NOT available on 850)
- Model Numbers: Trane: TCONT824AS52DBRHC or TZON1050AC52ZAEHC

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Indoor Humidity levels increase due to internal sources or moist air brought in from the outside.

Thermostat detects that humidity exceeds the user-set preference of low, medium, or high, depending on desired comfort level, and commands the HVAC system to turn on cooling, electric heat, and the variable speed air handler.

The system automatically senses the need to remove moisture and the cooled air passes over the electric heating element within the air handler and is warmed back up to the temperature of the home providing continuous comfort.

The air handler then circulates the drier, conditioned air throughout the home while IDS operates. After IDS has reduced humidity in the home, the thermostat continues to monitor humidity levels and the Smart Continuous Fan feature will automatically make airflow adjustments to prevent any moisture on the coil or in the drain pan from re-evaporating and being introduced back into the home.