OPTIMIZE YOUR EVAPORATOR FOR INCREASED EFFICIENCY AND IMPROVED PERFORMANCE

Introducing the Adjustable Nozzle Distributor from Heatcraft Refrigeration Products

The replaceable nozzle distributor body has been an important part of commercial refrigeration evaporator design for many years. Its ability to tune evaporator performance to specific refrigerant and application conditions results in better system performance than the older venturi-nozzle distributor designs.

The new Adjustable Nozzle Distributor (AND) takes the advantages of the replaceable nozzle design and adds a number of key improvements.

Advantages of the Adjustable Nozzle Distributor:

- Compensates for differences between design specifications and actual jobsite operation. The AND is tuned after start-up and is optimized for actual jobsite operation. This eliminates the possible need of opening the system to change replaceable nozzles if actual conditions vary significantly from design specs.
- Allows for adjustments in the following conditions without opening the system:
 - Alternate refrigerant use
 - Change in application
 - Change in room temperature
- Once set, the AND is more forgiving to seasonal temperature changes than typical replaceable nozzle selections
- Can be adjusted to compensate for marginal expansion valve sizing
- Adjustments are simple and require only standard hand tools





Adjusting the AND:

The AND has a slotted adjustment stem that is turned with a regular screwdriver. There are 11-12 detents that "click" as the stem is turned counterclockwise from the fully closed to the fully open position. Opening positions are referenced as "clicks" from the fully closed position. The adjustment stem is located under the adjustment stem nut.

The AND is shipped with a setting based upon the number of evaporator circuits. This setting is sufficient for evacuation and initial room pulldown after the refrigeration system is started.

After system startup, with the room temperature is close to operating conditions, the AND should be accessed and adjusted before setting the expansion valve superheat.

A pressure tap is located on the AND adjuster body. This location senses expansion valve outlet pressure. This pressure is compared to the value measured at the evaporator suction header to yield a pressure drop. By rotating the AND adjuster stem, the pressure drop can be changed. Tables for pressure drop settings, initial settings and optimal pressure drops are provided with the adjustment procedure instructions included with any AND-equipped evaporator.



After setting the AND, the expansion valve superheat should be set in the normal manner by measuring the suction outlet connection temperature and comparing to the saturation temperature measured at the evaporator suction header.

The Adjustable Nozzle Distributor from Heatcraft Refrigeration Products is available only on select models. Contact your sales representative or call 800-321-1881 for more information.

The name behind the brands you trust. ``







