



Channel Blender
(Patent Pending)

Dynamic Air Handler Mixing Device

CHANNEL BLENDER BY BLENDER PRODUCTS®

The CHANNEL BLENDER by BLENDER PRODUCTS®, is an innovative mixing device that improves mixing box performance. Offered by Nortek Air Solutions as a featured part of our air management solutions, the CHANNEL BLENDER provides an advantage over traditional static mixers by solving the issue of stratification in less air tunnel length.

Stratification is when cold outside air and warm inside air fail to mix in the mixing box. Traditionally, a static mixing section is used downstream of the mixing box to mix the two air streams. These sections are effective at protecting the coils from freezing and eliminate freeze stat trips but add length to the air tunnel thereby posing design challenges when it comes to buildings where there is limited space for the air handler unit.

The CHANNEL BLENDER solves both the stratification problem and overall length issue. It affords the same stratification protections as the static mixing section by creating alternating cold outside air and warm inside air channels. Damper blades at the ends of these channels direct the air to mix in minimal downstream distance. In most cases, the mixing performance of the CHANNEL BLENDER can eliminate the air tunnel length required for a traditional static mixing section. This allows air handler units to be more adaptable in limited space situations.

Your Benefits

The CHANNEL BLENDER affords several advantages over traditional static mixing sections while providing superior freeze protection and eliminating freeze stat trips.

- Small footprint; up to 50% less space
- Eliminates the static mixing section
- Less air tunnel length and smaller AHU footprint
- Lower first cost
- Lower operating costs with less pressure drop
- Replaces outdoor air and return air dampers
- Provides all control damper functionality

The CHANNEL BLENDER is available in several configurations to conform to almost any mixing box configuration.



Designed & Constructed for AHU Applications

- Provides solid construction in a small footprint
- Flanged frame for easy mounting to air handling unit plenum ceiling, walls or floors
- Insulated, double-wall constructed channel walls to eliminate condensation from heat transfer with adjacent channels
- Reliable, tight-sealing control dampers
- Downstream side damper actuators and damper linkage for service access
- Near all-aluminum construction to reduce corrosion concerns



CHANNEL BLENDER Specified Options

The CHANNEL BLENDER offers several options to customize the product to meet common specified criteria:

- Dampers – Outside air and return air dampers that can be separately specified:
 - Standard dampers – Single-wall aluminum extrusion with EPDM bulb seals
 - Airfoil dampers – Double-wall aluminum extrusion with improved flow and EPDM bulb seals included
 - Insulated Thermal Break (ITB) dampers – Composite aluminum and synthetic airfoil damper blades to prevent heat transfer through the damper blades with EPDM bulb seals included
- Minimum Outside Air Section – Outside air damper blades can be isolated and segmented to provide a minimum outside air path and economizing the outside air path
- Factory Installed Damper Actuators – Saves time at the job site by having damper actuators selected and installed at the factory; with nearly any brand actuator available

Offering reliable system control, the CHANNEL BLENDER provides proper indoor air quality through energy efficient operation. It is now available as a standard option in Nortek Air Solutions air management designs.





Specifications and illustrations subject to change without notice and without incurring obligation.



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