

# INDUCTION UNITS



FMTBY  
FMLBY



**DADANCO**<sup>TM</sup>

feel the difference<sup>TM</sup>

# PIONEERING INDOOR COMFORT THROUGH INNOVATION

## A Legacy of Innovation

At DADANCO, innovation isn't just a buzzword – it's in our DNA. Born in Australia, we embarked on a journey to revolutionize HVAC systems with cutting-edge solutions.

**From Breakthrough to Benchmark:** Our journey began with a breakthrough nozzle design that redefined perimeter induction systems. This marked the inception of DADANCO's commitment to engineering excellence. Our units boast an enhanced induction ratio with superior air mixing and distribution, resulting in consistently comfortable spaces.

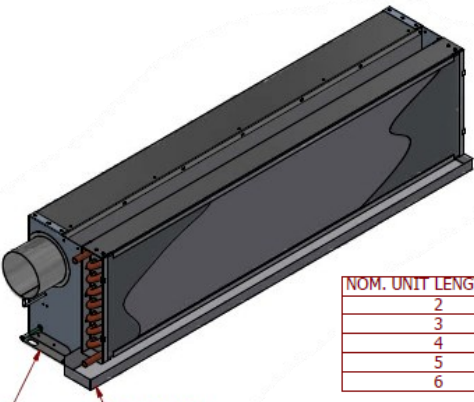
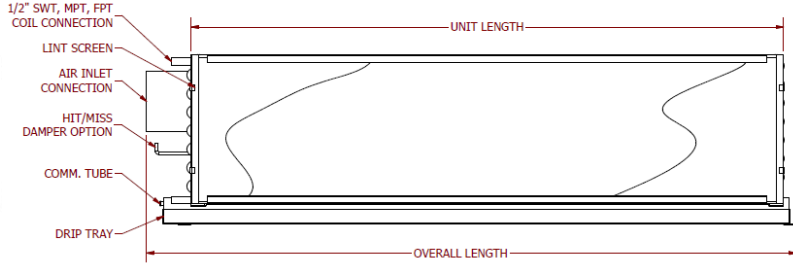
**Nozzle Technology:** Our patented nozzle technology became synonymous with whisper quiet, reducing noise levels by 3-4 dB. Innovation isn't just about performance; it's about creating comfortable environments.

**Customization, a Hallmark:** Beyond innovation, customization has been our hallmark. Our ability to craft bespoke units that fit seamlessly into existing spaces signifies our dedication to efficiency and comfort.

**An Ongoing Journey:** Today, as we stand on the shoulders of innovation, DADANCO continues to lead the industry. Our legacy is one of engineering excellence, and our future promises to redefine indoor comfort through ingenuity.

## FMLBY THE “LOW BOY”

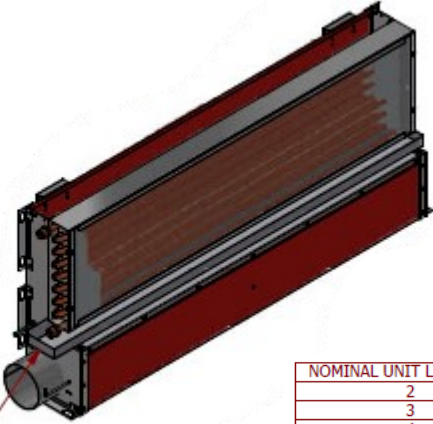
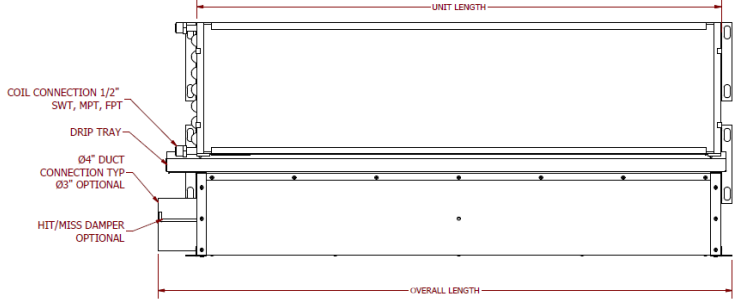
The Low Boy is 11.5” High and 9” wide

NOM. UNIT LENGTH (FT)	UNIT LENGTH (IN)	OVERALL LENGTH (IN)	WEIGHT (LB)
2	24	28	32
3	32	36	42
4	40	44	50
5	52	56	59
6	64	68	70

## FMTBY THE “TALL BOY”

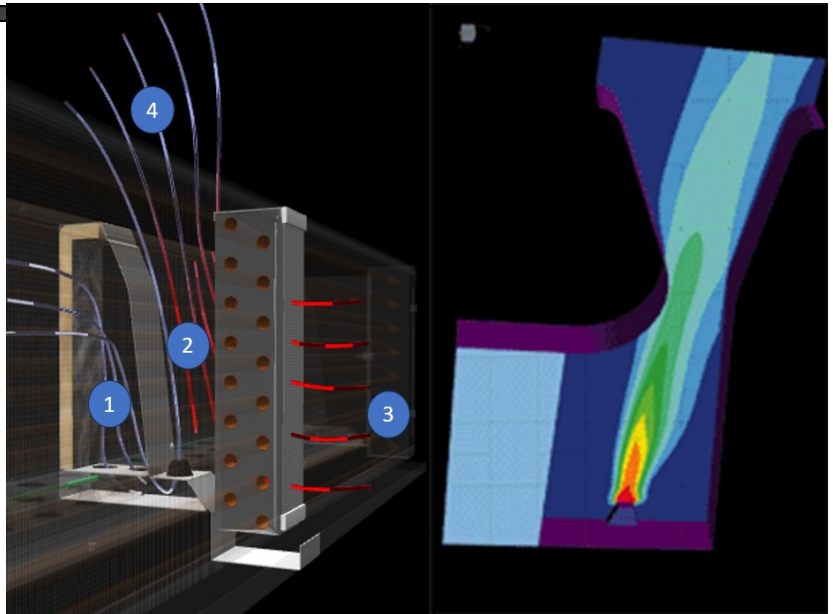
The Tall Boy is 18” High and 6.35” wide

NOMINAL UNIT LENGTH (ft)	UNIT LENGTH (in)	OVERALL LENGTH (in)	WEIGHT (lb)
2	24	28	28
3	32	36	36
4	40	44	44
5	52	56	51
6	64	68	59

## ENHANCED INDUCTION

- **Step 1** - Primary Air is introduced to the unit from the main air handling system. This fresh air is used to dehumidify the space and drives the induction process.
- **Step 2** - The primary air goes through an array of star shaped nozzles, which have more surface area than standard round nozzles. These nozzles are designed to increase the velocity of the primary air going through them, which in turn creates a negative pressure behind the coil, caused by these high velocity jets.
- **Step 3** - The room air is induced through the hydronic coil, caused by this negative pressure. The room air is heated or cooled by the coil.
- **Step 4** - The air is discharged into the room with a mix of the primary and induced air.



## THE PROBLEM:

There are a number of issues with the Old PIU Induction units including:

- **Noisy** – hissing sound.
- **Leaky** -condensate overflowing drain pans.
- **Dirty** -wet coils that collect dust and become clogged.
- **Inefficient** –Often not up to local codes, give energy ratings on buildings of D or less.
- **Uncontrolled** –Outdated control systems that make zones uncomfortable.

## SOLUTION:

- **Improved acoustics** – Dadanco PIUs operate with significantly reduced noise levels.
- **Condensation Control:** The new units employ elevated water temperatures around 57°F, preventing condensation and wet coils that impede performance and attract dust.
- **Maximized Air Entrainment:** Due to this induction process the system requires 70% less air than an all air (VAV) system. It is energy efficient because it uses water instead of air to move energy around a building. Pumps are typically ten times more efficient than fans to move energy in this way.
- **Energy Reduction:** By reducing the required CFM or air from the main system, our units contribute to significant energy savings. The advance fluid dynamics of the units use less primary air, with increased air distribution, due to the induction process. For every 100CFM of air, the units is inducing 300-400CFM of room air, which results in 400-500 CFM of air movement for only 100CFM of fan power! All of the sensible heating and cooling is done by the hydronic coil and is decoupled from the primary air, meaning the air handler is not responsible for heating and cooling in these spaces and most of the energy is coming from the cooling or heating water, which is typically a chiller and boiler. In many cases Dadanco was able to reduce the static pressure in the older units by 1” or more!
- **Modern Mastery:** Dadanco can help get rid of outdated controls and cabinets as DADANCO can offer custom enclosures and control systems to fit your space.

In the face of evolving local and federal legislation aimed at minimizing carbon footprints and achieving new energy benchmarks, staying compliant is paramount. If your building has outdated induction units, their replacement becomes an avenue to not only upgrade your HVAC system but also to elevate its efficiency. DADANCO's High Efficiency Perimeter Induction Units (PIUs) seamlessly replace older models, making them ideal for a variety of settings. Through our innovative technology, we collaborate closely with building owners, often reducing static pressure and overall fan energy. This dual impact not only curtails energy expenses but also aligns with the rigorous codes

## ELEVATE YOUR COMFORT, CONTACT US TODAY

Connect with us to delve deeper into the world of DADANCO's High Efficiency Perimeter Induction Units (PIUs). For technical resources and insights, visit our website at [www.dadanco.com](http://www.dadanco.com). There, you can find, brochures, FAQs, Guide Specifications, Revit files, submittal drawings, and even our advanced Selection Software. Based on imperial data from our in house 200 ASHRAE compliant lab, this software will select and size products, supported by performance data, sound metrics, throw data, and integrated BIM information. Your pathway to an upgraded HVAC future awaits – reach out to us and let's redefine indoor comfort together.



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