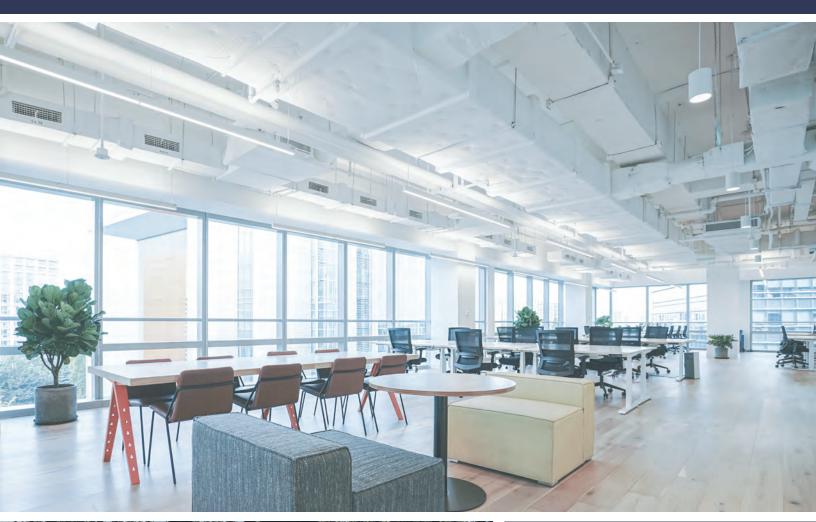
CHILLED WATER FAN POWERED TERMINAL UNITS







33SZ Chilled Water Fan Powered Terminal Units

Flow Sensor

Metallic multi-point averaging Diamond Flow sensor is more robust than a plastic option and is accurate to +/-5%, even without ideal supply ductwork.

Cabinet

18 ga. frame provides structural strength and secure mounting for the 20 ga insulated panels. Several liner options for any application.

Control Damper

Inclined Opposed Blade
Damper provides superior
control. The damper and
flow sensor work together
to deliver the exact amount
of ventilation air required by
the zone.



Sensible Cooling

Cooling coils are available up to 8 rows to meet the needs of any application. Provided standard with drip pans.

Fan/Motor

Highly efficient fan and motor combinations are specifically designed to handle advanced control sequences for the most efficient VAV systems.



Line Voltage

Enclosure

Hinged for easy

access. Several

mounting options,

including remote,

requirements to be

met in tight spaces.

allow NEC code

Water Heating Coils are available up to 2 rows. Nailor electric heating elements are available in .1 kw increments.



The Nailor Difference

Inclined Opposed Blade Damper (OBD)

The design and installation of the Nailor OBD significantly reduces inlet static pressure compared to a butterfly damper, reducing system energy use. The 45° closure design delivers uniform air flow to the fan and an air diffusion baffle on the damper eliminates fan shift.



EPIC Fan Technology®

Proprietary fully programmable and pressure independent ECM motors are paired with highly efficient blowers. Our ECM controller uses **EPIC Fan Technology**® to provide the most advanced control sequences and enables custom control of electric demand to meet specific limits in the field. Dynamic fan control is available to track building loads and provide substantial HVAC energy savings when compared to constant volume operation.



Space Frame Cabinet Construction

Unique **space frame construction** provides increased strength and enables full size access panels on top and bottom.



Distributed Cooling & Ventilation Control

The Nailor 33SZ enables a **new HVAC design** where latent loads are handled by the dedicated outdoor air system and sensible loads are handled by the terminal unit in the space. This eliminates the need for a central air handling unit. With multiple sizes, low profile configurations, and up to 8 rows of cooling coil the 33SZ portfolio can meet the needs of most projects.



33SZ CHILLED WATER

FAN POWERED TERMINAL UNITS

Why use a Chilled Water Fan Powered Terminal Unit (CWFPTU)?

The CWFPTU when combined with a dedicated outside air system (DOAS) enables a new paradigm of HVAC system design:

- Ensures ventilation requirements per ASHRAE 62.1 are met
- · Eliminate a central AHU
 - Increase rentable area
 - Distribute the HVAC system
- Substantially lower system cost when compared to chilled beam
- Demand Control ventilation at the zone level
- Occupancy
- CO₂

Is the Nailor 33SZ certified by AHRI?

There currently is not a certification program for CWFPTU, however all Nailor units are tested in accordance with AHRI practices.

For sound sensitive large projects, is it possible to mock-up the space to ensure sound levels?

Nailor has partnered with Energistics Laboratory that enables us to recreate any room and measure actual sound levels. Nailor also has several silencer and attenuation options for reducing unit sound.

Can controls be mounted in the field?

Yes, however factory mounting increases quality of the installation while reducing wire, conduit, and electrical box requirements. We mount any control manufacturers equipment supplied by the customer at our factory.

Do motor replacements have the original program?

Like the custom electrical limits above, Nailor stores the program of every motor by serial number. If a replacement order references the serial number, the new motor will contain the original program.

What liner options, beyond the standard dual density fiberglass, are available?

- · Foil Faced Steri-Liner
- Fiber-Free Closed Cell Liner
- Perforated Metal Liner over fiberglass
- Solid Metal Liner (double wall) over fiberglass
- Additional thicknesses for added thermal efficiency

What are the options for line voltage enclosure?

Two optional orientations for the control box are available for all fan powered terminal units to fit any application:



FN2 90° Mounted Control Box

FN3 Remote Control Box on 48" Umbilical

What are my options if latent loads are too high for the sensible coil of a 33SZ?

The Nailor 35FH and 37FH high capacity horizontal fan coil units with a draw through coil design are available with Outdoor Air Inlet to provide latent cooling to satisfy the space.



35FH High Capacity Fan Coil up to 4,000 CFM



37FH Low Profile Fan Coil only 11" height up to 1,200 CFM

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