

HYDRONIC AIR HANDLER

ventum



WATER AND AIR IN PERFECT SYNERGY

- Electronic controller on the front
- Efficient even with low-temperature water
- High-efficiency ECM fan motor
- Integrated circulator pump
- Ideal for new or existing centralized systems
- Durable. Quiet. Safe.
- Compact design. Two sizes.
Multi-position installation.
- Compatible with an air conditioning unit



Peak-performance
heating systems

Simply ingenious!

The VenTum hydronic air handlers condition the air of **new or existing centralized systems** with unmatched precision to provide increased comfort all year round. Enjoy unparalleled comfort at the ideal humidity level that only hydronic heating can create. Ideal for single-family homes or integrated into light commercial buildings, its design provides for simple and practical pairing with a **boiler** or a **water heater** in addition to being able to be **combined with a heat pump or air conditioning system** for cooling in the summertime.

Gentle and comfortable precision

Thermo 2000 has brought air handler technology up a notch. The VenTum controller can control the airflow in increments of 10 CFM. This is a first!

- It meets all needs! The VenTum is a must-have thanks to its high exchange capacity for both low and high water temperature systems.
- The temperature sensors ensure that the fan starts up only when the desired temperature is reached, which prevents discomfort and unwanted energy loss.

Innovative design

- Available in two sizes, the VenTum range can be installed vertically or horizontally for easy integration in tight spaces.
- Durable construction with noise-reducing insulation.
- Safety and increased protection thanks to the anti-freeze function in the event the home's thermostat fails.
- The electronic controller allows airflow configuration for two separate zones simultaneously, to simplify system installation.
- BOOST mode gradually increases airflow during prolonged use to adequately meet demand.
- The pump automatically starts every 6 hours to ensure water quality when paired with a water heater.



Convenient controls

The digital controller simplifies setup at installation and provides precise adjustments that improve comfort and energy savings. Controls at your fingertips: adjust the heating, cooling, ventilation and dehumidification flow rates and even the start-up setpoint temperature. It also provides real-time information on the operating status for heating/air conditioning, recirculation/dehumidification, pump, temperature data and alarm codes.

How does it work?

In heating mode

The controller receives a signal for heat from the thermostat. The circulator pump and the heat source are activated simultaneously. In order to avoid uncomfortable cold air circulation, the VenTum water temperature sensor will start the blower only when the water leaving the coil is at the desired temperature.

Once the heating demand has been met, the VenTum pump and the energy source stop and the fan continues to operate until all the heat is evacuated from the ducts.

In air conditioning mode

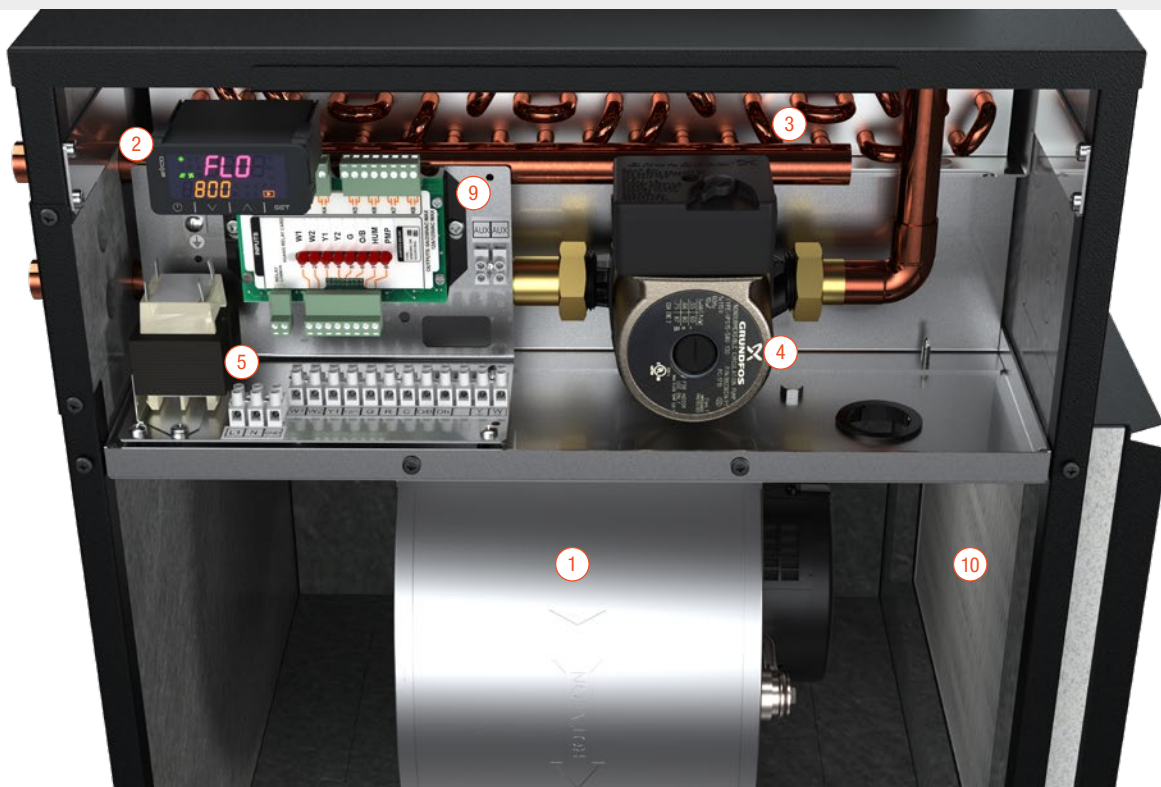
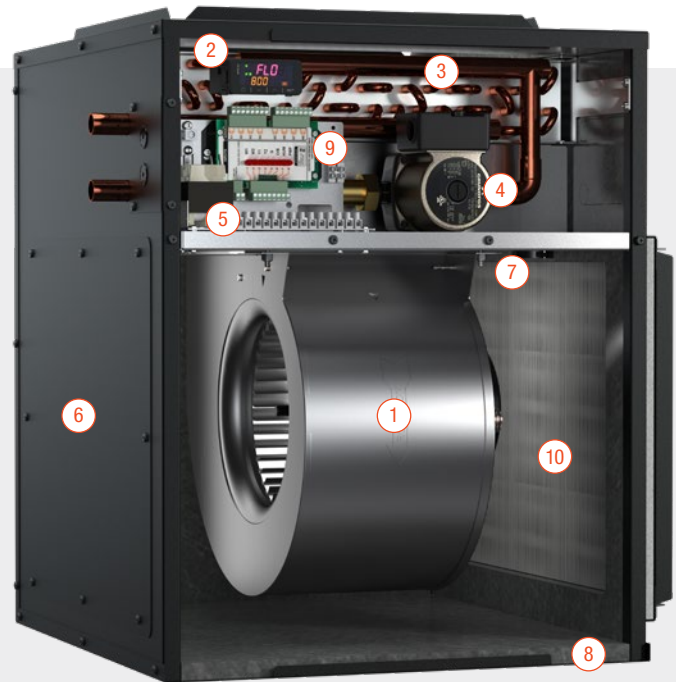
VenTum is also compatible with an air conditioning or heat pump systems that includes an indoor coil and an outdoor unit. The clearance on top of the VenTum unit makes it easy to install a coil.

To cool, VenTum gradually starts the fan and increases to full speed when the air temperature is cool and comfortable. Once the air conditioning demand has been met, the outdoor unit stops and the fan continues to operate until all the fresh air is evacuated from the ducts.



The VenTum from all angles

1. High-efficiency **ECM fan motor**
2. Digital controller
3. 4-row coil ideal for low-temperature water
4. 3-speed circulator pump
5. Connection terminal
 - 120 VAC main power
 - Thermostat connection
 - 24 VAC accessory power (motorized valves)
 - Heat source activation
 - Air conditioning activation
6. Pre-cut opening for easy positioning of the return duct (right, left or underneath)
7. Easy-maintenance slide fan
8. 1-inch, noise-reducing insulation
9. Relay card and light signals
10. Air filter



A multitude of compatibilities

Basic installation with boiler

Application with a heated floor and hydronic air handler



Basic installation with instantaneous water heater

Application of hydronic air handler with automatic pump start every 6 hours

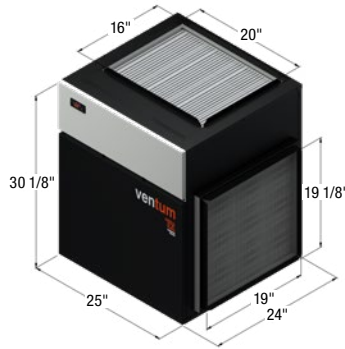
* Space heating using a domestic hot water system as illustrated may be prohibited by local code.





VenTum 40

Air filter: 16" x 20" x 1"
Weight: 99 lbs



VenTum 60

Air filter: 20" x 20" x 1"
Weight: 120 lbs

VenTum 40

VenTum 60

Fan

Max. CFM	1100	2000
External static pressure	0.75 in.	0.75 in.
Type of motor	ECM	ECM
Motor power	1/2 HP	3/4 HP
Motor power supply	120 V	120 V
Motor amperage	8 A	10 A

Pump

Pump power	1/25 HP	1/25 HP
Type of motor	3-speed	3-speed
Motor power supply	120 V	120 V
Motor amperage	1 A	1 A

Coil

Connectors	3/4" soldered	3/4" soldered
Max. temperature	200 °F	200 °F
Max. pressure	150 PSI	150 PSI

VenTum 40

		3 GPM					5 GPM				
WATER SUPPLY TEMPERATURE		700 CFM	800 CFM	900 CFM	1000 CFM	1100 CFM	700 CFM	800 CFM	900 CFM	1000 CFM	1100 CFM
HEATING EXCHANGE CAPACITY (BTU/H)	100 °F	13400	14400	15400	16500	17500	16400	17700	19100	20400	21700
	120 °F	24400	26300	28200	30100	31900	27200	29800	32400	35000	37700
	140 °F	35500	38200	41000	43700	46400	38500	42200	45900	49600	53200
	160 °F	47400	51400	55300	59300	63200	49700	54300	59000	63600	68200
	180 °F	50600	55000	59300	63700	68100	60200	67000	73800	80600	87400
	200 °F	68800	74000	79200	84500	89700	72000	79100	86200	93300	100400
COOLING	TONS	2	2	3	3	3	2	2	3	3	3

VenTum 60

		3 GPM					5 GPM				
WATER SUPPLY TEMPERATURE		1200 CFM	1400 CFM	1600 CFM	1800 CFM	2000 CFM	1200 CFM	1400 CFM	1600 CFM	1800 CFM	2000 CFM
HEATING EXCHANGE CAPACITY (BTU/H)	100 °F	18800	19700	21700	23900	26000	23000	24200	26900	29600	32300
	120 °F	35900	37900	41300	44500	47400	40000	43000	47400	51700	56000
	140 °F	54500	59900	65500	70800	76300	59100	66200	73300	80400	87500
	160 °F	70600	78900	86700	94900	102900	74000	83300	92500	101800	111000
	180 °F	77300	84500	91400	98400	105500	92000	102900	113700	124500	135400
	200 °F	106000	116900	127800	138800	149500	110900	125000	139100	153200	167300
COOLING	TONS	3	4	4	5	5	3	4	4	5	5

BASED ON A 70 °F AIR RETURN

2-YEAR WARRANTY
ON ELECTRICAL AND MECHANICAL PARTS



Thermo 2000 manufactures peak-performance heating systems for domestic hot water and hydronic heating systems. Since 1978, the company's innovations have provided sustainable solutions for residential, commercial and institutional applications.



THERMO 2000 Inc.
500 9th Avenue
Richmond, QC J0B 2H0 CANADA

1 888 854-1111 Toll-free
819 826-5613 Telephone
819 826-6370 Fax

thermo2000.com