



High Efficiency Heating, Cooling and Indoor Air Quality Systems

## Builders Series and Multi-Family Air Handlers



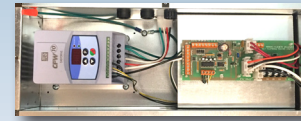
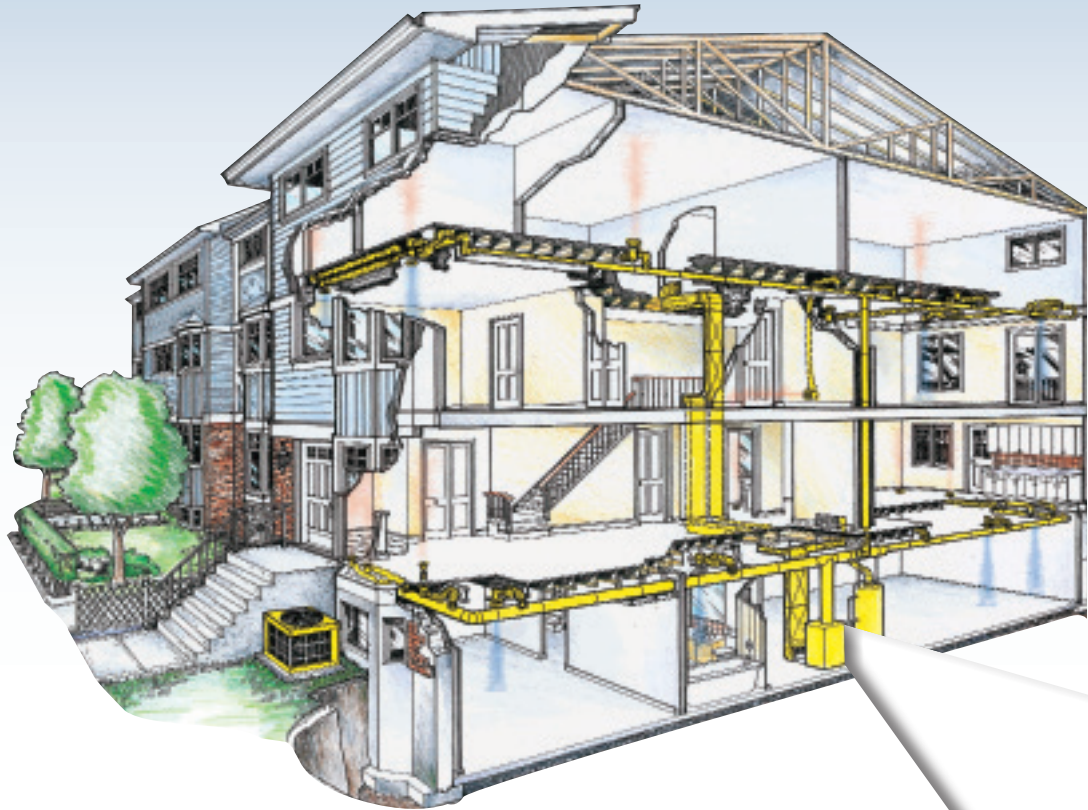
The Optimum Heating,  
Cooling and IAQ  
Solution for Builders

Manufactured by  
**Energy  
Saving**  
PRODUCTS LTD.

[www.hi-velocity.com](http://www.hi-velocity.com)

# When Every Square Foot Matters, Count On Hi-Velocity Systems™

## New Home & Townhouse Construction



### HE-Z Series - Featuring Inverter Drive Technology

- High Efficiency, reduce operating costs up to 50%
- 3-Phase motor will supply 1.5 to 5 tons (5.3 to 17.6 Kw) of air flow
- PSB Circuit Board allows for zoning right out of the box
- 110v supply comes standard, with optional 220v
- Utilizing Variable Frequency Drive (VFD) technology
- Dual function pressure sensing circuit board with direct control option

### Improved Indoor Air Quality

- Draft free heating and cooling
- Even temperatures in every room
- Constant flow air circulation helps eliminate dust

### Additional Components Easily Added

- HEPS Hi-Velocity Air Purification System
- Third-Party Humidifiers, HRV/ERV's

### Also Available: Non-Zoning HE-B Series Air Handler

- Cost-Saving Series for applications that do not require zoning
- HEB Circuit Board allows for simple wiring with no fan speed adjustments necessary

### 10 Ton HE-P Series Air Handler

- 220v Builders Series featuring backward curved fan

### 1 & 2 Ton Cube Series Air Handler

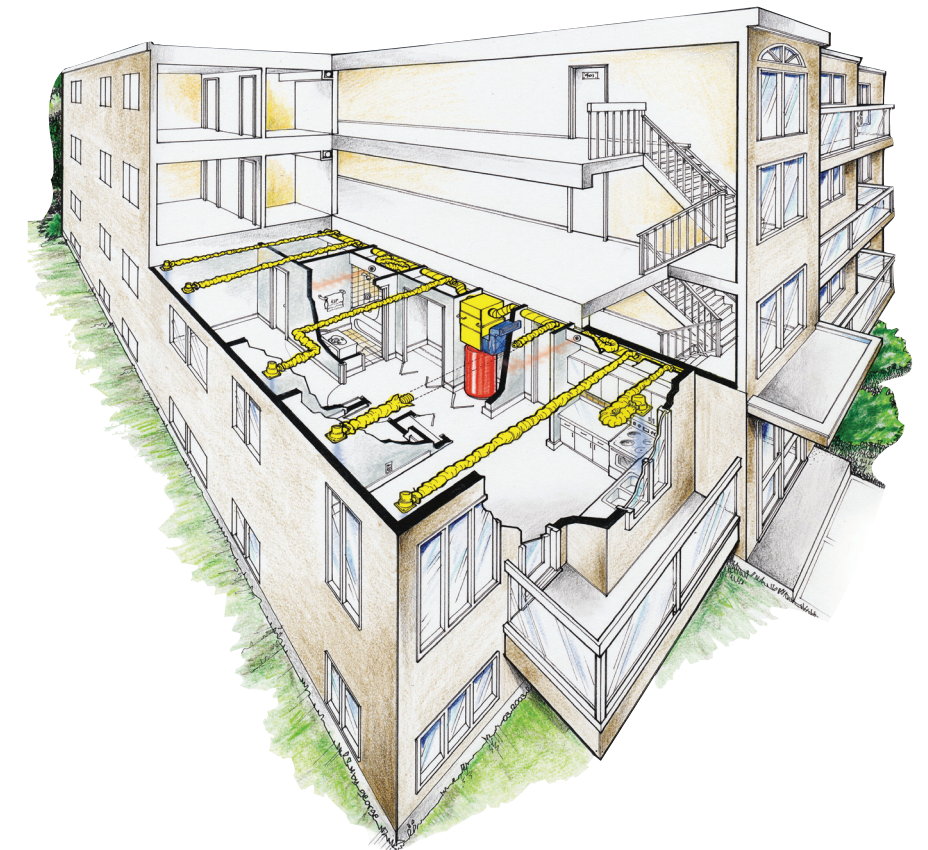
- Compact performance for small space heating and cooling

## Reduce Installation Time!

### Save on Installation Costs

- Quick & easy installation
- Eliminates most drywall bulkheads
- Constant flow air circulation
- Adjustable vents maximize air control
- Flexible vent locations
- Air distribution from ceiling, floor or sidewall
- 2" and HE Flexible Ducts

## Apartment Construction



### Multi-Positional Air Handlers

Cooling capacities ranging from:

1.5 to 5 tons (5.3 to 17.6 Kw)

- Heating capacities up to: 140,000 BTU (41 Kw)
- Optional heating coil simply slides in place
- 3 independent field adjustable speeds:
  - Cooling
  - Heating
  - Constant Air Flow
- Installs vertically, horizontally, counter-flow
- Single side access

1-888-652-2219

Manufactured by

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# Hi-Velocity Builders Series Air Handlers

## Specifications



	HE-Z/HE-B-51	HE-Z/HE-B-71	HE-Z/HE-B-101
<b>Hot Water Heating<sup>(1)</sup></b>	<b>2 Ton Airflow (7.0 kW)</b>	<b>3 Ton Airflow (10.6 kW)</b>	<b>5 Ton Airflow (17.6 kW)</b>
Coil Type	6 Row/10 FPI	6 Row/10 FPI	6 Row/10 FPI
Max. BTUH @ 190°F E.W.T. (kW @ 88°C)	59,400 (17.4 kW)	89,200 (26.1 kW)	134,000 (39.3 kW)
Max. BTUH @ 180°F E.W.T. (kW @ 82°C)	54,500 (16.0 kW)	81,800 (24.0 kW)	122,900 (36.0 kW)
Max. BTUH @ 170°F E.W.T. (kW @ 77°C)	49,600 (14.5 kW)	74,400 (21.8 kW)	111,800 (32.8 kW)
Max. BTUH @ 160°F E.W.T. (kW @ 71°C)	44,600 (13.1 kW)	67,100 (19.7 kW)	100,700 (29.5 kW)
Max. BTUH @ 150°F E.W.T. (kW @ 66°C)	39,700 (11.6 kW)	59,700 (17.5 kW)	89,700 (26.3 kW)
Max. BTUH @ 140°F E.W.T. (kW @ 60°C)	34,700 (10.2 kW)	51,800 (15.2 kW)	78,400 (23.0 kW)
Max. BTUH @ 130°F E.W.T. (kW @ 54°C)	29,700 (8.7 kW)	44,700 (13.1 kW)	67,100 (19.7 kW)
Max. BTUH @ 120°F E.W.T. (kW @ 49°C)	24,800 (7.3 kW)	37,400 (11.0 kW)	56,200 (16.5 kW)
Max. BTUH @ 110°F E.W.T. (kW @ 43°C)	20,100 (5.9 kW)	30,300 (8.9 kW)	45,500 (13.3 kW)
GPM Flow Ratings (L/s Flow Ratings)	5 (0.32 L/s)	7 (0.44 L/s)	10 (0.63 L/s)
Pressure Drop in Ft. H <sub>2</sub> O (Drop in KPa)	3 (8.96 KPa)	6.5 (19.4 KPa)	6.8 (20.3 KPa)
<b>Chilled Water Cooling<sup>(1)</sup></b>	<b>WBM/WCM-50</b>	<b>WBM/WCM-70</b>	<b>WBM/WCM-100</b>
Coil Type	6 Row/10 FPI	6 Row/10 FPI	6 Row/10 FPI
<b>WBM/WCM Modules in Cooling Mode</b>	<b>Total</b>	<b>Sensible</b>	<b>Total</b>
Max. BTUH @ 48°F E.W.T. (kW @ 8.9°C)	19,300 (5.7 kW)	13,700 (4.0 kW)	27,000 (7.9 kW)
Max. BTUH @ 46°F E.W.T. (kW @ 7.8°C)	20,900 (6.1 kW)	14,200 (4.2 kW)	29,400 (8.6 kW)
Max. BTUH @ 44°F E.W.T. (kW @ 6.7°C)	22,600 (6.6 kW)	14,900 (4.4 kW)	31,800 (9.3 kW)
Max. BTUH @ 42°F E.W.T. (kW @ 5.6°C)	24,200 (7.1 kW)	15,700 (4.6 kW)	34,000 (10.0 kW)
Max. BTUH @ 40°F E.W.T. (kW @ 4.4°C)	25,800 (7.6 kW)	16,300 (4.8 kW)	36,400 (10.7 kW)
<b>WBM/WCM Modules in Heating Mode</b>	<b>Total</b>	<b>Total</b>	<b>Total</b>
Max. BTUH @ 150°F E.W.T. (kW @ 66°C)	39,700 (11.6 kW)	59,700 (17.5 kW)	89,700 (26.3 kW)
Max. BTUH @ 140°F E.W.T. (kW @ 60°C)	34,700 (10.2 kW)	51,800 (15.2 kW)	78,400 (23.0 kW)
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GPM Flow Ratings (L/s Flow Ratings)	5 (0.32 L/s)	7 (0.44 L/s)	10 (0.63 L/s)
Pressure Drop in Ft. H <sub>2</sub> O (Drop in KPa)	3 (8.97 KPa)	6.5 (19.4 KPa)	6.8 (20.3 KPa)
<b>Refrigerant Cooling<sup>(1)</sup></b>	<b>RBM/RPM-E/RCM-50</b>	<b>RBM/RPM-E/RCM-70</b>	<b>RBM/RPM-E/RCM-100</b>
RBM/RPM-E/RCM Modules BTUH Refrigerant TX Cooling	1.5 - 2.0 Tons (5.3-7.0 kWh)	2.5 - 3.0 Tons (8.8-10.6 kWh)	3.5 - 5.0 Tons (12.3-17.6 kWh)
<b>Electrical Heating</b>	<b>ESH/VESH-650</b>	<b>ESH/VESH-750</b>	<b>ESH/VESH-1100</b>
Kilowatt Range (240v)	5 - 15 kW / 10 - 15 kW	5 - 18 kW / 10 - 18 kW	10 - 23 kW
<b>Specifications</b>	<b>HE-Z/HE-B-51</b>	<b>HE-Z/HE-B-71</b>	<b>HE-Z/HE-B-101</b>
Max Rated CFM @ 1.2" E.S.P. (L/s @ 298 Pa)	500 (236 L/s)	750 (354 L/s)	1250 (590 L/s)
Voltage	115/230/1/50/60 F.L.A. 8 amp	115/230/1/50/60 F.L.A. 8 amp	115/230/1/50/60 F.L.A. 8 amp
Nominal Operating Amperage	4 Amps	6 Amps	8 Amps
Integral Surge and Fuse System	Yes	Yes	Yes
Horse Power - Watts	3/4hp - 310W	3/4hp - 530W	3/4hp - 720W
Motor RPM	Variable	Variable	Variable
Supply Air Size	8" Round (203mm)	8" Round (203mm)	10" Round (254mm)
Supply Maximum Length <sup>(2)</sup>	70' (21.3m)	80' (24.4m)	100' (30.5m)
Return Size Needed	12" (120 in <sup>2</sup> ) (305mm/774cm <sup>2</sup> )	12" (120 in <sup>2</sup> ) (305mm/774cm <sup>2</sup> )	14" (168 in <sup>2</sup> )
Minimum Outlets <sup>(3)</sup>	6 (HE) 12 (2")	10 (HE) 20 (2")	14 (HE) 28 (2")
Maximum Outlets	13 (HE) 26 (2")	18 (HE) 36 (2")	30 (HE) 60 (2")
Shipping Weight (no coil)	69 lbs (31.3 kg)	77 lbs (34.9 kg)	92 lbs (41.7 kg)
Air Handler Dimensions (L x W x H) (Add 2 1/2 inches to height for collars)	14 1/2" x 18 1/4" x 32 5/16" (368mm x 464mm x 821mm)	19 1/2" x 18 1/4" x 32 5/16" (495mm x 464mm x 821mm)	25 1/2" x 18 1/4" x 32 5/16" (648mm x 464mm x 821mm)

<sup>(1)</sup> Heating specs are rated at 68°F E.A.T., Cooling specs are rated at 80°F/67°F dB/wB

<sup>(2)</sup> Maximum length is from the unit to the supply run end cap. More than one run per unit is allowable.

<sup>(3)</sup> Minimum of **four HE outlets per ton** of cooling needed. (2" Duct = Minimum **eight 2" outlets per ton**)

Call 1-888-652-2219

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Brochure-BLD-Builders-Series-120121

BTUH - British Thermal Units per Hour  
E.W.T. - Entering Water Temperature  
GPM - US Gallons per Minute  
L/s - Litres per Second  
CFM - Cubic Feet per Minute

F.L.A. - Full-Load Amperage  
RPM - Revolutions per Minute  
E.S.P. - External Static Pressure  
E.A.T. - Entering Air Temperature  
dB/wB - Dry Bulb/Wet Bulb

