



High Efficiency Heating, Cooling and Indoor Air Quality Systems

Builders Series and Multi-Family Air Handlers



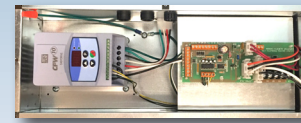
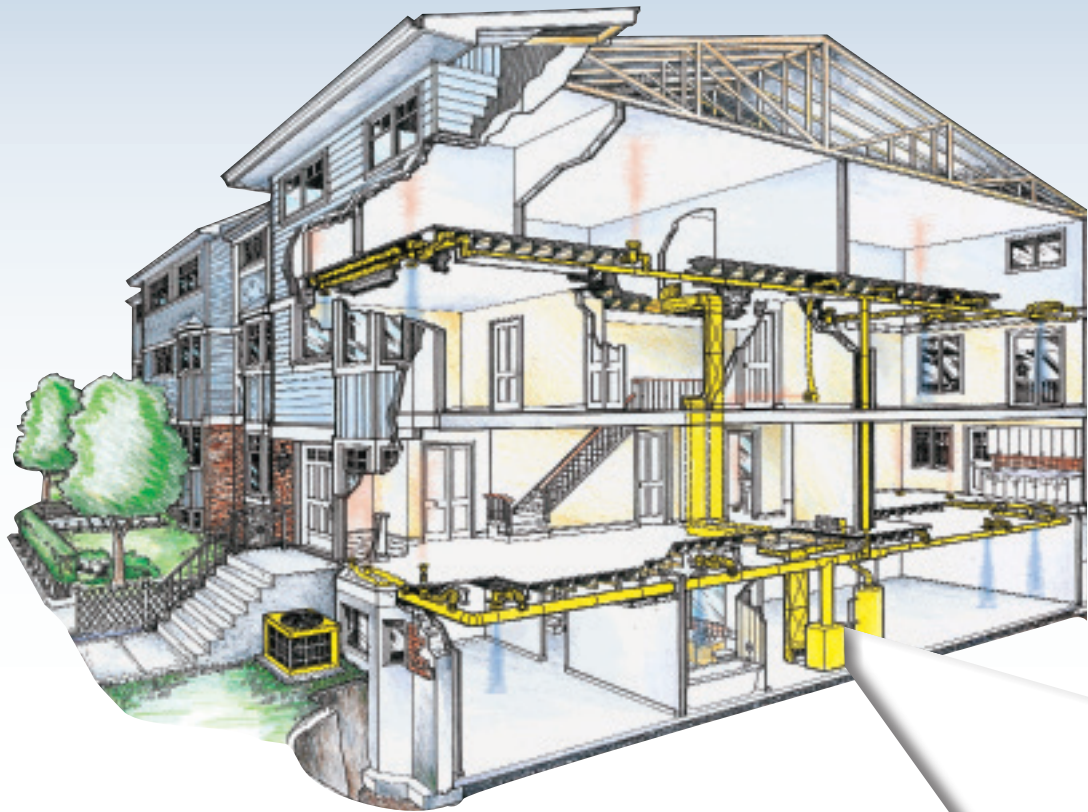
The Optimum Heating,
Cooling and IAQ
Solution for Builders

Manufactured by
**Energy
Saving**
PRODUCTS LTD.

www.hi-velocity.com

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

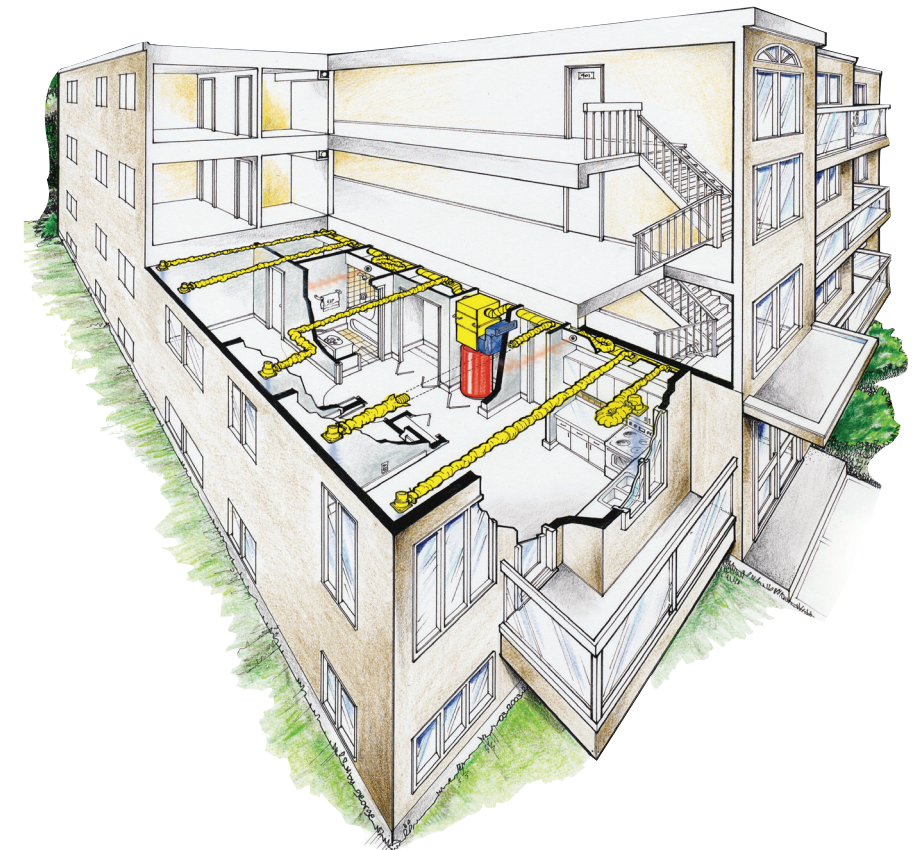
- Compact performance for small space heating and cooling

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



1-888-652-2219

Manufactured by



www.hi-velocity.com

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

Hi-Velocity Builders Series Air Handlers

Specifications



	HE-Z/HE-B-51		HE-Z/HE-B-71		HE-Z/HE-B-101	
Hot Water Heating ⁽¹⁾	2 Ton Airflow (7.0 kW)		3 Ton Airflow (10.6 kW)		5 Ton Airflow (17.6 kW)	
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 ₂ O (Drop in KPa)	3 (8.96 KPa)		6.5 (19.4 KPa)		6.8 (20.3 KPa)	
Chilled Water Cooling ⁽¹⁾	WBM/WCM-50		WBM/WCM-70		WBM/WCM-100	
Coil Type	6 Row/10 FPI		6 Row/10 FPI		6 Row/10 FPI	
WBM/WCM Modules in Cooling Mode	Total	Sensible	Total	Sensible	Total	Sensible
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)	19,200 (5.6 kW)	42,100 (12.3 kW)	30,300 (8.9 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)	20,000 (5.9 kW)	45,800 (13.4 kW)	32,100 (9.4 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)	21,000 (6.2 kW)	49,500 (14.5 kW)	33,700 (9.9 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)	21,800 (6.4 kW)	53,200 (15.6 kW)	35,100 (10.3 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)	23,000 (6.7 kW)	56,800 (16.6 kW)	36,400 (10.7 kW)
WBM/WCM Modules in Heating Mode	Total		Total		Total	
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 ₂ O (Drop in KPa)	3 (8.97 KPa)		6.5 (19.4 KPa)		6.8 (20.3 KPa)	
Refrigerant Cooling ⁽¹⁾	RBM/RPM-E/RCM-50		RBM/RPM-E/RCM-70		RBM/RPM-E/RCM-100	
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)	
Electrical Heating	ESH/VESH-650		ESH/VESH-750		ESH/VESH-1100	
Kilowatt Range (240v)	5 - 15 kW / 10 - 15 kW		5 - 18 kW / 10 - 18 kW		10 - 23 kW	
Specifications	HE-Z/HE-B-51		HE-Z/HE-B-71		HE-Z/HE-B-101	
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 ⁽²⁾	70' (21.3m)		80' (24.4m)		100' (30.5m)	
Return Size Needed	12" (120 in ²) (305mm/774cm ²)		12" (120 in ²) (305mm/774cm ²)		14" (168 in ²)	
Minimum Outlets ⁽³⁾	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)	

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

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

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

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

Manufactured by
Energy Saving
PRODUCTS LTD

Call **1-888-652-2219**
Visit Us At
www.hi-velocity.com

Brochure-BLD-Builders-Series-120121

