



Small Duct Heating, Cooling and
Indoor Air Quality Systems

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Hi-Velocity Specifications & Sizing

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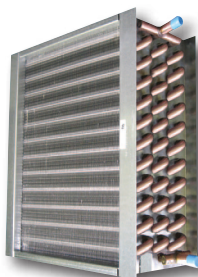
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Matching Coils

Refrigerant Coils

RPM-E-50, 70, 100

Chilled Water Coils

WCM-50, 70, WM-100

Hot Water Coils

HV-50, 70, 100 - 6 Row

Electrical Coils

ESH-650 (5-15 kW)

ESH-750 (5-18 kW)

ESH-1100 (5-23 kW)


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HE Series Specifications (Standard & Metric)

Model	HE-50/51	HE - 70/71	HE - 100/101
Hot Water Heating	2 Ton Airflow (7.0 kW)	3 Ton Airflow (10.6 kW)	5 Ton Airflow (17.5 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)	5 (0.32 L/s)	7 (0.44 L/s)	10 (0.63 L/s)
Pressure Drop in FT. (m) H ₂ O	3 (9.15 KPa)	6.5 (19.8 KPa)	6.8 (20.7 KPa)
CFM @ 68°F E.A.T. (L/s @ 20°C E.A.T.)	470 (221 L/s)	700 (300 L/s)	1120 (528 L/s)
Chilled Water Cooling	2 Ton Airflow (7.0 kW)	3 Ton Airflow (10.6kW)	5 Ton Airflow (17.5 kW)
Coil Type	6 Row/10 FPI	6 Row/10 FPI	6 Row/10 FPI
(WCM Modules in Cooling Mode)	TotalSensible	TotalSens ble	TotalSensible
Max. BTUH @ 48°F E.W.T. (kW @ 8.9°C)	19,300 (5.7 kW)	27,000 (7.9 kW)	42,100 (12.3 kW)
Max. BTUH @ 46°F E.W.T. (kW @ 7.8°C)	20,900 (6.1 kW)	29,400 (8.6 kW)	45,800 (13.4 kW)
Max. BTUH @ 44°F E.W.T. (kW @ 6.7°C)	22,600 (6.6 kW)	31,800 (9.3 kW)	49,500 (14.5 kW)
Max. BTUH @ 42°F E.W.T. (kW @ 5.6°C)	24,200 (7.1 kW)	34,000 (10.0 kW)	53,200 (15.6 kW)
Max. BTUH @ 40°F E.W.T. (kW @ 4.4°C)	25,800 (7.6 kW)	36,400 (10.7 kW)	56,800 (16.6 kW)
(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)	5 (0.32 L/s)	7 (0.44 L/s)	10 (0.63 L/s)
Pressure Drop in Ft. (m) H ₂ O	3 (9.15 KPa)	6.5 (19.8 KPa)	6.8 (20.7 KPa)
RPM Modules BTUH Refrigerant TX Cooling	1.5 - 2.0 Tons (3.5-6.4 kWh)	2.5 - 3.0 Tons (8.8-10.5 kWh)	3.5 - 5.0 Tons (12.3-17.5 kWh)
Electrical Heating			
Kilowatt Range (240v)	5 - 15 kW	5 - 18 kW	5 - 23 kW
Fan Coil			
Voltage	115/230/1/50/60 F.L.A. 8 amp		
Max Rated C.F.M. (L/s)	520 (245 L/s)	770 (363 L/s)	1260 (595 L/s)
Horse Power/Watts	3/4 - 310	3/4 - 530	3/4 - 720
R.P.M.	Variable	Variable	Variable
Integral Surge and Fuse System	Yes	Yes	Yes
Supply Air Size	8" round (203mm)	8" round (203mm)	10" round (254mm)
Supply Maximum Length ⁽¹⁾	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) (356mm/1084cm ²)
Minimum Outlets ⁽²⁾	12 (2") 6 (HE)	20 (2") 10 (HE)	28 (2") 14 (HE)
Maximum Outlets	24 (2") 12 (HE)	32 (2") 16 (HE)	52 (2") 26 (HE)
Shipping Weight	80 lbs (36.3 Kg)	95 lbs (43.1 Kg)	115 lbs (52.2 Kg)
Fan Coil Size	Length Width Height	32" (813mm) 19" (483mm) 18" (457mm)	32" (813mm) 25" (635mm) 18" (457mm)

⁽¹⁾ Maximum length is from the unit to the supply end run cap. More than one run per unit is allowable.

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

Matching Coils

Chilled Water Coils
WCM-70/1050, WM-100/1050, WM-1750

Hot Water Coils
HWC-70/1050, HWC-1750

Electrical Coils
ESH-750 (5-18 Kw)

LV-E Series Specifications (Standard & Metric)

Hot Water Heating

LV-E 1050

LV-E 1750

Coil Type	70/1050	70/1050	70/1050*1	70/1050*1	1750	1750	1750
Tonnage (kW)	1.5 (5.27kW)	2 (7.03 kW)	2.5 (8.78 kW)	3 (10.54 kW)	3.5 (12.30 kW)	4 (14.05 kW)	5 (17.57 kW)
Max. BTUH @ 190°F E.W.T. (kW @ 88°C)	50,100 (14.67)	63,200 (18.51)	75,200 (22.02)	86,000 (25.18)	112,800 (33.03)	125,500 (36.75)	149,200 (43.69)
Max. BTUH @ 180°F E.W.T. (kW @ 82°C)	45,900 (13.44)	58,000 (16.98)	69,000 (20.20)	78,900 (23.10)	103,400 (30.28)	115,100 (33.70)	136,800 (40.06)
Max. BTUH @ 170°F E.W.T. (kW @ 77°C)	41,800 (12.24)	52,800 (15.46)	62,700 (18.36)	71,700 (20.99)	94,200 (27.58)	104,700 (30.66)	124,400 (36.43)
Max. BTUH @ 160°F E.W.T. (kW @ 71°C)	37,700 (11.04)	47,500 (13.91)	56,500 (16.54)	64,600 (18.92)	84,800 (24.83)	94,300 (27.61)	112,100 (32.82)
Max. BTUH @ 150°F E.W.T. (kW @ 66°C)	33,600 (9.84)	42,300 (12.39)	50,300 (14.73)	57,400 (16.81)	75,500 (22.11)	83,900 (24.57)	99,700 (29.19)
Max. BTUH @ 140°F E.W.T. (kW @ 60°C)	29,400 (8.61)	37,000 (10.83)	43,900 (12.85)	50,100 (14.67)	66,100 (19.35)	73,400 (21.49)	87,000 (25.47)
Max. BTUH @ 130°F E.W.T. (kW @ 54°C)	25,200 (7.38)	31,700 (9.28)	37,500 (10.98)	42,700 (12.50)	56,600 (16.57)	62,800 (18.39)	74,400 (21.79)
Max. BTUH @ 120°F E.W.T. (kW @ 49°C)	21,100 (6.18)	26,500 (7.76)	31,500 (9.22)	35,900 (10.51)	47,400 (13.88)	52,600 (15.40)	62,300 (18.24)
Max. BTUH @ 110°F E.W.T. (kW @ 43°C)	17,100 (5.01)	21,400 (6.27)	25,500 (7.47)	29,100 (8.52)	38,300 (11.21)	42,600 (12.47)	50,500 (14.79)
GPM Flow ratings (L/s Flow Ratings)	5 (.32)	5 (.32)	5 (.32)	5 (.32)	10 (.63)	10 (.63)	10 (.63)
Pressure Drop FT. (m) H ₂ O (Drop in kPa)	3.9 (.97)	3.9 (.97)	3.9 (.97)	3.9 (.97)	3.1 (.77)	3.1 (.77)	3.1 (.77)
CFM @ 68°F E.A.T. (L/s @ 20°C E.A.T.)	420 (198)	560 (264)	700 (330)	840 (396)	980 (463)	1120 (529)	1400 (661)

Chilled Water Cooling

LV-E 1050

LV-E 1750

Coil Type	70/1050	70/1050	100/1050*2	100/1050*2	1750	1750	1750
E.W.T.							
Max. BTUH @ 48°F E.W.T. (kW @ 8.9°C)	20,200 (5.91)	23,800 (6.97)	31,500 (9.22)	34,900 (10.22)	46,700 (13.67)	50,400 (14.76)	56,200 (16.46)
Max. BTUH @ 46°F E.W.T. (kW @ 7.8°C)	22,000 (6.44)	25,800 (7.55)	34,200 (10.01)	37,900 (11.10)	50,700 (14.85)	54,600 (15.99)	60,900 (17.83)
Max. BTUH @ 44°F E.W.T. (kW @ 6.7°C)	23,700 (6.94)	27,800 (8.14)	37,000 (10.83)	40,800 (11.95)	55,000 (16.10)	58,800 (17.22)	65,500 (19.18)
Max. BTUH @ 42°F E.W.T. (kW @ 5.6°C)	25,400 (7.44)	29,900 (8.76)	39,600 (11.60)	43,800 (12.83)	58,300 (17.07)	62,900 (18.42)	70,000 (20.50)
Max. BTUH @ 40°F E.W.T. (kW @ 4.4°C)	27,000 (7.91)	31,800 (9.31)	42,200 (12.36)	46,600 (13.64)	62,100 (18.18)	66,900 (19.59)	74,500 (21.81)
S.H.R.							
Max. BTUH @ 48°F E.W.T. (kW @ 8.9°C)	69%	72%	71%	73%	69%	71%	74%
Max. BTUH @ 46°F E.W.T. (kW @ 7.8°C)	67%	70%	68%	70%	67%	68%	71%
Max. BTUH @ 44°F E.W.T. (kW @ 6.7°C)	65%	67%	66%	68%	65%	66%	69%
Max. BTUH @ 42°F E.W.T. (kW @ 5.6°C)	63%	66%	65%	66%	64%	65%	67%
Max. BTUH @ 40°F E.W.T. (kW @ 4.4°C)	62%	64%	63%	65%	62%	63%	65%
GPM Flow ratings (L/s Flow Ratings)	5 (.32)	5 (.32)	7 (.44)	7 (.44)	10 (.63)	10 (.63)	10 (.63)
Pressure Drop FT. (m) H ₂ O (Drop in kPa)	4.5 (1.12)	4.5 (1.12)	4.5 (1.12)	4.5 (1.12)	3.6 (.90)	3.6 (.90)	3.6 (.90)
CFM@80°F dB/67°F WB E.A.T. (L/s @ 27dB/ WB 19°C)	525 (248)	700 (330)	875 (413)	1050 (496)	1225 (578)	1400 (661)	1750 (826)

Electrical Heating

LV-E 1050

LV-E 1750

Kilowatt Range	5 - 18 Kw	N/A
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Fancoil

LV-E 1050

LV-E 1750

Voltage		115/230/1/50/60 F.L.A. 8 amp	
Max Rated C.F.M. (Max Rated L/s) Horse Power/Watts R.P.M. Integral Surge and Fuse System Supply Air Size Return Size Needed Shipping Weight		1200 (566) 1/3 HP EPC - 515w Variable Yes 15" X 16" (381mm X 406mm) 182 in ² (0.12m ²) 95 lbs (43 kg)	1750 (826) 3/4 HP EPC - 695w Variable Yes 22.5" X 22.5" (572mm X 572mm) 240 in ² (0.12m ²) 125 bs (43 kg)
Fan Coil Size	Length Width Height	32.5" (826mm) 19.5" (495mm) 18.5" (470mm)	39" (991mm) 26.75" (679mm) 24.25" (616mm)

*1 - WCM-100 will provide the same heating capacities at 7 GPM and 3.9 FT. H₂O (0.44L/s and 0.97 kPa)

*2 - Use a full transition when using the WCM-100 to ensure even airflow across the coil. The WCM-70 is not to be used at these airflow rates.

RPM-E Coils

Pre-Piped Refrigerant Cooling Module



Specifications		RPM-E-50	RPM-E-70	RPM-E-100
Matching Fan Coil		HE - 50 / 51 / 52	HE - 70 / 71	HE - 100 / 101
Part Number		20090200050	20090200070	20090200100
Refrigerant Type		R-410A	R-410A	R-410A
TX Cooling MBH ¹		18-24 (5.3-7.0 kW)	30-36 (8.8-10.6 kW)	42-60 (12.3-17.6 kW)
Latent Cooling MBH		6.8-8.9 (2.0-2.6 kW)	11.7-13.7 (3.4-4.0 kW)	16.0-22.2 (4.7-6.5 kW)
Fin Material		Aluminum	Aluminum	Aluminum
Tubing Material		Copper	Copper	Copper
Type of Fins		.006 Al	.006 Al	.006 Al
Connection Sizes	Liquid Line (Lq)	3/8" (9.5mm)	3/8" (9.5mm)	3/8" (9.5mm)
	Suction Line (S)	7/8" (22.3mm)	7/8" (22.3mm)	7/8" (22.3mm)
	Drain Connection	3/4" (19mm)	3/4" (19mm)	3/4" (19mm)
TXV with Built in Check Valve & Bypass		Yes	Yes	Yes
Site Glass		Yes	Yes	Yes
Access Ports		Yes	Yes	Yes
Freeze Stat		Yes	Yes	Yes
Shipping Weight (lbs)		48 (22kg)	59 (27kg)	74 (34kg)
Module Size (L x W x H)		19 ¹ / ₄ " x 14 ⁵ / ₈ " x 18 ¹ / ₂ " (489mm x 371mm x 470mm)	24 ¹ / ₄ " x 14 ⁵ / ₈ " x 18 ¹ / ₂ " (616mm x 371mm x 470mm)	32" x 14 ⁵ / ₈ " x 18 ¹ / ₂ " (813mm x 371mm x 470mm)
Tons ²		1.5 - 2.0 (5.3 - 7.0 Kw)	2.5 - 3.0 (8.8 - 10.6 Kw)	3.5 - 5.0 (12.3 - 17.6 Kw)

MBH = Thousand British Thermal Units per Hour

TX = Thermal Expansion

TEV = Thermal Expansion Valve

1) Smaller condensers may be matched to the fan coil when needed (match TXV to condenser size)

2) Minimum of 8 full outlets per ton of cooling needed

Multiple Access Coils:

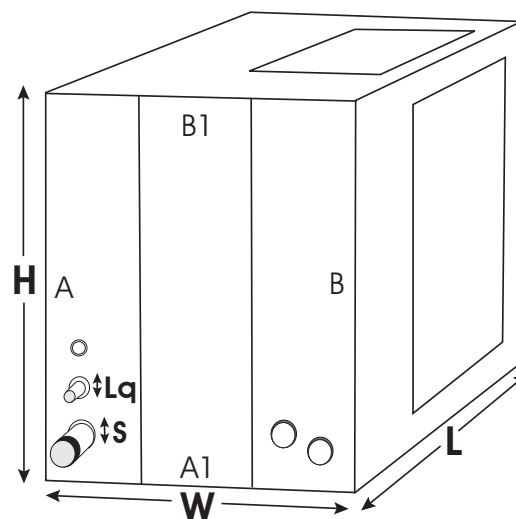
Can be used with a fan coil installed in any position. With our pre-fabricated knock outs, select the desired position and within minutes it is ready for installation.

Comes Pre-Piped:

The TXV (Thermal Expansion Valve), site glass, access ports and external freeze stat are already installed. The liquid and suction lines have male solder connections at a standard width making connections to the condenser lines quick and easy.

Refrigerant modules come with:

- Heat pump ready Thermal Expansion Valve, with built in check valve
- Integrated Site glass
- Integrated access ports
- Integrated external freeze
- Two L mounting brackets



Rough Opening Sizes	A or B	A1 or B1
RPM-E 50	11 ³ / ₄ " L X 13 ¹ / ₄ " H	11 ³ / ₄ " L X 9" W
RPM-E-70	16 ³ / ₄ " L X 13 ¹ / ₄ " H	16 ³ / ₄ " L X 9" W
RPM-E-100	22 ³ / ₄ " L X 13 ¹ / ₄ " H	22 ³ / ₄ " L X 9" W

Note: Do not use a combination of A/A1 or B/B1

WCM Coils

Water Cooling Module

High capacity coils:

Why let your water just sit around when it's not in use, using the hot or cold water you already have stored can save you money.

Primary and Secondary Drain Connections:

Connections are built into our modules which ensures the water always has an outlet to flow from.

Comes with:

The WCM/WM come supplied with two L mounting brackets for connection to the fan coil.



WCM/WM pipe sizing

Zone BTUH Heat loss	Pipe Size up to 40 feet	Pipe Size 40 – 100 feet
0 - 35,000 (0 - 10.3 kW)	5/8" (16mm)	3/4" (19mm)
35,001 - 70,000 (10.4 - 20.5 kW)	3/4" (19mm)	1" (25mm)

Specifications

WCM - 50

WCM - 70

WM - 100

Matching Fan Coil		HE - 50 / 51 / 52	HE - 70 / 71	HE - 100 / 101
Part Number		10010201050	10010201070	10010201100
Fin Material		Aluminum	Aluminum	Aluminum
Tubing Material		Copper	Copper	Copper
Type of Fins		.006 Al (0.1524mm)	.006 Al (0.1524mm)	.006 Al (0.1524mm)
Flow Rate (GPM)		5 (0.32 L/s)	7 (0.44 L/s)	10 (0.63 L/s)
Hydronic Connection Sizes	Supply Line	3/4" (19mm)	3/4" (19mm)	3/4" (19mm)
	Return Line	3/4" (19mm)	3/4" (19mm)	3/4" (19mm)
	Drain Connection	3/4" (22.3mm)	3/4" (22.3mm)	3/4" (22.3mm)
Pressure Drop FT. H ₂ O		3 (9.0 kPa)	6.5 (19.4 kPa)	6.8 (20.3 kPa)
Shipping Weight		30 lbs (14 kg)	35 lbs (16 kg)	40 lbs (18 kg)
Module Size (L x W x H)		14 ³ / ₈ " x 10 ¹ / ₈ " x 18 ¹ / ₂ " (365mm x 257mm x 470mm)	19 ³ / ₈ " x 10 ¹ / ₈ " x 18 ¹ / ₈ " (492mm x 257mm x 460mm)	25 ³ / ₈ " x 7" x 18 ³ / ₈ " (645mm x 257mm x 467mm)
BTUH		18,000-24,000 (5.3-7.0 kW)	30,000-36,000 (8.8-10.6 kW)	42,000-60,000 (12.3-17.6 kW)

Hot Water Coils

6 Row Add-Ins

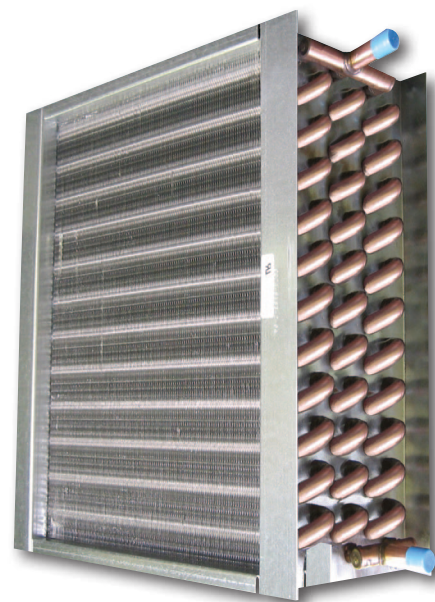
The Hot water coil:

Is easily installed in the Hi-Velocity System. With heating, condensate is not a consideration and the coil can be mounted on the supply side of the blower.

With the removal of the front coil access panel, the coil can be quickly and easily slid in place on the supply side of the blower.

The 6 row coil:

Is our standard coil that comes in every H model, if you would like to upgrade a BU model to heating, these coils simply slide into place.



Specifications		HWC-50 Hot Water Coil	HWC-70 Hot Water Coil	HWC-100 Hot Water Coil
Matching Fan Coil		HE/HV - 50 / 51*	HE/HV - 70 / 71	HE/HV - 100 / 101
Coil Type		6 Row/10 FPI	6 Row/10 FPI	6 Row/10 FPI
Part Number		20100100050	20100100070	20100100100
Fin Material		Aluminum	Aluminum	Aluminum
Tubing Material		Copper	Copper	Copper
Type of Fins		.006 Al (0.1524mm)	.006 Al (0.1524mm)	.006 Al (0.1524mm)
Hydronic Connection Sizes	Supply	3/4" (19mm)	3/4" (19mm)	3/4" (19mm)
	Return	3/4" (19mm)	3/4" (19mm)	3/4" (19mm)
Flow Rate (GPM)		5 (0.32 L/s)	7 (0.44 L/s)	10 (0.63 L/s)
Pressure Drop FT. H ₂ O		3 (9.0 kPa)	6.5 (19.4 kPa)	6.8 (20.3 kPa)
Coil Dimensions		13 1/2" x 5 1/2" x 16" (343mm x 140mm x 406mm)	19" x 5 1/2" x 16" (483mm x 140mm x 406mm)	25" x 5 1/2" x 16" (635mm x 140mm x 406mm)
Shipping Weight		17 bs (8kg)	21 lbs (10kg)	28 lbs (13kg)
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)

ESH Coils

Electric Strip Heater

Electric resistance heaters:

Can be used with the Hi-Velocity Systems™ HE model and are easily installed in the system.

Easily installed :

With the design of the Hi-Velocity System, the electric heaters can be easily installed in the fan coil at a later date by simply removing the coil access panel and sliding it in place.

TH-34 Electronic Sequencer:

On a demand for heat, the TH-34 electronic sequencer will energize the heating elements in sequence. When the thermostat is satisfied all the elements will be de-energized.



Kilowatts	Number of Feeders	Circuit Breakers
5	1 x 20.8	1 x 30A
10	1 x 41.6	1 x 60A
15	1 x 20.8 1 x 41.6	1 x 30A 1 x 60A
18	1 x 41.6 1 x 41.6	1 x 60A 1 x 60A
20	2 x 41.6	2 x 60A
23	2 x 47.0	2 x 60A

Specifications

		ESH - 650	ESH - 750	ESH - 1100
Matching Fan Coil		HE - 50 / 51	HE - 70 / 71	HE - 100 / 101
Part Numbers		5kw - 10025650005	5kw - 10025750005	10kw - 10025110010
		10kw - 10025650010	10kw - 10025750010	15kw - 10025110015
		15kw - 10025650015	15kw - 10025750015	18kw - 10025110018
			18kw - 10025750018	20kw - 10025110020
				23kw - 10025110023
Volts		240	240	240
Phase		1	1	1
Shipping Weight		21 lbs (9.5kg)	27 lbs (12kg)	28 lbs (13kg)
Module Size	Length	20" (508mm)	24" (610mm)	31" (788mm)
	Width	13" (330mm)	13" (330mm)	13" (330mm)
	Height	18" (457mm)	18" (457mm)	18" (457mm)

Flexible Duct

2" & HE Flexible Duct

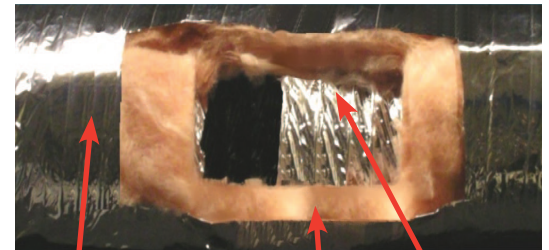


Our **flexible duct** can be installed along joists, in between walls or other space confined areas quickly and easily delivering the air quietly with a **sound absorbing** inner core.

The inner core is made of a double lamination of foil laminate and clear polyester film which is interlaced with a galvanised steel wire (.041) having a 3/4" pitch.

The core is wrapped with fibreglass insulation certified "GREENGUARD" having a coefficient of R4.2/R8.4 and is encapsulated by a metallized vapour barrier reinforced with fibreglass string.

Cut away showing the Inner Core



Metallized Vapour Barrier

Inner Core

Fibreglass Insulation



2" Flexible Duct

2" Flex	2" X 10' AFD	2" X 15' AFD	2" X 25' UFD
2" R4.2 Part #	20020120010 (4/Cartron)	20020120015 (4/Cartron)	20020120025 (1/Cartron)
2" R8 Part #	20022120010 (2/Cartron)	20022120015 (2/Cartron)	20022120025 (1/Cartron)



HE Flexible Duct

HE Flex	HE X 10' AFD	HE X 15' AFD	HE X 25' UFD
HE R4.2 Part #	20062010010 (2/Cartron)	20062010015 (2/Cartron)	20062010025 (1/Cartron)
HE R8 Part #	20062030010 (1/Cartron)	20062030015 (1/Cartron)	20062030025 (1/Cartron)

Technical Notes

UL Listed	Air Duct, Class 1
Maximum rated velocity:	5000 ft/min and/or 25,4 m/s
Maximum rated positive pressure:	10 in. W.C. And/or 2.5 Kpa
Maximum rated negative pressure:	0.5 in. W.C. And/or 0.12 Kpa
Maximum flame spread:	25
Maximum smoke developed:	50
Standard UL 181	
Standard CAN/ULC-S110M	

Our HE duct has been designed as a direct alternative for *two* 2" flex duct used in the Hi-Velocity System. No changes are required to fancoil selection and main plenum duct sizing.

Flex Duct Outside Diameters

2" R4.2	4.5"
2" R8	6.5"
HE R4.2	5.5"
HE R8	7.5"

The *Hi-Velocity* Air Purification System

*Complete Home
Purification
Easy Self-Service*



Imagine:
Chemical Free
Allergen Free
Odor-Free
Germ Free Living!

*Designed specifically for use with the **Hi-Velocity Systems** product line, giving consumers unsurpassed indoor air quality.*

Three Powerful Technologies in One Air Purification System

- Electrostatic MERV-11* Filter Removes Allergens Electrostatically:**

So small that they can only be seen with a microscope. Pollen, mold, fungal spores, dust mites, cockroach dust, tobacco smoke and bacteria are but a few examples.

- “Photo-Catalytic Oxidation” Destroys Toxic Chemicals and Eliminates Household Odors:**

Activated carbon, zeolite and potassium permanganate used by the best air purifiers can rapidly absorb large quantities of toxic fumes, however this media quickly becomes saturated and slowly releases pollutants back into the air stream. Photo-Catalytic Oxidation converts toxic compounds, even carbon monoxide and nitrous oxide, into benign constituents such as carbon dioxide and water without wearing out or losing its effectiveness.

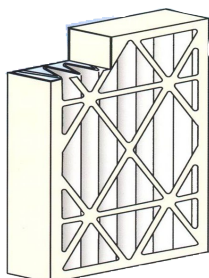
- Ultraviolet Light Kills Disease Germs on Contact**

Ultraviolet light 10,000 times the intensity of sun light kills viruses and bacteria too small to be filtered out by a Hepa filter. Ultraviolet technology combined with photo-catalytic oxidation is the most important feature in air purification since germs are easily spread from one person to another by central heating and air-conditioning systems.

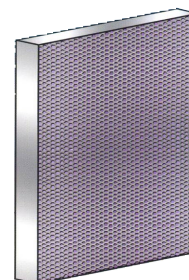
Specifications - HE PS with Flange

Dimensions	25 ^{3/4} " X 17 ^{3/4} " X 10"
Weight	25 Lbs
Shipping Box	7.5 Lbs
Power	120v/60Hz/54 watts/1.1 amps
Fuse	AGC 2 amps
Service Panel	12 vac.
UV Lamps	(2) ESP LT 016
Titanium Catalyst	12,220 cells/4,583 Sq. In of Surface Area
Service Interval	Replace Filter every 6 Months, UV Lamps every 12 Months
Filter ESP FI018	16" X 25" X 4" MERV-11 Electrostatic Needled Fiber Media

MERV - 11 Electrostatic
Particle Filtration



56 Square Feet of Titanium
Surface Area



Contaminated
Air In

Purified
Air Out

*MERV = ASHRAE Standard for Minimum Efficiency Reporting Value

PWM Zoning

Pulse Width Modulation Controller



**Multi-zone
Capabilities!**

Unsurpassed Energy Efficiency

- Reduced energy usage with reduced airflow
- Dump zones, by-pass dampers not required, no energy penalty because of zoning
- With power draws of 120 watts/ton or .48 watts/cfm for cooling, .34 watts/cfm heating and .23 watts/cfm for recirculation fan

Unique in the HVAC Industry

- Multi-zone capabilities
- Combines Inverter Drive Technology with Pulse Width Modulation
- Only draws the watts required for zones that are open
- Easy field upgrade/change-over

Indoor Air Quality (IAQ)

- With recirculation fan, IAQ concerns are addressed, providing filtration, humidity control, fresh air make-up and other IAQ concerns 24/7

“Set it and Forget it” Programming

- Field programming for Cooling, Heating, and Recirculation is Standard
- Mass flow programming will adjust power input for varying field conditions, for maximum power efficiency
- Automatically adjusts to maintain constant pressure, for equal air on open zones, from 5 tons down to 1/2 ton, without extra controls or wiring

Compatible with:

- Most Forced Air Zone Control Kits. Zoning control panels with a Recirculation Fan option are strongly recommended, so as to utilize continuous air circulation for optimal Indoor Air Quality (IAQ) and Energy Efficiency
- Inverter Drive Condensing Units
- High Efficiency Air Filters

Item	Length	Width	Height
HE Fan Coils	A	B	C
HE-50 H/BU	32 5/16" (821mm)	14 1/2" (368mm)	18 1/4" (464mm)
HE-52 H/BU	30 1/2" (775mm)	18 1/2" (470mm)	14 1/4" (362mm)
HE-70 H/BU	32 5/16" (821mm)	19 1/2" (495mm)	18 1/4" (464mm)
HE-100 H/BU	32 5/16" (821mm)	25 1/2" (648mm)	18 1/4" (464mm)

LV-E Fan coils	A	B	C
LV-E-1050 H/BU	32.5" (826mm)	19.5" (495mm)	18.5" (470mm)
LV-E-1750 H/BU	39" (991mm)	26 3/4" (679mm)	24 1/4" (616mm)

Refrigerant Modules	G	E	F	J	K
RPM-E-50	19 1/4" (489mm)	14 5/8" (371mm)	18 1/2" (470mm)	3/8" (9.5mm)	7/8" (22mm)
RPM-E-70	24 1/4" (616mm)	14 5/8" (371mm)	18 1/2" (470mm)	3/8" (9.5mm)	1 3/8" (35mm)
RPM-E-100	32" (813mm)	14 5/8" (371mm)	18 1/2" (470mm)	3/8" (9.5mm)	1 3/8" (35mm)

Hot Water Coils (6 Row)	B	D	C	H	I
HWC-50	13 1/2" (343mm)	5 1/2" (140mm)	16" (406mm)	3/4" (19mm)	3/4" (19mm)
HWC-70/1050	19" (483mm)	5 1/2" (140mm)	16" (406mm)	3/4" (19mm)	3/4" (19mm)
HWC-100	25" (635mm)	5 1/2" (140mm)	16" (406mm)	3/4" (19mm)	3/4" (19mm)
HWC-1750	26" (660mm)	5 1/2" (140mm)	22" (559mm)	1 3/4" (44mm)	3/4" (19mm)

Heating Coil Add-on does not come as a module, it slides into the Hi-Velocity fan coil

Water Cooling Modules	G	E	F	J	K
WCM-50	14 3/8" (365mm)	10 1/8" (257mm)	18 1/2" (470mm)	3/4" (19mm)	3/4" (19mm)
WCM-70/1050	19 3/8" (492mm)	10 1/8" (257mm)	18 1/2" (470mm)	3/4" (19mm)	3/4" (19mm)
WM-100/1050	25 3/8" (645mm)	7" (178mm)	18 3/8" (467mm)	3/4" (19mm)	3/4" (19mm)
WM-1750	26 1/4" (667mm)	8" (203mm)	22 5/8" (575mm)	1 1/8" (29mm)	1 1/8" (29mm)

Electrical Strip Heater	D	C	B
HV-650	13 3/4" (349mm)	5 5/8" (143mm)	15 1/2" (394mm)
HV-750	18 3/4" (476mm)	5 5/8" (143mm)	15 1/2" (394mm)
HV-1100	24 3/4" (629mm)	5 5/8" (143mm)	15 1/2" (394mm)

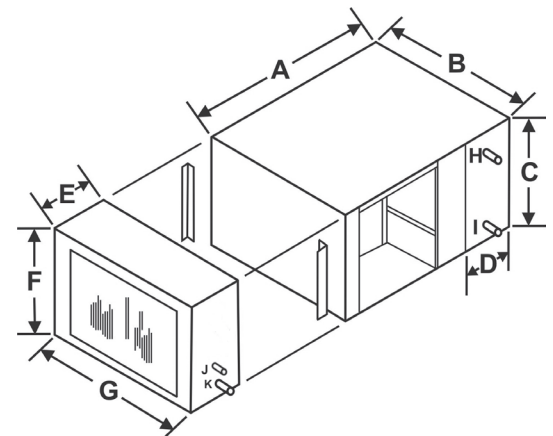
Dimensions for the ESH do not include the electrical access panel, add 4" to ESH for Total Length

Hi-Velocity Air Pur. Syst.	G	F	E
HE PS c/w Merv 11 Filt.	29" (737mm)	21" (533mm)	11" (279mm)
HE PS-1750	32" (813mm)	23" (584mm)	14" (356mm)

Filter Rack	G	F	E
FR-50 Filter Rack	20" (508mm)	17" (356mm)	4" (102mm)
FR-70 Filter Rack	21" (533mm)	22" (559mm)	4" (102mm)
FR-100 Filter Rack	18" (457mm)	24" (610mm)	4" (102mm)
FR-140 Filter Rack	24" (610mm)	26" (660mm)	4" (102mm)

Standard 1" Filters	G	F	E
FR/RA-50 Filter	18" (457mm)	14" (356mm)	1" (25mm)
FR/RA-70 Filter	18" (457mm)	18" (457mm)	1" (25mm)
FR/R-100 Filter	18" (457mm)	24" (610mm)	1" (25mm)
FR/RA-140 Filter	24" (610mm)	26" (660mm)	1" (25mm)

Return Air Base c/w Filter	A	B	C	D	E
RA-50	24" (610mm)	18 1/2" (470mm)	14 1/2" (368mm)	1 1/8" (28.6mm)	21 3/4" (552mm)
RA-70	24" (610mm)	18 1/2" (470mm)	19 1/2" (495mm)	1 1/8" (28.6mm)	21 3/4" (552mm)
RA-100	24" (610mm)	18 1/2" (470mm)	25 1/2" (648mm)	1 1/8" (28.6mm)	21 3/4" (552mm)



Energy Saving Products Ltd., established in 1983, manufactures the Hi-Velocity Systems™ product line for residential, commercial and multi-family markets. Our facilities house Administration, Sales, Design, Manufacturing, as well as Research & Development complete with an in-house test lab. Energy Saving Products prides itself on Customer Service and provides design services and contractor support.

For all of your Heating, Cooling and Indoor Air Quality needs, the Hi-Velocity System is the right choice for you!



Small Duct Heating, Cooling and IAQ Systems

Build Smart, Breathe *Easy*

Hi-Velocity HE Fan Coils, **Green** Technology



Phone: 780-453-2093

Fax: 780-453-1932

Toll Free: 1-888-652-2219



www.hi-velocity.com