EcoFit & ProFit
WH/WV Series

Horizontal/Vertical Water-Source Heat Pump Unit

EcoFit Horizontal

EcoFit Vertical

ProFit Horizontal

ProFit Vertical

Engineering Catalog

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AAON ProFit Series Features and Options Introduction

Energy Efficiency
- Direct Drive Supply Fan
- Scroll or Rotary Compressor
- High Efficiency Electronically Commutated (EC) Motor
- Copper Coaxial Refrigerant-to-Water-Heat Exchanger
- AHRI Certified Performance

Indoor Air Quality
- Stainless Steel Drain Pan

Controls
- 5 Wire Thermostat Control

Installation and Maintenance
- Color-Coded Wiring and Wiring Diagram

Environmentally Friendly
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Extended Life
- Induction Brazing
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Sound Control
- Sound Absorbing Fiberglass Cabinet Insulation
- Compressors Mounted with Rubber-in-Shear Isolators on an Isolation Plate with Rubber-in-Shear Isolation to the Cabinet
- Floating Water Connections

WSHP Series Feature String Nomenclature

Unit Configuration													:	Accessory Options																				
Gen	Major Rev		Size		Series		Minor Rev		Voltage		Eff. Level		Comp Style	Loop Type	Coil Type		Heat Type	Heat Staging		1	2		3A	3B		4	5		6A	6B		7	8	9	10	11		12	13	14	15	16
WH	B	-	024	-	C	-	0	-	3	-	1	-	0	0	0	-	0	0	:	0	0	-	0	E	-	0	0	-	0	0	-	0	0	0	0	0	-	0	A	0	0	0

Model Options

Generation and Orientation
WH = Horizontal Water-Source Heat Pump
WV = Vertical Water-Source Heat Pump

Major Revision
A = EcoFit
B = ProFit

Unit Size
006 = 6,000 Btu/hr = ½ ton
009 = 9,000 Btu/hr = ¾ ton
012 = 12,000 Btu/hr = 1 ton
015 = 15,000 Btu/hr = 1¼ ton
016 = 16,000 Btu/hr = 1¼ ton
018 = 18,000 Btu/hr = 1½ ton
019 = 19,000 Btu/hr = 1½ ton
024 = 24,000 Btu/hr = 2 ton
030 = 30,000 Btu/hr = 2½ ton
036 = 36,000 Btu/hr = 3 ton
042 = 42,000 Btu/hr = 3½ ton
048 = 48,000 Btu/hr = 4 ton
060 = 60,000 Btu/hr = 5 ton
072 = 72,000 Btu/hr = 6 ton
096 = 96,000 Btu/hr = 8 ton
120 = 120,000 Btu/hr = 10 ton
150 = 150,000 Btu/hr = 12½ ton

Series
A = A Cabinet (006, 009 & 012)
B = B Cabinet (015 & 018)
C = C Cabinet (024 & 030)
D = D Cabinet (036 & 042)
E = E Cabinet (048 & 060)
F = F Cabinet (072 & 096)
G = G Cabinet (120 & 150)

Minor Revision
0 = Minor Revision 0
A = Minor Revision A

Voltage
3 = 460V/3Φ/60Hz
4 = 575V/3Φ/60Hz
A = 265V/1Φ/60Hz
B = 115V/1Φ/60Hz
C = 208-230V/1Φ/60Hz
D = 208-230V/3Φ/60Hz

Efficiency Level
0 = Std Efficiency Compact Box
1 = Std Efficiency Compact Box with PSC Motor
2 = Std Efficiency Compact Box with ECM Motor
4 = Std Efficiency Compact Box with Two-Step Compressor & ECM Motor

Compressor Style
0 = R-410A On/Off Compressor - Heat Pump
A = R-410A Two-Step Compressor - Heat Pump

Loop Type
0 = Water Loop (Cooling Tower Only, EWT ≥ 60°F)
A = Ground Loop Application
B = Ground Water Application

Coil Type
0 = Copper Coaxial Refrigerant-to-Water Heat Exchanger + Microchannel Air Coil
A = Copper Coaxial Refrigerant-to-Water Heat Exchanger + Polymer E-Coated Microchannel Air Coil
B = Cupronickel Coaxial Refrigerant-to-Water Heat Exchanger + Microchannel Air Coil
C = Cupronickel Coaxial Refrigerant-to-Water Heat Exchanger + Polymer E-Coated Microchannel Air Coil

Auxiliary Heat Type
0 = Heating

Auxiliary Heating Staging
0 = No Heating

WSHP Series Feature String Nomenclature

Unit Configuration : Accessory Options

Gen	Major Rev	Size	Series	Minor Rev	Voltage	Eff. Level	Comp Style	Loop Type	Coil Type	Heat Type	Heat Staging	**1**	**2**	**3A**	**3B**	**4**	**5**	**6A**	**6B**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	14	15	16
WH	B	024	C	0	3	1	0	0	0	0	0	**0**	**0**	**0**	**E**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**A**	0	0	0

WH B - 024 - C - 0 - 3 - 1 - 0 0 0 - 0 0 : **0 0 - 0 E - 0 0 - 0 0 - 0 0 0 0 0 - 0 A** 0 0 0

1: Unit Orientation
0 = Right Hand Return + Left Hand Supply
A = Right Hand Return + End Supply
B = Left Hand Return + Right Hand Supply
C = Left Hand Return + End Supply
D = Right Hand Return + Top Supply
E = Left Hand Return + Top Supply

2: Supply Fan
0 = Standard Fan + PSC Motor
B = Standard Fan + ECM Motor

3A: Filter Rack*
0 = Open Return – Slide-Out Filter Rack
D = 4-Sided 2” Filter Rack - Return Duct Flange and Access Panel
E = 4-Sided 2” Filter Rack + High MERV Filter Seal - Return Duct Flange and Access Panel
F = 4-Sided 4” Filter Rack + High MERV Filter Seal - Return Duct Flange and Access Panel
J = 4-Sided 1” Filter Rack + Access Panel - Return Duct Flange and Access Panel
K = 4-Sided 1” Filter Rack + High MERV Filter Seal - Return Duct Flange and Access Panel

**1” Filter Rack for A Cabinet Only*
2” and 4” Filter Rack for C Cabinet and Larger

3B: Filters
A = 2” MERV 8 Filter
B = 4” MERV 11 Filter
C = 4” MERV 13 Filter
D = 4” MERV 14 Filter
E = 1” MERV 8 Filter
F = 1” MERV 11 Filter
G = 1” MERV 13 Filter

4: Refrigeration and Dehumidification Options
0 = Standard
A = ECM Fan Speed Dehumidification
B = On/Off Hot Gas Reheat Dehumidification

5: Service Disconnect
0 = Standard - 5 kAIC
A = Non-Fused Service Disconnect - 30 Amp
B = Non-Fused Service Disconnect - 60 Amp
D = 5 kAIC Standard / 100 kAIC w/Field Installed Fusing
F = 100 kAIC Fusing w/ Fused Disconnect - 30 Amp
G = 100 kAIC Fusing w/Fused Disconnect - 60 Amp

6A: Control Sequence
0 = Terminal Block for Thermostat + Pioneer Silver Controller
A = Terminal Block for Thermostat + Pioneer Silver + Expansion Board
B = Pioneer Gold Controller

6B: Control Options
0 = Standard – No Communication

7: Cabinet Options
G = 1/2” Fiberglass Cabinet Insulation + Stainless Steel Drain Pan
H = 1/2” Fiberglass Cabinet Insulation + Stainless Steel Drain Pan + Low Sound Package + MLV

8: WSE
0 = Standard - None
B = Waterside Economizer + 3-Way Motorized Valve

9, 10: Blank
00 = Standard - None

11: Code Options
0 = Standard - ETL USA Listing
B = ETL USA + Canada Listing

12: Shipping Options
0 = Standard

13: Cabinet Access
0 = Standard
A = Standard

WSHP Series Feature String Nomenclature

Unit Configuration : Accessory Options

Gen	Major Rev	Size	Series	Minor Rev	Voltage	Eff. Level	Comp Style	Loop Type	Coil Type	Heat Type	Heat Staging	1	2	3A	3B	4	5	6A	6B	7	8	9	10	11	12	13	**14**	**15**	**16**
WH	B	024	C	0	3	1	0	0	0	0	0	0	0	0	E	0	0	0	0	0	0	0	0	0	0	A	**0**	**0**	**0**

WH B - 024 - C - 0 - 3 - 1 - 0 0 0 - 0 0 : 0 0 - 0 E - 0 0 - 0 0 - 0 0 0 0 0 - 0 A **0 0 0**

<u>14 & 15: Blank</u>
00 = Standard - None

<u>16: Cabinet & Specials</u>
0 = Galvanized Steel Cabinet Construction

Unit Configuration
Major Revision

Example: WH**A**-024-C-A-3-1-000-00:A0-AA-00-A0-G0000-00000

A = *EcoFit Series*
B = *ProFit Series*

Unit Configuration
Unit Size

Example: WHA-**024**-C-A-3-1-000-00:A0-AA-00-A0-G0000-00000

The first number of the model string designates the nominal MBH capacity of cooling for EcoFit or ProFit WH or WV SeriesWater-Source Heat Pumps units with coaxial refrigerant-to-water heat exchangers. Actual capacities will vary with conditions. Refer to the AAON ECat selection software for performance and cooling capacities at design conditions.

Table 1 – EcoFit Series, Horizontal Unit Sizes

Model (Nominal MBH)	Cabinet	Width	Depth	Height	Intake	Discharge	Comp./ Circuits
006 = 6,000 Btu/hr = ½ ton	A	19”	34”	10 ¾”	Right or Left Intake	Left, Right, or End Discharge	1/1
009 = 9,000 Btu/hr = ¾ ton							
012 = 12,000 Btu/hr = 1 ton							
015 = 15,000 Btu/hr = 1 ¼ ton	B	20”	43”	17”			
018 = 18,000 Btu/hr = 1 ½ ton							
024 = 24,000 Btu/hr = 2 ton	C	22”	43”	17 3/8”			
030 = 30,000 Btu/hr = 2 ½ ton							
036 = 36,000 Btu/hr = 3 ton	D	22”	48”	21”			
042 = 42,000 Btu/hr = 3 ½ ton							
048 = 48,000 Btu/hr = 4 ton	E	24”	54”	21”			
060 = 60,000 Btu/hr = 5 ton							
072 = 72,000 Btu/hr = 6 ton	F	36 3/8”	78 ¾”	21 ¾”			
096 = 96,000 Btu/hr = 8 ton							
120 = 120,000 Btu/hr = 10 ton	G	42 1/8”	82”	27 5/8”			
150 = 150,000 Btu/hr = 12 ½ ton							

Table 2 – EcoFit Series, Horizontal Unit Dimensions Added

Feature	Dimensions Added						
	A Cabinet	*B Cabinet*	*C Cabinet*	*D Cabinet*	*E Cabinet*	*F Cabinet*	*G Cabinet*
1" Standard Filter Rack	1" (width)						
2" Standard Filter Rack		2" (width)	2" (width)	2" (width)	2" (width)	2" (width)	2" (width)
4" Standard Filter Rack		6" (width)	6" (width)	6" (width)	6"(width)	6" (width)	6" (width)
Supply Duct Flange	1 ¼" (width)	1 ¼" (width)	1 ¼" (width)	1 ¼" (width)	1 ¼" (width)	1 ¼" (width)	1¼" (width)
Hanging Brackets	4" (length)	4" (length)	4" (length)	4" (length)	4" (length)	4" (length)	4" (length)

Table 3 – EcoFit Series, Vertical Unit Sizes

Model (Nominal MBH)	Cabinet	Width	Depth	Height	Intake	Discharge	Comp./ Circuits
006 = 6,000 Btu/hr = ½ ton	A	15"	19"	40"	Right or Left Intake	Top Discharge	1/1
009 = 9,000 Btu/hr = ¾ ton							
012 = 12,000 Btu/hr = 1 ton							
016 = 16,000 Btu/hr = 1 ¼ ton	B	21"					
019 = 19,000 Btu/hr = 1 ½ ton							
024 = 24,000 Btu/hr = 2 ton	C	21 ½"	21 ½"	44"			
030 = 30,000 Btu/hr = 2 ½ ton							
036 = 36,000 Btu/hr = 3 ton	D	21 ½"	25 ½"	48"			
042 = 42,000 Btu/hr = 3 ½ ton							
048 = 48,000 Btu/hr = 4 ton	E	24"	29"	60"			
060 = 60,000 Btu/hr = 5 ton							
072 = 72,000 Btu/hr = 6 ton	F	29"	41"	62"			
096 = 96,000 Btu/hr = 8 ton							
120 = 120,000 Btu/hr = 10 ton	G	30"	52 ½"	70"			
150 = 150,000 Btu/hr = 12 ½ ton							

Table 4 – EcoFit Series Vertical Unit Dimensions Added

Feature	Dimensions Added						
	A Cabinet	*B Cabinet*	*C Cabinet*	*D Cabinet*	*E Cabinet*	*F Cabinet*	*G Cabinet*
1" Standard Filter Rack	1" (width)	1" (width)					
2" Standard Filter Rack			2" (width)	2" (width)	2" (width)	2" (width)	2" (width)
4" Standard Filter Rack			6" (width)	6" (width)	6" (width)	6" (width)	6" (width)
Supply Duct Flange	1 ⅛" (height)	1 ⅛" (height)	1 ⅛" (height)	1 ⅛" (height)	1 ⅛" (height)	1 ⅛" (height)	1 ⅛" (height)

Table 5 – ProFit Series, Horizontal Unit Sizes

Model (Nominal MBH)	Cabinet	Width	Depth	Height	Intake	Discharge	Comp./ Circuits
006 = 6,000 Btu/hr = ½ ton	A	19”	34”	11”	Right or Left Intake	Left, Right, or End Discharge	1/1
009 = 9,000 Btu/hr = ¾ ton							
012 = 12,000 Btu/hr = 1 ton							
015 = 15,000 Btu/hr = 1 ¼ ton	B	20”	43”	17”			
018 = 18,000 Btu/hr = 1 ½ ton							
024 = 24,000 Btu/hr = 2 ton	C	20”	43”	18 ¼”			
030 = 30,000 Btu/hr = 2 ½ ton							
036 = 36,000 Btu/hr = 3 ton	D	20”	47”	21”			
042 = 42,000 Btu/hr = 3 ½ ton							
048 = 48,000 Btu/hr = 4 ton	E	24”	54”	21”			
060 = 60,000 Btu/hr = 5 ton							

Table 6 – ProFit Series, Horizontal Unit Dimensions Added

Feature	Dimensions Added				
	A Cabinet	*B Cabinet*	*C Cabinet*	*D Cabinet*	*E Cabinet*
1” Standard Filter Rack	1” (width)				
2” Standard Filter Rack		2” (width)	2” (width)	2” (width)	2” (width)
4” Standard Filter Rack		6” (width)	6” (width)	6” (width)	6”(width)
Supply Duct Flange	1 ¼” (width)	1 ¼” (width)	1 ¼” (width)	1 ¼” (width)	1 ¼” (width)
Hanging Brackets	4” (length)	4” (length)	4” (length)	4” (length)	4” (length)

Table 7 – ProFit Series, Vertical Unit Sizes

Model (Nominal MBH)	Cabinet	Width	Depth	Height	Intake	Discharge	Comp./ Circuits
006 = 6,000 Btu/hr = ½ ton	A	19”	19”	22”	Right or Left Intake	Top Discharge	1/1
009 = 9,000 Btu/hr = ¾ ton							
012 = 12,000 Btu/hr = 1 ton							
015 = 15,000 Btu/hr = 1 ¼ ton	B	21 ½”	21 ½”	39”			
018 = 18,000 Btu/hr = 1 ½ ton							
024 = 24,000 Btu/hr = 2 ton	C	21 ½”	21 ½”	40”			
030 = 30,000 Btu/hr = 2 ½ ton							
036 = 36,000 Btu/hr = 3 ton	D	21 ½”	26”	45”			
042 = 42,000 Btu/hr = 3 ½ ton							
048 = 48,000 Btu/hr = 4 ton	E	24”	32 ½”	46”			
060 = 60,000 Btu/hr = 5 ton							

Table 8 – ProFit Series, Vertical Unit Dimensions Added

Feature	Dimensions Added				
	A Cabinet	*B Cabinet*	*C Cabinet*	*D Cabinet*	*E Cabinet*
1" Standard Filter Rack	1" (width)	1" (width)			
2" Standard Filter Rack			2" (width)	2" (width)	2" (width)
4" Standard Filter Rack			6" (width)	6" (width)	6" (width)
Supply Duct Flange	1 ⅛" (height)	1 ⅛" (height)	1 ⅛" (height)	1 ⅛" (height)	1 ⅛" (height)

Unit Configuration
Series

Example: WHA-024-**C**-A-3-1-000-00:A0-AA-00-A0-G0000-00000

A = *A Cabinet (006, 009 & 012)*
B = *B Cabinet (015, 016, 018 & 019)*
C = *C Cabinet (024 & 030)*
D = *D Cabinet (036 & 042)*
E = *E Cabinet (048 & 060)*
F = *F Cabinet (072 & 096)*
G = *G Cabinet (120 & 150)*

Unit Configuration
Minor Revision

Example: WHA-024-C-**A**-3-1-000-00:A0-AA-00-A0-G0000-00000

0 = *Minor Revision 0*
A = *Minor Revision A*

Unit Configuration
Voltage

Example: WHA-024-C-A-**3**-1-000-00:A0-AA-00-A0-G0000-00000

All units have single point power connections with grounding lugs and 24 VAC control circuits.

3 = *460V/3Φ/60Hz*
4 = *575V/3Φ/60Hz*
A = *265V/1Φ/60Hz*
B = *115V/1Φ/60Hz*
C = *208-230V/1Φ/60Hz*
D = *208-230V/3Φ/60Hz*

Unit Configuration
Efficiency Level

Example: WHA-024-C-A-3-**1**-000-00:A0-AA-00-A0-G0000-00000

0 = *Std Efficiency Compact Box* – Cabinet designed for replacement of conventional and legacy water-source heat pump products. Standard configuration for 006-060 ProFit horizontal and vertical configurations.
1 = *Std Efficiency Compact Box with PSC Motor* – Cabinet designed for new construction. Option for 016-060 EcoFit horizontal and vertical configurations.
2 = *Std Efficiency Compact Box with ECM Motor* – Cabinet designed for new construction. Standard for 006-012 EcoFit horizontal and vertical configurations. Option for 015-060 EcoFit horizontal and vertical configurations.
4 = *Std Efficiency Compact Box with Two-Step Compressor & ECM Motor* – Cabinet designed for new construction. Option for 072-150 EcoFit horizontal and vertical configurations.

Unit Configuration
Compressor Style

Example: WHA-024-C-A-3-1-**0**00-00:A0-AA-00-A0-G0000-00000

0 = *R-410A On/Off Compressor – Heat Pump* – Compressorized R-410A DX cooling and heat pump heating with one on/off compressor. Units with a capacity between 6 and 18 MBH (1-1 ½ ton) utilize a rotary compressor. Units with a capacity of 24 MBH and larger (2-5 ton) utilize a scroll compressor. Standard configuration for 006-060 EcoFit and ProFit horizontal and vertical configurations.

A = *R-410A Two-Step Compressor – Heat Pump* – Compressorized R-410A DX cooling and heat pump heating using two-step scroll compressor. Capacity steps are 100% and 67%. Option provides the unit with improved temperature control, improved humidity control and energy savings at part load conditions. Standard configuration for 072-150 EcoFit horizontal and vertical configurations. Option for 024-060 EcoFit horizontal and vertical configurations.

Unit Configuration
Loop Type

Example: WHA-024-C-A-3-1-0**0**-00:A0-AA-00-A0-G0000-00000

0 = *Water Loop (Cooling Tower Only, EWT ≥ 60°F*) – For cooling tower applications, assumes Entering Water Temperatures ≥ 60°F.

A = *Ground Loop Application* – Extended range insulation is added to water heat exchanger/piping and refrigerant piping.

B = *Ground Water Application* – Extended range insulation is added to water heat exchanger/piping and refrigerant piping.

Unit Configuration
Coil Type

Example: WHA-024-C-A-3-1-00**0**-00:A0-AA-00-A0-G0000-00000

0 = *Copper Coaxial Refrigerant-to-Water Heat Exchanger + Microchannel Air Coil* – Water-source heat pump unit with coaxial refrigerant-to-water heat exchanger for reliable operation. Microchannel DX coil provides improved efficiency and reduced refrigerant charge, air pressure drop, fan horsepower and overall unit weight. Available only for EcoFit Series.

Coil Type Continued

A = *Copper Coaxial Refrigerant-to-Water Heat Exchanger + Polymer E-Coated Microchannel Air Coil* – Water-source heat pump unit with coaxial refrigerant-to-water heat exchanger for reliable operation. Microchannel DX coil provides improved efficiency and reduced refrigerant charge, air pressure drop, fan horsepower and overall unit weight. E-coated coil option includes the complete coating of the air coil. Available only for EcoFit Series.

B = *Cupronickel Coaxial Refrigerant-to-Water Heat Exchanger + Microchannel Air Coil* – Water-source heat pump unit with cupronickel refrigerant-to-water heat exchanger for increased corrosion resistance. Microchannel DX coil provides improved efficiency and reduced refrigerant charge, air pressure drop, fan horsepower and overall unit weight. Available only for EcoFit Series.

C = *Cupronickel Coaxial Refrigerant-to-Water Heat Exchanger + Polymer E-Coated Microchannel Air Coil* –Water-source heat pump unit with cupronickel refrigerant-to-water heat exchanger for increased corrosion resistance. Microchannel DX coil provides improved efficiency and reduced refrigerant charge, air pressure drop, fan horsepower and overall unit weight. E-coated coil option includes the complete coating of the air coil. Available only for EcoFit Series.

D = *Copper Coaxial Refrigerant-to-Water Heat Exchanger + Fin & Tube Air Coil* – Water-source heat pump unit with coaxial refrigerant-to-water heat exchanger for reliable operation. Aluminum Fin & Copper Tube DX coil available only for ProFit Series.

E = *Copper Coaxial Refrigerant-to-Water Heat Exchanger + Polymer E-Coated Fin & Tube Air Coil* – Water-source heat pump unit with coaxial refrigerant-to-water heat exchanger for reliable operation. Aluminum Fin & Copper Tube DX coil available only for ProFit Series.

F = *Cupronickel Coaxial Refrigerant-to-Water Heat Exchanger + Fin & Tube Air Coil* – Water-source heat pump unit with cupronickel refrigerant-to-water heat exchanger for increased corrosion resistance. Aluminum Fin & Copper Tube DX coil available only for ProFit Series.

G = *Cupronickel Coaxial Refrigerant-to-Water Heat Exchanger + Polymer E-Coated Fin & Tube Air Coil* – Water-source heat pump unit with cupronickel refrigerant-to-water heat exchanger for increased corrosion resistance. Aluminum Fin & Copper Tube DX coil available only for ProFit Series.

Unit Configuration
Auxiliary Heat Type

Example: WHA-024-C-A-3-1-000-**0**0:A0-AA-00-A0-G0000-00000

0 = *No Heating*

Unit Configuration
Auxiliary Heat Staging

Example: WHA-024-C-A-3-1-000-0**0**:A0-AA-00-A0-G0000-00000

0 = *No Heating*

Feature 1
Unit Orientation

Example: WHA-024-C-A-3-1-000-00:**A**0-AA-00-A0-G0000-00000

0 = *Right Hand Return + Left Hand Supply* – Horizontal unit with right intake, draw-through supply fan, and left discharge. Discharge direction is field adjustable between left and end.
A = *Right Hand Return + End Supply* – Horizontal unit with right intake, draw-through supply fan and end discharge. Discharge direction is field adjustable between end and left.
B = *Left Hand Return + Right Hand Supply* – Horizontal unit with left intake, draw-through supply fan and right discharge. Discharge direction is field adjustable between right and end.
C = *Left Hand Return + End Supply* – Horizontal unit with left intake, draw-through supply fan and end discharge. Discharge direction is field adjustable between end and right.
D = *Right Hand Return + Top Supply* – Vertical unit with left intake, draw-through supply fan and top discharge.
E = *Left Hand Return + Top Supply* – Vertical unit with left intake, draw-through supply fan and top discharge.

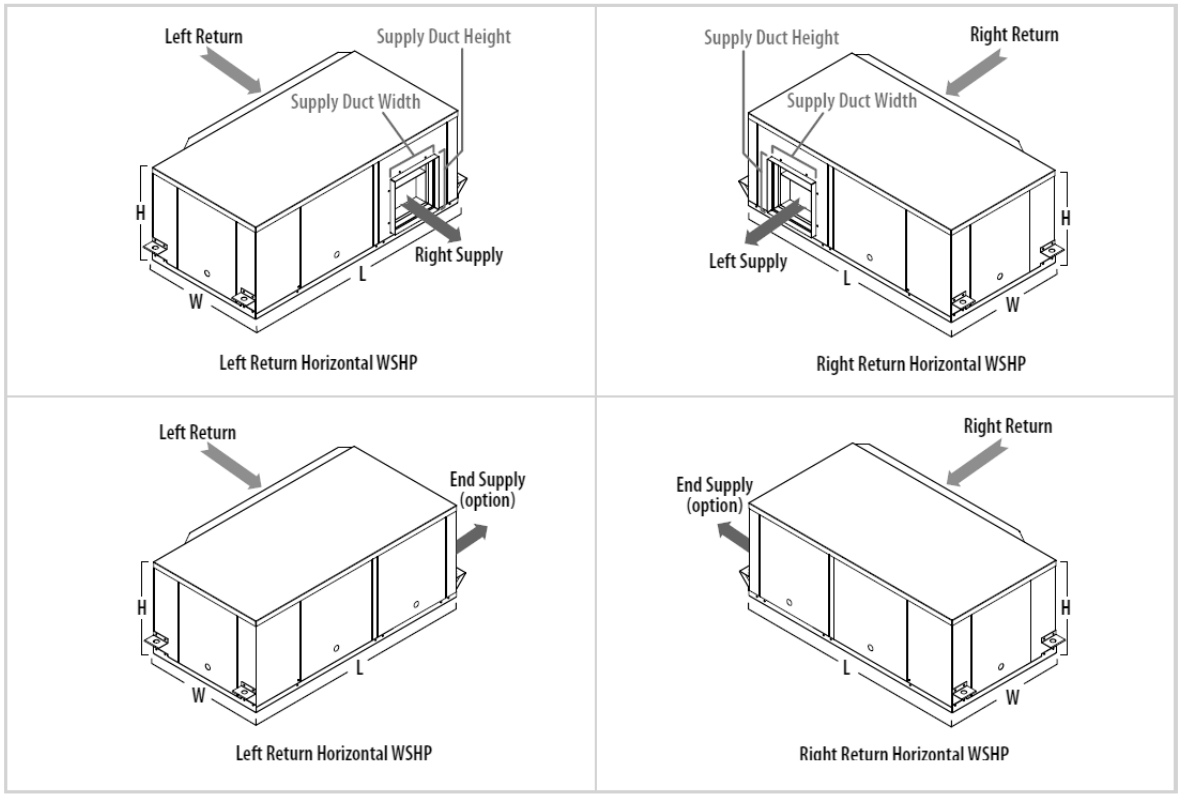

Figure 1 – Horizontal Configuration Orientations

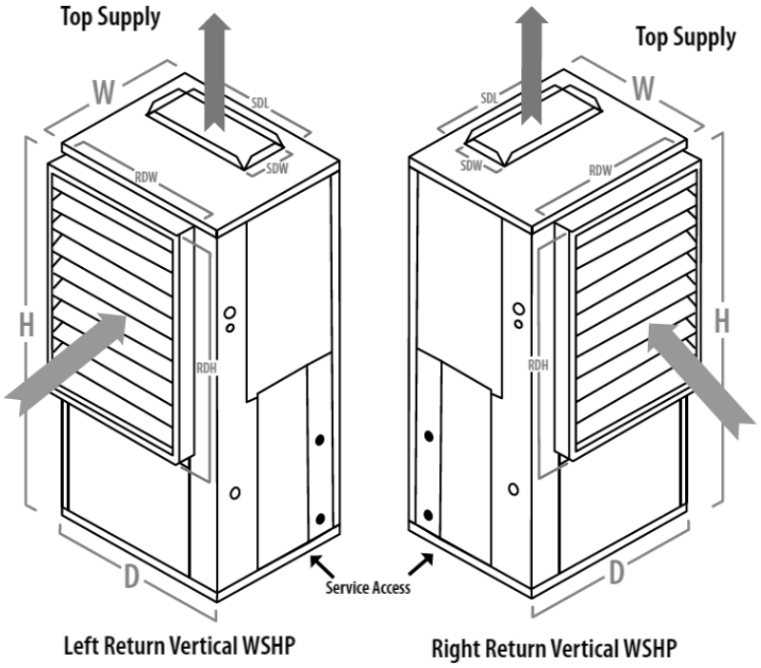

Figure 2 – Vertical Configuration Orientations

Feature 2
Supply Fan

Example: WHA-024-C-A-3-1-000-00:A**0**-AA-00-A0-G0000-00000

0 = *Standard Fan + PSC Motor* – Direct drive forward curved blower with permanent split capacitor motor. Standard for 016-060 EcoFit horizontal and vertical configurations.

B = *Standard Fan + ECM Motor* – Direct drive forward curved fan (Horizontal Units 009 or larger; Vertical Units 009 or larger) or direct drive backward curved fan (Horizontal Unit 006; Vertical Units 006) with electronically commutated motor (ECM). Direct drive backward curved ECM fan configuration is standard for 006 EcoFit horizontal and vertical configurations. Direct drive forward curved ECM fan configuration is standard for 009-012, 072-150 EcoFit horizontal and vertical configurations. No neutral wire required for this option. Standard for 006-060 ProFit horizontal and vertical configurations. Option for EcoFit 016-150 vertical and horizontal configuration.

Feature 3A
Filter Rack

Example: WHA-024-C-A-3-1-000-00:A0-**A**A-00-A0-G0000-00000

0 = *Open Return – Slide-Out Filter Rack* – Filter rack is accessible from side or bottom access in the horizontal configuration or through the top access on a vertical configuration. Available for ProFit 006-060 horizontal and vertical configurations. Available for EcoFit 006-012 horizontal configuration and 006-019 vertical configuration. Configuration cannot be connected to return ductwork.

A = *Open Return – Slide-Out 2" Filter Rack* – Filter rack is accessible from side or bottom access in the horizontal configuration or through the top access on a vertical configuration. Available for EcoFit 015-150 horizontal configuration and 024-150 vertical configuration. Also available for 015-060 ProFit horizontal and vertical configurations.

D = *4-Sided 2" Filter Rack – Return Duct Flange and Access Panel* – Filter rack is accessible from side or bottom access in the horizontal configuration or through the top access on a vertical configuration. Two-inch filter rack option for 015-150 EcoFit horizontal orientation and 024-150 EcoFit vertical configuration. Two-inch filter rack option also available for 015-060 ProFit horizontal and vertical configurations. Duct flange provided on the return air intake.

E = *4-Sided 2" Filter Rack + High MERV Filter Seal – Return Duct Flange and Access Panel* – Two inch filter rack option for 015-150 EcoFit horizontal orientation and 024-150 EcoFit vertical orientation. Two inch filter rack option also available for 015-060 ProFit horizontal and vertical configurations. High MERV seal option includes a gasket in the filter rack to reduce air leakage through the filter rack. Duct flange provided on the return air intake. Filter rack is accessible from side or bottom access in the horizontal configuration or through the top or front access on a vertical configuration.

Filter Rack Continued

F = *4-Sided 4" Filter Rack + High MERV Filter Seal – Return Duct Flange and Access Panel* – Four inch filter rack option for 015-150 EcoFit horizontal configuration and 024-150 EcoFit vertical configuration. High MERV seal option includes a gasket in the filter rack to reduce air leakage through the filter rack. Duct flange provided on the return air intake. Filter rack is accessible from side or bottom access in the horizontal configuration or through the top or front access on a vertical configuration.

J = *4-Sided 1" Filter Rack + Access Panel – Return Duct Flange and Access Panel* – One inch filter rack option for EcoFit 006-012 horizontal configuration and EcoFit 006-019 vertical configuration. One inch filter rack option also available for 006-060 ProFit horizontal and vertical configurations. Duct flange provided on the return air intake. Filter rack is accessible from side or bottom access in the horizontal configuration or through the top or front access on a vertical configuration.

K = *4-Sided 1" Filter Rack + High MERV Filter Seal – Return Duct Flange and Access Panel* – One inch filter rack option for 006-012 EcoFit horizontal configuration and 006-019 EcoFit horizontal configuration. One inch filter rack option also available for 006-060 ProFit horizontal and vertical configurations. High MERV seal option includes a gasket in the filter rack to reduce air leakage through the filter rack. Duct flange provided on the return air intake. Filter rack is accessible from side or bottom access in the horizontal configuration or through the top or front access on a vertical configuration.

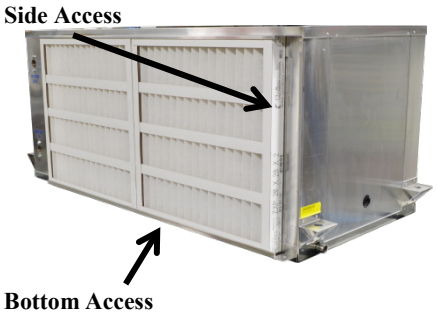

Figure 3 – Horizontal Configuration Filter Rack Access

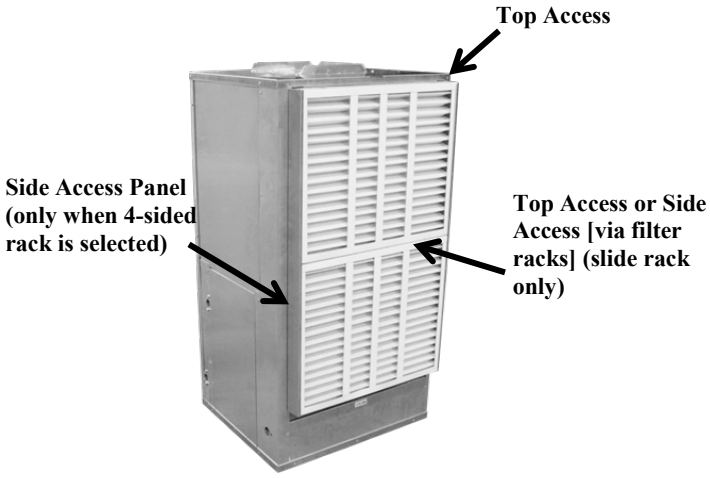

Figure 4 – Vertical Configuration Filter Rack Access

Feature 3B
Filters

Example: WHA-024-C-A-3-1-000-00:A0-A**A**-00-A0-G0000-00000

A = *2" MERV 8 Filter* – 2 inch pleated, MERV 8, unit filters mounted adjacent and upstream of the coils and downstream of the air intake opening. Standard filter for EcoFit 015-150 horizontal and vertical configurations.

B = *4" MERV 11 Filter* **–** 4 inch pleated, MERV 11, unit filters mounted adjacent and upstream of the coils and downstream of the air intake opening. Available for EcoFit 024-150 horizontal and vertical configurations.

C = *4" MERV 13 Filter* **–** 4 inch pleated, MERV 13, unit filters mounted adjacent and upstream of the coils and downstream of the air intake opening. Available for EcoFit 015-150 horizontal and vertical configurations.

D = *4" MERV 14 Filter* **–** 4 inch pleated, MERV 14, unit filters mounted adjacent and upstream of the coils and downstream of the air intake opening. Available for EcoFit 015-150 horizontal and vertical configurations.

E = *1" MERV 8 Filter* – 1 inch pleated, MERV 8, unit filters mounted adjacent and upstream of the coils and downstream of the air intake opening. Standard filter for ProFit 006-060 horizontal and vertical configurations. Available for EcoFit 006-012 horizontal and vertical configurations.

F = *1" MERV 11 Filter* **–** 1 inch pleated, MERV 11, unit filters mounted adjacent and upstream of the coils and downstream of the air intake opening. Available for ProFit 006-060 horizontal and vertical configurations, and EcoFit 006-019 horizontal and vertical configurations.

G = *1" MERV 13 Filter* **–** 1 inch pleated, MERV 13, unit filters mounted adjacent and upstream of the coils and downstream of the air intake opening. Available for ProFit 006-060 horizontal and vertical configurations, and EcoFit 006-019 horizontal and vertical configurations.

I = *1" Fiberglass Filter* – Available for ProFit 006-060 horizontal and vertical configurations.

J = *2" Fiberglass Filter* – Available for ProFit 006-060 horizontal and vertical configurations.

Feature 4
Refrigeration and Dehumidification Options

Example: WHA-024-C-A-3-1-000-00:A0-AA-**0**0-A0-G0000-00000

0 = *Standard – None* **–** Standard option for ProFit 006-060 horizontal and vertical configurations, and EcoFit 006-150 horizontal and vertical configurations.

A = *ECM Fan Speed Dehumidification* **–** ECM supply fan with controls for a dehumidification mode for cooling operation at lower airflow for increased dehumidification capabilities. Pioneer Silver expansion board or Pioneer Gold controller is required. Available for EcoFit 006-150 horizontal and vertical configurations.

Refrigeration and Dehumidification Options Continued

B = *On/Off Hot Gas Reheat Dehumidification* **–** Hot gas reheat coil provided on the refrigeration circuit with on/off controls that provide the unit with a dehumidification mode of operation for when the cooling load has been satisfied. Pioneer Silver expansion board or Pioneer Gold controller is required. Available for EcoFit 024-060 horizontal and vertical configurations.

F = *Modulating Hot Gas Reheat Dehumidification* – Available for EcoFit 072-150 horizontal and vertical configurations.

Feature 5
Service Disconnect

Example: WHA-024-C-A-3-1-000-00:A0-AA-0**0**-A0-G0000-00000

0 = *Standard – None* – Contactors provided to connect power to the unit. Standard option with 5 kAIC SCCR. Electrical rating of 100 kAIC available with field installed fusing.

A = *Non-Fused Disconnect – 30 Amp* – Units shall be provided with factory installed and factory wired non-fused disconnect. Electrical rating of 5 kAIC SCCR. Switch shall be accessible from the exterior of the unit. Switch shall be capable of being locked/tagged out.

B = *Non-Fused Disconnect – 60 Amp* – Units shall be provided with factory installed and factory wired non-fused disconnect. Electrical rating of 5 kAIC SCCR. Switch shall be accessible from the exterior of the unit. Switch shall be capable of being locked/tagged out.

F = *100 kAIC with Fused Disconnect – 30 Amp* – Units shall be provided with factory installed and factory wired non-fused disconnect. Electrical rating of 100 kAIC with factory installed fusing. Switch shall be accessible from the exterior of the unit. Switch shall be capable of being locked/tagged out.

G = *100 kAIC with Fused Disconnect – 60 Amp* – Units shall be provided with factory installed and factory wired non-fused disconnect. Electrical rating of 100 kAIC with factory installed fusing. Switch shall be accessible from the exterior of the unit. Switch shall be capable of being locked/tagged out.

Feature 6A
Control Sequence

Example: WHA-024-C-A-3-1-000-00:A0-AA-00-**A**0-G0000-00000

0 = *Terminal Block for Thermostat + Pioneer Silver Controller* – Unit provided with Pioneer Silver control board and terminal block for field installation of thermostat controls. Unit capable of a "hard-reset" by cycling power at the unit or a "soft-reset" at the thermostat by removing the compressor call. Requires a separately selected or field provided thermostat. For more information, refer to controls section. Available for ProFit 015-060 horizontal and vertical configurations, and EcoFit 015-060 horizontal and vertical configurations.

A = *Terminal Block for Thermostat + Pioneer Silver Controller + Expansion Board* – Unit provided with Pioneer Silver control board, expansion board, and terminal block for field installation of thermostat controls. Unit capable of a "hard-reset" by cycling power at the unit or a "soft-reset" at the thermostat by removing the compressor call. Requires a separately selected or field provided thermostat. For more information, refer to controls section. Available for ProFit and EcoFit 006-060 horizontal and vertical configurations. Expansion board required with Pioneer Silver Controller on EcoFit and ProFit 006-012 for ECM fan control.

B = *Terminal Block for Thermostat + Pioneer Gold Controller* – Unit provided with Pioneer Gold control board. Requires a separately selected or field provided thermostat or a separately selected or field provided space sensor. For more information, refer to controls section. Available for ProFit 006-060 horizontal and vertical configurations, and EcoFit 072-150 horizontal and vertical configurations. Pioneer gold controller required with EcoFit 072-150 for two-step compressor control.

Feature 6B
Control Options

Example: WHA-024-C-A-3-1-000-00:A0-AA-00-A**0**-G0000-00000

0 = *Standard*

Feature 7
Cabinet Options

Example: WHA-024-C-A-3-1-000-00:A0-AA-00-A0-**G**0000-00000

G = *1/2" Fiberglass Cabinet Insulation + Stainless Steel Drain Pan*

Cabinet Options Continued

H = *1/2" Fiberglass Cabinet Insulation + Stainless Steel Drain Pan + Low Sound Package + MLV* – Low sound package adds insulation to the blower housing corresponding to the selected cabinet insulation type. Mass loaded vinyl available under standard unit insulation for increased sound damping.

Feature 8
Waterside Economizer

Example: WHA-024-C-A-3-1-000-00:A0-AA-00-A0-G**0**000-00000

0 = *Standard – None*
B = *Waterside Economizer + 3-Way Motorized Valve* – Unit shall be supplied with complete waterside economizer. It shall be shipped with a 3-way valve and a water coil and must be externally piped/installed in the field. Pioneer Silver expansion board or Pioneer Gold controller is required.

Feature 9
Blank

Example: WHA-024-C-A-3-1-000-00:A0-AA-00-A0-G0**0**00-00000

0 = *Standard – None*

Feature 10
Blank

Example: WHA-024-C-A-3-1-000-00:A0-AA-00-A0-G00**0**0-00000

0 = *Standard – None*

Feature 11
Code Options

Example: WHA-024-C-A-3-1-000-00:A0-AA-00-A0-G000**0**-00000

0 = *Standard – ETL USA Listing* – Unit shall be safety certified by ETL and be ETL US listed. Unit nameplate shall include the Intertek/ETL label.
B = *ETL USA + Canada Listing* – Unit shall be safety certified by ETL and be ETL US and ETL Canada listed. Unit nameplate shall include the Intertek/ETL Canada label. Warning decals and labels are in French.

Feature 12
Shipping Options

Example: WHA-024-C-A-3-1-000-00:A0-AA-00-A0-G0000-**0**0000

0 = *Standard – Pallet and Blue Shrink Wrap*

Feature 13
Blank

Example: WHA-024-C-A-3-1-000-00:A0-AA-00-A0-G0000-0**0**000

0 = *Standard – None*

Feature 14
Blank

Example: WHA-024-C-A-3-1-000-00:A0-AA-00-A0-G0000-00**0**00

0 = *Standard – None*

Feature 15
Blank

Example: WHA-024-C-A-3-1-000-00:A0-AA-00-A0-G0000-000**0**0

0 = *Standard – None*

Feature 16
Cabinet & Specials

Example: WHA-024-C-A-3-1-000-00:A0-AA-00-A0-G0000-0000**0**

0 = *Galvanized Steel Cabinet Construction*

Filter Information

Table 9 – 006-012 ProFit Horizontal Unit Filters (A Cabinet)

Feature 3B	Quantity/Size (W x H x D)	Type
A	(1) 18” x 10” x 2”	Pleated, MERV 8
K		Pleated, MERV 11
L		Pleated, MERV 13
E	(1) 18” x 10” x 1”	Pleated, MERV 8
F		Pleated, MERV 11
G		Pleated, MERV 13
I	(1) 18” x 10” x 1”	Fiberglass
J	(1) 18” x 10” x 2”	

Table 10 – 015 & 018 ProFit Horizontal Unit Filters (B Cabinet)

Feature 3B	Quantity/Size (W x H x D)	Type
A	(1) 25” x 16” x 2”	Pleated, MERV 8
K		Pleated, MERV 11
L		Pleated, MERV 13
E	(1) 25” x 16” x 1”	Pleated, MERV 11
F		Pleated, MERV 13
G		Pleated, MERV 14
I	(1) 25” x 16” x 1”	Fiberglass
J	(1) 25” x 16” x 2”	

Table 11 – 024 & 30 ProFit Horizontal Unit Filters (C Cabinet)

Feature 3B	Quantity/Size (W x H x D)	Type
A	(1) 25” x 18” x 2”	Pleated, MERV 8
K		Pleated, MERV 11
L		Pleated, MERV 13
E	(1) 25” x 18” x 1”	Pleated, MERV 8
F		Pleated, MERV 11
G		Pleated, MERV 13
I	(1) 25” x 18” x 1”	Fiberglass
J	(1) 25” x 18” x 2”	

Table 12 – 036 & 042 ProFit Horizontal Unit Filters (D Cabinet)

Feature 3B	Quantity/Size (W x H x D)	Type
A	(1) 14” x 20” x 2”	Pleated, MERV 8
K		Pleated, MERV 11
L		Pleated, MERV 13
E	(1) 14” x 20” x 1”	Pleated, MERV 8
F		Pleated, MERV 11
G		Pleated, MERV 13
I	(1) 14” x 20” x 1”	Fiberglass
J	(1) 14” x 20” x 2”	

Table 13 – 048 & 060 ProFit Horizontal Unit Filters (E Cabinet)

Feature 3B	Quantity/Size (W x H x D)	Type
A	(1) 24” x 20” x 2” (1) 14” x 20” x 2”	Pleated, MERV 8
K		Pleated, MERV 11
L		Pleated, MERV 13
E	(1) 24” x 20” x 1” (1) 14” x 20” x 1”	Pleated, MERV 8
F		Pleated, MERV 11
G		Pleated, MERV 13
I	(1) 24” x 20” x 1” (1) 14” x 20” x 1”	Fiberglass
J	(1) 24” x 20” x 2” (1) 14” x 20” x 2”	

Table 14 – 006 & 012 ProFit Vertical Unit Filters (A Cabinet)

Feature 3B	Quantity/Size (W x H x D)	Type
A	(1) 18” x 10” x 2”	Pleated, MERV 8
K		Pleated, MERV 11
L		Pleated, MERV 13
E	(1) 18” x 10” x 1”	Pleated, MERV 8
F		Pleated, MERV 11
G		Pleated, MERV 13
I	(1) 18” x 10” x 1”	Fiberglass
J	(1) 18” x 10” x 2”	

Table 15 – 015-030 ProFit Vertical Unit Filters (B & C Cabinet)

Feature 3B	Quantity/Size (W x H x D)	Type
A	(1) 20” x 20” x 2”	Pleated, MERV 8
K		Pleated, MERV 11
L		Pleated, MERV 13
E	(1) 20” x 20” x 1”	Pleated, MERV 8
F		Pleated, MERV 11
G		Pleated, MERV 13
I	(1) 20” x 20” x 1”	Fiberglass
J	(1) 20” x 20” x 2”	

Table 16 – 036 & 042 ProFit Vertical Unit Filters (D Cabinet)

Feature 3B	Quantity/Size (W x H x D)	Type
A	(1) 24” x 24” x 2”	Pleated, MERV 8
K		Pleated, MERV 11
L		Pleated, MERV 13
E	(1) 24” x 24” x 1”	Pleated, MERV 8
F		Pleated, MERV 11
G		Pleated, MERV 13
I	(1) 24” x 24” x 1”	Fiberglass
J	(1) 24” x 24” x 2”	

Table 17 – 048 & 060 ProFit Vertical Unit Filters (E Cabinet)

Feature 3B	Quantity/Size (W x H x D)	Type
A	(1) 24” x 20” x 2” (1) 14” x 20” x 2”	Pleated, MERV 8
K		Pleated, MERV 11
L		Pleated, MERV 13
E	(1) 24” x 20” x 1” (1) 14” x 20” x 1”	Pleated, MERV 8
F		Pleated, MERV 11
G		Pleated, MERV 13
I	(1) 24” x 20” x 1” (1) 14” x 20” x 1”	Fiberglass
J	(1) 24” x 20” x 2” (1) 14” x 20” x 2”	

Table 18 – 006-012 EcoFit Horizontal Unit Filters (A Cabinet)

Feature 3B	Quantity/Size (W x H x D)	Type
E & 0	(1) 24” x 10” x 1”	Pleated, MERV 8
F		Pleated, MERV 11
G		Pleated, MERV 13

Table 19 – 015-030 EcoFit Horizontal Unit Filters (B & C Cabinet)

Feature 3B	Quantity/Size (W x H x D)	Type
A & 0	(2) 16” x 16” x 2”	Pleated, MERV 8
B	(2) 16” x 16” x 4”	Pleated, MERV 11
C		Pleated, MERV 13
D		Pleated, MERV 14

Table 20 – 036 & 042 EcoFit Horizontal Unit Filters (D Cabinet)

Feature 3B	Quantity/Size (W x H x D)	Type
A & 0	(2) 20” x 20” x 2”	Pleated, MERV 8
B	(2) 20” x 20” x 4”	Pleated, MERV 11
C		Pleated, MERV 13
D		Pleated, MERV 14

Table 21 – 048 & 060 EcoFit Horizontal Unit Filters (E Cabinet)

Feature 3B	Quantity/Size (W x H x D)	Type
A & 0	(3) 16” x 20” x 2”	Pleated, MERV 8
B	(3) 16” x 20” x 4”	Pleated, MERV 11
C		Pleated, MERV 13
D		Pleated, MERV 14

Table 22 – 072 & 096 EcoFit Horizontal Unit Filters (F Cabinet)

Feature 3B	Quantity/Size (W x H x D)	Type
A	(3) 24” x 18” x 2”	Pleated, MERV 8
B	(3) 24” x 18” x 4”	Pleated, MERV 11
C		Pleated, MERV 13
D		Pleated, MERV 14

Table 23 – 120 & 150 EcoFit Horizontal Unit Filters (G Cabinet)

Feature 3B	Quantity/Size (W x H x D)	Type
A	(4) 18” x 24” x 2”	Pleated, MERV 8
B	(4) 18” x 24” x 4”	Pleated, MERV 11
C		Pleated, MERV 13
D		Pleated, MERV 14

Table 24 – 006-019 EcoFit Vertical Unit Filters (A & B Cabinet)

Feature 3B	Quantity/Size (W x H x D)	Type
E & 0	(1) 16” x 25” x 1”	Pleated, MERV 8
F		Pleated, MERV 11
G		Pleated, MERV 13

Table 25 – 024 & 030 EcoFit Vertical Unit Filters (C Cabinet)

Feature 3B	Quantity/Size (W x H x D)	Type
A & 0	(2) 20” x 16” x 2”	Pleated, MERV 8
B	(2) 20” x 16” x 4”	Pleated, MERV 11
C		Pleated, MERV 13
D		Pleated, MERV 14

Table 26 – 036 & 042 EcoFit Vertical Unit Filters (D Cabinet)

Feature 3B	Quantity/Size (W x H x D)	Type
A & 0	(2) 24” x 20” x 2”	Pleated, MERV 8
B	(2) 24” x 20” x 4”	Pleated, MERV 11
C		Pleated, MERV 13
D		Pleated, MERV 14

Table 27 – 048 & 060 EcoFit Vertical Unit Filters (E Cabinet)

Feature 3B	Quantity/Size (W x H x D)	Type
A & 0	(2) 24” x 24” x 2”	Pleated, MERV 8
B	(2) 24” x 24” x 4”	Pleated, MERV 11
C		Pleated, MERV 13
D		Pleated, MERV 14

Table 28 – 072 & 096 EcoFit Vertical Unit Filters (F Cabinet)

Feature 3B	Quantity/Size (W x H x D)	Type
A	(4) 18” x 24” x 2”	Pleated, MERV 8
B	(4) 18” x 24” x 4”	Pleated, MERV 11
C		Pleated, MERV 13
D		Pleated, MERV 14

Table 29 – 120 & 150 EcoFit Vertical Unit Filters (G Cabinet)

Feature 3B	Quantity/Size (W x H x D)	Type
A	(6) 25” x 16” x 2”	Pleated, MERV 8
B	(6) 25” x 16” x 4”	Pleated, MERV 11
C		Pleated, MERV 13
D		Pleated, MERV 14

General Data
Unit Information

Table 30 – EcoFit WH Series 006-012 (A Cabinet) Cooling and Fan Information

	Model		
	WH-006	*WH-009*	*WH-012*
Compressors			
Quantity			
R-410A On/Off Compressor	*1 Rotary*	*1 Rotary*	*1 Rotary*
Capacity Steps	*On/Off*		
Evaporator Coil			
Circuits	*1*		
Heat Pump Standard Coil			
Quantity/Face Area	*1 / 1.0 ft²*		
Supply Fans			
Quantity/Type	*1/ ECM Direct Drive Backward Curved Plenum*	*1/ ECM Direct Drive Forward Curved Plenum*	

Table 31 – EcoFit WH Series 015-030 (B & C Cabinet) Cooling and Fan Information

	Model			
	WH-015	WH-018	WH-024	WH-030
Compressors				
Quantity				
R-410A On/Off Compressor	*1 Rotary*	*1 Rotary*	*1 Scroll*	*1 Scroll*
R-410A Two-Step Compressor			*1 Scroll*	*1 Scroll*
Capacity Steps	*On/Off* *100, 100/67 with Two-Step Compressor*			
Evaporator Coil				
Circuits	*1*			
Heat Pump Standard Coil				
Quantity/Face Area	*1 / 2.6 ft²*			
Supply Fans				
Quantity/Type	*1/ PSC or ECM Direct Drive Forward Curved Plenum*			

Table 32 – EcoFit WH Series 036 & 042 (D Cabinet) Cooling and Fan Information

	Model	
	WH-036	WH-042
Compressors		
Quantity		
R-410A On/Off Compressor	*1 Scroll*	*1 Scroll*
R-410A Two-Step Compressor	*1 Scroll*	*1 Scroll*
Capacity Steps	*On/Off* *100, 100/67 with Two-Step Compressor*	
Evaporator Coil		
Circuits	*1*	
Heat Pump Standard Coil		
Quantity/Face Area	*1 / 4.0 ft^2*	
Supply Fans		
Quantity/Type	*1/ PSC or ECM Direct Drive Forward Curved Plenum*	

Table 33 – EcoFit WH Series 048 & 060 ton (E Cabinet) Cooling and Fan Information

	Model	
	WH-048	WH-060
Compressors		
Quantity		
R-410A On/Off Compressor	*1 Scroll*	*1 Scroll*
R-410A Two-Step Compressor	*1 Scroll*	*1 Scroll*
Capacity Steps	*On/Off* *100, 100/67 with Two-Step Compressor*	
Evaporator Coil		
Circuits	*1*	
Heat Pump Standard Coil		
Quantity/Face Area	*1 / 5.7 ft^2*	
Supply Fans		
Quantity/Type	*1/ PSC or ECM Direct Drive Forward Curved Plenum*	

Table 34 – EcoFit WH Series 072 & 096 ton (F Cabinet) Cooling and Fan Information

	Model	
	WH-072	WH-096
Compressors		
Quantity		
R-410A On/Off Compressor		
R-410A Two-Step Compressor	*1 Scroll*	*1 Scroll*
Capacity Steps	*100/67 with Two-Step Compressor*	
Evaporator Coil		
Circuits	*1*	
Heat Pump Standard Coil		
Quantity/Face Area	*1 / 8.0 ft²*	
Supply Fans		
Quantity/Type	*1/ ECM Direct Drive Forward Curved Plenum*	

Table 35 – EcoFit WH Series 0120 & 150 ton (G Cabinet) Cooling and Fan Information

	Model	
	WH-0120	WH-150
Compressors		
Quantity		
R-410A On/Off Compressor		
R-410A Two-Step Compressor	*1 Scroll*	*1 Scroll*
Capacity Steps	*100/67 with Two-Step Compressor*	
Evaporator Coil		
Circuits	*1*	
Heat Pump Standard Coil		
Quantity/Face Area	*1 / 16.7 ft²*	
Supply Fans		
Quantity/Type	*1/ ECM Direct Drive Forward Curved Plenum*	

Table 36 – EcoFit WV Series 006-012 ton (A Cabinet) Cooling and Fan Information

	Model		
	WV-006	WV-009	WV-012
Compressors			
Quantity			
R-410A On/Off Compressor	*1 Rotary*	*1 Rotary*	*1 Rotary*
Capacity Steps (%)	*On/Off*		
Evaporator Coil			
Circuits	*1*		
Heat Pump Standard Coil			
Quantity/Face Area	*1 / 2.5 ft²*		
Supply Fans			
Quantity/Type	*1/ ECM Direct Drive Backward Curved Plenum*	*1/ ECM Direct Drive Forward Curved Plenum*	

Table 37 – EcoFit WV 015-030 (B & C Cabinet) Cooling and Fan Information

	Model			
	WV-015	WV-018	WV-024	WV-030
Compressors				
Quantity				
R-410A On/Off Compressor	*1 Rotary*	*1 Rotary*	*1 Scroll*	*1 Scroll*
R-410A Two-Step Compressor			*1 Scroll*	*1 Scroll*
Capacity Steps	*On/Off* *100, 100/67 with Two-Step Compressor*			
Evaporator Coil				
Circuits	*1*			
Heat Pump Standard Coil				
Quantity/Face Area	*1 / 2.5 ft²*		*1 / 3.75 ft²*	
Supply Fans				
Quantity/Type	*1/ ECM Direct Drive Backward Curved Plenum*		*1/ PSC or ECM Direct Drive Forward Curved Plenum*	

Table 38 – EcoFit WV 036 & 042 ton (D Cabinet) Cooling and Fan Information

	Model	
	WV-036	WV-042
Compressors		
Quantity		
R-410A On/Off Compressor	*1 Scroll*	*1 Scroll*
R-410A Two-Step Compressor	*1 Scroll*	*1 Scroll*
Capacity Steps	*On/Off* *100, 100/67 with Two-Step Compressor*	
Evaporator Coil		
Circuits	*1*	
Heat Pump Standard Coil		
Quantity/Face Area	*1 / 5.61 ft²*	
Supply Fans		
Quantity/Type	*1/ PSC or ECM Direct Drive Forward Curved Plenum*	

Table 39 – EcoFit WV 048 & 060 ton (E Cabinet) Cooling and Fan Information

	Model	
	WV-048	WV-060
Compressors		
Quantity		
R-410A On/Off Compressor	*1 Scroll*	*1 Scroll*
R-410A Two-Step Compressor	*1 Scroll*	*1 Scroll*
Capacity Steps	*On/Off* *100, 100/67 with Two-Step Compressor*	
Evaporator Coil		
Circuits	*1*	
Heat Pump Standard Coil		
Quantity/Face Area	*1 / 7.7 ft²*	
Supply Fans		
Quantity/Type	*1/ PSC or ECM Direct Drive Forward Curved Plenum*	

Table 40 – EcoFit WV 072 & 096 ton (F Cabinet) Cooling and Fan Information

	Model	
	WV-072	WV-096
Compressors		
Quantity		
R-410A On/Off Compressor		
R-410A Two-Step Compressor	*1 Scroll*	*1 Scroll*
Capacity Steps	*100/67 with Two-Step Compressor*	
Evaporator Coil		
Circuits	*1*	
Heat Pump Standard Coil		
Quantity/Face Area	*1 / 11.7 ft²*	
Supply Fans		
Quantity/Type	*1/ ECM Direct Drive Forward Curved Plenum*	

Table 41 – EcoFit WV 120 & 150 ton (G Cabinet) Cooling and Fan Information

	Model	
	WV-0120	WV-150
Compressors		
Quantity		
R-410A On/Off Compressor		
R-410A Two-Step Compressor	*1 Scroll*	*1 Scroll*
Capacity Steps	*100/67 with Two-Step Compressor*	
Evaporator Coil		
Circuits	*1*	
Heat Pump Standard Coil		
Quantity/Face Area	*1 / 16.7 ft²*	
Supply Fans		
Quantity/Type	*1/ ECM Direct Drive Forward Curved Plenum*	

Table 42 – ProFit WH Series 006-012 (A Cabinet) Cooling and Fan Information

	Model		
	WH-006	*WH-009*	*WH-012*
Compressors			
Quantity			
R-410A On/Off Compressor	*1 Rotary*	*1 Rotary*	*1 Rotary*
Capacity Steps	*On/Off*		
Evaporator Coil			
Circuits	*1*		
Heat Pump Standard Coil			
Quantity/Face Area	*1 / 1.0 ft²*		
Supply Fans			
Quantity/Type	*1/ ECM Direct Drive Forward Curved Plenum*		

Table 43 – ProFit WH Series 015 & 018 (B Cabinet) Cooling and Fan Information

	Model	
	WH-015	WH-018
Compressors		
Quantity		
R-410A On/Off Compressor	*1 Rotary*	*1 Rotary*
R-410A Two-Step Compressor		
Capacity Steps	*On/Off*	
Evaporator Coil		
Circuits	*1*	
Heat Pump Standard Coil		
Quantity/Face Area	*1 / 2.4 ft²*	
Supply Fans		
Quantity/Type	*1/ ECM Direct Drive Forward Curved Plenum*	

Table 44 – ProFit WH Series 024 & 030 (C Cabinet) Cooling and Fan Information

	Model	
	WH-024	WH-030
Compressors		
Quantity		
R-410A On/Off Compressor	*1 Rotary*	*1 Rotary*
R-410A Two-Step Compressor		
Capacity Steps	*On/Off*	
Evaporator Coil		
Circuits	*1*	
Heat Pump Standard Coil		
Quantity/Face Area	*1 / 2.4 ft²*	
Supply Fans		
Quantity/Type	*1/ ECM Direct Drive Forward Curved Plenum*	

Table 45 – ProFit WH Series 036 & 042 (D Cabinet) Cooling and Fan Information

	Model	
	WH-036	WH-042
Compressors		
Quantity		
R-410A On/Off Compressor	*1 Rotary*	*1 Rotary*
R-410A Two-Step Compressor		
Capacity Steps	*On/Off*	
Evaporator Coil		
Circuits	*1*	
Heat Pump Standard Coil		
Quantity/Face Area	*1 / 3.5 ft²*	
Supply Fans		
Quantity/Type	*1/ ECM Direct Drive Forward Curved Plenum*	

Table 46 – ProFit WH Series 048 & 060 (E Cabinet) Cooling and Fan Information

	Model	
	WH-048	WH-060
Compressors		
Quantity		
R-410A On/Off Compressor	*1 Rotary*	*1 Rotary*
R-410A Two-Step Compressor		
Capacity Steps	*On/Off*	
Evaporator Coil		
Circuits	*1*	
Heat Pump Standard Coil		
Quantity/Face Area	*1 / 4.9 ft²*	
Supply Fans		
Quantity/Type	*1/ ECM Direct Drive Forward Curved Plenum*	

Table 47 – ProFit WV Series 006-012 (A Cabinet) Cooling and Fan Information

	Model		
	WH-006	*WH-009*	*WH-012*
Compressors			
Quantity			
R-410A On/Off Compressor	*1 Rotary*	*1 Rotary*	*1 Rotary*
Capacity Steps	*On/Off*		
Evaporator Coil			
Circuits	*1*		
Heat Pump Standard Coil			
Quantity/Face Area	*1 / 1.0 ft²*		
Supply Fans			
Quantity/Type	*1/ ECM Direct Drive Forward Curved Plenum*		

Table 48 – ProFit WV Series 015 & 018 (B Cabinet) Cooling and Fan Information

	Model	
	WH-015	WH-018
Compressors		
Quantity		
R-410A On/Off Compressor	*1 Rotary*	*1 Rotary*
R-410A Two-Step Compressor		
Capacity Steps	*On/Off*	
Evaporator Coil		
Circuits	*1*	
Heat Pump Standard Coil		
Quantity/Face Area	*1 / 2.4 ft²*	
Supply Fans		
Quantity/Type	*1/ ECM Direct Drive Forward Curved Plenum*	

Table 49 – ProFit WV Series 024 & 030 (C Cabinet) Cooling and Fan Information

	Model	
	WH-024	WH-030
Compressors		
Quantity		
R-410A On/Off Compressor	*1 Rotary*	*1 Rotary*
R-410A Two-Step Compressor		
Capacity Steps	*On/Off*	
Evaporator Coil		
Circuits	*1*	
Heat Pump Standard Coil		
Quantity/Face Area	*1 / 2.4 ft²*	
Supply Fans		
Quantity/Type	*1/ ECM Direct Drive Forward Curved Plenum*	

Table 50 – ProFit WV Series 036 & 042 (D Cabinet) Cooling and Fan Information

	Model	
	WH-036	WH-042
Compressors		
Quantity		
R-410A On/Off Compressor	*1 Rotary*	*1 Rotary*
R-410A Two-Step Compressor		
Capacity Steps	*On/Off*	
Evaporator Coil		
Circuits	*1*	
Heat Pump Standard Coil		
Quantity/Face Area	*1 / 3.6 ft²*	
Supply Fans		
Quantity/Type	*1/ ECM Direct Drive Forward Curved Plenum*	

Table 51 – ProFit WV Series 048 & 060 (E Cabinet) Cooling and Fan Information

	Model	
	WH-048	WH-060
Compressors		
Quantity		
R-410A On/Off Compressor	*1 Rotary*	*1 Rotary*
R-410A Two-Step Compressor		
Capacity Steps	*On/Off*	
Evaporator Coil		
Circuits	*1*	
Heat Pump Standard Coil		
Quantity/Face Area	*1 / 4.7 ft²*	
Supply Fans		
Quantity/Type	*1/ ECM Direct Drive Forward Curved Plenum*	

Performance Information

Table 52 – ProFit WH Series Performance Data with ECM Fan

WH Model	Airflow (cfm)	Fluid Flow (gpm)	Voltage	Water Loop (Ratings at AHRI Cooling Tower/Boiler Conditions as in accordance with ISO Standard 13256-1)			
				Cooling EWT 86°F		Heating EWT 68°F	
				Btu/hr	EER	Btu/hr	COP
WH-006	225	2.0	115V / 1Ø / 60Hz	5,800	13.6	7,500	4.49
WH-009	325	2.9	208-230V / 1Ø / 60Hz	8,600	13.4	11,200	4.40
WH-012	380	3.5	265V / 1Ø / 60Hz	11,000	12.2	15,600	4.30
WH-015	525	3.8	208-230V / 1Ø / 60Hz	14,100	15.1	16,000	5.04
WH-018	600	4.5	265V / 1Ø / 60Hz	18,100	15.0	21,800	5.04
WH-024	850	6.0		23,500	13.9	27,500	5.11
WH-030	1,000	7.5	208-230V / 1Ø / 60Hz	27,300	13.6	34,000	4.64
WH-036	1,150	9.5	208-230V / 3Ø / 60Hz	34,500	14.8	44,200	4.50
WH-042	1,400	11.3	265V / 1Ø / 60Hz	41,000	14.7	48,100	4.50
WH-048	1,600	12.0	460V / 3Ø / 60Hz	48,000	14.7	48,000	4.80
WH-060	1,950	15.0		59,500	15.8	72,000	4.40

Table 53 – ProFit WV Series Performance Data with ECM Fan

WV Model	Airflow (cfm)	Fluid Flow (gpm)	Voltage	Water Loop (Ratings at AHRI Cooling Tower/Boiler Conditions as in accordance with ISO Standard 13256-1)			
				Cooling EWT 86°F		Heating EWT 68°F	
				Btu/hr	EER	Btu/hr	COP
WH-006	225	2.0	115V / 1Ø / 60Hz	5,800	14.2	7,200	4.65
WH-009	325	2.9	208-230V / 1Ø / 60Hz	8,600	13.2	11,200	4.40
WH-012	380	3.5	265V / 1Ø / 60Hz	11,000	12.1	15,300	4.20
WH-015	525	3.8	208-230V / 1Ø / 60Hz	13,900	15.2	17,100	5.30
WH-018	600	4.5	265V / 1Ø / 60Hz	17,300	15.0	21,800	5.10
WH-024	850	6.0		21,900	13.6	25,100	4.64
WH-030	1,000	8.0	208-230V / 1Ø / 60Hz	27,500	13.6	36,300	4.64
WH-036	1,150	9.5	208-230V / 3Ø / 60Hz	34,500	15.1	43,500	4.50
WH-042	1,400	11.3	265V / 1Ø / 60Hz	41,000	15.1	48,400	4.50
WH-048	1,600	12.0	460V / 3Ø / 60Hz	48,800	13.8	48,800	4.75
WH-060	1,950	15.0		57,700	14.6	70,200	4.40

Table 54 – EcoFit WH Series Performance Data with ECM Fan

WH Model	Airflow (cfm)	Fluid Flow (gpm)	Voltage	Water Loop (Ratings at AHRI Cooling Tower/Boiler Conditions as in accordance with ISO Standard 13256-1)			
				Cooling EWT 86°F		Heating EWT 68°F	
				Btu/hr	EER	Btu/hr	COP
WH-006	230	2.0	115V / 1Ø / 60Hz	5,700	14.0	7,200	4.90
WH-009	380	3.0	208-230V / 1Ø / 60Hz	8,700	14.6	10,800	5.10
WH-012	420	4.0	265V / 1Ø / 60Hz	11,000	12.8	15,100	4.60
WH-015	610	3.8	208-230V / 1Ø / 60Hz	14,200	17.0	17,900	6.30
WH-018	640	4.5	265V / 1Ø / 60Hz	16,600	15.7	20,000	4.93
WH-024	800	6.0	208-230V / 1Ø / 60Hz 208-230V / 3Ø / 60Hz 265V / 1Ø / 60Hz 460V / 3Ø / 60Hz 575V / 3Ø / 60Hz	24,000	15.1	27,700	5.00
WH-030	1,010	7.5		28,800	15.2	34,900	4.50
WH-036	1,260	9.0		36,100	15.2	43,500	5.00
WH-042	1,420	10.5		41,800	15.3	48,900	5.00
WH-048	1,670	12.0		51,700	16.8	63,200	5.30
WH-060	2,000	15.0		61,000	15.1	76,700	4.80

Table 55 – EcoFit WV Series Performance Data with ECM Fan

WV Model	Airflow (cfm)	Fluid Flow (gpm)	Voltage	Water Loop (Ratings at AHRI Cooling Tower/Boiler Conditions as in accordance with ISO Standard 13256-1)			
				Cooling EWT 86°F		Heating EWT 68°F	
				Btu/hr	EER	Btu/hr	COP
WV-006	250	2.0	115V / 1Ø / 60Hz	5,900	15.3	8,500	6.00
WV-009	330	2.3	208-230V / 1Ø / 60Hz	9,100	15.4	12,000	5.40
WV-012	440	3.0	265V / 1Ø / 60Hz	13,100	15.2	17,800	5.10
WV-016	530	3.8	208-230V / 1Ø / 60Hz	14,000	17.5	18,400	5.10
WV-019	640	4.5	265V / 1Ø / 60Hz	18,400	16.8	21,100	5.10
WV-024	800	6.0	208-230V / 1Ø / 60Hz	22,900	15.3	27,400	4.60
WV-030	1,000	7.5	208-230V / 3Ø / 60Hz 265V / 1Ø / 60Hz 460V / 3Ø / 60Hz	27,800	15.1	34,000	4.90
WV-036	1,200	9.0	208-230V / 1Ø / 60Hz	35,700	15.5	43,400	4.90
WV-042	1,400	10.5	208-230V / 3Ø / 60Hz	42,000	15.3	52,700	5.10
WV-048	1,550	12.0	265V / 1Ø / 60Hz	48,500	16.4	63,900	5.10
WV-060	2,100	15.0	460V / 3Ø / 60Hz 575V / 3Ø / 60Hz	59,000	15.0	72,900	5.00

Table 56 – EcoFit WH Series Performance Data with PSC Fan

WH Model	Airflow (cfm)	Fluid Flow (gpm)	Voltage	Water Loop (Ratings at AHRI Cooling Tower/Boiler Conditions as in accordance with ISO Standard 13256-1)			
				Cooling EWT 86°F		Heating EWT 68°F	
				Btu/hr	EER	Btu/hr	COP
WH-015	570	3.8	208-230V / 1Ø / 60Hz 265V / 1Ø / 60Hz	14,100	15.4	18,100	5.80
WH-018	700	4.5		17,200	14.5	21,600	4.85
WH-024	800	6.0	208-230V / 1Ø / 60Hz 208-230V / 3Ø / 60Hz 265V / 1Ø / 60Hz 460V / 3Ø / 60Hz	23,600	14.4	27,800	4.70
WH-030	1,000	7.5		28,400	14.7	35,100	4.30
WH-036	1,260	9.0	208-230V / 1Ø / 60Hz 208-230V / 3Ø / 60Hz 265V / 1Ø / 60Hz 460V / 3Ø / 60Hz 575V / 3Ø / 60Hz	35,600	14.7	43,800	4.70
WH-042	1,420	10.5		41,200	15.0	49,200	4.70
WH-048	1,660	12.0		49,500	14.5	63,700	5.00
WH-060	1,980	15.0		60,000	14.6	76,700	4.80

Table 57 – EcoFit WV Series Performance Data with PSC Fan

WV Model	Airflow (cfm)	Fluid Flow (gpm)	Voltage	Water Loop (Ratings at AHRI Cooling Tower/Boiler Conditions as in accordance with ISO Standard 13256-1)			
				Cooling EWT 86°F		Heating EWT 68°F	
				Btu/hr	EER	Btu/hr	COP
WH-016	530	3.8	208-230V / 1Ø / 60Hz 265V / 1Ø / 60Hz	13,700	16.2	18,400	4.80
WH-019	640	4.5		18,100	15.6	21,100	4.80
WH-024	800	6.0	208-230V / 1Ø / 60Hz 208-230V / 3Ø / 60Hz 265V / 1Ø / 60Hz 460V / 3Ø / 60Hz	22,600	14.6	27,500	4.30
WH-030	1,000	7.5		27,400	14.6	34,200	4.70
WH-036	1,200	9.0	208-230V / 1Ø / 60Hz 208-230V / 3Ø / 60Hz 265V / 1Ø / 60Hz 460V / 3Ø / 60Hz 575V / 3Ø / 60Hz	36,800	15.0	45,000	4.70
WH-042	1,400	10.5		42,000	14.8	53,500	5.00
WH-048	1,550	12.0		46,100	13.6	64,100	4.60
WH-060	1,950	15.0		57,500	13.9	73,800	4.70

Table 58 – EcoFit WH Series Performance Data Two-Step Compressor with ECM Fan

Cooling								
WH Model	Airflow (cfm)	Part Load Airflow (cfm)	Fluid Flow (gpm)	Voltage	Water Loop (Ratings at AHRI Cooling Tower/Boiler Conditions as in accordance with ISO Standard 13256-1)			
					Cooling EWT 86°F		Part Load Cooling EWT 86°F	
					Btu/hr	EER	Btu/hr	EER
WH-024	820	580	6.0	208-230V / 1Ø / 60Hz	23,500	15.1	17,400	16.4
WH-030	1,000		7.5	208-230V / 3Ø / 60Hz 265V / 1Ø / 60Hz 460V / 3Ø / 60Hz	29,700	14.6		
WH-036	1,260	960	9.0	208-230V / 1Ø / 60Hz	35,100	15.2	25,300	17.1
WH-042	1,420	1,150	10.0	208-230V / 3Ø / 60Hz	41,400	14.9	30,600	16.6
WH-048	1,640	1,150	12.0	265V / 1Ø / 60Hz	47,800	15.9	34,400	17.7
WH-060	2,100	1,500	15.0	460V / 3Ø / 60Hz 575V / 3Ø / 60Hz	59,400	16.2	42,200	18.3
WH-072	2,450	1,700	18.0	208-230V / 1Ø / 60Hz 208-230V / 3Ø / 60Hz 460V / 3Ø / 60Hz 575V / 3Ø / 60Hz	79,500	16.0	52,500	17.2
WH-096	3,200	2,300	24.0	208-230V / 3Ø / 60Hz	97,400	15.0	65,500	16.6
WH-120				460V / 3Ø / 60Hz	120,000	17.0	81,000	18.0
WH-150				575V / 3Ø / 60Hz	146,000	16.7	98,000	18.4
Heating								
WH Model	Airflow (cfm)	Part Load Airflow (cfm)	Fluid Flow (gpm)	Voltage	Water Loop (Ratings at AHRI Cooling Tower/Boiler Conditions as in accordance with ISO Standard 13256-1)			
					Heating EWT 68°F		Part Load Heating EWT 68°F	
					Btu/hr	COP	Btu/hr	COP
WH-024	820	580	6.0	208-230V / 1Ø / 60Hz	26,800	4.30	19,100	3.00
WH-030	1,000		7.5	208-230V / 3Ø / 60Hz 265V / 1Ø / 60Hz 460V / 3Ø / 60Hz	37,300	4.50		
WH-036	1,260	960	9.0	208-230V / 1Ø / 60Hz	41,200	4.70	30,100	5.10
WH-042	1,420	1,150	10.0	208-230V / 3Ø / 60Hz	48,600	4.60	36,000	4.50
WH-048	1,640	1,150	12.0	265V / 1Ø / 60Hz	57,100	4.90	39,600	3.90
WH-060	2,100	1,500	15.0	460V / 3Ø / 60Hz 575V / 3Ø / 60Hz	70,300	5.30	50,300	5.40
WH-072	2,600	2,000	18.0	208-230V / 1Ø / 60Hz 208-230V / 3Ø / 60Hz 460V / 3Ø / 60Hz 575V / 3Ø / 60Hz	91,400	4.70	61,500	5.30
WH-096	3,000	2,000	24.0	208-230V / 3Ø / 60Hz	114,200	4.50	74,500	4.50
WH-120				460V / 3Ø / 60Hz	140,000	5.00	92,000	4.20
WH-150				575V / 3Ø / 60Hz	146,000	5.30	96,000	5.90

Table 59 – EcoFit WV Series Performance Data Two-Step Compressor with ECM Fan

Cooling								
WV Model	Airflow (cfm)	Part Load Airflow (cfm)	Fluid Flow (gpm)	Voltage	Water Loop (Ratings at AHRI Cooling Tower/Boiler Conditions as in accordance with ISO Standard 13256-1)			
					Cooling EWT 86°F		Part Load Cooling EWT 86°F	
					Btu/hr	EER	Btu/hr	EER
WH-024	830	700	6.0	208-230V / 1Ø / 60Hz	24,300	16.1	18,500	17.0
WH-030	1,000	760	8.0	208-230V / 3Ø / 60Hz 265V / 1Ø / 60Hz 460V / 3Ø / 60Hz	30,100	15.1	22,000	16.0
WH-036	1,200	950	9.0	208-230V / 1Ø / 60Hz	36,900	16.1	26,300	16.8
WH-042	1,450	1,130	10.5	208-230V / 3Ø / 60Hz	42,100	15.4	30,000	16.8
WH-048	1,600	1,130	12.0	265V / 1Ø / 60Hz	46,900	15.4	33,200	15.4
WH-060	2,000	1,500	15.0	460V / 3Ø / 60Hz 575V / 3Ø / 60Hz	62,300	15.5	41,500	15.0
WH-072	2,650	1,950	18.0	208-230V / 1Ø / 60Hz 208-230V / 3Ø / 60Hz 460V / 3Ø / 60Hz 575V / 3Ø / 60Hz	81,000	17.0	52,700	17.5
WH-096	3,200	2,250	24.0	208-230V / 3Ø / 60Hz	96,200	16.0	66,700	18.0
WH-120				460V / 3Ø / 60Hz	117,000	16.3	76,000	17.3
WH-150				575V / 3Ø / 60Hz	140,000	15.9	98,000	17.1
Heating								
WV Model	Airflow (cfm)	Part Load Airflow (cfm)	Fluid Flow (gpm)	Voltage	Water Loop (Ratings at AHRI Cooling Tower/Boiler Conditions as in accordance with ISO Standard 13256-1)			
					Heating EWT 68°F		Part Load Heating EWT 68°F	
					Btu/hr	COP	Btu/hr	COP
WH-024	830	700	6.0	208-230V / 1Ø / 60Hz	27,900	4.90	21,200	5.40
WH-030	1,000	760	8.0	208-230V / 3Ø / 60Hz 265V / 1Ø / 60Hz 460V / 3Ø / 60Hz	37,200	4.60	26,700	4.80
WH-036	1,200	950	9.0	208-230V / 1Ø / 60Hz	44,300	5.20	31,600	5.50
WH-042	1,450	1,130	10.5	208-230V / 3Ø / 60Hz	52,700	4.90	35,800	5.40
WH-048	1,600	1,130	12.0	265V / 1Ø / 60Hz	60,300	4.90	42,000	4.40
WH-060	2,000	1,500	15.0	460V / 3Ø / 60Hz 575V / 3Ø / 60Hz	73,200	5.00	49,900	5.00
WH-072	2,400	1,700	18.0	208-230V / 1Ø / 60Hz 208-230V / 3Ø / 60Hz 460V / 3Ø / 60Hz 575V / 3Ø / 60Hz	96,200	5.40	63,000	5.50
WH-096	2,900	2,000	24.0	208-230V / 3Ø / 60Hz	120,900	5.00	79,700	5.20
WH-120				460V / 3Ø / 60Hz	148,000	5.30	96,500	5.50
WH-150				575V / 3Ø / 60Hz	186,000	5.20	124,000	6.10

Control Options

Pioneer Silver Controller

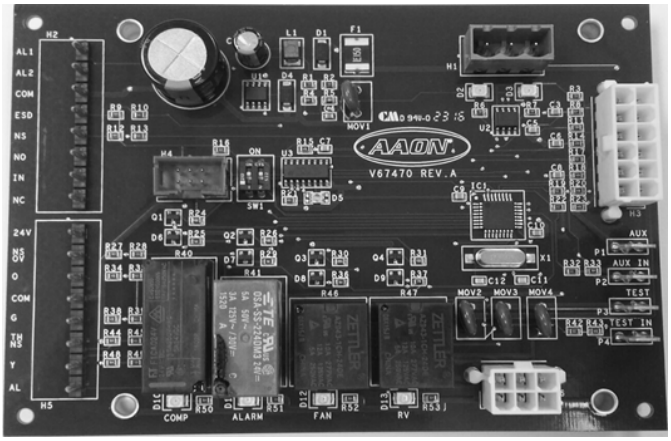

Figure 5 – Pioneer Silver

The AAON Pioneer Silver controller contains all the functionality required to operate the basic configuration of AAON WH/WV Series WSHP HVAC units. The controller receives commands from a standard heat pump room thermostat or DDC control and has outputs to control a supply fan, a single on/off compressor, and a reversing valve.

Required Features
Feature 6A = Terminal Block for Thermostat + Pioneer Silver Controller
Feature 6A = Terminal Block for Thermostat + Pioneer Silver + Expansion Board
This controller requires a separately selected or field provided thermostat.

Applications
This controller is designed for basic water-source heat pump systems.

Thermostat Terminals
Pluggable Screw Terminal Block H2
AL1 = Dry, normally open contact with terminal AL2. Contact closes when controller is in alarm.
AL2 = Dry, normally open contact with terminal AL1. Contact closes when controller is in alarm.
COM = 24VAC Common.
ESD = Emergency shutdown Input. 24VAC or common may be used as inputs.
NS = Night setback mode enable. 24VAC or common may be used as inputs.
NO = Dry, normally open contact with terminal IN. Contact closes when compressor is active.
IN = Common input for terminals NO and NC.
NC = Dry, normally closed contact with terminal IN. Contact opens when compressor is active.

Pluggable Screw Terminal Block H5
24V = 24VAC power output for thermostat.
NS_OV = Night setback override input. Input requires 24VAC to activate.
O = Thermostat input for reversing valve operation. Input requires 24VAC to activate.
COM = 24VAC common for thermostat power.
G = Thermostat input for fan operation. Input requires 24VAC to activate.
TH_NS = Night setback compressor enable. Input requires 24VAC to activate.
Y = Thermostat input for compressor operation. Input requires 24VAC to activate.
AL = 24VAC wet alarm output.

Pioneer Silver Expansion Board

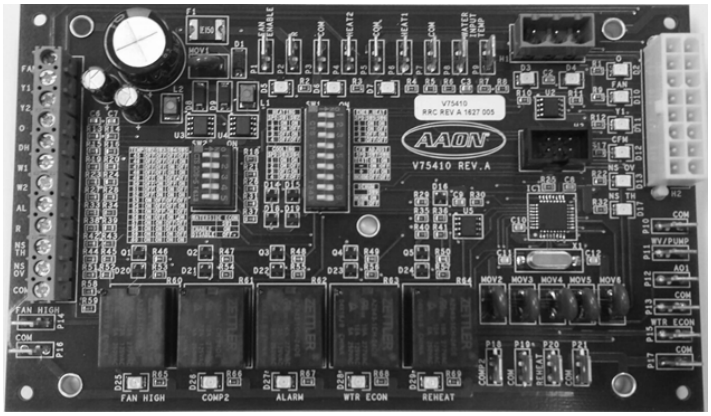

Figure 6 – Pioneer Silver Expansion Board

The expansion board communicates with the Pioneer Silver board and is required for more advanced functionality such ECM fan dehumidification, hot gas reheat dehumidification, and waterside economizer.

Thermostat Terminals
Pluggable Screw Terminal Block H4
G = Thermostat input for fan operation. Input requires 24VAC to activate.
Y1 = Thermostat input for compressor stage 1 operation. Input requires 24VAC to activate.
Y2 = Thermostat input for compressor stage 2 operation. Input requires 24VAC to activate.
O = Thermostat input for reversing valve operation. Input requires 24VAC to activate.
DH = Humidistat input for dehumidification operation. Input requires 24VAC to activate.
W1 = Thermostat input for Heat 1 operation.
W2 = Thermostat input for Heat 2 operation.
AL = 24VAC wet alarm output
R = 24VAC power output for thermostat.
NS_TH = Night Setback compressor enable. Input requires 24VAC to activate.
NS_OV = Night Setback override input. Input requires 24VAC to activate.
C = 24VAC common for thermostat power.

Pioneer Gold Controller

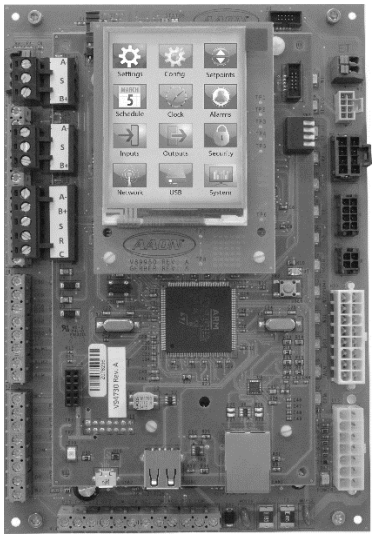

Figure 7 – Pioneer Gold Controller

The AAON Pioneer Gold Controller is the advanced WSHP controller. It has BACnet IP/MSTP and Modbus compatibility, terminals to connect with a heat pump thermostat, and a standalone touchscreen interface to control/configure a unit using space sensors.

Controllable Features
When a unit is selected with a waterside economizer coil, the Pioneer Gold controller has the ability to utilize both elevated loop water temperatures for heating as well as cold loop temperatures for cooling demands. Through the interface the unit can be set to utilize cooling, heating, or both economizer modes, as well as changeover temperatures for each mode.

Applications
This controller is designed for advanced water-source heat pump systems.

Networking
BACnet IP/ MSTP compatibility
Modbus compatibility

Required Features
Feature 6A = Terminal Block for Thermostat + Pioneer Gold
This controller requires a separately selected or field provided thermostat or a separately selected or field provided space sensor.

Pioneer Series Controller Features

	AAON Pioneer Silver	AAON Pioneer Gold
Unit Capacity Control	½ to 5 ton WSHPs	½ to 12½ ton WSHPs
User Interface	• Thermostat Terminals to Heat Pump Thermostat • Alarm Status LED	• Standalone with Selectable Space Sensor • Thermostat Terminals to Heat Pump Thermostat • 2.8" Touchscreen LCD Configuration Interface
Networking Capability	Thermostat Terminals to DDC System	Built-in BACnet IP/MSTP and Modbus

Basic Features	**AAON Pioneer Silver and Gold**
Random Start Delay	Standard
Compressor Minimum On/Off Timers	Standard
High Condensate Level Sensor	Standard
High Refrigerant Pressure Protection	Standard
Loss of Refrigerant Charge Protection	Standard
Reversing Valve Default to Heating Mode	Standard
High/Low Control Voltage Alarms (24 VAC)	Standard
Air Coil Low Refrigerant Temperature Alarm	Standard
Water Coil Low Refrigerant Temperature Alarm	Standard
Dry Alarm Contacts	Standard
Emergency Shut Down Input	Standard
Night Setback Mode	Standard
Night Setback Override Timer	Standard
Night Setback Override Thermostat Input	Standard
Auxiliary Alarm Input	Standard
I/O Relay Status LEDs	Standard
Constant Torque EC Motor	Standard

Service and Reliability Features	**AAON Pioneer Silver and Gold**
Service Test Mode	Standard
Factory Wiring Harness Connectors	Standard
High/Low Control Voltage Lockouts (Auto Reset)	Standard
Alarm and Relay Status LEDs	Standard
Alarm Status	Silver – Alarm LED with Fault Codes Gold – LCD Interface

Advanced Features	AAON Pioneer Silver + Expansion Board	Pioneer Gold
Waterside Economizer	Standard	Standard
Two-Speed EC Fan	Standard	Standard
Hot gas Reheat	Standard	Standard
Two-Step Compressor	Standard	Standard
Constant Airflow EC Motor	Standard	Standard
Motorized Water Valve	Standard	Standard
Single Zone Valve	Standard	Standard
Externally Controlled EC Motor (0-10VDC)	Standard	Standard
Supply Air Temperature Control	Standard	Standard
Supply Air Reset Control	Standard	Standard
Motorized Hot Water Valve	Standard	Standard
Two Stage Auxiliary/Emergency Heat	Standard	Standard
Space Sensor Alarm		Standard
Entering Hot Water Temperature Alarm		Standard
CO2 Alarm		Standard
CO2 Setpoint Outside Air Damper Override		Standard
Variable Speed Pump		Standard
2.8” Color Touchscreen LCD Configuration Interface		Standard
Space Temperature Sensor Control		Optional
4.3” Color Touchscreen Space Temperature and Humidity Sensor		Optional

Literature Change History

August 2017
Feature 2 - Supply Fan nomenclature corrected; *B = Standard Fan + ECM Motor.* Feature 3A – Filter Rack nomenclature corrected; *A, B, C, D, E became D, E, F, J, K respectively.* Added Standard Efficiency Standard Box with Two-Step Compressor & ECM Motor; *Efficiency Level = 5.* Added R-410A Two-Step Compressor; *Compressor Style = A.* Added Non-Fused Service Disconnect – 60 Amp; *Feature 5 = B*. Removed *No Filter* Option. Added two-step compressor performance information. Added Pioneer Gold option; Feature 6A.

November 2017
Supply fan updated for fan changes to the WH-009 & WH-012.

July 2018
Updated *Performance Information* section. Added WV B-Short Sizes – WV-016 & WV-019. Updated fan changes for the WH and WV in the Efficiency Level and Supply Fan sections. Updated *Feature 8* - Waterside Economizer section. Updated *Feature 4* - Refrigeration and Dehumidification section.

August 2019
Added unit sizes WH-072,096 and WV0-72,096. Updated Performance Information tables.

October 2020
Updated to clarify that controls require a separately selected or field provided thermostat or space sensor.

September 2022
Updated with EcoFit and ProFit specifications and information.

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EcoFit & ProFit WH/WV Series Engineering Catalog

V93150 · Rev. C · 221103