



# Stacked Water Source Heat Pumps



Vertical stacked cabinet model WVHF  
and chassis models WVHC - standard  
range and WVHW - extended range



Model WVHF



Model WVHC/WVHW

Sizes 009 – 036 ( $\frac{3}{4}$  - 3 tons)

Cost-effective project solutions, energy savings, and quiet operation



Daikin vertical stacked units are the optimal choice for applying water source heat pumps in multi-floor apartment buildings, office buildings, hotels, dormitories, nursing homes and other similar applications. They require a minimum amount of floor space and can be configured for multiple discharge air arrangements. Units are available in a wide range of sizes (3/4 to 3 ton) and with industry leading factory installed options, to support the needs of a wide range of applications.



### Vertical stack project solutions

- Low operating costs from the use of optional high efficiency ECM motors and easy maintenance design
- Quiet operation to meet the needs of sound sensitive applications. Solid high quality construction, compressor and chassis sound attenuation options and selectable flow (CFM) settings allow for multiple design options
- Easy to use controls for the space occupant as well as multiple, factory installed network interface options including LonWORKS® and BACnet®
- Easy and flexible installation for both new construction and existing building applications





# Compact, perfect for new construction or replacement

## 1 Compact cabinets

- Constructed of unpainted galvanized steel, with the smallest possible footprint. 18" x 18" cabinet for unit sizes 009 through 012, 18" x 20" for unit sizes 015 and 018 and 24" x 24" for unit sizes 021 through 036

## 2 Chassis

- Removable, allows staged installation and ease of service and routine maintenance. Available with hydronic heat

## 3 Motor/blower assembly

- The standard blower motor is a multi-speed, Permanent Split Capacitor (PSC) with thermal overload protection. The fan, motor and housing are easy to remove and slide out from the cabinet front. The fan and motor are attached to an orifice ring, and this assembly is mounted to the fan housing, easily removed should service be necessary
- All units are available with a variable speed Electronically Commutated Motor (ECM), featuring 4-selectable CFM settings for quiet operation and reduced energy consumption. Perfect for sound sensitive spaces and controlling the amount of air delivery. Unit sizes 009-012 utilize a constant torque ECM motor and unit sizes 015 - 036 utilize a constant CFM ECM motor

## 4 Supply air plenum

- Allows for multiple discharge air configurations. Supply air diffuser 1/2" foam seal field-furnished and installed

## 5 Compressors

- High efficiency rotary and scroll, available with optional mass plate and/or compressor blanket for quiet operation (unit sizes 024-036)

## 6 Chassis vibration isolators

- Vibration Isolators are integral to the chassis support rails to help minimize noise and vibration transmission resulting in quiet operation

## 7 Primary condensate drain pan

- Sloped and constructed of a corrosion resistant ABS plastic. The primary drain pan sits below the air coil to capture all condensate in cooling mode. A factory installed condensate overflow sensor disables unit operation when the condensate level reaches the sensor

## 8 MicroTech III control system

- Open Choices™ feature allows standalone or easy, low cost network integration using LonWorks® or BACnet® communications

## Value added options

### Optional wireless temperature control (T9000)



The T9000 Wireless Temperature Control is designed to provide precision temperature control without the installation labor and expense of wiring. Available as programmable or non-programmable.

### Remote control node (RCN)



The RCN easily mounts on the filter frame/front panel and interfaces with the unit controller, communicating with the wireless temperature control (T9000) for complete unit control.

### Hydronic heat

The hydronic heat option helps to reduce energy consumption by using hot loop water temperatures to condition a space without energizing mechanical heating.

### Outdoor air damper

The lower panel door frame has openings for an optional motorized outdoor air damper to bring in outdoor air into the space.

### Sound package

Mass plate for compressor isolation with sound blanket to further reduce sound levels (sizes 024-036)

### Subbase kit

Available in heights of 2", 3", 4" and 5" to accommodate interiors with higher baseboard mouldings.

### Filters

1" standard (factory provided) or an optional 1" Merv 8 for improved indoor air quality.



# Efficiencies that exceed ASHRAE 90.1 levels

## ISO performance data - rated in accordance with ISO Standard 13256-1

Water Loop				PSC Fan Motor								ECM Fan Motor							
Ground Loop				Cooling				Heating				Cooling				Heating			
				EWT 86°F		EWT 77°F		EWT 68°F		EWT 32°F		EWT 86°F		EWT 77°F		EWT 68°F		EWT 32°F	
Unit Size	Airflow cfm	Fluid Flow Rate GPM	Voltages	Capacity Btuh/hr		EER		Capacity Btuh/hr		COP		Capacity Btuh/hr		EER		Capacity Btuh/hr		COP	
009	300	2.5	115-60-1	9,300	9,700	13.8	15.8	11,200	7,000	4.6	3.2	9,700	9,800	15.1	16.8	11,400	6,900	5.0	3.2
			208/230-60-1																
			265-60-1	9,200	9,800	12.8	14.8	11,900	7,300			9,300	9,900	12.2	15.6	11,900	7,300	4.2	
012	400	3.0	115-60-1	11,700	12,400	12.8	14.7	14,500	9,100	4.3	3.2	12,000	12,500	13.4	15.7	14,400	9,100	4.3	3.3
			208/230-60-1																
			265-60-1			12.2	14.2	15,000	9,500	4.4				13.1	14.6	14,900	9,300	4.5	3.2
015	500	3.5	208/230-60-1	14,400	15,000	13.5	15.4	18,300	11,000	4.8	3.2	14,300	15,300	15.0	17.1	18,200	10,900	5.1	3.4
			265-60-1	14,000	14,600	13.0	14.7	18,700	11,400										
018	600	4.2	208/230-60-1	16,600	17,400	13.0	14.6	22,500	13,900	4.9	3.3	16,900	17,700	13.6	15.4	22,400	13,600	5.0	3.4
			265-60-1	17,500	18,600	13.2	15.3	23,200	14,300	4.8				13.8	16.1	22,900	14,100	4.9	
021	700	5.4	208/230-60-1	20,300	21,500	13.9	16.2	24,400	15,400	4.8	3.3	20,500	21,500	14.5	17.1	24,100	15,200	4.8	3.4
			265-60-1	20,400	21,800														
024	800	6.0	208/230-60-1	23,000	24,000	14.3	16.0	28,000	16,600	4.9	3.3	23,400	24,800	14.8	17.2	27,800	16,400	5.0	3.4
			265-60-1			13.4	15.7	28,500	17,800	4.7				13.8	15.9	28,200	17,700	4.9	
030	1000	7.3	208/230-60-1	29,400	30,800	14.7	16.8	34,700	21,700	5.0	3.4	29,400	30,900	15.2	17.6	34,300	21,400	5.1	3.5
			265-60-1	29,100	30,400	14.4	16.3	33,900		4.7	3.3	29,100	30,500	14.9	16.7			5.0	3.4
036	1200	9.0	208/230-60-1	35,600	37,100	14.1	16.0	41,600	26,200	4.7	3.2	35,300	37,200	14.4	16.4	42,000	26,100	4.7	3.3
			265-60-1	35,400	36,600	13.8	15.5	41,900	27,500	4.6	3.3	35,100	36,700	13.9	15.6	42,300	27,500	4.6	3.4

 = Ground loop data in light blue tint

**Water Loop Conditions:** Cooling capacity is based on 80.6°F db, 66.2°F wb (27/19°C) EAT and 86°F (30°C) EWT; Heating capacity is based on 68°F db, 59.0°F wb (20/15°C) EAT and 68°F (20°C) EWT.

**Ground Loop Conditions:** Cooling capacity is based on 80.6°F db, 66.2°F wb (27/19°C) EAT and 77°F (25°C) EWT; Heating capacity is based on 68°F db, 59.0°F wb (20/15°C) EAT and 32°F (0°C) EWT.



## Focused on a sustainable future

Daikin Applied is committed to sustainable practices as part of our corporate culture. We believe it is the right thing to do for our customers, our community, the environment and ourselves. As a global leader in HVAC technology, Daikin Applied has a unique opportunity to make a difference in sustainable initiatives and to continue to lead the industry in environmental solutions.



For more information about our complete line of water source heat pumps, contact your local Daikin Applied sales office or visit [www.DaikinApplied.com](http://www.DaikinApplied.com) to find an office near you.

