

SmartSource[®] Compact Vertical Water Source Heat Pump

Big features, small design, perfect fit



Vertical Model GCV Sizes 007 – 070 (½ - 6 tons) Compact fits-ideal for limited spaces in new, existing, or retrofit projects









Daikin SmartSource Compact vertical water source heat pumps (WSHPs) lead the way in smallscale, serviceable design that provides commercial building contractors and facility managers with a low-cost alternative to more expensive and larger WSHPs. Readily available for quick delivery, compact WSHPs are ideal for new, existing, or replacement jobs where space is a premium and budgets are constrained. They can be configured for boiler tower or geothermal applications that are often found in schools, offices, lodging, condominiums, and retail facilities.

Small in size, SmartSource Compact WSHPs deliver big in performance capabilities. Specifying engineers will appreciate the high-performance features and options we've engineered into these units; EC fan motors with adjustable airflow settings, dehumidification, and waterside economizers that typically are found only in larger WSHPs. These options are now fully selectable and available in this smaller packaged unit at a lower cost than premium efficiency units.

The comprehensive variety of design features and options available for SmartSource Compact WSHPs also allows building owners to create a more quiet and comfortable environment for occupants. Additionally, owners will benefit from a low first-installed cost and efficient, cost-saving operation that lowers energy bills.

Project solutions and benefits

- Small footprint for easy replacement of most competitor WSHPs
- Competitively priced with extensive features and options to out specify
- In-stock availability for quick delivery
- Dehumidification for increased occupant comfort
- · Low operating costs, easy installation, and quick serviceability

Smart dehumidification

- Uses hot gas reheat, humidistat, 2-stage thermostat & smart airflow management for precise humidity control
- Simplified dehumidification Uses a 3-stage thermostat to optimize unit capacity and fan speed for maximum latent capacity while decreasing room humidity levels
- Humidistat controlled dehumidification Optimizes fan speed for maximum latent capacity while decreasing room humidity levels
- Dehumidification only Uses a humidistat in cooling only mode

Factory-mounted options and accessories:

Hydronic heat

- Reduces energy consumption by using warm loop water temperatures to condition a space without energizing mechanical heating
- Advanced fan controls reduce sound levels by delivering optimum airflow during hydronic heating

3 Waterside economizer

 Reduces compressor energy consumption by using a cold water coil for cooling under suitable conditions

4 Non-fused disconnect (option)

Convenient power shut-off and lockout at the unit

Smart EC fan motor

- Quiet and efficient motors are available on all sizes
- Easy 4-position fan speed selector switch on sizes 015-070

6 Sound options

1 Hot gas reheat

6 Sound options

Reduce sound levels for quieter operation

Swing-out removable control box

• Designed for easy access to control terminal connections and easy service access

8 LED status sight glass

• LED status sight glass allows an instant visual of unit operation for quick troubleshooting and advanced diagnosis

9 Slide-out fan motor/housing (015 - 048)

 Motor and fan housing assembly slide-out for easy removal and service access

10 2-Way Motorized Water Valve (Factory or field-installed)

• Used in variable pumping applications when multiple units share a common loop.

Additional options:

- MicroTech® III controls easy open-protocol integration with optional LONWORKS® or BACnet®
- Extended range coaxial heat exchanger coil and piping insulation – for use with geothermal application
- 4-sided filter rack with 2" or 4" filters designed for easy filter maintenance. MERV 8 and 13 filter options with gasketed filter rack meet LEED-NC EQc5 applications with leakage rate at less than 4 CFM per square foot of filter area at 0.5" ESP
- **Insulation options** closed cell or ¹/₂"-standard fiberglass options for the air and compressor side of the unit
- Epoxy coated coils provides extra corrosion protection to meet ASTM B-11 3000 hour salt spray test
- 5-year extended parts warranty available



10 2-Way Motorized Water Valve (Option)







9 Slide-out fan motor/housing

Compact fits performance, capacity, and space needs

AHRI performance data – Compact model GCV with EC motor

Note: All ratings based on 208V operation.

Unit Size	Motor Type	CFM	GPM	Wat	ter Loop (Boiler Tov	ver)	Ground Loop (Geothermal)				
				Cooling		Heating		Cooling		Heating		Dimensions
				Btu/hr	EER	Btu/hr	СОР	Btu/hr	EER	Btu/hr	СОР	
007	*ECM	250	1.8	6,200	13.8	6,900	4.8	6,500	16.2	4,700	3.3	19.0W x 19.0D x 24.0H
009		300	2.3	8,100	13.0	9,200	4.3	8,400	14.8	6,100	3.2	
012		400	3.0	10,900	13.2	13,500	4.6	11,700	15.1	8,700	3.4	
015	ECM	500	3.5	13,900	14.6	16,400	5.2	14,700	16.5	10,300	3.5	21.5W x 21.5D x 32.0H
019		600	4.5	17,500	14.3	20,100	5.0	18,500	16.7	12,900	3.5	
024	ECM	775	6.0	24,200	13.5	25,700	4.5	25,400	15.9	17,100	3.4	- 21.5W x 21.5D x 39.0H
030		1000	7.1	28,900	14.1	33,000	4.4	30,500	16.2	21,200	3.3	
036	ECM	1200	9.1	36,500	13.7	41,900	4.5	38,300	15.8	27,000	3.4	21.5W x 26.0D x 44.0H
042		1400	10.0	41,000	14.5	45,000	4.8	42,700	16.7	28,900	3.4	
048	ECM	1600	12.0	48,200	14.7	57,400	5.1	50,100	16.9	37,000	3.6	24.0W x 32.5D x 46.0H
060		2000	15.0	59,300	13.9	73,100	4.9	62,000	15.7	47,800	3.6	
070	ECM	2200	18.0	67,500	14.6	78,900	4.8	70,000	16.2	52,200	3.5	26.0W x 33.25D x 54.125H

AHRI performance data – Compact model GCV with PSC motor

	Motor Type	CFM	GPM	Wat	ter Loop (Boiler Tow	ver)	Gro	und Loop	(Geotherr		
Unit Size				Cooling		Heating		Cooling		Heating		Dimensions
				Btu/hr	EER	Btu/hr	СОР	Btu/hr	EER	Btu/hr	СОР	
007	PSC	250	1.8	6,100	12.8	7,000	4.5	6,400	15.1	4,800	3.3	19.0W x 19.0D x 24.0H
009		300	2.3	8,000	12.2	9,500	4.3	8,400	14.8	6,300	3.2	
012		400	3.0	10,900	12.2	13,600	4.3	11,600	14.1	8,900	3.2	
015	PSC	500	3.5	13,700	13.8	16,600	5.1	14,500	15.6	10,500	3.4	21.5W x 21.5D x 32.0H
019		600	4.5	17,300	13.8	20,300	4.7	18,300	15.8	13,000	3.4	
024	PSC	775	6.0	24,000	13.4	25,900	4.4	25,200	15.5	17,200	3.2	21.5W x 21.5D x 39.0H
030		1000	7.1	28,900	14.0	33,000	4.4	30,500	16.0	21,200	3.3	
036	PSC	1200	9.1	36,100	13.0	42,300	4.3	37,900	15.0	27,300	3.3	21.5W x 26.0D x 44.0H
042		1400	10.0	40,300	13.7	45,800	4.6	42,000	15.7	29,700	3.3	
048	PSC	1600	12.0	47,800	14.2	58,400	5.0	49,800	16.3	38,000	3.6	24.0W x 32.5D x 46.0H
060		2000	15.0	58,700	13.2	74,500	4.6	61,400	14.8	49,200	3.3	
070	PSC	2200	18.0	66,500	13.5	79,900	4.6	69,000	14.9	53,200	3.3	26.0W x 33.25D x 54.125H

Water loop test conditions:

1. Cooling capacity is based on 80.6°F db, 66.2°F wb (27/19°C) EAT and 86°F (30°C) EWT.

2. Heating capacity is based on 68°F db, 59.0°F wb (20/15°C) EAT and 68°F (20°C) EWT.

Ground loop test conditions:

1. Cooling capacity is based on 80.6°F db, 66.2°F wb (27/19°C) EAT and 77°F (25°C) EWT.

2. Heating capacity is based on 68°F db, 59.0°F wb (20/15°C) EAT and 32°F (0°C) EWT.

*Constant torque EC fan motor only, all other sizes are constant torque or constant CFM type.

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** to find an office near you.

