

AIO Ceiling Suspended w/ERV



AIO Ceiling Suspended with ERV is hung from the ceiling unobtrusively. These units are ideal for retrofit applications where it is desirable to have the unit "out of reach." Ceiling Suspended units are suitable for dormitories, budget rental apartments or hotels, or anywhere a ceiling-mounted unit is desired. Ceiling Suspended units are available with or without the integrated ERV and can be vented directly outside or through ductwork. Watch how it is installed by scanning or clicking the QR code.



Key Features

- Compact unit
- Easy to install
- Paintable, sleek cabinet
- Electronically controlled air louver
- Always-on back-lit LED dims after 15 seconds of inactivity
- Auto-restart
- Washable filters
- Preheater for extreme cold climates

Options

- Optional 0.9 or 1.8 kW electric heat
- With ERV
- 115V or 230V
- Hardwire or LCDI cord
- R32

Operation

- Cool, heat, dehumidify, and auto
- Selectable fan speeds, low, med, high, and auto
- Fresh air ERV - field configurable amount of fresh air

Mounting

- Ceiling

Airflow

- Dual 8" (203 mm) external vents
- Available 0.45" WC (112 Pa) for external ducting, adapters, and louvers

Included Controllers

- Onboard touch controller

Optional Controllers

- WiFi app for Android and iPhone
- Wall Mounted Advanced touchscreen with a 7-day program
- Wall Mounted Basic touch controller
- Third party thermostat interface
- BACnet/Modbus interface

Installation



Ducted external vent



Direct existing window vent



Shared supply and exhaust vents

Key Specifications

High Performance & High Efficiency



			AHRI			Energy Star Certified		
			95°F (35°C) ¹	105°F (41°C) ²	115°F (46°C) ³	95°F (35°C) ¹	105°F (41°C) ²	115°F (46°C) ³
Cooling - Heat Pump Only								
Capacity	Maximum		15.0 (4.4)	11.4 (3.3)	9.8 (2.9)	15.0 (4.4)	11.4 (3.3)	9.8 (2.9)
	Recommended*	kBtu/h (kW)	9.4 (2.8)	8.2 (2.4)	7.3 (2.1)	9.4 (2.8)	8.2 (2.4)	7.3 (2.1)
	Nominal		7.7 (2.3)	7.4 (2.2)	6.6 (1.9)	6.1 (1.8)	7.4 (2.2)	6.6 (1.9)
	Minimum		3.1 (0.9)	3.1 (0.9)	3.1 (0.9)	3.1 (0.9)	3.1 (0.9)	3.1 (0.9)
Power input	Maximum		1.58	1.64	1.70	1.58	1.64	1.70
	Recommended*	kW	0.96	0.95	1.04	0.96	0.95	1.04
	Nominal		0.73	0.83	0.91	0.53	0.83	0.91
	Minimum		0.23	0.26	0.29	0.23	0.26	0.29
Efficiency	Maximum		9.5	7.0	5.8	9.5	7.0	5.8
	Recommended		9.8	8.6	7.0	9.8	8.6	7.0
	Nominal		10.6	8.9	7.3	11.6	8.9	7.3
	SEER2		13.9	-	-	15.3	-	-
Moisture removal		Pts/h (L/h)	1.8 (0.9)	2.0 (1)	2.2 (1.0)	1.8 (0.9)	2.0 (1)	2.2 (1.0)

			AHRI					Energy Star Certified				
			47°F (8°C) ⁴	17°F (-8°C) ⁵	5°F (-15°C) ⁶	0°F (-17°C) ⁷	-5°F (-20°C) ⁸	47°F (8°C) ⁴	17°F (-8°C) ⁵	5°F (-15°C) ⁶	0°F (-17°C) ⁷	-5°F (-20°C) ⁸
Heating - Heat Pump Only**												
Capacity	Maximum		14.0 (4.1)	10.0 (2.9)	6.6 (1.9)	6.3 (1.8)	5.8 (1.7)	14.0 (4.1)	10.0 (2.9)	6.6 (1.9)	6.3 (1.8)	5.8 (1.7)
	Recommended*	kBtu/h (kW)	9.2 (2.7)	9.3 (2.7)	6.2 (1.8)	5.9 (1.7)	5.6 (1.6)	9.2 (2.7)	8.7 (2.5)	6.2 (1.8)	5.9 (1.7)	5.6 (1.6)
	Nominal		8.6 (2.5)	8.3 (2.4)	6.2 (1.8)	5.9 (1.7)	5.6 (1.6)	8.2 (2.4)	7.8 (2.3)	5.9 (1.7)	5.9 (1.7)	5.6 (1.6)
	Minimum		3.5 (1.0)	3.3 (1.0)	2.8 (0.8)	2.5 (0.7)	2.5 (0.7)	3.5 (1.0)	3.3 (1.0)	2.8 (0.8)	2.5 (0.7)	2.5 (0.7)
Power input	Maximum		1.42	1.46	1.70	1.60	1.65	1.42	1.46	1.70	1.60	1.65
	Recommended*	kW	0.78	0.99	1.09	1.06	1.01	0.78	0.92	1.09	1.06	1.01
	Nominal		0.70	0.86	1.09	1.06	1.01	0.64	0.80	0.99	1.06	1.01
	Minimum		0.32	0.42	0.44	0.43	0.48	0.32	0.42	0.44	0.43	0.48
Efficiency	Maximum		2.9	2.0	1.1	1.1	1.0	2.9	2.0	1.1	1.1	1.0
	Recommended		3.5	2.8	1.68	1.6	1.6	3.5	2.8	1.68	1.6	1.6
	Nominal		3.6	2.8	1.7	1.6	1.6	3.8	2.8	1.8	1.6	1.6
	Minimum		3.3	2.3	1.9	1.7	1.5	3.3	2.3	1.9	1.7	1.5
	HSPF2		9.2	-	-	-	-	9.2	-	-	-	-

- 1 **95°F (35°C)** ID: 80°F(26.7°C), W.B. 67°F(19.4°C); OD: 95°F(35°C), W.B. 75°F(23.9°C)
 2 **105°F (41°C)** ID: 80°F(26.7°C), W.B. 67°F(19.4°C); OD: 105°F(40.6°C), W.B. 75°F(23.9°C)
 3 **115°F (46°C)** ID: 80°F(26.7°C), W.B. 67°F(19.4°C); OD: 115°F(46.1°C), W.B. 75°F(23.9°C)
 4 **47°F (8°C)** ID: 70°F(21.1°C), W.B. 60°F(15.6°C); OD: 47°F(8.3°C), W.B. 43°F(6.1°C)

- 5 **17°F (-8°C)** ID: 70°F(21.1°C), W.B. 60°F(15.6°C); OD: 17°F(-8.3°C), W.B. 13°F(-10.6°C)
 6 **5°F (-15°C)** ID: 70°F(21.1°C), W.B. 60°F(15.6°C); OD: 5°F(-15°C), W.B. 3°F(-16.1°C)
 7 **0°F (-17°C)** ID: 70°F(21.1°C), W.B. 60°F(15.6°C); OD: 0°F(-17.8°C)
 8 **-5°F (-20°C)** ID: 70°F(21.1°C), W.B. 60°F(15.6°C); OD: -5°F (-20.6°C)

* This is the recommended capacity for sizing the unit to the space.

** The tables show Heat Pump performance only. An electric heating element can be added to provide an additional output of 3.1 or 6.1 kBtu/h (0.9 or 1.8 kW).

Technical Specifications

Airflow				
Indoor	Type	ECM centrifugal		
	CFM (m³/h)	226 - 350 (384 - 595)		
	Fan Modes	Low, med, high, boost, auto		
	Available ESP	N/A		
	Supply connection	Integrated front		
	Return connection	Integrated bottom		
	Filter	MERV 3		
Outdoor	Type	ECM centrifugal		
	CFM (m³/h)	385 - 638 (654 - 1,084)		
	Available ESP	0.7" WC (174 Pa, with ERV), 0.45" (112 Pa, no ERV)		
	Intake connection	8" (203 mm) round		
	Exhaust connection	8" (203 mm) round		
	Speeds	Low, med, high, auto		
General				
Indoor	Type	BLDC twin rotary inverter		
	Oil Type	Fv50s		
Controls	Basic Functionality	Dependent on controller		
	WiFi	Optional module available		
	Power Outage Restart	Auto-on based on last setting		
	Dry Contact	Yes		
Modes	Operation	Cool+ fresh air, cool only, heat+ fresh air, heat only, auto		
	Restricted Modes	Heat only, cool only, temperature limiting		
	Timers	Dependent on the controller		
Condensate	Pipe size	3/4" (19 mm) outside diameter		
	Pipe Material	Rubber		
ERV				
Flow type		Counterflow enthalpy exchanger		
Material		Mold and bacteria resistant, washable polymer membrane		
ASHRAE compliance		62.1 and 62.2 when used with the ERV module		
Efficiency of Core in Winter		40 CFM (68 m³/h)	60 CFM (102 m³/h)	80 CFM (140 m³/h)
Sensible	%	86.7	85.2	83.1
Latent		72.5	65.1	60.3
Efficiency of Core in Summer				
Sensible	%	71.1	69.4	68.1
Latent		56.2	54.5	51.2
Filter				
Indoor air	MERV	MERV 3 / optional MERV 13		
Outside air		MERV 13		
Leakage				
Internal	in. WC (Pa)	2.6% at 0.40" (100)	2.4% at 0.40" (100)	2.2% at 0.40" (100)
External		2.8% at 1.0" (249)	2.7% at 1.0" (249)	2.5% at 1.0" (249)

Electical Data: Heat Pump Only*		AHRI		Energy Star Certified	
		115V	230V	115V	230V
Power Supply	Ph/Hz	1/60		1/60	
Power Factor		0.96		0.96	
Input Power – standby	W	10.8		10.8	
Input Power – off mode		1.5		1.5	
Running Amps Cooling		8.2	4.1	8.2	4.1
Max. Amps Cooling		20.9	9.5	20.9	9.5
Running Amps Heating		10.0	5.0	10.0	5.0
Max. Amps Heating	A	20.9	9.5	20.9	9.5
MCA		25	11	25	11
MOCp		35	15	35	15
Rec. Breaker Size		30	15	30	15

* See the Post and Pre Heater table.

Electrical Connection			115V	230V
LCDI Power Cord	Amps	A	N/A	15
	Plug	NEMA	N/A	6-15P
Quick-connect whip	Length	in (mm)	40 (1,016)	40 (1,016)

Electrical (General) – Motors				
Compressor	RLA	A	13	6
	LRA		13	6
Indoor ECM fan motor	Max Watts	W	260	200
	F.L.A.	A	3.4	1.2
	Power	HP	0.125	0.1
Outdoor ECM fan motor	Max Watts	W	150	150
	F.L.A.	A	2.1	1.05
	Power	HP	0.1	0.1

	Pre Heater		Post Heater		
	500 W	1,000 W	900 W	1,800 W	2,700 W
115 V	500 W / 7.8 A	N/A	900 W / 7.8 A	N/A	N/A
208 V	N/A	818 W / 3.9 A	736 W / 3.5 A	1,472 W / 7.1 A	2200 W / 10.6 A
230 V	N/A	1,000 W / 4.3 A	900 W / 3.9 A	1,800 W / 7.8 A	2,700 W / 11.7 A
240 V	N/A	1,089 W / 4.5 A	980 W / 3.8 A	1,960 W / 7.5 A	3,000 W / 11.3 A

Sound		
Indoor	DB range: dB(A)	27 – 43
	STC	40
	OITC	35
Outdoor	dB(A)	28 – 55

Unit Dimensions and Mechanical Details		
Dimensions		41.3" W x 44.4" D x 11.5" H
		1,049 mm W x 1,129 mm D x 292 mm H
Net weight	lb	203 (92.1)
Gross weight	(kg)	214 (97.1)
Cabinet finish		RAL 9003 signal white
Cabinet material		Steel

Dimensions

For CAD and DWG files, please scan or click the QR code below.

