

# **Product Data Sheet** Ceiling Suspended ASE10R4H2

List: \$8,170

- Integrated ERV
- 900W electric heat
- R410a
- **2**30V



## **▲ SAFETY WARNING**

Only qualified professionals should install and service this equipment. Improperly installed or modifications by an unqualified person could result in death or serious injury. When working on the equipment, observe all precautions in the installation manual and labels attached to the equipment.



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AIO Ceiling Suspended unit 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.

## Ephoca is constantly innovating and improving its products and reserves the right to modify product design and specifications without notice and without incurring any obligations.

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# **Key Features**

#### No outdoor unit

The single package design means no outdoor unit, freeing up space on rooftops and at ground level and enabling installations in buildings without space for an outdoor unit.

#### Twin rotary BLDC inverter compressor

The state-of-the-art twin rotary BLDC inverter compressor operates efficiently, quietly, and with minimal vibration. AIO is ideal for any room or area that requires between 4,000 and 10,500 BTU.

#### Integrated ERV

AIO's integrated ERV eliminates the requirement of installing an independent ERV system, ducting, electrical work, and engineering.

#### ■ Recovery plus<sup>™</sup>

With a patent pending innovation, AIO utilizes the heat or cold remaining in the air after passing through the recovery core to lower or raise the temperature of the condenser, enabling a boost in performance and efficiency.

#### MERV 13 clean air

Clean outdoor air is essential to well-being and safety. The MERV 13 filter ensures that all air entering the room/home is clean and safe. Additionally, stale air is passed through a second MERV 13 filter keeping the core clean.

#### ■ High-efficiency ECM fans with auto ESP

High-efficiency ECM fans enable efficient and quiet operation as the EC motor can ramp up or down depending on the need. Automatically adjusted external static pressure ensures correct airflow.

#### Cold climate heat pump

The heat pump with efficiently function down to 5°F outdoors.

#### 900 Watt electric heat

The electric heat works in conjunction with the heat pump when the heat pump has insufficient power.

#### Intelligent defrosting

AIO's intelligent defrosting system means more time heating and less time on reverse cycle defrost.

#### Coil cooling system

The condensate mister system drizzles the condensate on the outdoor heat exchanger coils, lowering the coil's temperature and increasing efficiency and performance.

#### Quiet

With whisper-quiet operation as low as 27 decibels, the occupant will barely notice AIO is operating.

#### No outside noise infiltration

AIO has the lowest STC and OITC rating among comparable units. This means less outside noise intruding into the room day and night.

#### Versatile on/off options

AlO's low voltage connection enables connection to any occupancy system, key-card, window sensors, fire alarms, etc.; as long as it can send a signal to AlO via low voltage, the unit can be easily turned on or off.

#### Corrosion protection

AIO comes standard with corrosion protection, assuring many years of trouble-free performance.

#### Minimal clearances and compact footprint Alors according with the line acts reaging the

AlO's compact form with no line sets means there is no need to access the sides of the unit. Mount units with as little as 1 inch clearance on all sides. Compact footprints take up minimum space.

#### Leak protection

A drain alarm will activate if the drain becomes clogged, and the system will be shut off, preventing water damage.

#### Easy to service

AIO can be easily maintained and repaired from the front or bottom of the unit without having to remove the unit from the wall or ceiling. AIO can also be quickly swapped out with a replacement, reducing downtime.

#### Versatile controls

AlO includes an iOS and android app and an onboard touch controller. AlO can be used with optional wall-mounted controllers, including a TFT with 7 day program and third-party controllers from any company using the optional 3rd party kit. An optional BACnet and Modbus module enables interfacing with building management systems

#### 10-Year limited warranty

An industry-leading ten-year limited on-site warranty provides peace of mind. One full-year parts and labor. Nine-year parts and a full ten-year parts and labor on the sealed system, including the compressor.

# **Technical requirements**

## AIO Ceiling Suspended specifications

Note: Refer to the full specifications for detailed information about the list of specifications.

- The power supply circuit is installed in accordance with the current edition of NEC (ANSI/NFPA 70) and local codes and ordinances. Note: Always consult local and national electric codes.
- Voltage rating of 60 Hz, 208V/230V single phase.
- Interior clearances as follows: Sides of unit to wall: 1"
- Properly installed insulated condensate drain line with a minimum of 30% slope if an external drain. An internal drain is highly recommended.
- Approved louvers installed with best practices to ensure no water into the wall assembly.
- 8" or larger diameter ducts through the wall which are tighly fitted to the rear openings of the unit.
- The unit must be perfectly level on the vertical and horizontal axis.
- The unit must be tight to the wall, with zero leakage between the external ducts and the unit. Use insulating material if wall is not level.
- Properly affixed ceiling bracket to ceiling studs or other supporting material.

## **Louver specifications**

AIO Ceiling Ducted units can be vented through all kinds of custom and creative solutions. The possibilities are endless, from perforated panels to custom louvers.

There are two critical factors in selecting and sizing a solution that will work with AIO Ceiling ducted units.

■ Free area: This area on a louver/grille is open for the air to flow through. The louver, perforated panel, or other solution must have at least the amount of free area as required in the specifications below in the plenum from the unit so that ample air can enter and exit the condenser chamber. A more restrictive solution with a smaller free area can be utilized by enlarging the louver and plenum until the required free area is achieved.

#### The minimum free area required is .34 sq feet for the intake vent and .34 sq feet for the exhaust vent.

■ Pressure drop: Pressure drop is the resistance the louver/grille creates against the airflow. This resistance can create heat build-up inside the condenser portion, causing the compressor to overheat and shut down. A solution with a higher pressure drop than specified can be utilized by enlarging the louver and plenum until the pressure drop is within specification.

#### The maximum total pressure for the intake and exhaust ducting (if any) and intake and exhaust louvers combined must be under 0.7 WC.

#### To be clear, the entire assembly of ductwork, plenums, and louvers for the complete air circuit, in and out of the system may not exceed 0.7 WC.

Any louver or louver assembly must meet these requirements, as exceeding these limits can cause the unit to overheat and fail and void the warranty.

The following louvers are approved for AIO Ceiling ducted units:

- Sunvent: LLA/C, LLA/M, LLA/S available through your Ephoca distributor.
- Thermaduct: RLA8 available through your Ephoca distributor.

# What's inside



# **Technical specifications**

#### Cooling

Indoor: 80°F, W.B. 67°F; Outdoor: 95°F, W.B. 75°F

		40 CFM	60 CFM	80 CFM
Heat Pump				
Range	Btu/h		3,400 - 14,500	
Nominal	Btu/11		8,100	
Input Power	W		730	
Efficiency	EER		11.10	
	IEER		14.09	
ERV				
Sensible recovery	Btu/h	600	890	1,140
Latent recovery	Blu/n	390	570	730
Input Power	W	18	34	53
Efficiency	EER	19.54	15.34	12.61
Combined Heat F	Pump + ER	V1		
Range	Btu/h	5,190 - 15,490	5,660 - 15,960	6,070 - 16,370
Nominal	btu/11	9,090	9,560	9,970
Input Power	W	748	764	783
Efficiency	EER	12.15	12.51	12.73
Moisture Removal	Pts/h		1.9	

#### Heating 47°

Indoor: 70°F, W.B. 60°F; Outdoor: 47°F, W.B. 43°F

	40 CFM	60 CFM	80 CFM		
Dtu /b	4,200 - 14	4,500 + 3,000 Ele	ctric heat		
Blu/n	8,000	8,000 + 3,000 Electric heat			
W		698			
COP		3.36			
Btu/h	1,230	2,000	2,490		
W	18	34	53		
COP	20.03	17.24	13.77		
Combined heat pump +ERV'					
	5,430 - 15,730	6,200 - 16,500	6,690 - 16,990		
	9,200	10,000	10,500		
W	716	732	751		
COP	3.77	4.00	4.10		
	COP Btu/h W COP at pump +E Btu/h W	Btu/h 4,200 - 1/2   Btu/h 8,000   W 200   Btu/h 1,230   W 18   COP 20.03   at pump +ERV' 5,430 - 15,730   Btu/h 9,200   W 716	Btu/h 4,200 - 14,500 + 3,000 Electric   W 698   COP 3.36   Btu/h 1,230 2,000   W 18 34   COP 20.03 17.24   tt pump +ERV' 5,430 - 15,730 6,200 - 16,500   W 716 732		

## Heating 13°F

Indoor: 70°F, w.B. 60°F; Outdoor: 13°F, W.B. 9°F

		40 CFM	60 CFM	80 CFM
Heat pump				
Range	— Btu/h	3,200 - 7	,000 + 3,000 Elec	ctric heat
Nominal	Blu/n	6,100	+ 3,000 Electric	heat
Input power	W		955	
Efficiency	COP		1.87	
ERV				
Recovery	Btu/h	2,590	4,060	5,250
Input power	W	18	34	53
Efficiency	COP	42.17	35.00	29.03
Combined heat pump + ERV'				
Range	Btu/h	5,660 - 9,460	7,260 - 11,060	8,450 - 12,250
Nominal	Blu/n	8,560	10,160	11,350
Input power	W	973	989	1,008
Efficiency	COP	3.46	4.04	4.43

#### Heating 5°F

Indoor: 70°F W.B. 60°F; Outdoor : 5°F, W.B. 3°F

		40 CFM	60 CFM	80 CFM
Heat pump				
Range	— Btu/h	2,700 - 6	6,700 + 3,000 Elec	ctric heat
Nominal	Blu/n	5,600	) + 3,000 Electric	e heat
Input power	W		936	
Efficiency	COP		1.75	
ERV				
Recovery	Btu/h	2,970	4,500	5,970
Input power	W	18	34	53
Efficiency	COP	48.36	38.79	33.01
Combined heat pump + ERV'				
Range	— Btu/h	5,670 - 9,670	7,200 - 11,200	8,670 - 12,670
Nominal	DLU/N	8,570	10,100	11,570
Input power	W	954	970	989
Efficiency	COP	2.63	3.05	3.43

#### ERV

General	
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

		40 CFM	60 CFM	80 CFM
Efficiency of c	ore in winte	er		
Sensible	%	86.7	85.2	83.1
Latent	/0	72.5	65.1	60.3
Efficiency of c	ore in sumr	ner		
Sensible		71.1	69.4	68.1
Latent	~ %	56.2	54.5	51.2
Filter				
Indoor air		MER	V 3 / optional ME	ERV 13
Outside air	MERV		MERV 13	
Leakage				
Internal		2.6% at 0.40"	2.4% at 0.40"	2.2% at 0.40"
External	- WC	2.8% at 1.0"	2.7% at 1.0″	2.5% at 1.0″

To understand the ratings, please see the section "Understanding the ratings" on the following pages.

<sup>1</sup> The total capacity and efficiency of the heat pump and the ERV can not be used to heat/cool the room and is only shown to demonstrate the capacity and efficiency when comparing to a system without an ERV. A percentage of the heat pump capacity is required to heat/cool the outdoor air which is not recovered by the ERV.

# **Technical specifications**

## Airflow

Туре		
/ 1	ECM centrifugal	
CFM	226 - 400	
Supply connection	Integrated louver	
Return connection	Integrated bottom	
Speeds	Low, med, high, auto	
Filter	MERV 3	
Туре	ECM centrifugal	
CFM	20 - 85	
Speeds	Based on CFM	
Filter	MERV 13	
Туре	ECM centrifugal	
CFM	20 - 85	
Connection	Integrated	
Speeds	Based on CFM	
Filter	MERV 13	
Туре	ECM centrifugal	
CFM	385 - 638	
Available ESP	0.45″	
Intake connection	O" round	
Exhaust connection	8" round	
Speeds	Low, med, high, auto	
	CFM Supply connection Return connection Speeds Filter Type CFM Speeds Filter Type CFM Connection Speeds Filter Type CFM Connection Speeds Filter Type CFM Available ESP Intake connection Exhaust connection	

#### Electrical

Electrical	2	230V
General		
Volt range	20	7 - 251
Hz/ phase	60 Hz si	inge phase
Power supply	Но	irdwire
Power factor	%	0.96
Cooling (nominal)		3.3
Cooling (max)		7.8
Heating - heat pump only (nominal)	A	3.2
Heating - heat pump + electric (max)		12.2
Input power (standby)	W	10.8
Input power (off mode)	VV	1.7
Motors		
Compressor	RLA	2.8
	LRA	4.7
Indoor ECM fan motor	W (max)	180
	F.L.A.	0.8
	HP	0.24
Fresh air intake ECM fan motor	W (max)	41
	F.L.A.	0.3
	HP	0.05
Stale air exhaust ECM fan motor	W (max)	41
	F.L.A.	0.2
	HP	0.05
Outdoor ECM fan motor	W (max)	190
	F.L.A.	0.8
	HP	0.25

## **Circuit Breakers**

Circuit breakers		
MCA - heat pump only		14
Recommended breaker size	А	15
MOCP		20

## Compressor

Compressor		230V
Model voltage	•	
Туре		BLDC twin rotary inverter
Refrigerant	Туре	R410a
	Oz.	21.87
Oil	Туре	Fv50s

## Sound

General		
Indoor	dB(A)	27 - 43
	STC	40
	OITC	35
Outdoor	dB(A)	28 - 55

## General

Controls			
Basic functionality	Dependent on controller		
Wi-Fi	Vee		
ADA compliant	Yes		
Dry contact		Yes	
Power outage restart		Auto-on based on last setting	
Modes			
Operation	Cool+ fresh c	air, cool only, heat+ fresh air, heat only, auto	
Restricted modes	Heat	only, cool only, temperature limiting	
Timers		Dependent on controller	
Condensate			
Pipe size		3/4"	
Physical data			
Dimensions	Net	38.3 W x 33.7" D x 11.3" H	
	Gross	48" L x 48" W x 18" H	
Weight	Net	170 Lb	
	Gross	190 Lb	
Cabinet	Finish	RAL 9003 signal white	
	Material	Steel	
Certification			
Safety	Field certifie	d Intertek until full certification is complete	
Energy efficiency	Innova Labs		
Warranty			
Year 1		On-site parts and labor	
Year 2 - 10		Parts only	
	On-sit	e parts and labor on compressor	

## Airflow

AIO Ceiling Suspened is flexible in many ways. It can be fully ducted or used with minimal or no ducting. This flexibility enables AIO Ceiling Sucted to be placed anywhere in a dwelling without restrictions.

#### Supply air

The supply air is through an electronically controlled louver that can be set at any angle or continuously oscillate.

#### Stale and return airt

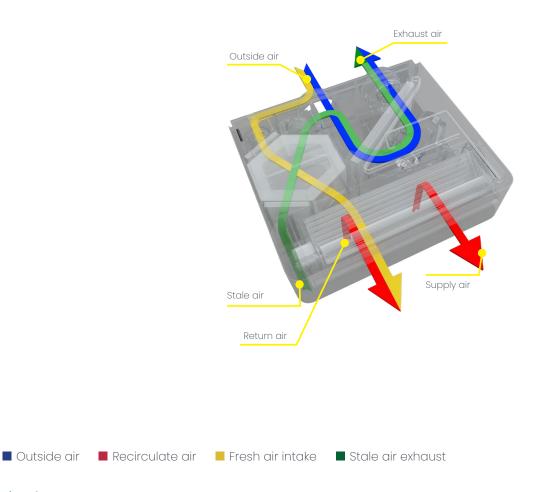
Both room and stale air are returned into the unit through the the integrated return air grille on the bottom of the unit.

#### Outside air intake

The single 8" round outside air intake connection provides air for the condenser portion and fresh air for the inside. This can be ducted with up 0.45" WC external static pressure (combined between intake and exhaust).

#### Outside air exhaust

The single 8" round outside air exhaust connection is for the condenser portion and the stale air exhaust. This can be ducted with up 0.45" WC external static pressure (combined between intake and exhaust).



# **Understanding the ratings**

AlO is a unique system that incorporates a heat pump and ERV in a single package. To understand the specifications, you must read this first to understand. There are different ways to bring treated outside air into a dwelling unit; using a rooftop package, PTAC or VTAC, DOAS, ERV, or a fresh air intake kit.

#### Package systems such as Rooftop, PTAC, and VTAC

In these systems, outside air is introduced via a vent and heated/cooled using the heat pump or electric heat (if the outside temperature is below the heat pump's operating range). The heat pump's capacity must include inside and outside air loads.

#### DOAS (Dedicated Outside Air Systems)

DOAS units condition the outside air to inside temperature with a heat pump. With a DOAS, the only load is the outside air.

#### ERV Systems

ERV systems utilize the heat/cold from the exhausted stale air to heat/cool the incoming outside air. As ERVs are only 60% and 85% efficient, the outside air must be further heated/cooled to meet room temperature. Depending on the system design, the air can be passed through an additional dedicated heat pump or passed into the return of a fan coil unit. Regardless, the heat pump's capacity must be calculated to cover the load which the ERV does not recover.

#### Fresh air intake kit for indoor units

Some indoor units (such as cassettes and ducted) of VRF and other split systems will accommodate a fresh air kit, where outside air is ducted into the return of the indoor units. The indoor fan coil and connected outdoor heat pump must accommodate inside and outside air loads.

## **How AIO works**

AlO integrates an ERV with the heat pump providing an all-in-one solution with maximum efficiency. Outside air is initially treated by the super-efficient ERV core, recovering up to 86% of the sensible heat from the exhaust air, and the heat pump treats the remainder before it enters the supply air. To further boost efficiency, the heat remaining after passing through the recovery core is used to slightly warm/ cool the outdoor heat exchanger, lowering/raising the coil's temperature.

With AIO, just like any other solution with an ERV, a percentage of the heat pump's capacity is used to heat the outside air and must be factored into the load calculation. AIO is available with or without the ERV option; if AIO is used only as a heat pump, all the heat pump's capacity can be utilized for the room's load.

## **Explanation of the terms**

Below is a list of terms used in the specifications and their explanation.

## Heat Pump

#### Range

AlO's twin rotary inverter compressor enables a wide range of capacities. The capacity range reflects the minimum and maximum capacity of the heat pump. Using AlO in an environment that requires less than the minimum will result in AlO's inverter compressor operating as an on-off compressor. While this will not damage AlO or shorten the lifespan, it will reduce efficiency. It is important to note that a small percentage of the capacity will be utilized to heat/cool the outside air.

While the capacity range is wide, Ephoca does not recommend using AIO in an environment that consistently requires more than 10,500 BTU. Beyond that limit, AIO is louder and less efficient. The additional capacity is helpful for those occasions when extra capacity is needed.

#### Nominal

This is rated capacity, used for efficiency testing purposes. With an inverter-based heat pump, a manufacturer can "lock" the inverter compressor to a specific frequency to control the capacity for a test. This capacity was selected as it achieves the optimum efficiency to capacity ratio. A lower capacity will achieve a more efficient rating but will be officially too small, and a larger capacity will have a less efficient rating with inverter compressors; the lower the frequency (capacity), the better the efficiency. This is what makes inverters so efficient, as most of the time, an inverter will operate at less than half the capacity. This number rating is only provided for official rating purposes and for comparing with similar units in apples-to-apples comparisons.

#### Input power

This is the input power to operate AIO at the rated capacity and does not include the input power of the ERV fans. Using AIO in an environment that requires less capacity than the rated will result in less power input, and a higher capacity will use more input power.

#### Efficiency

This is the official efficiency of AIO based on AHRI testing standards based on the rated capacity. Using AIO in an environment that requires less than the rated will result in a higher efficiency rating. An environment with higher loads will have a lower efficiency rating. This number is only provided for official rating purposes and to compare with similar units in apples-to-apples comparisons.

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# **Understanding the ratings**

## ERV

#### Capacity

This is the capacity of the ERV based on CFM of outside air. The higher the CFM, the higher the capacity. It is critical to note that the ERV's capacity can only be used to offset the load required to heat/cool the outside air, which will always be greater than the capacity of the ERV. This capacity never be used to heat/cool the inside air.

#### Input power

This is the input power of two ERV fans. One pulls outside air through the ERV core; the other pulls the stale air through the ERV core. The higher the CFM of outside air, the higher the input power. The CFM of outside air is fully controllable and can be set anywhere from 20 to 85 CFM. The speed of the ECM fans controls this.

#### Efficiency

The effective efficiency of the ERV is exceptionally high, as the only input power is the ECM fan. The efficiency is dependent upon the CFM and related fan power.

## Combined Heat Pump + ERV Section

#### Range

This reflects the combined capacity range of the heat pump (as described in the heat pump section) and the ERV (as described in the ERV section). This combined capacity range helps compare the capacity required using only a heat pump to heat/ cool the outside and inside air instead of an ERV and a heat pump.

For example, a 12x15 room requires 8,000 BTU, and 35 CFM of outside air requires 3,000 BTU, requiring 11,000 BTU's.

There are two ways to achieve this:

- Typical, where all 11,000 BTU are from the heat pump/ electric heat.
- AIO, with 11,000 BTU of combined capacity. In this case, AIO's heat pump provides 8,000 BTUs for the room and 480 BTU (16% of the 3,000 BTU) for the outside air. The recovery on the ERV would provide the remaining 2,520 BTU required to heat/ cool the outside air.

This capacity range is useful as a quick reference to see if AIO will be able to support the combined load of indoor and outside air. This combined capacity can not be used solely for inside air.

#### Nominal

This capacity range is useful as a quick reference to see if AIO will be able to support the combined load of indoor and outside air. This combined capacity can not be used solely for inside air.

#### Input power

This is the input power to operate AIO at the rated capacity and the input power of the ERV fans. Using AIO in an environment that requires less capacity than the rated will result in less power input and a higher capacity will use more input power.

#### Efficiency

The effective efficiency of the heat pump and the ERV is higher than the efficiency of just the heat pump. However, this combined efficiency presents a more accurate picture of the efficiency of AIO as it shows the benefit of a combined ERV heat pump versus other types of configurations.

# AIO Ceiling Suspended ASE10R4H2 Submittal

Products are subject to continuous improvements and Ephoca reserves the right to modify product design, and specifications without notice.

Job	Reference	Construction
Location	Approval	Quote Number
Engineer	Date	Drawing Number
Submitted To	Submitted By:	P.O. Number:

## **ERV performance**

General	
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

		40 CFM	80 CFM	80 CFM		
Efficiency of	Efficiency of core in winter					
Sensible	- %	86.7	85.2	83.1		
Latent	/o	72.5	65.1	60.3		
Efficiency of	core in sum	imer				
Sensible	- %	71.1	69.4	68.1		
Latent	/o	56.2	54.5	51.2		
Filter						
Indoor air		MERV 3 / optional MERV 13				
Outside air	MERV	MERV 13				
Leakage						
Internal		2.6% at 0.40"	2.4% at 0.40"	2.2% at 0.40"		
External	WC	2.8% at 1.0"	2.7% at 1.0″	2.5% at 1.0″		

## Heat pump performance

Cooling			
Moisture Removal		Pts/h	1.9
	Range	Dt. //-	3,400 - 14,500
Cooling	Capacity	Btu/h	8,100
Indoor: 80°F, W.B. 67°F; Outdoor:	Input Power	W	730
95°F, W.B. 75°F	Efficiency	EER	11.10
		SEER	14.09
Heating			
Sensible Heat Fact	or	%	86
Heating 47°F	Range	Btu/h	4,200 - 14,500 +3,000 electric heat
Indoor: 70°F, W.B.	Capacity		8,000 +3,000 electric heat
60°F; Outdoor: 47°F, W.B.	Input Power	W	698
43°F	Efficiency	COP	3.36
11	Range	Btu/h	3,200 - 7,000 +3,000 electric heat
Heating 13°F Indoor: 70°F, W.B.	Capacity		6,100 +3,000 electric heat
60°F; Outdoor: 13°F, W.B. 9°F	Input Power	W	955
VV.D. 9-F	Efficiency	COP	1.87
Heating 5°F Indoor: 70°F, W.B.	Range	Dtu /b	2,700 - 6,700 +3,000 electric heat
	Capacity	Btu/h	5,600 +3,000 electric heat
60°F; Outdoor: 5°F, W.B.	Input Power	W	936
3°F	Efficiency	COP	1.75

## Compressor

General		
Туре		BLDC twin rotary inverter
Refrigerant	Туре	R410a

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#### Airflow

Airflow		Indoor	Fresh air	Outdoor
General				
Fere	Motor		ECM	
Fan	Туре	Centrifugal	Centrifugal	Centrifugal
Input power	W	180	41	190
Airflow	CFM	226 - 400	25 - 85	385 - 638
ESP	WC	N/A	N/A	.045″
Speeds		Low, med, high, auto	Auto	Low, med, high, auto

## Sound

General		
Indoor	dB(A)	27 - 43
	STC	40
	OITC	35
outdoor	dB(A)	28 - 55

## Electrical

General		
Volt range		207 - 251
Hz/ phase	60	Hz singe phase
Power Cord		Hardwire
Power factor	%	0.96
Cooling (nominal)		3.3
Cooling (max)	A	7.8
Heating (nominal)		3.2
Heating - heat pump + electric (max)		12.2
Circuit breakers		
MCA - heat pump only		14
Recommended breaker size	A	15
MOCP		20

## Warranty

Warranty	
Year 1	On-site parts and labor
Year 2 - 10	Parts only
	On-site parts and labor on compressor

## **Dimensions**

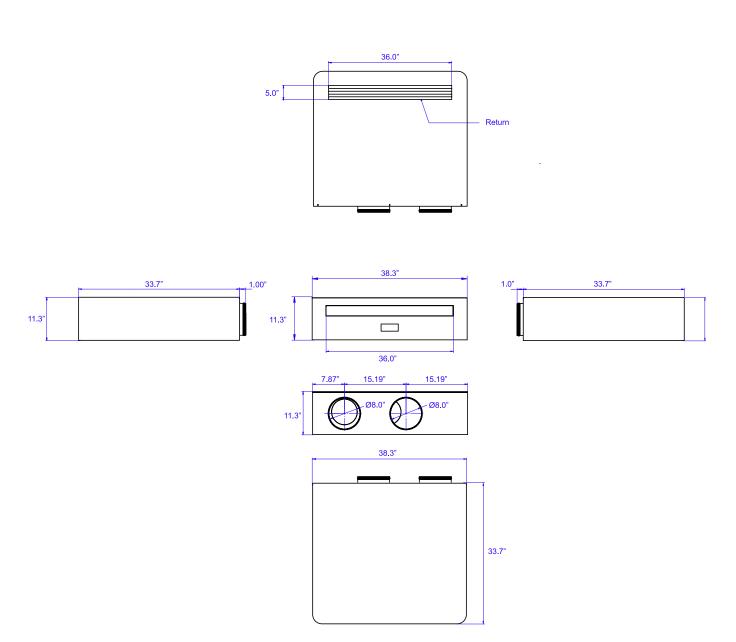
General		
Dimensions	Net	38.3 W x 33.7" D x 11.3" H
	Gross	48" L x 48" W x 18" H
Weight	Net	160 Lb
	Gross	180 Lb
Cabinet	Finish	RAL 9003 signal white
	Material	Steel

# Dimensions

## Dimensions

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







With over 15 years of experience in the climate comfort sector, we have a clear goal: growth through innovation. Our team is laser-focused on the conception, development, and production of innovative heating, ventilation, and air conditioning solutions. This mission has developed through bringing together technical skills, creativity, technology, design, Italian passion, and a global vision to achieve the best energy efficiency and performance.

Ephoca is the US subsidiary of Innova SRL - Via 1º Maggio, 8 - 38089 Storo (TN) Italy.

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MADE IN ITALY

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