Product
Data Sheet

Wall Mounted Pro

APP10N3H1

TECHNICAL REQUIREMENTS

Site Requirements

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, single phase in 115V or 208/230V in accordance with the model specified
- Interior clearances as follows:
  - Sides of unit to wall: 1″
  - Bottom of unit to floor 1″
  - Top of unit to any obstruction: 3.5″
- Unblocked vents on the exterior and no obstacles within 36″.
- An internal drain is highly recommended.
- If using an externally run condensate line, note the following:
  - Must be properly insulated
  - Minimum of 30% slope
  - If on a low floor, ensure that end of drain is above the maximum height of snow buildup.
  - Highly recommended to use a heat trace wire on the drain line to prevent freezing. This can be connected to the a heat trace power connection on the bottom of the unit.
- Approved louvers installed with best practices to ensure no water into the wall assembly.
- 8″ diameter ducts through the wall which protrude 1/8″ into the unit's EPDM backing to ensure a tight seal.
- 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 wall bracket to wall studs or other supporting material. Note the wall bracket has several places that must be secured.

Louver Specifications

AIO Wall Mounted Pro 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 Wall Mounted Pro 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 0.34 sq feet for the intake vent and 0.34 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 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 0.45" 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 0.45" WC.
- Any louver or louver or 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 Wall Mounted Pro:
- Sunvent: LLA/C, LLA/M, LLA/S - available through your Ephoca distributor.
- Thermaduct: RLA9 - available through your Ephoca distributor.

INSTALLATION

Airflow

Fresh air volume

Indoor	Type	ECM centrifugal
	Supply connection	Integrated front
	Return connection	Integrated bottom
	Filter	MERV 3
Outdoor	Type	ECM centrifugal

General

Compressor

Refrigerant	Type	R32
Type	BLDC twin rotary inverter	

Modes

Timers	Dependent on controller
Restricted modes	Heat only, cool only, temperature limiting

Condensate

Pipe	Size	3/4" Outside diameter
	Material	Rubber

Sound

Sound

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

Dimensions

Physical data

Dimensions	Net	WxDxH

ADDITIONAL CONNECTIONS

AIO Wall Mounted Pro offers a group of connections on the bottom of the unit to enable quick and easy connection to accessories and components. This includes the following:

Controller Gateways

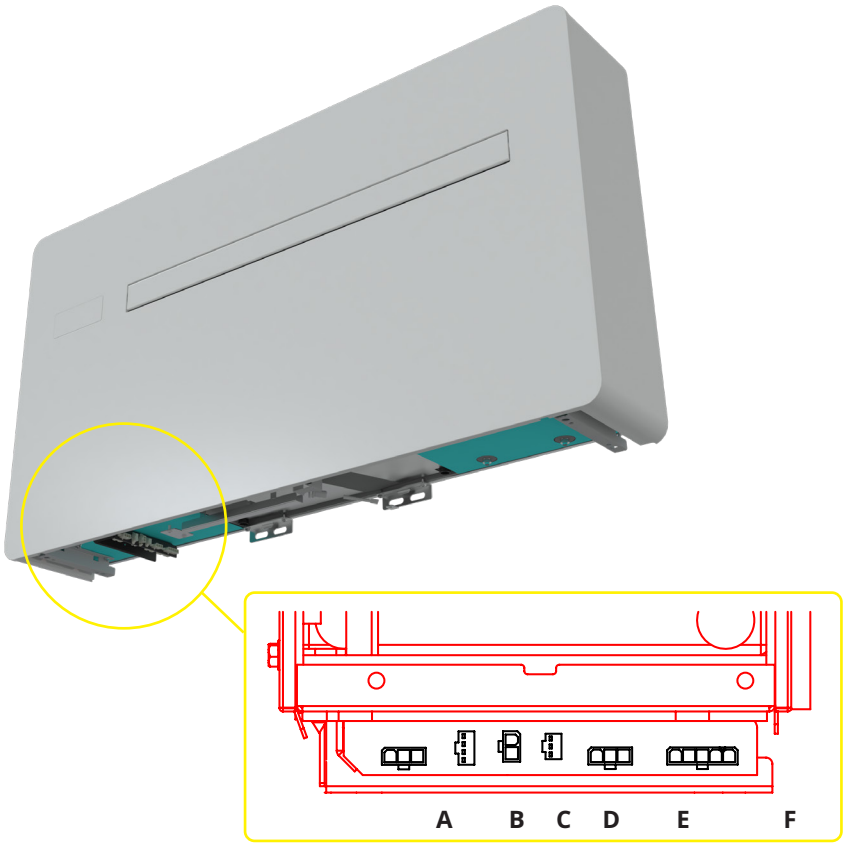
This includes power and communication ports to connect the Third Party Gateway, Advanced Touch Controller, Basic Touch Controller, BACnet, Modbus and other controllers.

Heat Trace Power

When installing a condensate line that is draining directly outside, in cold climates, we highly recommend using a heat trace line.

ERV

When connecting the AIO ERV these ports allow quick connections to the power and communications for the ERV.



A - Power Supply for Controller Gateway

B - Communication port for Controller Gateway

D - Communication port for ERV

E - Power for ERV

Electrical

General

Heating (max)	14.2
Volt range	103-127
Heating (nominal)	5.8
Cooling (max)	14.7
Cooling (nominal)	6.9
Input power (off mode)	1.5
Input power (standby)	10.8
Power factor (%)	0.96
Power supply	Hardwire or LCDI
Hz/phase	60 Hz single phase

Motors

Compressor	RLA	9.35
	LRA	9.35
Indoor ECM fan motor	W (max)	50
	F.L.A.	0.4
	HP	0.07
Outdoor ECM fan motor	W (max)	150
	F.L.A.	1.3
	HP	0.20

Circuit breakers

MOCP	35
Recommended breaker size	20
MCA	20

LCDI Power Cord

Plug Type	5-20P
Amps	20

WIRING DIAGRAM

Heat Pump Only