# **Performance** & Submittal

Model: Specifications, Wall Air Handler 208-230V 9k-24k

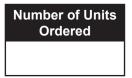
### **Wall Air Handler**

Model	Sing	le Zone	Capacity	Voltage	Product R <u>evisio</u> n
A D	W	A L		D	A
Advantage Series Heat Pump			<b>09</b> - 9,000 Btu/h	<b>D</b> - 208-	230V/1ph/60Hz
<u> </u>			<b>12</b> - 12,000 Btu/h		
			<b>18</b> - 18,000 Btu/h		
			<b>24</b> - 24,000 Btu/h		

	Indicate the quantity of field installed accessories, required for each unit							
QTY Ordered	Description	Part Number						
	Optional: <b>SPARE</b> Hand Held Infrared Remote Control [NOTE: Each Wall Air Handler comes with a hand held remote, standard]	17317000A59014						
	Optional: Wi-Fi Module, USB	17310900003167						



Approved:	
Reviewed:	
Contact:	
Address:	
Phone:	
Unit Tag #	
REVISON	



	Approval
Ву:_	

NOTICE: Due to ongoing product development; design, specification and performance data listed within this submittal document are subject to change without notice. Visit our website *emiretroaire.com* for the most current performance data or consult the factory.

# Specifications, Performance & Submittal

Model: Single Zone Condenser 208-230V 9k-24k

## Single Zone Condenser (Heat Pump)

Model	Single Zon	<u>e</u>	Nominal Rated <u>Capacity</u>	Voltage	Product R <u>evisio</u> n
A D	SZ	1		D	Α
Advantage Series Heat Pump			<b>09</b> - 9,000 Btu/h	<b>D</b> - 208-	-230V/1ph/60Hz
			<b>12</b> - 12,000 Btu/h		
			<b>18</b> - 18,000 Btu/h		
			<b>24</b> - 24,000 Btu/h		

	Indicate the <i>quantity</i> of <u>field</u> installed accessories, required <u>for each unit</u>								
QTY Ordered	Description	Part Number	Notes						
	TUBE SET,3/8X1/4X16',5M,09,FLR,INS,US		09 size only						
	TUBE SET,3/8X1/4X26',8M,09,FLR,INS,US	F0323261A	09 size only						
	TUBE SET,3/8X1/4X49',15M,09,FLR,INS,US	F0323491	09 size only						
	TUBE SET,1/2X1/4X16',5M,12-18,FLR,INS,US	F0423161A	12 & 18 sizes						
	TUBE SET,1/2X1/4X26',8M,12-18,FLR,INS,US	F0423261A	12 & 18 sizes						
	TUBE SET,1/2X1/4X49',15M,12/18,FLR,INS,	F0423491	12 & 18 sizes						
	TUBE SET,5/8X3/8X26',8M,24-36,FL,INS,US	F0533262A	24 size only						
	TUBE SET,5/8x3/8X49',15M,24-36,FL,INS,US	F0533492A	24 size only						



Approved:	
Reviewed:	
Contact:	
Address:	
Phone:	
Unit Tag #	
REVISON	



	Approval	
Ву:		

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# Specification and Performance

Single - Zone Systems 208V-230V 9k-24k

### **Ductless Mini Split:**

- ♦ Heat Pump
- ♦ R-410A refrigerant.
- ♦ Single and multi-zone application flexibility.
- ♦ 20 to 25 SEER high efficiency models with capacities from 9,000 Btuh to 24,000 Btuh.
- ♦ Easy installation requiring no ductwork, a small hole for running power wiring and refrigerant lines is all that is needed to connect indoor and outdoor sections.
- ♦ Low profile indoor air handler is neutral color that blends with any decor.
- Next generation outdoor condenser with inverter compressor provides exceptionally quiet operation and intelligently adjusts speed to temperature conditions.
- ♦ Low noise.
- ♦ Low operating cost.
- ♦ Optional Wi-Fi module.
- ♦ Simple design makes it easy to remove and clean the washable filters.
- ♦ Intelligent Design allows system to intelligently adjust the angle of the louver to ensure greatest efficiency for heating and cooling. For more control, manually adjust louver as small as 6 degrees from using the hand-held remote.
- ♦ Golden Fin prevents bacteria breeding and improves heat transfer efficiency. The unique anti-corrosive golden coating on the condenser can withstand salty air, rain, and other corrosive elements.
- Refrigerant Leakage Detection will better protect compressor being damaged by high temperature due to refrigerant leakage.

### **Features:**

- All models supplied with hand-held Infrared Remote Controller with easy-to-read LCD display.
   Factory installer operating features provide capacity to set temperature, louver control, fan speeds and more.
- Follow-Me Technology Mode that activates a temperature sensor that is built into Infrared remote control. When you stay close to the remote control, the unit will continue to condition the space until you are comfortable.
- Turbo Mode Air condition maximizes output of cooling and heating capacity, making the room cool down or heat up rapidly and attain the desired temperature in the shortest time.
- Auto Restart If system shuts down due to power failure, system will restart with previous function setting when power is restored.
- Auto Level Swing Louvers In cooling mode, louvers self adjust to horizontal position and circulate cold air more efficiently. In heating mode, louvers deflect hot air downward so hot air will rise and circulate keeping the room warm.
- 24 Hour Timer Set a wide variety of timer based operations, start and stop at specific times.
   Control fan speed as well as cool, heat and auto from anywhere in the room.
- Sleep Mode Enables the system to gradually decrease cooling or heating output automatically during night operation to maintain comfort level while saving energy.
- Self-Diagnosis & Auto Protection Should abnormal operation or part failure happen, unit will shut off automatically. Unit will then indicate protection or error code for fast service.
- Low Ambient Cooling/Heating Operating range -22°F to 122°F provide year round cooling/ heating comfort.

## Single - Zone Systems 208V-230V 9-24K

Indoor Wall Air Handler Model			ADWAL09D	ADWAL12D	ADWAL18D	ADWAL24D
Power Supply		V/ph/ Hz	208-230/1/60	208-230/1/60	208-230/1/60	208-230/1/60
RLA		Α	0.56	0.56	0.66	0.5
Indoor air flo	ow (Hi/Mi/Lo)	cfm	320/240/180	320/240/180	460/370/280	570/450/340
Indoor air flo	ow (Hi/Mi/Lo)	m3/h	540/410/300	540/410/300	788/628/468	960/760/580
Indoor noise	e level (Hi/Mi/Lo)	dB(A)	42/35/26	42/35/26	44/38/30	46/40/34
	Dimensions (WXDXH)	inch	31.69x7.64x11.22	31.69x7.64x11.22	37.68x8.39x11.89	40.94x8.66x12.87
	Dimensions (WXDXH)	mm	805x194x285	805x194x285	957x213x302	1040x220x327
Indoor unit	Packing (W×D×H)	inch	34.25x10.63x14.37	34.25x10.63x14.37	37.68x8.39x11.89	40.94x8.66x12.87
	Packing (W×D×H)	mm	870x270x365	870x270x365	1035x295x385	1120x405x315
	Net/Gross weight	lbs.	22	22	29	37
		kg	10	10	13	17
Thermostat type			Remote Control	Remote Control	Remote Control	Remote Control
Thermostat	Indoor	°C	17~32/0~30	17~32/0~30	17~32/0~30	17~32/0~30
Setting Range	(cooling/heating)	۰F	63~90/32~86	63~90/32~86	63~90/32~86	63~90/32~86
	Liquid aida/Caa aida	inch	½ x 3/8	1/4 x 3/8	1/4 X 1/2	3/8 x 5/8
	Liquid side/Gas side	mm	6.35 x 9.52	6.35/12.7	9.52/15.9	9.52/15.9
Refrigerant	Maximum ning langth	ft	82	82	98	164
piping	Maximum pipe length	m	25	25	30	50
	Max. height difference	ft	32.8	32.8	66	82
	between indoor units	m	10	10	20	25

**Interconnect wire:** 3 - conductor plus ground, stranded, un-shielded. Wire size is determined by MCA and MOP/fuse, per NEC, CEC and local codes.

## Single - Zone Systems 208V-230V 9-24k

Outdoor	Condensing Unit I	Model	ADSZ109DA	ADSZ112DA	ADSZ118DA	ADSZ124DA
Power supply		V/ph/ Hz	208-230/1/60	208-230/1/60	208-230/1/60	208-230/1/60
	Capacity	Btu/h	9000	12000	17000	24000
Continu	Rated current	А	7.0	7.0	10	15.5
Cooling	EER		8.8	8.8	9.9	8.9
	SEER		16.5	16.8	16.8	16.5
	Capacity	Btu/h	10000	12000	18000	24000
Haatina	Rated current	Α	7.0	7.0	10	15.5
Heating	СОР		3.59	2.90	3.10	2.84
	HSPF		9.4	9.4	9.7	9.5
MINIMUM CIR	CUIT AMPACITY	А	12	12	15	19
MAX TIME DE	LAY FUUSE OR HARC	А	15	15	20	30
Outdoor noise	level	dB(A)	54.5	54.5	57	59.5
	Dimension (WXDXH)	inch	28.35x10.63x19.49	28.35x10.63x19.49	30.12x11.93x21.85	35.04x13.46x26.50
	Dimension (WXDXH)	mm	720x270x495	720x270x495	765x303x555	890x342x673
Outdoorunit	Packing (WXDXH)	inch	32.87x11.81x21.26	32.87x11.81x21.26	34.92x13.27x24.02	39.17x15.67x29.13
Outdoor unit	Packing (WXDXH)	mm	835x300x540	835x300x540	887x337x610	995x398x740
	Net/Gross weight	lbs.	56	56	70	105
	Net/Gross weight	kg	26	26	32	47
Refigerant type	e - 410A / oz	oz	25.75	25.75	47.97	62.8
Refrigerant pred	charge (Total pipe length)	ft	25.0	25.0	25.0	25.0
Additional char	ge for each ft	oz	0.16	0.16	0.16	0.32
Design pressur	e	psig	550/340	550/340	550/340	550/340
	Liquid cido/Cas cido	inch	1/4 liquid line 3/8 gas line	1/4 liquid line 3/8 gas line	1/4 liquid line 1/2 gas line	3/8 liquid line 5/8 gas line
Deficience	Liquid side/Gas side	mm	6.35 liquid line 9.52 gas line	6.35 liquid line 9.52 gas line	6.35 liquid line 12.7 gas line	9.52 liquid line 15.9 gas line
Refrigerant piping	May nine length	ft	82.0	82.0	98.0	164
	Max. pipe length	m	25.0	25.0	30.0	50
	Max. height difference	ft	32.8	32.8	66.0	82
	between indoor units	m	10.0	10.0	20.0	25
Operating Range Ambient	Indoor (cooling/hosting)	°F	63~90 / 32~86	63~90 / 32~86	63~90 / 32~86	63~90 / 32~86
	Indoor (cooling/heating)	°C	17~32 / 0~30	17~32 / 0~30	17~32 / 0~30	17~32 / 0~30
	Outdoor (cooling/	°F	5~122 / 5~75	5~122 / 5~75	5~122 / 5~75	5~122 / 5~75
Temperature	heating)	°C	-15~50 / -15~24	-15~50 / -15~24	-15~50 / -15~24	-15~50 / -15~24

**Additional Refrigerant Calculation:** Sum Total Liquid Pipe ft. (m) - Additional Charge Required After ft. (m.) x Additional Charge oz./ft. (g/m) 0.16 (15) **NOTES:** If the calculation results in a negative number no refrigerant is required to be added or removed. Electronic expansion valves in the outdoor unit are used as metering devices

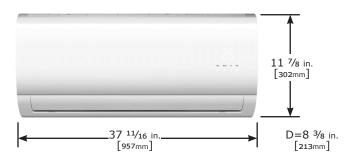
**NOTE:** The refrigerant charge included is adequate for the outdoor unit's maximum number of zones multiplied by the standard piping length per zone. For piping runs greater than the "Maximum Piping Length with no additional refrigerant charge per System", see Additional Refrigerant Charge (see Table 3).

Refrigerant Piping: Line sets to be sized based on the connection size of the indoor unit. Each pipe should be insulated individually.

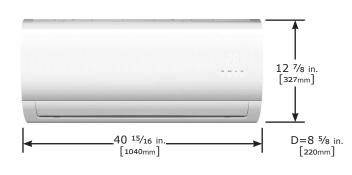
# **ADWAL09D & ADWAL12D**

# 11 ½ in. [285mm] D=7 5/8 in. [194mm] 31 <sup>11</sup>/<sub>16</sub> in [805mm]

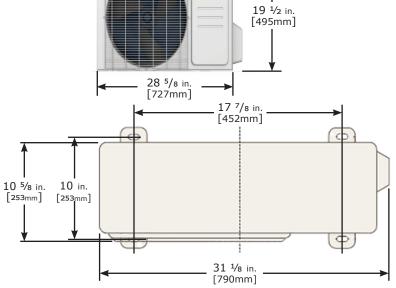
### ADWAL18D



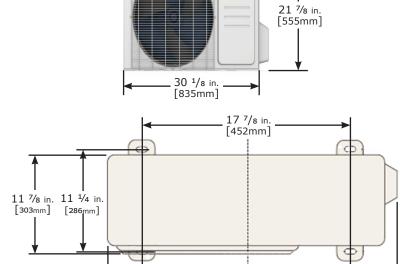
### ADWAL24D



### ADSZ109DA & ADSZ112DA

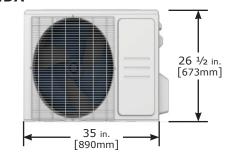


### ADSZ118DA



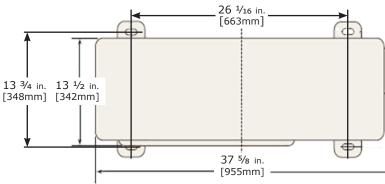
### ADSZ124DA

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32 7/8 in.

[835mm]



# Handheld Remote Controller

Every EMI System comes with an easy to use handheld remote so you can adjust your comfort level at the touch of a button.

- Enabling "Follow Me" Technology.
   When "Follow Me" mode is activated, the system switches from air handler-mounted room temperature sensor, to the sensor inside of the infrared handheld remote control. The unit conditions the space where you are, with the remote close at hand.
- Enabling Timer Modes On a schedule? Control variety of settings with precision through the Timer Mode. Never worry about arriving to a cold home again. If the system stops due to power outage, it will automatically restart to its last setting when the power comes back.

